CENTRAL SUGAR LAND LIVABLE CENTERS STUDY



Final Report | October 31, 2024







Acknowledgements

This Livable Centers Study owes its success to the contributions of the project partners and community stakeholders involved. Their commitment to the initiative played a crucial role in guiding the project team toward the development of actionable recommendations.

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Executive Summary

OVERVIEW

The Central Sugar Land study area is approximately 3.7 square miles and is bounded by Creekbend Drive, First Colony Boulevard, Lexington Boulevard, Austin Parkway, Williams Trace Boulevard, and Settlers Way Boulevard. The area contains two Regional Activity Centers, a Neighborhood Activity Center, and one Medium Density Mixed Use area, as identified by the City's Land Use Plan. According to H-GAC's Vulnerable Population Density web application, the study area contains medium to highest density of elderly population and disabled family population. The intersection of US 59/IH 69 and SH 6 bisects the study area, which is the busiest and one of the most congested intersections in the region. This intersection is a key crossing connecting the north and south portions of the Central Sugar Land area and is one of the major barriers to accessible multimodal connections between activity centers in the area.

The Central Sugar Land Livable Centers Study was initiated by the City of Sugar Land (City) and the Houston-Galveston Area Council (H-GAC) to understand and address the existing and future multimodal infrastructure needs surrounding the Central Sugar Land area. The study effort, with multiple presentations, public engagement events, and project reports, was developed to investigate the possible development of an array of housing options, retail/office, and civic destinations within walking distance of a community gathering place.

GOALS

Prior to the beginning of this study, H-GAC and the Project Management Team (PMT) were strategic with the approach, stating how imperative it is for the community to not only have a role in enhancing their community, but to also ensure the vision and goals matched Central Sugar Land's needs. With the help of community stakeholders and public influence, the team worked to develop vision and goals. Goals focused on the following elements:



PROCESS

The 13-month long project commenced in October 2023 which entailed multiple public meetings and Task Force meetings. The PMT held three Task Force Meetings and two Community Meetings in efforts to engage with the public and stakeholders. The first Task Force and Community Meetings were held to discuss data collection techniques and analyze the existing conditions report for Central Sugar Land. Task Force Meetings #2 and #3, and Community Meeting #2 were organized to discuss input received from the community, including public concerns, opportunities, produce the goals and vision of the study, and alternative design concepts.

PROJECT OVERVIEW

Within the past several months the PMT and the public's influence has created short-term, mid-term, and long-term project recommendations to enhance the connectivity and mobility of the community. Short-term recommendations are intended to be constructed within five years, mid-term recommendations within six to 10 years, and long-term recommendations at more than 10 years for completion. This includes connecting existing trails, creating future trails, and enhancing the image of the community by installing wayfinding and amenities along trails, creative crosswalks, and murals It also includes exploring ways to activate waterfronts and reshaping regional activity centers.

The list of recommended projects, as well as a price breakdown for each project type, is shown below. For more information please visit https://www.sugarlandtx.gov/2522/Central-Sugar-Land-Livability-Study

PROJECT RECOMMENDATIONS ESTIMATED COST

Short-Term Projects (0-5 years)

- 1. Intersection improvements add to signal heads backplates with reflective borders, provide signage, install bollards/decorative planers, and refresh striping
- 2. High-emphasis crosswalk construct at key intersections in coordination with TxDOT
- 3. Bike lane upgrade dedicated lane

Mid-Term Projects (6-10 years)

- 4. Intersection improvements provide for turning radius reduction
- 5. Mid-block crossings construct near select middle and elementary schools
- 6. Sidewalks provide at US 59/IH 69 frontage road in coordination with TxDOT

7. Curb ramps - coordinate with FBCLID2, TxDOT, and CenterPoint to provide curb ramps for new sidewalks and shared-use paths within their ROW

Long-Term Projects (10+ years)

- 8. Pedestrian bridges and underpass coordinate with Fort Bend County Levee Improvement District #2 (FBCLID2) and TxDOT to construct at select locations in their ROW
- 9. Shared-use path coordinate with FBCLID2 and CenterPoint to provide curb ramps for new sidewalks and shared-use paths within their ROW

SHORT-TERM PROJECTS1. Intersection improvements\$237,5002. High-emphasis crosswalks\$40,0003. Upgrade dedicated bike lane\$52,500

Total

\$330,000

MID-TERM PROJECTS 4. Intersection improvements \$320.000 5. Mid-block crossings \$250.000 \$243,700 6. Sidewalks 7. Curb ramps for sidewalks and shared-use path \$55,000 \$813.700 LONG-TERM PROJECTS 8. Pedestrian bridges \$1,347,500 9. Pedestrian underpass \$1,400,000 10. Shared-use path \$1,972,000 Total \$4,719,500

*Refer to Appendix B for Project Cost Estimates that include 20% contingency.

Additionally, a list of creative placemaking opportunities was developed to help create the sense of place in the neighborhood. Creative placemaking seeks to animate public and private spaces and rejuvenate structures. Below is a list of various locations, as well as the phases, that offer the most immediate impact from placemaking.

- Wayfinding signage and trailhead markers (short-term)
- Amenities add at benches, picnic tables, shade structure, and planters in

 public spaces and parks/open space (short-term)
- Activate existing pergola structure (short-term)
- Add art or sculpture to activate space (short-term)
- Add tree canopy to streets (short-term)
- Parking lot activation activate with temporary market and food truck park (mid-term)
- Pedestrian-scale lighting add in public spaces/streets (mid-term)
- Trail development (mid-term)
- Artistic intersections implement at schools and other public institutions (mid-term)
- Waterfront access provide access and frontage at retail centers (long-term)
- Artistic crosswalk enhance visibility and placemaking (long-term)
- Parking structure develop facility with transit connection and connection to public realm (long-term)

With all these identified projects in the horizon, the intent of this report is to help guide the City in developing actionable work program that can create a greater living experience for the Central Sugar Land community. In addition to the recommended projects, the project team developed a list of policy recommendations to enhance the safety and look of Central Sugar Land. These policy based projects were evaluated to help fasttrack identified infrastructure improvements and address some quality of life concerns expressed by the community.

Policy Recommendations:

- Safety implement driver education, provide more policing, and investigate nighttime corridor signal timing plan
- Complete Streets establish Complete Streets engineering design standards
- Vision Zero design mobility network aligned with Vision Zero principles



Project Overview

STUDY PURPOSE

The H-GAC's Livable Centers Program seeks to facilitate the creation of walkable, mixed-use places that provide multimodal transportation options, improve environmental quality, and promote economic development. Studies create the groundwork for future implementation projects by identifying potential investments and generating implementation designs and plans. The Program aims to deliver implementable ideas that capitalize on a community's existing opportunities while remediating long-standing challenges.

The Central Sugar Land Livable Centers Study was initiated by the City of Sugar Land and H-GAC to understand and address the existing and future multimodal infrastructure needs surrounding the Central Sugar Land area. The vision of the Study is to create a safe, well-connected, walkable, and accessible neighborhood that is transportation-focused and forward-thinking.

With this vision at the forefront, the Central Sugar Land Livable Center Study vision statement is to:

Trailblaze the revitalization of Central Sugar Land into a vibrant, interconnected community by creating engaging hubs and diverse activities that enrich the quality of life for everyone.

STUDY AREA

The Central Sugar Land study area is approximately 3.7 square miles and is bounded by Creekbend Drive, First Colony Boulevard, Lexington Boulevard, Austin Parkway, Williams Trace Boulevard, and Settlers Way Boulevard. The area contains two Regional Activity Centers, a Neighborhood Activity Center, and one Medium Density Mixed Use area, as identified by the City's Land Use Plan. The intersection of US 59/IH 69 and SH 6 bisects the study area, which is the busiest and one of the most congested intersections in the region. This intersection is a key crossing connecting the north and south portions of the Central Sugar Land area and is one of the major barriers to accessible multimodal connections between activity centers in the area.



Figure 1: Study Area Map

PROJECT GOALS

A list of goals was developed based on previous plan recommendations and feedback from the various community meetings and events. Goals for the Central Sugar Land Livable Centers Study focus on **mobility**, **infrastructure**, **safety**, and **vitality**.



The study goals of **mobility** and **infrastructure** seek to provide opportunities for multimodal transportation options that provide a safe, walkable environment to activity centers throughout the study area. This will include enhancing infrastructure while maintaining Central Sugar Land's character by improving multimodal options, improving safety, and adding amenities to create a sense of place and promote walkability.



The study goal of **safety** seeks to improve the livable experience of the community by fostering a safe and inclusive environment. This is supported by infrastructure and policy enhancements that provide safe scenarios for all forms of active travel around Central Sugar Land.



The study goal of **vitality** seeks to create and restore opportunities and prosperity for the businesses in the community that serve as anchors and catalysts for new businesses and activity, while at the same time, enhancing the study area's unique character.

Project goals include:

- Improving multimodal transportation options for people of all ages and abilities and enhancing the infrastructure to minimize crash risks and boost comfort at key intersections, ensuring a safe and inviting experience for everyone.
- Identifying convenient connections to neighborhoods and activity centers to reduce barriers and foster a sense of security and community.
- Adding enhancements like shaded walkways, pedestrian lighting, and ample bicycle parking to create a welcoming environment that encourages walking and biking as enjoyable alternatives to car travel.
- Creating a collection of vibrant community hubs that foster a strong sense of place, belonging, and neighborhood identity, transforming existing commercial properties into dynamic focal points for social, cultural, and commercial activities.

- Integrating public art, engaging signage, and inviting gathering spaces to revitalize underutilized areas and support a diverse array of small businesses and top-notch talent, ultimately creating lively, interconnected spaces.
- Maximizing access to Central Sugar Land's waterfront and commercial properties.
- Seeking opportunities for placemaking along rights-of-way through enhanced landscaping, public art, and programming.
- Aiming to uphold and preserve the area's natural assets, such as mature trees and parks, while creating new interconnected parks and open spaces that complement the existing infrastructure.

These focus on developing and/or updating infrastructure to ensure that residents of Central Sugar Land can safely and efficiently live, work, stay, and play.



Virtual Task Force Meeting presentation

PROJECT TIMELINE AND PROCESS

The project process began in October 2023. Shortly after the kick-off meeting, a Task Force group composed of residents and organizations ingrained in the study area and was developed to guide the project management team (PMT) on study goals and key community issues, as well as identify the projects in this plan.

The 13-month process also included public outreach. Two community meetings were held, and the attendees had the opportunity to give feedback on the goals and the projects. Other ways the team reached people that live, work, and visit Central Sugar Land was through an online survey and attendance to organized community events.

Figure 2 illustrates the project timeline and process. The following chapter provides explanation of the public engagement that was held for this study.

Focus Group Meeting #1 and #2	Data Collection and	10/2023
Community Wide Meeting #1	Existing Conditions Report	
Task Force Meeting #1	What We Heard, Issues and Opportunities,	
Task Force Meeting #2	and Conceptual Alternatives	
Community Wide Meeting #2	Recommendations and	
Task Force Meeting #3	Final Report	10/2024

Figure 2: Public Engagement Timeline and Process



Community meeting engagement

Public Engagement

Having a well thought out public engagement plan ensures the study develops realistic and implementable projects that reflect the true needs of the community. There were a variety of engagement strategies and groups for the study. It was important that the project team deploy strategies that reached non-English speaking households and that the team was prepared to communicate with residents in their preferred language. Not only was all material created in English, Hindi, and Cantonese, but all events also had live translation and were equipped with project members that were bilingual.

COMMUNITY TASK FORCE

The Task Force consisted of people representing the study area's community across a wide range of age groups and three ex-officio members representing city and state agencies operating within the study area and was developed to guide the PMT on key community issues, as well as public outreach. Members of the Task Force represented the following neighborhoods and organizations:

Community Task Force Members			
Name	Neighborhood/Organization		
Buckley, Wende	Fluor Central/PCD		
Choi, Jack	Sweetwater		
Hankins, Samuel	Oyster Point		
Henriques, Eduardo	Oyster Point		
Leo, Debbie	Enclave @ Lake Pointe		
Mascarenhas, Tara	Plantation Bend		
Mattioli, Carlos	Oyster Point		
Nguyen, Peter	Creek Bend		
Poindexter, Michael	Enclave @ Lake Pointe		
Ramanathan, Ram	Telfair		
Sebastian, Roshal	Settlers Way		

Ex-Officio Members—Subject Matter Experts			
Name	Organization		
Bailey, Caroline	H-GAC		
D'Armond, Perri	Fort Bend Transit		
McCreight, Catherine	TxDOT		

TASK FORCE MEETINGS

- Task Force Meeting #1 February 8, 2024: Cane Room at City Hall located at 2700 Town Center Blvd N, Sugar Land, TX 77479 from 6:00 p.m. to 7:30 p.m.
- Task Force Meeting #2 May 30, 2024: virtual via MS Teams from 9:30 a.m. to 11:00 a.m.
- Task Force Meeting #3 August 16, 2024: virtual via MS Teams from 9:30 a.m. to 11:00 a.m.

Task Force members were sent email invitations. The Task Force was encouraged to give feedback interactively through web-based exercises utilizing the platforms Mentimeter and Google Jamboard.





Virtual Task Force meeting

FOCUS GROUPS

To help supplement information received from the public, two focus group meetings were held before finalizing the Existing Conditions report. These focused discussions were an opportunity for the project team to hear directly from a special group of residents about the issues they encounter in the study area.

The goal was to identify members' usual destinations and mode of transportation. Attendees were asked to share their thoughts on ways to improve connectivity and mobility in the study area.

FOCUS GROUP MEETINGS

Two Focus Group Meetings were conducted on December 14, 2023 at the Cane Room at City Hall at 2700 Town Center Blvd N, Sugar Land, TX 77479:

- Meeting #1 from 12:30 p.m. to 2:00 p.m.
- Meeting #2 from 6:00 p.m. to 7:30 p.m.



Focus group survey



Focus group boards



Focus group engagement

COMMUNITY MEETINGS

The project team hosted two community meetings for this study. The first meeting was held at the Clyde and Nancy Jacks Conference Center while the second meeting as held at the T.E. Harman Center. The purpose of the first round of outreach was to collect and gather feedback about how residents moved around the neighborhood, their preferred destinations, their perceived transportation and mobility issues, what they liked about their community, what they would like to improve, and the community's health concerns. Participants provided feedback on areas of concern including flooding, where they live, play, work and run errands, and on locations where they feel safe or unsafe with in the community.

The purpose of the second round of outreach was to provide an overview of the identified recommended projects and implementation timelines that provide a strong starting point in identifying a combination of short-, mid-, and long-term initiatives that can improve the community through a better built environment.

Methods to invite the community to these meetings included:

- Social media blast by the City of Sugar Land
- Trilingual (English, Hindi, Cantonese) invitation flyers
- Study information and online surveys were included on the City of Sugar Land webpage (www.sugarlandtx.gov/2522/Central-Sugar-Land-Livability-Study)

COMMUNITY MEETINGS

- Community Meeting #1 January 17, 2024: Clyde and Nancy Jacks Conference Center located at 3232 Austin Pkwy, Sugar Land, TX 77479 from 6:00 p.m. to 7:30 p.m.
- Community Meeting #2 August 10, 2024: T.E. Harman Center located at 226 Matlage Way, Sugar Land, TX 77478 from 9:00 a.m. to 1:00 p.m.

A complete summary of each meeting can be found in Appendix A.



Community meeting engagement



Community meeting presentation



Community meeting boards

Existing Conditions

OVERVIEW

The purpose of the existing conditions analysis is to highlight the historical context, existing resources, and gaps and identify opportunities and challenges that could be addressed in the final recommendations. The indepth area analysis involved data collection from various sources, discussions with community members, and field research.

AREA HISTORY

In 1828, Stephen F. Austin granted land in the Sugar Land area to Samuel M. Williams, one of the land's first settlers. Williams named the property Oakland Plantation because of the variety of oak trees found there. Freight travel passing through Cuba from New York to Texas ports brought sugar cane stalks to Oakland Plantation. The conditions were perfect for growing sugar cane, which turned into the area's major cash crop. The area was renamed Sugar Land in 1853.



Historical image of sugar mill

After the Civil War, the sugar mill expanded into the sugar refining process. In 1907, I.H. Kempner and W.T. Eldridge purchased the Sugar Land plantation and refinery, and it became the Imperial Sugar Company. To ensure a successful business venture, these partners wanted to attract dependable families and a permanent workforce by providing a quality living and working environment. In an effort to create a model community, the Imperial Sugar Company provided workers with housing, a hospital, a grocery store, and an exemplary school within proximity to the factory. As Imperial's production expanded and its workforce multiplied, the company town outgrew its close structure and evolved into a suburban community. In 1959, the citizens incorporated and founded the City.

On January 17, 1981, a special City election was held for the purpose of establishing a home rule municipal government. On August 9, 1986, a majority of the voters approved amendments to the Charter that provided for a change in the City's form of government from that of "mayor-council" to that of a "council-manager." The Imperial Sugar Company ceased all refining and distribution operations within the City in 2003.

Much of the growth of the City in the 1980s and 1990s occurred as a result of the annexation of master-planned communities formed as municipal

utility districts (MUDs). Through these annexations, the City incorporated major residential areas such as Sugar Creek and First Colony, growing from approximately 7.5 square miles to 24.5 square miles from 1980 to 2000. Within the study area, several developments have given way to a bustling Central Sugar Land.

In 2003, Sugar Land Town Square (Town Square) opened when Planned Community Developers (PCD) partnered with the City to create a new unique downtown destination where Sugar Land residents could live, work, shop, and gather. The Town Square is a premier walking district and lifestyle destination located at the intersection of US 59 and SH 6. It has 223,000 SF of retail and restaurant, 566,000 SF of Class A office space, 167 condominiums, a full-service Marriott Hotel with a conference



First Colony Mall

center, and City Hall, all anchored by an expansive central plaza. Town Square is a public and private partnership between the City, Fort Bend County, Fort Bend County Levee Improvement District Number 2, and Lionstone Investments.

Adjacent to Town Square is First Colony Mall which opened in 1996 and was renovated in 2006. It serves more than 10 million shoppers annually. Visitors of the one-level, 1,184,329 sqft enclosed mall can enjoy shopping and dining at 145 retailers. The 'lifestyle' center concept features an outdoor pedestrian corridor lined with shops and restaurants.

Fluor Corporation built its 1.2 million-sqft offices in Sugar Land in 1984 to accommodate approximately 5,000 people. The firm will be relocating to the west Houston area in mid-2024, presenting an opportunity to redevelop the site.

In 2004 City Council approved the Lake Pointe General Land Plan for the nearly 200 acres that surround the Fluor Corporation site. The Plan includes 184 acres with a mix of uses at the north corner of SH 6 and US 59. Construction began in late 2005. By 2011, the majority of the acreage planned for commercial and office uses was developed, with only a few remaining tracts either vacant or currently under construction. Portions of the development are gated communities with urban densities of patio homes, villas, townhomes, and condominiums, all within close proximity to retail services, restaurants, hospital and medical offices, and business offices.

NEIGHBORHOOD CONTEXT

The Central Sugar Land study area is approximately 3.7 square miles and is bounded by Creekbend Drive, First Colony Boulevard, Lexington Boulevard, Austin Parkway, Williams Trace Boulevard, and Settlers Way Boulevard. The area contains two Regional Activity Centers, a Neighborhood Activity Center, and one Medium Density Mixed Use area, as identified by the City's Land Use Plan. According to H-GAC's Vulnerable Population Density web application, the study area contains medium to highest density of elderly population and disabled family population. The intersection of US 59/IH 69 and SH 6 bisects the study area, which is the busiest and one of the most congested intersections in the region. This intersection is a key crossing connecting the north and south portions of the Central Sugar Land area and is one of the major barriers to accessible multimodal connections between activity centers in the area.

POPULATION

According to the U.S. Census American Community Survey 2022, the Central Sugar Land area has a population of 16,939, the City of Sugar Land has a population of 110,077, and Fort Bend County has a population of 832,607. The Central Sugar Land area is densely populated with 4,578 people per square mile. By comparison, the City of Sugar Land has a population density of 2,568 people per square mile and Fort Bend County has a population density of 966 people per square mile.



Figure 3: Study Area Activity Centers and Neighborhoods

SOCIO DEMOGRAPHICS

AGE

The Central Sugar Land community has an older population compared to the City of Sugar Land and Fort Bend County populations. The median ages include 42.6 years for Central Sugar Land, 42.5 years for the City, and 36.9 years for Fort Bend County. Central Sugar Land's older population (65 years of age and older) is 23% compared to 18% in the City of Sugar Land and 11% in Fort Bend County.



Figure 4: Age Distribution of Central Sugar Land, City of Sugar Land, and Fort Bend County, Source: U.S. Census, American Community Survey, 2022

INCOME

Central Sugar Land has a lower median household income than that of the City of Sugar Land and Fort Bend County. Central Sugar Land has a median household income of \$88,389, while the City of Sugar Land has a median household income of \$132,247 and Fort Bend County has a median household income of \$109,987. The Commerce Department's Economic Development Administration (EDA) determined that the census tracts within the study area are not considered high poverty areas.¹



Figure 5: Median Household Income of Central Sugar Land, City of Sugar Land, and Fort Bend County, Source: U.S. Census, American Community Survey, 2022

1 SOURCE: U.S. Census, EDA-Census Poverty Status Viewer

LEVEL OF EDUCATION

In the population group of 25 years of age and older, Central Sugar Land has 57% of members with a bachelor's degree compared to the 61% of the City of Sugar Land population and 49% of the Fort Bend County population.²



Figure 6: Educational Attainment of Central Sugar Land, City of Sugar Land, and Fort Bend County, Source: U.S. Census, American Community Survey, 2022

GROWTH RATE

Based on 2010 and 2020 US Census population data^{3,4}, the City had a 3.4% average annual growth rate over the 10-year period. In comparison, Fort Bend County had a 3.4% annual growth rate over the same period. Thus, the City population is growing at a similar annual rate to that of Fort Bend County. Note that the growth largely due to annexation of Greatwood and New Territory versus actual new growth.

HOUSEHOLD SIZE

The average household size for Central Sugar Land is 2.37, while the average household size for the City of Sugar Land is 2.93 and Fort Bend County is 3.06.²

RACE/ETHNICITY

Within the Central Sugar Land, 40% identify as White alone and 32% identify as Asian alone, representing 72% of the population. This is less than in the City of Sugar Land where White alone and Asian alone make up 77% and more than Fort Bend County where White alone and Asian alone make up 52%.



Figure 7: Race of Central Sugar Land, City of Sugar Land, and Fort Bend County, Source: U.S. Census, American Community Survey, 2022

HOUSEHOLD LANGUAGE

The majority of households in the community are English speaking. The community population speaking a language other than English are 36% in Central Sugar Land, 42% in the City of Sugar Land, and 41% in Fort Bend County. English only is spoken in 64% of Central Sugar Land households, 58% of City of Sugar Land households, and 59% of Fort Bend County households.²

DISABILITY STATUS

The population of people with disabilities in Central Sugar Land and the City are 6.9% and 7.3%, respectively, nearly equal of the disabled population in Fort Bend at 7.3%²

ZERO VEHICLE HOUSEHOLDS

Approximately 4% of the Central Sugar Land population do not have a car, while 2.2% of the City of Sugar Land population and 2.8% of the Fort Bend County population do not have a car.²

2 SOURCE: U.S. Census, American Community Survey, 2022 | 3 SOURCE: U.S. Census, American Community Survey, 2010 | 4 SOURCE: U.S. Census, American Community Survey, 2020

EXISTING LAND USE

This view of the citywide land use allocation and overall development pattern (Figure 8) confirms the extent of the City's commercial base that is concentrated within the study area (Figure 9). This commercial concentration is also centered around the busiest traffic location in the City – at the IH 69 and SH 6 interchange.⁵

The land use allocation data for the planning area confirms the mapped visual showing single-family residential as the predominant use (28%, 695 acres). The single-family residential areas mostly frame the nonresidential use concentrations located around freeway interchanges and major intersections, and spread along main roadway corridors elsewhere.

Also notable is that nearly one-quarter of the area (22.6%, 560 acres) is devoted to accommodation of the automobile, within freeway and street rights of way.

Various forms of commercial development are the third most frequent land use type in the area (18.2%, 453 acres). Although, it should be noted that this data reflects horizontal land consumption while the Town Square represents a significant node of mixed-use economic activity on a relatively compact footprint, with taller structures (including for parking) and vertical mixed use.



Figure 8: Map of Existing Land Use

5 SOURCE: City of Sugar Land



Figure 9: Existing Land Use in Study Area

Civic uses are also prominent in the area (7.8%, 193 acres), including government, public education and medical facilities. Office use accounts for the next highest share (5.8%, 143 acres), with several instances also involving taller, smaller-site examples in the Town Square.

Finally, only a small portion of the area is built with multifamily residential and group quarters use, such as assisted living (2.9%, 72 acres). However, this denser housing type places concentrations of residents in locations immediately adjacent to — and at the edges of — the area's clusters of commercial and mixed-use development. The City Plaza at Town Square condominiums are also a core component of the Town Square.⁶

Table 1: Land Uses

Land Use Category	Acres	Percentage
Civic	192.8	7.8 %
Commercial	452.8	18.2%
Multifamily & Group Quarters	71.6	2.9 %
Office	143.1	5.8 %
Open Space	99.6	4.0%
Park	31.7	1.3%
Single Family Residential	695	28.0%
Street	560.3	22.6%
Townhome	13.7	0.6%
Utility	13.8	0.6%
Vacant Nonresidential	17.2	0.7%
Water	80.3	3.2%
Water Drainage	112.4	4.5%
	2,484.3	100.0%

6 SOURCE: City of Sugar Land

OBSERVATIONS ON LAND USE STATUS IN PLANNING AREA

Placed over the aerial view below are consultant team observations on existing land use conditions, form, and character within the study area.



Figure 10: Observations on Land Use Status in the Study Area

EXISTING COMMERCIAL CONDITIONS

"20/20" COMMERCIAL PROPERTIES

Figure 11 shows existing commercial properties in the planning area and elsewhere in the City that are both at least 20 years old and 20% vacant.⁷



Figure 11: Older Commercial Properties with Vacancy

Ratio of Improvement Value to Land Value on Commercial Properties Figure 12 shows variations within the planning area (and nearby) when calculating the ratio of a commercial property's improvement value to its land value.

Factors indicative of commercial redevelopment potential sometimes include items such as property age, physical condition and level of vacancy. Another factor is the value of the underlying land (i.e., "the dirt") relative to the value of the improvements upon it. Properties with high land values relative

7 SOURCE: Costar 2024

Given their age and lower occupancy, these properties could be ripe for redevelopment in coming years.

to improvement values may be increasingly susceptible to redevelopment as property owners attempt to maximize returns to high-value real estate.

The average ratio of improvement value to land value (I/L ratio) for the City's commercial properties is 3.6. The darker the shading on the map, the lower the I/L ratio and the greater the likelihood that the property will be redeveloped.



Figure 12: Ratio of Improvement Value to Land Value -Sugar Land Commercial Properties

Improvement Value of Commercial Properties on Per Square Foot of Land (PSF) Basis

Another way of predicting the likelihood of a property being redeveloped is the value of property improvements on a PSF land basis. Properties with lower PSF values than other commercial properties in the same asset class may be seen as "underdeveloped" compared to peer properties and may be prime for redevelopment.

The average PSF value of improved commercial properties in the City is \$31.15. The darker-shaded parcels fall below this number and may be subject to redevelopment pressures (Figure 13).⁸



Figure 13: Improvement Value of Commercial Real Estate on Per Square Foot of Land (PSF)

Combining the information presented on Figures 10-13 gives some indication of sites most likely to redevelop (Figure 14).



Figure 14: Sites Most Likely to Redevelop

8 SOURCE: Fort Bend County Appraisal District

ECONOMIC DEVELOPMENT

ECONOMIC DEVELOPMENT INCENTIVES

The City currently offers a menu of business and investment incentives tied either to job creation or capital investment or both. Job-based incentives include:

Office Headquarter Retention Program

The City provides up to \$6,000 per job (minimum 50 jobs) to retain regional or national headquarter companies in Sugar Land. Companies must enter into a lease for a minimum of five years and expend at least \$1 million in tenant improvements to be eligible for the incentive.

380 Agreements

The City allows the redirection of new sales tax revenue for up to 10 years for businesses that generate at least \$100,000 per year in sales tax revenue.

Direct Incentives

The Sugar Land Development Corporation (SLDC) offers direct cash incentives for companies with more than 100 full-time employees earning at least 50% of the citywide median household income. Eligibility is based on minimum capital investment thresholds of \$15 million for new construction or \$3.25 million for leasing tenants, with a requirement to occupy more than 25,000 square feet of space for at least 10 years.

Tax Abatements

The City offers tiered tax abatements, ranging from 35% to 100% of new valuation, that increase progressively with the size of investment. A project must achieve a minimum \$4 million of new assessed value to be eligible for the program.

Tax Increment Reinvestment Zone (TIRZ)

The City has several TIRZs that capture incremental new property tax revenue from large projects to offset the cost of providing new public infrastructure to these projects/districts. Generally, this tool is reserved for larger redevelopment projects requiring major new public investments in roads and utilities to service them.

TAKEAWAYS

Although the City's incentive tools are fairly wide ranging, they are geared mainly to large-scale, job-heavy projects involving corporate relocations and major capital investments. Fewer tools are available for small business development or corridor/neighborhood-level interventions. As the City continues to mature, however, many of its older, smaller commercial centers will likely begin to experience some of the same issues of increasing vacancies

and functional obsolescence as seen elsewhere in the Houston Metro. The dynamic has been accelerated in many places by the combined effects of e-commerce and remote work, which have pushed commercial vacancies to their highest levels in decades. The City is fortunate to have weathered these trends much better than most places; however, the future is nothing if not unpredictable. Developing policies and programs now to contend with what could be a rising number of failing commercial centers in coming years – particularly the City's high number of smaller strip retail centers that fall between the cracks of the City's job creation and minimum investment thresholds – is something the City should begin to consider.

Two divergent approaches are possible. The first involves taking no action to prolong the lifespan of what many consider to be disposable architecture, thereby hastening the redevelopment process. Once the economic life of the project has effectively run its course, the property presumably would get redeveloped for a higher and better use (e.g., mixed commercial/residential in a walkable format). Depending on the vibrancy of the local real estate market, this approach risks a potentially prolonged process of property downcycling, tenant turnover and deferred maintenance, possibly involving increased vacancies and/or the replacement of "credit tenants" with short-term, seasonal leases and/or ultra-discount stores. On the positive side, this approach may help support the creation of an organic entrepreneurial scene with local businesses such as independent restaurants potentially moving in to occupy relatively cheap space (Houston has many interesting examples of this).

An alternative approach would be to provide incentives to improve these properties so they can either maintain their existing tenant base or attempt to compete for the same class of tenants as newer developments. This approach seeks to extend the economic life of these properties and return them to full occupancy at "market-rate" leases under the presumption that property owners cannot or will not do this on their own volition due to market risk or lack of capital. Given the legal requirement that any incentive program must be structured on a co-investment, reimbursement basis, this approach tends to favor national chain tenants who can afford to pay the full market rents that the developer will expect for his or her efforts.

MULTIMODAL INFRASTRUCTURE

Mobility is the ability to move around and within a community and impacts how residents access health care, jobs, parks, and groceries. Multimodal transportation is the use of different forms of transportation for mobility, including walking, biking, using public transportation, or driving, and is a key component of a healthy community.

Central Sugar Land provides a range of mobility infrastructure, including sidewalks, well-designed trails, on-street bikeways, a park and ride location, and roadways. These existing facilities are part of a largely built-out City, where highway construction, development, and physical barriers present their own challenges to connectivity in multiple locations where a trail or bike lane is unable to make the connection across a highway, waterway, or other barrier. Additionally, although there is no fixed transit route beyond the park and ride, the City of Sugar Land continues to explore ways to improve mobility.

The City's Mobility Master Plan is part of the efforts undertaken by the City to promote a pedestrian and bicycle friendly community with recommendations for facilities (bike lanes, sidewalks, and crosswalks, etc.) that adhere to applicable Texas Manual on Uniform Traffic Control Devices (TMUTCD), Americans with Disabilities Act of 1990 (ADA), and American Association of State Highway and Transportation Officials (AASHTO) standards.

The City is currently exploring innovative and trailblazing projects such as autonomous air taxis or sky gondolas to connect and minimize the impact of barriers and the suburban roadway network on walking and biking.

CONNECTIVITY

Barriers to Connectivity

The City's Mobility Master Plan identified numerous barriers to connectivity and mobility. These barriers - including TxDOT facilities of SH 6 and IH 69; LID 2 levee; and major streets including First Colony Boulevard, Lexington Boulevard, and Austin Parkway - create isolation and make it difficult for people to access destinations around the City. Connecting the multimodal infrastructure will expand access across all the City has to offer.

People Walking

Within the study area, the sidewalks provide a pedestrian network, connecting various destinations (Figure 15); however, sidewalk safety and conditions vary from area to area or street to street and often diminish the walking experience. While many of the sidewalks in the study area appear to be in good condition or up-to-date with current design standards, older sidewalk sections are in need of being brought up to current design standards to provide a safe, comfortable mode of transportation for pedestrians. Sidewalks

that exceed five feet in width are more comfortable for side-by-side pedestrian use along with passing, including wheelchairs and similar wheel-based mobility devices.

The community views the sidewalk network as a critical element of mobility within the study area if they were to provide a safe walking experience, accessibility to nearby amenities, shading, and pedestrian lighting. Despite efforts from the City to provide an extended sidewalk network within the study area, many community members are still discouraged to use sidewalks as a mode of transportation based on perceived unsafe conditions at intersections along SH 6, older sidewalks segments where tree roots lift or erode the sidewalks, and/or lack of pedestrian lighting or where street lighting does not illuminate the walking area.



Figure 15: Existing Pedestrian Paths and Proposed Bike Network, Source: City of Sugar Land AGO

People Biking

The City's existing bikeway network includes more than 100 miles of facilities (Figure 16). City infrastructure features a variety of bikeway facility types including separate bikeways, delineated bikeways, and shared bikeways, all three of which are available for use in the study area. Similar to the existing conditions of the sidewalks, the bikeway network is in need of several key connections to establish a safe, comfortable, and convenient network for users.

The community primarily views the bikeway facilities as a means for recreation and notes that the bicycle network often does not connect to a destination. Additional barriers including lack of confidence biking in high stress areas, areas without placemaking, and exposure to extreme weather conditions hinder community members from choosing biking as a means of transportation.



Figure 16: Existing Bike and Shared Use Network, Source: City of Sugar Land AGO

People Taking Transit

Transit service within the City is provided by Fort Bend Transit. Within the study area, Fort Bend Transit operates from the First Colony AMC Theater parking lot and offers commuter park and ride services to the Texas Medical Center, Greenway Plaza, the Galleria area of Houston, and as of March 3, 2024, to Downtown Houston. Fort Bend Transit also offers a curb-to-curb Demand Response service within Fort Bend County, including Sugar Land with limited availability. Passengers must schedule at least a day in advance. The community has expressed an interest for a more convenient, on-demand day-of service with connections throughout the City that transport riders to activity centers like Lake Pointe and Town Center.

People Driving

The majority of the City was built as a standard post-World War II suburb, and accelerated growth between the 1970s and 2018 resulted in new and expanded highways and high-speed arterials. The City's previous mobility projects have successfully resulted in a robust roadway network that is predominantly curvilinear suburban streets that are then grouped into distinct residential areas, primarily as a result of the development of master planned communities within the City. Arterials and major collectors connect neighborhoods within the City and study area. Four state-owned high-speed, high-capacity facilities cross Sugar Land's limits and connect to surrounding cities.

The study area is bounded by Creekbend Drive, First Colony Boulevard, Lexington Boulevard, Austin Parkway, Williams Trace Boulevard, and Settlers Way Boulevard. The speed limit on these facilities is less than or equal to 35 miles per hour. SH 6 has a speed limit of 45 to 55 MPH, and IH 69 has a speed limit of 65 MPH.

9 SOURCE: TxDOT Statewide Traffic Analysis and Reporting System (STARS II)

Functional classifications and five-year annual average daily traffic (AADT) for the study area boundaries⁹ are shown in Table 2 below:

Roadway	Functional Classification	5-Year AADTs (2021)
Creekbend Drive	Major Collector	4,850
First Colony Boulevard	Minor Arterial	17,556
Lexington Boulevard	Minor Arterial	15,235
Austin Parkway	Minor Arterial	14,209
Williams Trace Boulevard	Minor Arterial	25,729
Settlers Way Boulevard	Major Collector	8,867
SH 6	Principal Arterial	67,660
IH 69	Interstate	123,966

SAFETY ASSESSMENT

Analysis of the study area crash data was performed using the Texas Department of Transportation (TxDOT) crash system database, which looked at a five-years of crash data from years 2019 through 2023. Ultimately this analysis will be used to identify crash trends that can be targeted for mitigation. Crash frequency and severity, as well as notable crash trends, are summarized for the study area and each on the following section.

The study area saw a total of 2,678 crashes, of which almost 2% of crashes (46) were identified as fatal or serious injuries. The study showed that 31% of all crashes took place at intersections, with the majority being rear ending another vehicle (61%), crashing into a fixed object like an electric pole or a parked car (41%), at an angle (24%). Many of the contributing factors for crashes were due to unsafe maneuvers, speeding, and aggressive driving. Lighting is another crash factor gleaned from the data. 0.7% of all crashes (18) in the study area were classified as "Dark - not Lighted," inferring that the crash took place in a location without any streetlights, but were still classified as "Dark."

The high crash locations for the study area (Figure 17) are noted below:

- » High crash segments:
 - SH 6 from First Colony Boulevard to Settlers Way Boulevard
 - Williams Trace Boulevard from IH 69 to SH 6
- » High crash intersections:
 - IH 69 and SH 6
 - IH 69 and Sweetwater Boulevard
 - IH 69 and Williams Trace Boulevard

Of the 2% (46 total) of crashes identified as fatalities or serious injuries, 2.2% (one individual) were pedestrian or bicycle crashes. While the majority of bicycle and pedestrian crashes have taken place in the high crash locations identified above, there is also a concentration taking place on First Colony Boulevard and Lexington Boulevard.



Figure 17: Crash Data Heat Map

INFRASTRUCTURE

STORMWATER

The 2014 Master Drainage Plan (MDP) was adopted by the City Council on November 4, 2014. It offers policy direction for achieving drainage-related objectives outlined in the comprehensive plan. The MDP outlines Sugar Land's drainage-related attributes, designates relevant drainage agencies, defines their roles, and highlights forthcoming initiatives crucial for drainage planning and flood management.

The Central Sugar Land area has the Brazos River to the west and Oyster Creek to the northeast of the study area. The Federal Emergency Management Administration (FEMA) Federal Insurance Rate Maps (FIRM) denotes the study area is zoned X as area of minimal flood hazard determined to be outside the 500-year flood and protected by levees from 100-year flood.



Figure 18: Federal Insurance Rate Map Data, Source: FEMA

Levees are built to reclaim land inside them, which means the Levee Improvement District (LID) has to manage stormwater runoff within the protected area by holding it back during storms. The LID within the study area is operated by Fort Bend County LID 2 (FBCLID 2). LIDs are independent entities governed by a Board of Directors who are appointed by the Commissioners Court of Fort Bend County or are elected by the residents. Based on the FBCLID 2 construction updates, ongoing projects that would improve the stormwater infrastructure include the widening of ditch channel B and B-1 and the expansion of the Thelen Pump Station. The widening of drainage channels B and B-1 includes clearing silt and replacing storm sewer outlets. In addition, the bottoms of these channels will be reinforced with concrete blocks to stop erosion. Furthermore, the project aims to boost flood storage in FBCLID 2 by expanding the channels within the current easement. The Thelen Pump Station will be expanded by adding four pumps, doubling its pumping capacity. The existing four pumps, replaced in 2020, will continue operating during construction. Once finished, all eight pumps will collectively move over 215,000 gallons of water per minute. Location of the projects are shown in Figure 19.



Figure 19: Drainage Improvement Projects

LIGHTING

The municipality of Sugar Land has collaborated with CenterPoint, the primary owner of streetlights in the region, to shift from High Pressure Sodium (HPS) lighting fixtures to Light-Emitting Diode (LED) fixtures for both new installations and existing streetlights throughout the City. Examples of current streetlights include the standard galvanized cobra-head lights as seen in most neighborhoods and decorative fixtures along some of the City's Signature Routes.

Based on car crash reports and public feedback, there is a sense of underillumination throughout the study area and a desire to explore installation of pedestrian lighting along the study area. This could be in part due to the low lighting wattage or the overgrown trees near street light facilities. The lighting wattage should be 45-watt LED light in residential areas and a 95 watt or 115-watt LED light along major thoroughfare or collector streets. LED technology offers improved directional lighting, diminishes glare and light dispersion, and boasts a longer lifespan compared to traditional HPS fixtures. In 2014, the City launched a program aimed at replacing the "cobrahead" street lights with shorter decorative post-top lights along key collector and signature routes. This initiative was prompted by the need to ensure sufficient roadway illumination in areas affected by tree canopy interference. As the conversion advances on various thoroughfares, the City will persist in evaluating and prioritizing the necessity for street light replacement along each corridor.



Illumination in the City of Sugar Land



PLACEMAKING

The Central Sugar Land study area sits at the heart and gateway into the City of Sugar Land, featuring a robust town center and close access to some of the City's natural areas. Elements of placemaking can be seen throughout the study area and play a role in creating inviting spaces that encourage people to enjoy the balance of live, work, and play in the City.

WHAT IS PLACEMAKING?

Placemaking, at its core, thinks about how to reimagine public spaces in ways that strengthens people's connections with each other and with their shared spaces. It is both a philosophy and a practical process for transforming public spaces, that is usually guided by the following steps.

- Define Place and Identify Stakeholders
- Evaluate Space and Identify Issues
- Vision the Place
- Short-term Experiments and Management
- Ongoing Reevaluation and Long-term Improvement

The last two steps, in particular, put the philosophy of placemaking into action and within communities, fostering ongoing conversation and connection between people and space.

While placemaking promotes better urban design, it also encourages collaboration across communities and their cities to facilitate creative uses of space. Placemaking can touch on engaging people through physical, cultural, and social identities that are tied to a place or the communities who live, work, and play within it.

Common examples of placemaking include public art such as wall murals and sculptures, it can also include more tactical measures such as curb cuts/ extensions with artistic features or parklets, which are small pocket parks that are created in lieu of on-street parking. It can also be as simple as adding street amenities such as seating, pedestrian-scale lighting, or having tree-lined streets. Placemaking can also be the activation of space through events or cultural activities that bring people together to a space.

OVERVIEW OF PLACEMAKING IN CENTRAL SUGAR LAND

Most of the placemaking seen in Central Sugar Land are focused on public art such as murals and sculptures. These are often found in spaces that draw large crowds or frequently used paths or spaces, where people are free to look, touch, and interact with the pieces.



Event at Sugar Land Town Square Plaza



Event at Sugar Land Town Square Plaza

The Town Square, in particular, embodies the philosophy and elements of placemaking by creating a comfortable, vibrant, and engaging spaces where people of all ages and interests can enjoy. Programming and events happen almost every day in the Town Square, creating a destination for the community to have fun, take pride in, and get to know the City more.

SUGAR LAND TOWN SQUARE

The Town Square embodies a lot of the overarching values placemaking efforts strive for. While the area draws its inspiration from a small town's "main street," it very much holds its own identity and attracts a diverse crowd in terms of interests, occasion, culture, age, and more. The area has a welcoming and festive atmosphere, with a lot of public programming that are family friendly and open to all.

In this study, it is important to acknowledge the efforts put into building up placemaking in Central Sugar Land, particularly in the Town Square. With its location being adjacent to the intersection of IH 69 and SH 6, the Town Square is many people's first impression of the City. It serves as the gateway and welcome center, and tells the story of the City's vibrancy and diversity. The following highlights some of the elements of placemaking that creates a sense of place, with supplemental images showing examples in the area.

Seating

There are plenty of seating options that meet different needs here. Most of the seating options are primarily found in front of City Hall in the Sugar Land Town Square Plaza (the Plaza). When visiting the Plaza, one's eyes are drawn to many groups of people enjoying a meal at the picnic tables, or spending time with family, often taking a seat on the ledge of the fountains. Also, finding someone lounging on the lawn grass itself, or having a fun conversation on one of the whimsical, round purple or silver lawn chairs.

Additional outdoor seating options are available, as one makes their way down City Walk, wandering in to view art galleries or small businesses along the way. Shoppers and visitors can find additional picnic tables, outdoor chairs, and cushioned outdoor sofas to take a seat in and enjoy people watching, the buzzing scenes of City Walk, or have a quick rest.









Public Art and Sculptures

One of the notable features of the Town Square are the pops of color and art. Whether it be sculptures or murals, these elements draw in visitors to engage with the public realm.

Bronze sculptures are seen throughout the City, but some of the sculptures such as the "Selfie" statue located in front of City Hall evoke conversations and a range of reactions. Other more modern sculptures and art pieces such as the "SLTX" sign or other art features along City Walk also act as conversation starters or a focal point or visual feature of the place.





The other more prominent type of art element found in the Town Square are wall murals and paintings. These are often funded by the City and created by local artists, making them memorable pieces with strong ties to the City's identity.





Wayfinding and Signage

Another feature that brings in a sense of place for the Town Square are the various wayfinding and signage available for visitors.

Signage that provide overall directions to key streets and destinations within the Town Square are found in several locations along City Walk. Around City Hall and the Plaza, one can find several maps of the overall area, along with a directory. Residents and visitors can also find official notices for various City-hosted meetings on a bulletin board in front of City Hall. There are several digital signs placed adjacent to the kiosks that have advertisement capabilities.

In addition to wayfinding mechanisms, there are several banners and general signage that change seasonally and/or for specific occasions that can be seen on lamp posts throughout the area.









Landscaping and Planting

The Town Square is colored with various shades and texture of greens, adding depth to the streetscape. There are mature live oak trees and red oak trees that surround the Plaza, providing areas with shade and character.

The streets consists of younger live oak trees, along with plants such as fox tail ferns, big muhlys, flax lilies, and silver ponysfoots.

There is also signage that provide classification, as well as protection to the trees and plants found in the Town Square.



Trees and landscaping offer depth, character, and shade to Sugar Land Town Square

Lighting

The lighting fixtures are predominantly focused on the pedestrian experience in the Town Square. The images below show examples of decorative light fixtures that provide lighting for sidewalk users.

Overall, the Town Square provides sufficient lighting in the evenings, ensuring that there is visibility all around.

The bottom two photos show examples of event specific and aesthetic lighting that can also be seen in the Town Square.

The bottom left photo is an image taken in December in the Plaza. The decorative lighting offers opportunities for family-friendly events and for people to gather to enjoy the holiday festivities.

The photo on the bottom right shows an example of aesthetic lighting, in this case fairy lights that dangle throughout the corridor, offering a fun touch to the streetscape at night.



Lighting seen throughout Sugar Land Town Square

Other Placemaking Elements

Shade

Shade elements provide additional comfort to the pedestrian experience within the Town Square. Some areas of the streetscape offer shaded areas for walking that connect to other destinations and buildings nearby.

The Plaza offers a large shade structure, featuring a variety of seating, and an ADA-accessible platform that has multi-use functions such as for gatherings or event staging.

Kiosk Vendors

Another notable feature of the Town Square, specifically in front of the Plaza, are kiosk vendors. These stores feature benches and wayfinding on its exterior. The kiosks provide small retail space that help to cultivate local business activity in the area, as well as to further activate the streets.



Examples of shade provided in Sugar Land Town Square



Kiosk vendor in front of the Plaza

BEYOND SUGAR LAND TOWN SQUARE

Placemaking elements are seen beyond the perimeter of the Town Square within Central Sugar Land. The majority are seen along the study area's major thoroughfare, including SH 6, and are primarily smaller traffic box art pieces that feature local artists.

There are also elements of placemaking weaved into the study area's parks and natural spaces, offering some unique dynamics to these spaces. They are also strategically placed in areas with high visibility and are generally accessible to those passing by.

Overall, however, there are no centralized spaces outside of the Town Square area that create a cohesive, community-driven space that is creative and reflective of the community's culture and pride of their neighborhood and of Sugar Land. Many areas are often subdivided by larger roads, making it difficult to connect communities to key destinations or to each other.

There are opportunities to reimagine some of the large, underutilized parking lots that are very car-centric at neighborhood retail centers such as Market at First Colony or First Colony Mall. These spaces have the potential to be repurposed as public gathering spots for parklets, food trucks, and more.



Shade structures seen at Lake Pointe



Shade structures seen at First Colony Mall

- Beautify the right-of-way
- Provide a memorable welcome for visitors to Sugar Land
- Support the City's reputation as a place to see art
- Brighten drive for commuters

Within the Central Sugar Land study area, there are 14 of these artistic traffic boxes. Most of these are located along SH 6, but some can be seen at the underpasses of IH 69, as well as along Sweetwater Boulevard and other major thoroughfares.

The images below show some examples of the traffic boxes seen in the study area. Though these art pieces feature bright colors, to the average driver, these are easy to miss due to its size and the speed of drivers. The traffic boxes are also not visited or seen by many pedestrians and cyclists, as they are often located along larger roads and highways that do not offer the most comfortable walking experience.



Traffic Box Civic Art seen throughout the study area

Traffic Box Civic Art Project

The City has a Civic Arts Division that "plays a pivotal role in fostering this [Community] identity." The Traffic Box Civic Art Project is one program hosted by the Division.

The Traffic Box Civic Art program seeks regionally-based artists to add a colorful touch to traffic signal control boxes along Sugar Land's major corridors. By selecting diverse artists from the community, the program aims to meet the following goals:

Nature and Placemaking

The study area's natural features such as its tree lined streets and lakes are a key asset in providing a pleasurable environment and image of the community.

Some of these areas with natural features also showcase some placemaking such as sculptures, playgrounds with themed equipment, and interactive digital activities. Sculptures range from more modern, nature-based forms, to those of people and figures who have been prominent in the history and culture of Sugar Land.

There are navigable paths where people can frequently be seen walking or jogging that also help people access, view, and interact with these pieces. Other elements that also help develop a sense of place include several kayak launch pad sites that further connect people to Central Sugar Land's naturebased assets.





Rock sculpture at Lake Pointe Running Trail



Interactive digital activity/park survey at First Colony Park



Bronze sculpture of Herb Appel at Lake Pointe/Fluor Central overlooking Brooks Lake

CALL TO ACTION

As the City of Sugar Land seeks to remain at the forefront of positive change and trailblazing ideas and the Central Sugar Land area navigates through its life-cycle and contends with transportation challenges arising from its role as a significant employment hub, shopping destination, regional thoroughfare, and residential enclave, the conclusions drawn from this Existing Conditions Report, coupled with community feedback, underscore the necessity for a decisive "Call to Action."

The ongoing challenges posed by the existing car-centric infrastructure network and spread out land uses hinder the provision of safe pedestrian accommodations. Inadequate sidewalks in some areas, limited bike and pedestrian paths, corridors, and disjointed trail systems exacerbate the issue. Additionally, although Fort Bend Transit also offers a limited availability curb-to-curb Demand Response service in Sugar Land, availability is limited and the community could benefit from a fixed route service with connections throughout the City.

Addressing these issues comprehensively enables the City to strategically plan transportation investments that cater to local demands while effectively managing travel patterns. These investments towards sustainable infrastructure will aid in the reduction of vehicle miles traveled and improvement of air quality and focus on live, work, stay, and play ideals of a well-connected, human-scale, and accessible area.

To ensure that members of the Central Sugar Land community can reside in a safe, well-connected, walkable, and accessible core area, an uncompromising livable centers plan with a forward-thinking vision, sustainable goals, and a set of implementable projects must be completed. The plan must have assignments for entities to implement these projects, and projects must be completed to sustain and improve the community's quality of life and continue the City's trailblazing relentless pursuit of good so that residents, business, and employees can enjoy a life better than they can even imagine. This "Call to Action" must be answered.





Recommendations Concepts

INTRODUCTION

As the study progressed, it became clear based on community and stakeholder feedback the need for the PMT to assess and provide recommendations for both infrastructure and non-infrastructure needs.

This section details the process that the PMT, the Task Force, and the community undertook to create recommendations that would address the needs, goals, and vision of Central Sugar Land and would serve as "Call to Action". This section will describe and enumerate the number of interactions with the Task Force, focus groups, and the community at large. This section will also describe the needs assessment process, the development of conceptual recommendations for placemaking, for infrastructure, and for new or augmented policy recommendations to accompany the placemaking and infrastructure recommendations. The recommendations will span the planning horizon of more than eleven years with a limit of twenty years. The recommendations will be grouped into three categories: short-term, mid-term and long term. The timelines for these groups are one to five years for the short-term, six to 10 years for the mid-term, and more than 11 years for the long term. It is advisable that both H-GAC and the City of Sugar Land review this plan yearly with a major update to the plan be conducted in 10 years. Cost estimates were also developed for each project recommendation and used to help categorize each recommendation in their appropriate timeline.

Recommendations for the short-term are projects that are low in costs, easy to implement, could be implemented within five years, and were prioritized by the feedback received from the Task Force and the community at large. Policy recommendations proposed were also considered short-term recommendations. Recommendations for the mid-term are projects that could be implemented within six to 10 years, are modest in costs, and will need some interagency coordination, permitting and approvals, as well as project budgeting and programming. Finally, long term recommendations are projects with major costs, harder to implement and would necessitate interagency coordination permitting and approvals, as well as project budgeting and programming.

Furthermore, this section will also describe the potential land use changes that could be realized in the mid-term and long-term. Because counties in Texas do not have land use regulation authority (i.e., zoning), these potential land use changes will need to happen organically and as a result of infrastructure upgrades, with little or no incentives provided by the City of Sugar Land. These potential land use changes were also analyzed through an economic development lens. The potential land use changes were compared using sales tax and property tax revenue using a base year or base condition (i.e., current sales and tax revenue) to changes in the mid term and changes in the long term.

An Implementation Plan will follow this section and will be formulated using the recommendations and their timelines. Responsible agencies will be assigned projects to implement and possible funding sources will be listed with each project.





Development Process

A list of goals were developed based on previous community plan recommendations and feedback from the community. The development of goals began with a Task Force meeting and continued with the project management team presenting the input obtained at the first Community-wide Meeting and soliciting feedback from attendees. The list of goals were then evaluated within the context of City of Sugar Land goals to ensure they were consistent with desired outcomes.

The PMT identified a set of recommendations based on community priority, vision, goals, and opportunities for Central Sugar Land. The conceptual recommendations considered the following:



Community vision: Recommendations that reflect member needs as expressed by the public throughout the public engagement process.



Meeting project goals: Recommendations that meet areawide goals identified in this study as well as previous studies.



Opportunity: Recommendations that have potential to be advanced though upcoming projects, e.g., through proposed development or upcoming microtransit pilot project.



Central Sugar Land area focus: Recommendations that serve the heart of the study area.



Modal network balance: Recommendations that address the area network connectivity for mode of travel.



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Crash history: Recommendations to improve intersection locations with high crash histories over the past five years and that represent safety concerns to the Central Sugar Land community.

The success of a livable centers study is dependent on the engagement of the community; thus stakeholder engagement was an essential step in developing the vision. A vision statement for the future of Central Sugar Land was defined based on the recommended goals and further input from the Task Force members.

To ensure that members of the Central Sugar Land community can reside in a safe, well-connected, walkable, and accessible neighborhood, the transportation-focused and forward-thinking vision of Central Sugar Land will serve as a guide to the development of an uncompromising livable centers plan.



Pedestrians crossing at Town Center Blvd

PLACEMAKING ENHANCEMENTS

Central Sugar Land has multiple nodes that are ripe with potential for placemaking and art activation.

SIGREEN SPACE ACTIVATION

- 1. Activate wide medians/green space within Fluor Central as event spaces or lawns with programming.
- 2. Create a resting space with seating for pedestrians on the green space between First Colony Mall and Edward Mercer Stadium along Lexington Blvd. Activate this space more by adding seasonal art installations. • Coordinate with management for First Colony Mall.
- 3. Engage and unify the two lakefronts along Edgewater Dr (between Waters Way Dr and Vista Lake Dr) by adding benches, lighting, and vegetation/ planters. Also consider adding art installations that reflect the Lakes of Edgewater Community.



Examples of green space activation with lawns for programming

Q PARKING SPACE ACTIVATION

Several shopping areas within Central Sugar Land have excess parking spaces that rarely fill out completely. There are opportunities to temporarily or permanently engage those spaces through placemaking.

- 4. Open access to the waterways along the parking spaces located at Creekway Dr and Creekbend Dr. Add adequate seating, shade, and lighting to make this space comfortable and accessible at various times of the day.
 - Coordinate with developers/property owners to develop agreement on types of use, etc.
- 5. Activate portion of the parking spaces that are adjacent to Town Center Blvd at the AMC Theater at First Colony.
 - Coordinate with property owner and Fort Bend Transit to ensure this does not interrupt park and ride services.
 - Create engaging spaces through weekend food truck park and temporary art installations.
 - ${\scriptstyle \circ}$ Add shade structures and seating to waiting areas.
 - Explore future opportunity to develop a parking structure.
- 6. Activate portion of the parking spaces that are adjacent to SH 6 at The Shops at Williams Trace.
 - $^\circ$ Consider activating the parking spaces located along Mesquite Park Trail to

- allow seamless connection between shopping center and trail system. • Coordinate with the property owner/management to ensure activation does not interrupt existing parking needs or store operations.
- Add benches, pedestrian lighting, and bicycle parking that have a flare/ touch of the culture of the community within activated spaces.
- Seek opportunities to activate the space with food trucks, small farmers markets, and other temporary vendors during low-peak hours for the shopping center east of Mesquite Park Trail.



Figure 20: Opportunities for Green Space Activation and Parking Space Activation

- Host events that embrace Asian/Asian American culture throughout the year such as Lunar New Year festivities, mid-autumn festival festivities, and other celebrations. Daiso, Jusgo, and 99 Ranch are all located in the shopping area to the west of the trail/drainage ditch.
- Expand permitting to allow for temporary events that would be hosted by the existing businesses within the shopping center.



Examples of parking space activation for temporary events

IMPROVING ACCESS AND WAYFINDING

Central Sugar Land is abundant in its mature oak trees and access to green spaces. Providing wayfinding and trail markers can offer visitors and Sugar Land residents from other neighborhoods the opportunity to explore the natural beauty Central Sugar Land has to offer.

WAYFINDING SIGNAGE

Provide signage to address wayfinding within and around Central Sugar Land to help individuals orient themselves within the community and feel a sense of belonging. Wayfinding signage along major corridors provides direction and distance to neighborhood services, parks, and attractions. This will require coordination with TxDOT on any modifications or signage added to state rightof-way, as well as collaboration with local artists to design wayfinding signage where applicable.

1. Add wayfinding signage at trail heads and along trails.



Examples of wayfinding signage

Q TRAIL HEAD MARKERS

The Mesquite Park trail connects to the newly completed First Colony trail, which serves as an extensive, safe trail to Central Sugar Land communities. Adding trail head markers can help to establish markers of orientation and trail progress. This can go hand-in-hand with wayfinding signage.

- 2. Add trail head markers at all entrances to the Mesquite Park Trail.
 - Ensure trail head markers meet City of Sugar Land design standards while also adding distinct neighborhood characteristics or design elements to the signage.
- 3. Add trail head markers to future trail locations where identified and completed.



Examples of trail head markers



Proposed Trails and Sidewalks Existing Trails

Figure 21: Opportunities for Wayfinding Signage and Trail Head Markers

35 CENTRAL SUGAR LAND LIVABLE CENTERS STUDY

PLACEMAKING FOR PEDESTRIAN AND CYCLIST SAFETY

One way to create safe streets for all is to plan and design pedestrian and cyclist infrastructure that is visible to cars and other motor vehicles. Having visible, eye catching features such as art can help to focus attention on the roadway and slow down traffic for oncoming pedestrians and cyclists. Adding other art elements including murals and sculptures can also help to create more lively, colorful neighborhoods that reflect the community's unique character and pride.

Q ARTISTIC PROVISIONS

Activation of space through the placement of art can add unique character to the area, attracting people to linger and enjoy. Commission local or regional artists to collaborate on artistic endeavors on City of Sugar Land right-of-way through the Civic Arts Program.

- 1. Add art or sculpture at the Fluor Daniel Dr bridge entering Fluor Central development.
- 2. Activate the existing pergola structure at First Colony Blvd and Colony Lakes Dr with artistic elements.
- 3. Add murals or art on crosswalks to enhance visibility, slow traffic, and provide focal points throughout neighborhoods at the following locations: • Highlands Park/Highlands Elementary School
 - Williams Trace Blvd
 - Serene Oak Dr
 - Town Center Blvd
 - Between First Colony Mall and Sugar Land Town Center
 - Between First Colony Mall and AMC First Colony/Houston Methodist Sugar Land Hospital
 - Lexington Blvd at Edward Mercer Stadium
 - $^{\rm o}$ Lexington Blvd at Williams Trace Blvd
 - Lexington Blvd at Austin Pkwy
 - First Colony Blvd at Colony Lakes Dr
 - Fluor Daniel Dr connecting to trails around Fluor Central
 - Austin Pkwy at Fort Bend County Library First Colony Branch







Examples of murals and art



Proposed Trails and Sidewalks – – – – Existing Trails Figure 22: Opportunities for Artistic Provisions



Existing mural in Sugar Land

ENHANCE EXISTING GREEN SPACE/ASSETS

Central Sugar Land residents indicated their love for the mature oaks and the greenery throughout the study area. While it is important to create new green spaces, it is also equally valuable to preserve, protect, and add to existing greenery.

Q TREE CANOPY ADDITIONS

Tree canopies can provide the much needed and appreciated greenery in any neighborhoods and also provide shade. Shaded sidewalks and trails can encourage walking and bicycling, reducing temperatures and the harmful effects of the summertime sun. Trees between the roadway and sidewalk can also act as a physical barrier to oncoming automobile traffic, enhancing comfort and safety. The below list indicates locations that could benefit from the addition of more tree canopy. This list is not definitive and is subject to City of Sugar Land requirements, land conditions, and other factors.

- 1. Along Planters St at Colony Bend Park
- 2. Along Steep Bank Creek at Austin Pkwy
- 3. Various points along Mesquite Park Trail
 - First Colony Middle School
 Intersection at Steep Bank Creek



Examples of tree canopy and shade structure

Q AMENITIES FOR ALL

Amenities such as seating, lighting, and seat structures can provide comfortable provisions for users of all ages and abilities.

- 4. Add seating along existing Mesquite Park Trail. Seating can include benches, picnic tables, and other seating options.
- 5. Consider adding seating along future potential trails.
- 6. Add pedestrian-scale lighting at the following locations:
 - Various points along existing Mesquite Park Trail
 - Within Colony Bend Park
 - There may be a need for court lighting for court sports such as volleyball.
 - Various points along potential trail along Steep Bank Creek
 - Various points along potential trail along waterway north of SH 6
 - \circ Various points along the Lake Pointe Running Trail

 Along both sides of Edgewater Dr between Waters Way Dr and Vista Lake Dr, accommodating potential green space activations.





Examples of pedestrian-scale lighting



Proposed Trails and Sidewalks – – – Existing Trails Figure 23: Opportunities for Tree Canopy Additions and Amenities for All

Q MAXIMIZING USE OF WATERFRONTS

Central Sugar Land is surrounded and intertwined with bodies of water that have opportunities to be better accessed by residents and visitors.

MAXIMIZE WATERFRONT CONNECTIONS

Currently, many commercial/retail centers along Central Sugar Land's waterfronts serve as the delivery entrance and back of house for businesses. Reconfiguring and opening up storefronts and restaurant seating to the waterfront can enhance placemaking and people's experiences within Central Sugar Land.

- 1. Consider providing waterfront access and frontage along:
 - First Colony Commons
 - Sugar Land Medical Center

• Collaborate with the Medical Center to design restorative and healthy spaces for patients and visitors that encourage healthy habits.

- Minuti Coffee on SH 6
 - Consider expanding connections to existing trail.
- Whole Foods Market
 - Consider expanding connections to existing trail.
- Keemat Grocers
- Chuck E. Cheese

• Consider child safety and family-friendly options when designing waterfront access.

- 2. Open up the waterfront to establish trails and access to the waterfront at the Shops at Williams Trace.
 - Coordinate with individual property owners/management to ensure business operations are not heavily impacted by construction, placement, and activity on trails and waterfront access.
- 3. Pave the paths along the northern edge of the Rivercrest and Englewood subdivisions.
 - Coordinate with the Fort Bend Drainage District to ensure that trail design and placement meet drainage requirements.
- 4. Open up waterfront access and activities along Steep Bank Creek at Edward Mercer Stadium.
 - \circ Coordinate with Fort Bend County on trail location and landscaping.
 - Coordinate with the Fort Bend Drainage District to ensure that trail design and placement meet drainage requirements.



Proposed Trails and Sidewalks
 Existing Trails
 Figure 24: Opportunities for Maximizing Waterfront Connections



Example of waterfront activation

LAND USE AND ECONOMIC DEVELOPMENT

As noted in the City's current Land Use Plan, Chapter 6 of the Comprehensive Plan, the redevelopment of aging commercial centers is critical to Sugar Land's physical quality and its fiscal health. The forces driving change in commercial real estate markets have only accelerated since that plan's initial adoption in 2018. In the meantime, the changes in working and shopping habits brought on by the one-two punch of ecommerce and COVID have seemingly become permanent. Anticipating the growing obsolescence of much of its commercial real estate inventory even before the onset of COVID—and perhaps believing that certain types of commercial development in the City had become overbuilt—the City denoted as Neighborhood Activity Areas in its Comprehensive Plan several of the areas within the Livable Centers Study area, primarily along SH 6. This designation (captioned below) presages the need to retrofit or reinvent sizable chunks of the City's supply of commercial strip development in ways that make them more compact, walkable, and multi-use.

G Two types of Activity Centers are introduced in the land use categories to guide denser development in preferred areas such that they do not negatively impact single-family neighborhoods. The success of Sugar Land Town Square is a model for future new walkable mixed use Regional and Neighborhood Activity Centers. These centers address the growing demand for living closer to services and entertainment. Regional Activity Centers are proposed to attract visitors from around Sugar Land and the entire region. These are intended to have a civic anchor such as City Hall and a central outdoor gathering space. Neighborhood Activity Centers are proposed to be created through redevelopment of aging retail centers that are adjacent to existing single-family neighborhoods and would provide everyday services such as grocery stores, dentist offices, and dry cleaners, and would promote walkability for daily trips. Redevelopment is critical to maintaining the long-term fiscal health of the City but must always be balanced and considerate of the impact on any adjacent single-family neighborhoods. All new, denser housing options should be located in these activity centers, in order to minimize impacts to single-family neighborhoods."

Source: City of Sugar Land Comprehensive Plan Executive Summary

Despite the recommendations of the Comprehensive Plan, many of the areas it designated as "Neighborhood Activity Center" remain zoned either B-1 (Neighborhood Business) or B-2 (General Business). Neither of these zoning districts allow for a range of non-commercial uses including residential. These zoning districts also promote suburban style development, not denser walkable places. Apart from the open-ended Planned Development (PD) zoning designation, the City does not currently have a zoning district that approximates "Neighborhood Activity Center," as defined previously, as part of its zoning ordinance.

NEEDS ASSESSMENT

Neighborhood Activity Center redevelopment will require a multi-pronged effort involving (1) (re)zoning, (2) developer incentives such as 380 Agreements, and (3) liberal use of public finance tools such as tax increment revitalization zones (TIRZ) financing for public infrastructure. At a basic level, the City should work to remove all perceived barriers in adapting these sites to more neighborhood-centric activities. Current zoning could be seen as one such barrier. Having the right entitlements in place that allow for the range of activities contemplated in the plan serves to reinforce the City's vision and is a simple first step toward facilitating redevelopment. Simply defaulting to a Planned Development "fallback" puts developers through the additional time, expense, and uncertainty of a developer-initiated rezoning which could inhibit redevelopment.

Having zoning that allows for the types of uses that have proven successful in other strip-center conversions around the U.S.—uses like medical offices, clinics, athletic clubs, co-working spaces, schools, multi-tenant vendor arcades, office condos, maker spaces, event centers, and upper-floor apartments—are examples of how these developments have been successfully adapted in other cities.

RECOMMENDATIONS

Rec dist

Recommendation: Create a new Neighborhood Mixed-Use zoning district designation.

This zoning district designation should be based on the Neighborhood Activity Center construct set forth in the Comprehensive Plan. It should establish certain walkability criteria such as: maximum storefront and/or block lengths; a minimum upper-floor residential requirement; a minimum two-story building height requirement; and heavier than normal sidewalk, landscape, and building articulation/massing requirements. The zoning district should also stipulate maximum as well as reduced minimum surface parking requirements than what is currently spelled out in the City's zoning ordinance for "shopping center" developments (a minimum/maximum of 1:500,000/1:250,000 square feet is suggested).



Recommendation: Actively promote commercial center design adaptation strategies.

The Central Sugar Land Livable Centers Study area contains many supersized commercial strip centers, with several exceeding over 1,000 feet of unbroken storefront (Town Center, Colony Square, and First Colony Commons all have close to 2,000 feet of continuous storefront). Although vacancy in most of these centers remains fairly low, the ongoing challenges in retailing portend continued store closures and leasing volatility in the years to come. Some of these centers are also reaching an age where major capital improvements will soon be needed. These factors suggest that owners and investors may soon be considering ways to reposition their properties to meet new market opportunities that involve less traditional merchandise shopping and more food and entertainment-based retail. The latter involves the need to curate an environment that encourages more leisure activities and lingering.

From a physical design standpoint, one possible strategy to adapt these centers (assuming that total redevelopment is not in the immediate offing) is to:

- 1. Make them less monolithic by subdividing extra-long façade surfaces into city-block sized segments of approximately 300-600 feet each, by surgically removing one or more interior bays.
- 2. Use the new mid-block openings to relocate (and break up) some of the expansive front parking lots and provide through-block bike-ped access to adjacent neighborhoods and waterfront areas.
- 3. Convert the drop-off/fire lanes along the current storefronts into full pedestrian-oriented streets.
- 4. Backfill the near-in frontage parking with new, smaller mixed-use buildings to create a full, new two-sided street.
- 5. Eventually, fill in more of the front parking with parking structures, ground-level retail, and public space.

Conceptual retrofits of strip commercial development on SH 6 showing intermediate and full adaptation concepts. The superblocks are subdivided into regular city-block sized lengths with a second retail frontage backed by structured parking. The surface lots are infilled with new commercial buildings, "wrapped" parking structures, and enclosed green spaces.





The Hilldale Shopping Center in Madison, WI, circa 1960s 1 and today 2. A pedestrian pass-through 3 was punched out of the original superstructure to break it into two smaller sections while providing through-access to the neighborhood at rear. The former drop-off lane and front rows of parking were transformed into a proper street with a second retail frontage and structured parking behind 4.







Of course, this is not a one-size-fits-all solution since commercial properties will vary by size, dimensions, and area market strengths. Many strip shopping centers can be adapted through far less radical means that still support multi-purpose trips and walkability. Turning underused parking lots into greenspace, diversifying the tenant mix to include more quasi-public uses and experience-based retail, improving the outdoor realm with more landscaping and shaded circulation areas and seating, improving internal and external pedestrian connections and flow, and incorporating transit are all ways that conventional strip centers can adapt through less invasive means. Superficial cosmetic treatments alone, like "reskinning" buildings with new veneer or accent materials, will not change their underlying functionality or market viability. All retrofits should be approached in a way that recognizes these properties' remaining market value and long-term tenancies such as they may exist.

The Toco Hills Shopping Center in the Atlanta area has maintained its market position through an aggressive program of greening, beautification, and tenant diversification skewed toward experiential retail.



In cases where major demolition may be warranted, replacement development should be designed to incorporate some amount of upper-floor residential and public space from the outset. Parking lots should be amply landscaped and not oversized. Zoning rules should be modified to include surface parking maximums as well as reduced parking minimums, prohibitions on drivethroughs, and reduced lot coverage maximums. The internal circulation system should be designed to tie into the surrounding neighborhood street system whenever possible. Waterfront trail easements should be mandatory, especially where the City is providing any incentives.

Perhaps most importantly, new development should not be allowed to completely turn its back to adjacent neighborhoods or waterfront areas, especially when obvious connections can be made. In the best cases, new development would serve as a transition through-zone between arterial streets and interior residential neighborhoods—a neighborhood "front door" or vestibule rather than a solid barrier wall.



Recommendation: Develop a master redevelopment plan for the Town Center Blvd corridor.

Although the Sugar Land Town Square has been a resounding success, it is a somewhat undersized "downtown" for a suburban city of well over 100,000 people—especially if the City aims to draw more young professionals. However, together with the adjacent First Colony Mall and Methodist Hospital campus, the surrounding area comprises a triad of regional attractions like few others in the Houston Metro. Instead of melding together into a larger downtown district, these back-to-back attractions stand completely apart from one another. They are islands unto themselves.

The main problem is that the compact urban "grid" pattern of development of both Town Square and the hospital is interrupted by the expansive suburban development that separates them. In addition, Town Center Blvd—the transportation spine that connects all three—is lined mostly with small, widely spaced buildings and surface parking lots, so it does not have the personality of an urban street. However, the key character disconnect remains the mall and the other retail centers in the middle between these district anchors.

To consider what the future could hold, recent gyrations in retail markets have resulted in a wave of interesting mall adaptations throughout the U.S. The mall, as a development type, has also proven itself to be surprisingly malleable from a construction standpoint. Examples of malls that have been reconfigured for new uses through surgical demolitions, complete "amputations," and parking lot infilling are many and growing. Of course, First Colony Mall is among them, having previously introduced an open-air, walkable area, mimicking a "main street" design, that is oriented northeast toward Town Square.



Looking to the future, the City should contemplate the almost inevitable time when the First Colony Mall (and the adjacent Town Center Shopping Center) needs to be repositioned in the retail marketplace. The same goes for ancillary development including the AMC First Colony multiplex theater. The City should be ready with a vision plan for this area for when that time comes. Through that vision, the City should express its intent to rechristen Town Center Blvd as the City's signature urban boulevard, lined with the types of buildings befitting that distinction (i.e., taller, mixed-use and more closely spaced).

Incrementally redeveloping this area by infilling surface parking lots with new mixed-use development and structured parking, and breaking up superblocks with new street and pedestrian openings and greenspace, would effectively extend the footprint of the original Town Square and make the entire area more interconnected, walkable, and transit-supportive.

Examples of suburban redevelopment incorporating mixed use.







Recommendation: Establish and promote a Neighborhood Center Redevelopment Program.

Besides having the appropriate zoning in place, the City can help evolve the next generation of neighborhood mixed-use centers through more liberal use of tax redirection tools such as tax increment finance (TIRZ) and 380 agreements to help offset the extraordinary costs associated with improvements like structured parking, underground stormwater detention, pervious pavements, and new streets and sidewalks.

Although the City has effectively used these tools in the past, most of its incentives are oriented to very large, job-heavy projects involving corporate relocations and major capital investments in the tens of millions of dollars. Fewer tools are available for small business development or corridor/ neighborhood-level interventions. As the City continues to mature, however, many of its older, smaller commercial centers will likely begin to experience some of the same issues of increasing vacancies and functional obsolescence as seen elsewhere in the Houston metro area. The dynamic has been accelerated by the combined effects of ecommerce and remote work which have pushed commercial vacancies to their highest levels in decades.

Sugar Land is fortunate to have weathered these trends much better than most places; however, the future is unpredictable. Developing policies and programs now to contend with what could be a rising number of failing commercial centers in coming years is something the City should be thinking about-particularly given Sugar Land's high number of smaller strip retail centers that fall between the cracks of the City's job creation and minimum investment thresholds.

Two divergent approaches are possible. One is to do nothing that would extend the life of what many consider to be *disposable* architecture, thereby hastening the redevelopment process. Once the economic life of the project has effectively run its course, the property presumably would get redeveloped for a higher and better use (e.g., mixed commercial/residential in a walkable format).

Depending on the vibrancy of the local real estate market, this approach risks a potentially prolonged process of property downcycling, tenant turnover, and deferred maintenance, possibly involving increased vacancies and/or the replacement of "credit tenants" with short-term, seasonal leases and/or ultra-discount stores. On the positive side, this approach may help support the springing-up of an organic entrepreneurial scene with local businesses such as independent restaurants potentially moving in to occupy relatively cheap space. Houston has many interesting examples of this.

An alternative approach would be to provide incentives to improve these properties so that they can either maintain their existing tenant base or attempt to compete for the same class of tenants as newer developments. This approach seeks to extend the economic life of these properties and return them to full occupancy at "market rate" leases under the presumption that property owners cannot or will not do this on their own volition due to market risk or lack of capital. Assuming that any incentive program would be structured on a co-investment, reimbursement basis, this approach tends to favor national chain tenants who can afford to pay the full market rents that the developer will expect for their efforts.

Recommendation: Use/promote 380 Agreements to rebate property and sales taxes for new mixed-use redevelopment projects.

Depending on the City's philosophy, an incentive program for these types of properties could couple a limited tax abatement (couched as a tax "freeze") with a redirection of new incremental sales taxes under a 380 agreement to reimburse developers for building improvements up to a predetermined amount (i.e., 50% of the improvement costs). This budget-neutral approach may involve reducing the City's current minimum investment threshold for tax abatements (\$4 million of new assessed value) to something closer to \$1 million and allowing up to a 10-year recapture period of new, marginal sales taxes.

This approach would also require a reduction of the City's current minimum eligibility threshold of \$100,000 of sales tax revenue to access the 380 program. Note that the value of the abatement program for developers would obtain mostly to securing bank financing since they would effectively be getting a limited-time *insurance policy* against tax increases rather than a major tax break in the typical sense. Also, the costs of the program to the City would be minimal since rehab projects do little to boost assessed values anyway. In fact, this strategy may actually help the City preserve the current taxable values of these properties.

The City could require that the property owner maintain a property maintenance reserve fund and/or set aside some discounted "first right of refusal" space for independent merchants or restaurateurs as a condition of receiving the combined incentive. Alternatively, the City could create a traditional building matching grant or low-interest loan program targeted to these types of properties. Because of the job requirements that attach to other state and local programs, funding this type of program would likely require a special general fund budget allocation. Another approach may be to create a district-level sales tax recapture mechanism (akin to a sales tax TIRZ) to help fund these smaller types of projects.

Structured correctly, this type of program would effectively *pre-commit* the availability of tax increment finance and/or 380 agreements for large commercial redevelopment projects within the Central Sugar Land area that meet key project metrics and community goals. Metrics could include things like minimum project size and capital investment thresholds, as well as the inclusion of a minimum amount or percentage of upper-floor residential, structured parking spaces, and publicly accessible greenspace. Projects would still be subject to the normal design review process.

Taken together, these program adjustments would help communicate the City's preferred use of these tools in a very intentional and explicit way. It would also help instill confidence among developers that these tools can be tapped on more of an entitlement (or by-right) basis as compared to it being a highly speculative pursuit.

Recommendation: Establish tenant incentive programs.

Other types of programs to help improve the prospects of older commercial centers focus more on small business development and the "demand" (i.e., tenant) side of the real estate equation. These include low-interest revolving loan funds (RLFs) for working capital, tenant improvements, or property acquisition. Such programs help bridge the intermediate needs of projects that cannot be fully funded through equity, grants, or conventional debt alone. They can also be oriented to incent only the types of businesses that the City may want to see more of (e.g., independent restaurants), thereby helping to curate the City's retail environment.

A city-level RLF, structured as a lower-interest, subordinated, extended amortization "soft second" mortgage would position borrowers to leverage larger conventional loans and help bridge financial feasibility gaps. Depending on potential bank participation in the fund(s), the program could perhaps be structured as a simple loan guarantee or loan loss reserve program, thus eliminating the need for the city to perform (or contract out) its own loan underwriting or loan servicing. In the case of real estate projects, the program could take the form of a "patient capital" lien where repayment (including capitalized interest) is triggered only after an agreed-upon 10- or 15-year refinancing event or at the time of sale. Borrowers could be granted forbearance for any outstanding loan balances that are not fully satisfied by sales proceeds.

Recommendation: Waive permit fees for commercial center redevelopment.

As an added sweetener incentive, the City could choose to expedite building permits and/or waive permit fees to encourage the redevelopment, renovation, or adaptation of smaller, older commercial centers. Although none of the above incentives by themselves is a panacea for aging retail centers, as a package they might help prevent a future slide in this class of property.



INFRASTRUCTURE

The City of Sugar Land seeks to remain at the forefront of positive change and trailblazing ideas as the Central Sugar Land area navigates through its life-cycle and contends with transportation challenges arising from its role as a significant employment hub, shopping destination, regional thoroughfare, and residential enclave. Addressing these issues comprehensively enables the City to strategically plan multimodal investments that cater to local demands and investments towards sustainable infrastructure to aid in the reduction of vehicle miles traveled, improve of air quality, and focus on live, work, and play ideals of a well-connected, human-scale, and accessible area for its members. The PMT in collaboration with community stakeholders have developed infrastructure recommendations to ensure that members of Central Sugar Land can reside in a safe, lively, interconnected, walkable, and accessible area.

NEEDS ASSESSMENT

Understanding Central Sugar Land existing conditions and stakeholder concerns is key to identifying the opportunities available in the community. The results of the needs assessment led to understanding areas of concern for individuals including; where they live, play, work, and run errands; and locations where they feel safe or unsafe within the community. Participants provided comments on key points of concern within the community, to include infrastructure-related items including road infrastructure, safety, and connectivity. A survey inquiring infrastructure-related concerns stemming from this survey included land use issues (such as development and redevelopment); sidewalks and bike lane connections; public transportation; and enhancement of parks, trails, or other areas for recreation.

In addition to the stakeholder feedback obtained, several existing plans and previous studies were analyzed as part of the needs assessment.

RECOMMENDATION CONCEPTS

Recommendations provide a starting point to identify a combination of short-, medium-, and long-term initiatives that can improve the social, physical, and economic health and wellbeing of the community through better built environments. While some of these recommendations can be implemented relatively quickly, others require additional planning and analysis, budgeting, and partnerships with numerous stakeholders.

Neighborhood-wide and critical area concepts including infrastructure recommendations are detailed on the following pages.



Q INSTALL INTERSECTION IMPROVEMENTS

Signal head modification, signal timing, high emphasis crosswalk striping, and turn radius reduction can all help to enhance safety for pedestrians and cyclists. This may also include delineators and barriers that separate pedestrians and cyclists from vehicular traffic.

- 1. Intersections along SH 6 from First Colony Blvd to Settlers Way Blvd
- 2. US 59/IH 69 and Sweetwater Blvd
- 3. Sweetwater Blvd and Lexington Blvd
- 4. Austin Pkwy and Williams Trace Blvd







Examples of intersection improvements

For the two intersections at US 59/IH 69:

- Implement decorative bollards along the edge of the median to enhance aesthetic appeal and provide a protective barrier for pedestrians.
- Incorporate decorative lighting or planters in the underpass area to create a more inviting atmosphere for users.





Figure 25: Opportunities for Intersection Improvements



Observation: According to the analysis using TxDOT Crash Records Information System (CRIS) database, a high percentage of crashes occur at intersections. Potential solutions:

- High rear-end crashes indicate there may be an issue with how the yellow time is set. At signalized intersections, signal timing can be evaluated to verify if yellow and all-red times are set appropriately.
- At unsignalized intersections, a new signal warrant analysis can be performed to see whether the recent traffic growth and crash history warrants a traffic signal to separate out the conflict points by signal phase and to reduce certain types of crashes.
- Where permitted left turn movements are allowed, ensure shrubbery in the median is maintained to keep the line of sight of opposing through vehicles clear.

Q INSTALL HIGH-EMPHASIS CROSSWALK

High-emphasis crosswalks with signage can increase safety for pedestrians and cyclists and awareness towards non-vehicular users for drivers.

- 1. US 59/IH 69 Frtg Rd at Town Center Dr
- 2. US 59/IH 69 Frtg Rd at Lake Point Pkwy



Examples of high-emphasis crosswalks

Q INSTALL MID-BLOCK CROSSING

A mid-block crossing creates a safe way for pedestrians to cross roadways but also enhances connectivity throughout the bike and pedestrian network.

- 3. Austin Pkwy at First Colony Middle School
- 4. Settlers Way Blvd
- 5. Williams Trace near Highlands Elementary
- 6. Williams Trace Blvd near the existing trail
- 7. Lexington Blvd near Edward Mercer stadium







Proposed Trails and Sidewalks - - - Existing Trails

Figure 26: Opportunities for High-Emphasis Crosswalks and Mid-Block Crossings



Existing mid-block crossing at City Hall

ESTABLISH DEDICATED BIKE LANES/SHARED-USE PATH

Dedicated bike lanes with protective barriers (delineators, e.g. zicla zippers) can enhance the safety for bicyclists.

Add or connect a shared-use path along:

- 1. Fort Bend County LID 2 Ditch C and E and North Levee
- 2. CenterPoint easement between Mesquite Dr and Settlers Way Blvd
- 3. Shops at Williams Trace along water front

Add and upgrade dedicated bike lane at:

4. Creek Bend Dr

Apply road diet alternatives to:

5. Lexington Blvd



Examples of dedicated bike lanes and shared-use paths



Proposed Trails and Sidewalks - - Existing Trails Figure 27: Opportunities for Dedicated Bike Lanes/Shared-Use Paths **CENTRAL SUGAR LAND LIVABLE CENTERS STUDY**



Road diets are beneficial because they enhance safety by reducing vehicle speeds, promote walking and cycling through dedicated lanes, and improve overall community aesthetics and accessibility. Converting one existing lane into a six foot dedicated bike lane with a five foot barrier protected buffer.

Existing configuration



Figure 28: Road Diet Alternative

SIDEWALKS

Install 5'-10' sidewalk to connect with proposed trails or existing sidewalks. This will enhance the connectivity within the community.

6. US 59/IH 69 Frtg Rd and connect to Town Center Dr sidewalk 7. US 59/IH 69 Frtg Rd and connect to Lake Point Pkwy sidewalk





Examples of sidewalks

Q INSTALL PEDESTRIAN BRIDGES

Bridges significantly enhance connectivity within a community by improving safety, promoting active transportation, connecting key areas, and enhancing accessibility.

1. Fort Bend County LID 2 Ditch C and E and North Levee



Examples of pedestrian bridges

Q CREATE PEDESTRIAN AND BICYCLE UNDERPASSES

Underpasses provide dedicated pathways that effectively separate pedestrians and bicyclists from vehicular traffic. These structures ensure a safe and uninterrupted flow of pedestrian and bicycle traffic, enhancing overall safety and convenience for all users.

- 2. Fort Bend County LID 2 North Levee at US 59/IH 69
- 3. Fort Bend County LID 2 Ditch E at Austin Pkwy, SH 6





Examples of pedestrian and bicycle underpasses



Proposed Trails and Sidewalks ---- Existing Trails

Figure 29: Opportunities for Pedestrian Bridges and Pedestrian and Bicycle Underpasses



Existing pedestrian bridge in Sugar Land

TRANSIT

The City of Sugar Land is committed to improving its multimodal network by incorporating cutting-edge mobility solutions that address the needs of its residents. Introducing a frequent circulator system designed to serve multiple regional activity centers is a sustainable approach to enhancing mobility and connectivity. This system would ensure efficient and accessible transit for all users in Central Sugar Land.

To effectively launch and manage this transit circulator, a dedicated lead organization is essential. For the pilot phase, Fort Bend County Transit is wellpositioned to explore the potential of assuming this role depending on how the development or redevelopment of the regional centers progress, providing the necessary flexibility in route design, scheduling, and policy development.

A central circulator equipped with transit priority features can meet immediate mobility needs; reduce the impact of barriers; and enhance access to employment, entertainment, and other key activity centers in Sugar Land.

Additionally, the City is launching a microtransit service with service anticipated to begin at the end of 2024. It will be the first of its kind in the Texas Gulf Coast region. This project is a "test run" to see how well a microtransit service will perform in a city like Sugar Land. Microtransit services have been highly successful in other parts of Texas, the U.S., and around the world. The pilot project, if successful, is envisioned to be expanded throughout the entirety of Sugar Land.

Finally, the City has entered into an agreement with Swyft Cities, a provider of advanced urban mobility systems, to study bringing an autonomous elevated cable and rail mobility system developed as part of a Google project to the greater Houston region for fast, convenient mobility. Swyft Cities implements an innovative transportation system, known as Whoosh®, that can quickly and conveniently whisk people with no waiting. Swyft Cities and the City have agreed to conduct an engineering schematic study to examine the potential for a Whoosh® system in Sugar Land, including concepts for potential routes and station locations, and use of public-private partnerships to minimize financial burdens and risks for the City. Whoosh® prototypes have demonstrated low cost, an excellent user experience with great views, and environmental sustainability with zero emissions.



Fort Bend Transit services



Swyft Cities Whoosh®

POLICY

Feedback gathered from Community-wide Meetings, Task Force sessions, and other stakeholder discussions highlighted several common concerns. The needs assessment and input reveal issues that negatively affect the condition and safety of the Central Sugar Land area. Addressing them is essential for creating a safe, vibrant, and livable environment; achieving the objectives of this plan; and advancing the City's forward-thinking vision.

RECOMMENDATIONS



SAFETY

Public safety is at the forefront of community concerns. With the implementation of infrastructure improvements noted in the previous section comes the need to implement measures to minimize crashes at identified intersections. Investing in infrastructure alone is not enough to achieve Central Sugar Land's goals and dramatically shift the way members travel around the area. The majority of crashes observed have been due to unsafe maneuvers, speeding, and aggressive driving. In light of this, policy recommendations include initiatives related to education and travel safety:

- Implement education program crossing roads safely (elementary school) and driving safely (high school).
- Provide more policing during off-peak, shoulder hours.
- Investigate a nighttime corridor signal timing plan that optimizes traffic flow while prioritizing safety. The plan should allow vehicles to travel at 45 mph and strategically synchronize traffic signals to maximize green lights during off-peak hours. To enhance safety, ensure that vehicles exceeding the speed limit are penalized with additional stop signals at key intersections. This approach will encourage compliance with speed limits and promote a safer travel environment for all road users.



COMPLETE STREETS ENGINEERING STANDARDS

Complete Streets is a national initiative aimed at ensuring safe and convenient travel for people of all ages, abilities, and modes of transportation. To enhance safety and comfort for pedestrians,

bicyclists, motorists, and transit riders, the City should continue with the recommendation proposed in the Mobility Master Plan and establish Complete Streets engineering design standards. These standards will guide the planning, design, construction, and maintenance of streets to effectively accommodate all users.



VISION ZERO

Vision Zero is a global initiative aimed at eliminating all traffic fatalities and severe injuries by creating mobility networks that

prioritize safety, health, and equity. This approach is being embraced by numerous jurisdictions and municipalities. Even in areas where it hasn't been fully implemented, its principles are being integrated into existing practices. Vision Zero offers a fresh perspective on safety, rooted in the belief that everyone deserves to navigate their communities safely.

A fundamental tenet of Vision Zero is the recognition that people may make mistakes while traveling. Consequently, the City of Sugar Land should design its mobility network to ensure that these inevitable errors do not lead to severe injuries or fatalities. Designers and policymakers should focus on enhancing roadway environments and policies to mitigate the severity of crashes, striving to achieve zero traffic fatalities.

HOW POLICY RECOMMENDATIONS RELATE TO INFRASTRUCTURE

Although these policy recommendations are not physical in nature, they can greatly shape the quality of life for the community. Programs and strategies play a crucial role alongside infrastructure projects. They create the supportive environment needed to influence behavior, shift cultural norms, and enhance the effectiveness of infrastructure projects, ensuring their success. They work in conjunction with and are closely tied to the infrastructure recommendations detailed in the previous section.

Implementation Approach and Timeline

Keys to Central Sugar Land's future success has been identified through this Livable Centers Study. A clear path has been developed, projects have been identified, timelines have been assigned, and responsible parties and costs have been identified to blaze that path.

RECOMMENDED PROJECTS:

For recommend timelines, the City of Sugar Land should select projects that it wants to pursue as the first of a series. In the first year, a three-pronged approach is recommended. The City should concurrently initiate:

- One to three "Quick Win Projects" (short-term)
- One to two "Pilot Projects" (mid-term)
- Planning for two to four larger scale "Signature Projects" (long-term corresponding to CIPs)

Several relatively simple projects can be fully planned and delivered in FY 2025 and 2026. In addition, more complex projects that require additional planning, engineering, and lead time should be selected and start the initial planning and development stage.

Descriptions and more information for each project type follows in this section. The final selection of specific projects should be made by the City. A summary of these projects is included in the following table.

PLACEMAKING:

Туре	Potential Sites	Estimated Timeframe (Short-, mid-, and/or long-term)	Estimated Budget		
Quick Win Projects					
Wayfinding Signage and Trailhead Markers	Mesquite TrailColony Bend Park	Short-term	\$15,000+ each		
Add Amenities Such as Benches, Picnic Tables, Shade Structure, and Planters in Public Spaces and Parks/Open Space	 Mesquite Trail Fluor Central Colony Bend Park 	Short-term	\$20,000 - \$100,000+ each		
Activate Existing Pergola Structure	• First Colony Blvd. at Colony Lakes Dr.	Short-term	\$5,000 - \$20,000+ each		
Add Art or Sculpture to Activate Space	 Fluor Central (Fluor Daniel Dr. Bridge) Colony Bend Park Edward Mercer Stadium 	Short-term	\$5,000-\$200,000+ each		
Add Tree Canopy to Streets	 Colony Bend Park Austin Parkway Mesquite Park Trail 	Short-term	\$1,800 per tree Approx. 30'-0" spacing		
Pilot Projects					
Parking Lot Activation - Temporary Market, Food Truck Park	Shops at Williams TraceFirst Colony Mall	Mid-term	\$50,000 - \$200,000+ each		
Add Pedestrian-Scale Lighting In Public Spaces/Streets	Colony Bend ParkMesquite Park Trail	Mid-term	\$4,500 per fixture Approx. 60'-0" spacing		
Trail Development	 Steep Bank Creek Waterway north of SH 6 Northern edge of Rivercrest and Englewood subdivisions 	Mid-term	\$100,000 - \$500,000+ each		
Artistic Intersections at Schools and Public Institutions	 Highlands Park/ Elementary School Fluor Daniel Drive Lexington Blvd at Edward Mercer Stadium Austin Pkwy at Fort Bend County Library - First Colony Branch 	Mid-term	\$25,000 - \$100,000+ each		

PLACEMAKING (CONTINUED):

Туре	Potential Sites	Estimated Timeframe (Short-, mid-, and/or long-term)	Estimated Budget
Signature Projects			
Provide Waterfront Access and Frontage at Retail Centers	 First Colony Commons Sugar Land Medical Center Minuti Coffee on SH 6 Whole Foods Market Keemat Grocers Chuck E. Cheese Shops at Williams Trace 	Long-term	\$50,000 - \$500,000+ each
Artistic Crosswalk (Visibility Enhancement + Placemaking)	 Lexington Boulevard Town Center Blvd First Colony Blvd Fluor Central 	Long-term	\$25,000 - \$100,000+ each
Parking Structure With Transit Connection + Public Space	First Colony MallShops at Williams Trace	Long-term	

INFRASTRUCTURE:

Туре	Potential Sites	Estimated Timeframe (Short-, mid-, and/or long-term)	Estimated Budget			
Quick Win Projects						
Signal Heads - Backplates With Reflective Borders (Intersection Improvements)	US 59/IH69 at Sweetwater Blvd Lexington Blvd at Sweetwater Blvd Austin Pkwy at Williams Trace Blvd		\$13,500			
Signage (Intersection Improvements)	 Intersections along SH 6 from First Colony Blvd to Settlers Way Blvd US 59/IH 69 and Sweetwater Blvd Austin Pkwy and Williams Trace Blvd 		\$36,000			
Bollards/Decorative Planters (Intersection Improvements)	 US 59/IH 69 at SH 6 US 59/IH 69 at Sweetwater Blvd 	Short-term	\$60,000			
Decorative Lighting (Intersection Improvements)	 US 59/IH 69 at SH 6 US 59/IH 69 at Sweetwater Blvd 	Short-term	\$64,000			
Refresh Striping (Intersection Improvements)	 Intersections along SH 6 from First Colony Blvd to Settlers Way Blvd US 59/IH 69 and Sweetwater Blvd Austin Pkwy and Williams Trace Blvd 	Intersections along SH 6 from First Colony Blvd to Settlers Way Blvd US 59/IH 69 and Sweetwater Blvd Austin Pkwy and Williams Trace Blvd				
High-Emphasis Crosswalk	 US 59/IH 69 at Town Center Dr US 59/IH 69 at Lake Point Pkwy 	Short-term	\$40,000			
Upgrade Dedicated Bike Lane	Creekbend Dr	Short-term	\$52,500			
Pilot Projects						
Turn Radius Reduction (Intersection Improvements)	 Intersections along SH 6 from First Colony Blvd to Settlers Way Blvd US 59/IH 69 and Sweetwater Blvd Austin Pkwy and Williams Trace Blvd 	Mid-term	\$320,000			
Mid-Block Crossings	 Austin Pkwy at First Colony Middle school Settler Way Blvd Williams Trace near Highlands Elementary 	Mid-term	\$250,000			
Sidewalks	US 59/IH 69 Frontage Rd (both sides)	Mid-term	\$243,700			
Curb Ramps for New Sidewalks and Shared-use Path	 US 59/IH 69 Frontage Rd (both sides) FBCLID2 Ditch C, E & North Levee CenterPoint easement between Mesquite Dr and Settlers Way Blvd Shops at Williams Trace along the waterfront 	Mid-term	\$55,500			
Signature Projects						
Pedestrian Bridge	FBCLID2 Ditch E	Long -term	\$350,000			
Pedestrian Bridge	FBCLID2 North Levee	Long-term	\$997,500			
Pedestrian Underpass	FBCLID2 North Levee at US 59/IH 69	Long-term	\$1,400,000			
Shared-use Path	 FBCLID2 Ditch C, E & North Levee CenterPoint easement between Mesquite Dr and Settlers Way Blvd Shops at Williams Trace along the waterfront 	Long-term	\$1,972,000			

*Refer to Appendix B for Project Cost Estimates that include 20% contingency.

55 CENTRAL SUGAR LAND LIVABLE CENTERS STUDY

IMPLEMENTATION AND PERFORMANCE MANAGEMENT

Through an inclusive and robust public engagement process comprised of a wide cross section of community perspectives and interests and a comprehensive analysis of existing conditions, the project team developed with the collaboration of the community and stakeholders a prioritized list of infrastructure and policy recommendations. This section details the approach to translating the recommendations into actionable strategies for project and policy implementation.

PRIORITIZATION

The infrastructure and policy-based projects were evaluated to develop a prioritized list of short-, medium-, and long-term projects. The prioritization timeframe indicates when a project or policy change will be initiated. The timelines will be revisited based on the City's funding and ability to deliver the projects.

Short-term (0-5 years) - Projects that have relative ease of implementation and relatively small in costs. This category would also include projects that serve as catalysts to enable significant benefits to be captured in the future. Some listed projects may be underway and/or poised to commence with secured funding.

Mid-term (6-10 years) and Long-term (10+ years) - Projects that have relative ease of implementation but typically face some challenge or barrier that makes them longer in nature. This can include funding availability, right-ofway or environmental issues or the complexity of agencies and partnership involved to successfully execute. Some mid-term, or long-term projects may be able to be implemented opportunistically.

To successfully address the initiatives, a set of recommended projects has been identified for implementation. These are specific, tangible projects in mobility, infrastructure, placemaking, land use, vitality enhancements, and policy including multi-use trails, pedestrian bridge crossings, roadway reconstruction, quick-build and safety improvements, Safe Route to Schools (SRTS), Vision Zero, Complete Streets projects and advocacy programs to enhance Central Sugar Land's mobility, infrastructure, vitality, and safety.

The projects identified and descriptions are listed below, and are categorized by type of improvement content area: facility type (infrastructure) or advocacy (policy).



Figure 30: Ditch E Shared-use Path Build-out Rendering



Figure 31: Austin Pwky at Williams Trace Blvd Recommended Improvements

FUNDING STRATEGY

A critical element in implementing these projects is securing diverse and sustainable funding. Infrastructure projects are typically financed through a combination of local, state, and federal sources, with funding structures often differing by transportation mode. For the City of Sugar Land, future success hinges on transparent and consistent collaboration among stakeholders to identify, secure, and execute necessary improvements that deliver community-wide benefits and will likely need to explore a variety of funding strategies to support effective project and policy implementation.

To achieve these goals, it is essential for the City to explore a wide array of funding strategies. This may include tapping into federal grants such as the Transportation Alternatives Program or Community Development Block Grants, which support projects aimed at enhancing community infrastructure. Additionally, leveraging state funding opportunities from the Texas Department of Transportation can provide critical resources for road improvements and public transit initiatives.

POTENTIAL FUNDING SOURCES:

- CMAQ Commuter and Transit Pilot Program: CMAQ is a funding source focused on finding first mile/last mile implementation solutions. Sugar Lands LCS encourages connectivity through different modes of transportation, specifically the use of transit (Gondola, new transit routes, Park and ride locations, etc.)
- Hazard Mitigation Grant Program (HMGP), Hurricane Beryl Grant: provided through the Texas Division of Emergency Management (TDEM), the HMGP assist communities with projects that will reduce the risk of loss of life and property from future natural disasters during the reconstruction process following a disaster.
- Highway Safety Improvement Program (HSIP): HSIP is a state/national program that aims to achieve a significant reduction in traffic fatalities and serious accidents through the implementation of infrastructure-related highway safety improvement on all public roads, including non-state-owned roads.
- Safe Streets and Roads for All (SS4A): SS4A is a national program that provides grants to local, regional, and Tribal communities for implementation, planning, and demonstration activities as part of a systematic approach to prevent deaths and serious injuries on the nation's roadways.

- Surface Transportation Block Grant Program (STBG): the STBG program provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
- Recreational Trails Program (RTP): RTP annually funds recreational trails, including bicycle and pedestrian paths. The reimbursable grants can be up to 80% of project cost with a maximum of \$200,000 for nonmotorized trail grants and a maximum award of \$400,000 for motorized (off-highway vehicle) trail grants. Funds can be spent on both motorized and non-motorized recreational trail projects such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors.
- Rivers, Trails, and Conservations Assistance Program (RTCA): RTCA supports locally-led conservation and outdoor recreation projects across the United States. NPS-RTCA assists communities and public land managers in developing or restoring parks, conservation areas, rivers, and wildlife habitats, as well as creating outdoor recreation opportunities and programs that engage future generations in the outdoors. Non-Monetary.

The projects have been grouped by type (infrastructure or policy) and then by timeline. For each project, the following information has been provided:

- Project type: title of proposed project
- Type of improvement: Facility type (infrastructure) or advocacy (policy)
- Timeline: Short-term, mid-term, or long-term
- Project cost: Estimated study, design, and construction cost
- Responsible party: Agency responsible for implementing the project or policy
- Funding: Possible source of funds for the project or policy update

	Infrastructure Recommendations								
	Project Name	Type of Improvement	Timeline	Project Costs	Responsible Party	Funding			
1	Signal Heads - Backplates with Reflective Borders	Intersection	Short-term 0-5 years	\$13,500	COSL, TxDOT	SS4A, HSIP			
2	Signage	Intersection	Short-term 0-5 years	\$36,000	COSL, TxDOT	SS4A, HSIP			
3	Bollards/ Decorative Planters	Intersection	Short-term 0-5 years	\$60,000	COSL, TxDOT	SS4A, HSIP			
4	Decorative Lighting	Intersection	Short-term 0-5 years	\$64,000	COSL, TxDOT	SS4A, HSIP			
5	Refresh Striping	Intersection	Short-term 0-5 years	\$64,000	COSL, TxDOT	SS4A, HSIP			
6	High-emphasis crosswalk	Bike/Ped	Short-term 0-5 years	\$64,000	COSL, TxDOT	SS4A, HSIP, COSL General Fund			
7	Upgrade Dedicated Bike Lane at Creekbend Dr	Bike/Ped	Short-term 0-5 years	\$52,500	COSL	COSL General Fund			
8	Turn Radius Reduction	Intersection	Mid-term 6-10 years	\$320,000	COSL, TxDOT	SS4A, HSIP			
9	Mid-block Crossings	Bike/Ped	Mid-term 6-10 years	\$250,000	COSL	COSL General Fund			
10	Sidewalks	Roadway, Streetscape/Corridor	Mid-term 6-10 years	\$243,700	COSL, FBCLID2	CMAQ, MPO Funding Sources			
11	Curb Ramps for New Sidewalks and Shared- use Paths	Bike/Ped	Long-term 10+ years	\$55,500	COSL, FBCLID2, TxDOT	STBG, RTP, MPO Funding Sources			
12	Pedestrian Bridge	Bike/Ped	Long-term 10+ years	\$350,000	COSL, FBCLID2	STBG			
13	Pedestrian Bridge	Bike/Ped	Long-term 10+ years	\$997,500	COSL, FBCLID2	STBG			
14	Pedestrian Underpass	Bike/Ped	Long-term 10+ years	\$1,400,000	COSL, FBCLID2, TxDOT	STBG			
15	Shared-use Path	Bike/Ped	Long-term 10+ years	\$1,972,000	COSL, FBCLID2	STBG, RTP, MPO Funding Sources			
	SS4A = SAFE STREETS AND ROADS RTP = RECREATIONAL TRAILS PRO COSL = CITY OF SUGAR LAND FBCLID2 = FORT BEND COUNTY LID 2 FBT = FORT BEND TRANSIT	FOR ALL OGRAM	MPO = METF TxDOT = TEXA HMGP = HAZA CMAQ = CMAQ STBG = SURF	ROPOLITAN PLANNING S DEPARTMENT OF TR IRD MITIGATION GRAN Q COMMUTER AND TRA ACE TRANSPORTATION	ORGANIZATION ANSPORTATION T PROGRAM ANSIT PILOT PROGRAM I BLOCK GRANT PROG	SS4A = SAFE STREETS AND ROADS FOR ALL MPO = METROPOLITAN PLANNING ORGANIZATION RTP = RECREATIONAL TRAILS PROGRAM TxDOT = TEXAS DEPARTMENT OF TRANSPORTATION COSL = CITY OF SUGAR LAND HMGP = HAZARD MITIGATION GRANT PROGRAM FBCLID2 = FORT BEND COUNTY LID 2 CMAQ = CMAQ COMMUTER AND TRANSIT PILOT PROGRAM FBT = FORT BEND TRANSIT END TRANSIT PLOCK CRANT DROCRAM			

HSIP = HIGHWAY SAFETY IMPROVEMENT PROGRAM

*Refer to Appendix B for Project Cost Estimates that include 20% contingency.

	Policy Recommendations				
	Project Name	Type of Improvement	Timeline	Responsible Party	Funding
1	Safety	Advocacy	Short-term 0-5 years	COSL	COSL General Fund
2	Complete Streets Engineering Standards	Advocacy	Mid-term 6-10 years	COSL	COSL General Fund
3	Vision Zero	Advocacy	Mid-term 6-10 years	COSL	COSL General Fund

SS4A = SAFE STREETS AND ROADS FOR ALL

RTP = RECREATIONAL TRAILS PROGRAM

COSL = CITY OF SUGAR LAND

FBCLID2 = FORT BEND COUNTY LID 2

FBT = FORT BEND TRANSIT

HSIP = HIGHWAY SAFETY IMPROVEMENT PROGRAM

MPO = METROPOLITAN PLANNING ORGANIZATION

TxDOT = TEXAS DEPARTMENT OF TRANSPORTATION

HMGP = HAZARD MITIGATION GRANT PROGRAM

CMAQ = CMAQ COMMUTER AND TRANSIT PILOT PROGRAM

STBG = SURFACE TRANSPORTATION BLOCK GRANT PROGRAM

Reduction in Vehicle Miles Traveled and Emissions

AIR QUALITY BENEFITS

The effectiveness of Livable Centers projects is based on the premise that locating housing near jobs and services in a pedestrian and bike-friendly, the transit-oriented environment will provide more opportunities for people to commute and make other trips via walking, transit, or biking, thereby potentially reducing vehicle miles traveled (VMT) and thus improving air quality. Livable Centers Air Quality Methodology, developed by Houston-Galveston Area Council (H-GAC) is used to estimate air quality benefits (between 2024 and 2045) derived from implementing Central Sugar Land Livable Centers Study recommendations. The methodology, assumptions, and results are discussed in this section.

METHODOLOGY

Primary inputs included Traffic Analysis Zone (TAZ) level socio-economic data such as households and population and related Auto Origin-Destination (O-D) trip rates. The Livable Centers Methodology is used in conjunction with two templates provided by H-GAC, and ridership data from Fort Bend Transit for Monday through Friday as listed below.

- 01_2021_EmissionVMTReductions_Template_LC Center Study Trip Flows.xlsx [refer to as "Flow template" hereinafter] (see Appendix C1)
- 02_2021_EmissionAirQualityEstimate_Template_LC Center Study.xlsx [refer to as "VMT and Emission Reduction template" hereinafter] (see Appendix C1)
- Average Monthly Ridership for AMC Park and Ride (see Appendix C1)

STEP 1: GENERATE TRIP FLOWS

The first step involves calculating the total Auto O-D trips within all Traffic Analysis Zones (TAZs) encompassing a Livable Center. The template contains the O-D trip rate from H-GAC's Travel Demand Forecast Model. TAZ zones IDs for Central Sugar Land Livable Centers study area and one mile buffer zone was obtained from H-GAC website. Figure 32 shows the TAZs within Internal zones and one mile buffer zones. Internal trips and trips to/from additional one mile buffer zones were transferred from 'Flow template' to 'VMT and Emission Reduction template.



Figure 32: Internal Zones and One Mile Buffer Zones

STEP 2: MODE SHIFT

Step 2a: Mode Shift

The mode shift to pedestrian activities is based on the proportion of new sidewalk coverage relative to the maximum possible sidewalk coverage with the Livable Center. The maximum share of mode shift is 27%. A total of 3,174 linear feet of sidewalk is proposed within the Central Sugar Land Livable Centers. There is 71,5651.2 feet (135.54 miles) of sidewalk in the existing conditions, so 0.1% pedestrian shift was calculated by the template.

Step 2b: Bike Mode Shift

Based on the literature, mode shifts rates of 1.72% and 1% were assumed within the template for internal and external Auto O-D trips, respectively.

Step 2c: Transit Mode Shift

Based on the template, a maximum of 12.9% of bike riders can shift to transit system if the bus-stop is significantly upgraded. To receive the transit ridership, Central Sugar Land Livable Centers plan meets both of the requirements listed below:

- stop infrastructure upgrade
- accessibility to stop upgrade

The template was filled with the average ridership information for AMC Park and Ride along three routes: Texas Medical Center (TMC), Downtown, and Greenway/Galleria Transfer. Bus services in the area are provided by Fort Bend Transit on weekdays only. There is currently no weekend service. Average ridership for the AMC Park and Ride was 41 rides per day. The template was slightly modified to account for no-bus services on weekends.

Please note that the H-GAC Air Quality estimation methodology depends on the existing ridership information for existing bus stops. However, the methodology seems to not consider new transit stops. As several new transit stops have been proposed in the study area, we are expecting the transit ridership to go more than what's currently calculated.

STEP 3: VMT REDUCTION

Step 3a: Infrastructure VMT Reduction

In the absence of available data, the default values from the template have been used.

Step 3b: Land use VMT Reduction

In this step, trip reductions as a result of Built-environment or Land-use mix are calculated. The template assumes that overall VMT reduction due to Built-environment mode-shift is typically between 5% and 12%. These bonus percentages were assigned to population density breaks from H-GAC's Activity-Connectivity Explorer (ACE) tool. The information obtained from HGAC tool (https://datalab.h-gac.com/ace/) and used in the calculations are as follows:

- Central Sugar Land Livable Centers study area: 3.7 square miles
- H-GAC tool zones study area: 8.32 square miles

Year	2018	2045
Population	27,102	24,474
Population Density	7,325	6,615
Job	35,956	37,919
Job Density	9,718	10,248

STEP 4: RESULTS SUMMARY

In the final step, the emissions reductions from the VMT reduction are calculated using emissions factors, available within the template. The total annual emissions (ton/year) are calculated separately for each pollutant and includes emission outputs from "Engine Starts" and "Running." The summary of the results are as follows:

New Trips and Reduction of Trips and VMT	New Pedes trian Daily Trips	New Bike Daily Trips	New Daily Transit Trips	General Auto Trip Reduction Due to Densification Daily Trip	Total Daily VMT Reduction	Total Annual VMT Reduction
Planning Horizon Totals	581	17,176	126	0	42,190	15,399,506
Planning Horizon Averages	23	687	5	0	1,688	615,980

Emissions Reduction	CO (ton/year)	<u>NOX</u> (ton/year)	<u>NOX</u> (ton/year)	<u>CO2</u> (ton/year)	PM <u>10_</u> <u>(</u> ton/year)
Planning Horizon Totals	36.22	1.59	1.93	4,025	0.07
Planning Horizon Averages	1.45	0.06	0.08	161	0.00

Endorsements

As part of the Central Sugar Land study process, a comprehensive public engagement process was implemented, ensuring that the Task Force, the community at-large, and both H-GAC and the City of Sugar Land remained informed and actively involved throughout every stage. This process has energized the community, raising aspirations for a safe and connected area of Central Sugar Land residents and visitors. Community input played a vital role in various phases, including data collection, identifying issues and opportunities, developing a shared vision and goals, formulating recommendation concepts, and crafting the final study documentation. As the study neared completion, we gathered endorsements and refinements for the recommendations, which will serve as crucial momentum for future efforts. These insights will be discussed here.

ENDORSEMENTS

The study team met separately with TxDOT, Fort Bend Transit, and Fort Bend County Levee Improvement District No. 2 (FBCLID2). These are some of the responsible parties that would be implementing the recommendations in conjunction with the City of Sugar Land. Below are the meeting dates and endorsements:

- TxDOT Engaged in several email conversations regarding the intersection improvements along SH 6 from First Colony Blvd to Settlers Way Blvd and US 59/IH 69 at Sweetwater Blvd and sidewalk connections along US 59/IH 69 frontage road.
 - » Agreed on the intersection recommendations and the addition of decorative enhancements on both intersections at US 59/IH 69 within the study area.
- Fort Bend Transit Met virtually on 08/26/24 at 2:00 pm.
 - » Had no objection to explore a pilot circulator that connects Town Center and future redevelopmet of Lake Pointe depending on how the development or redevelopment on these centers progress.
 - » Open to any discussions needed that would benefit not only the study area but as a county as well in providing alternatives to the Fort Bend county residents.

• FBCLID2 - Engaged in email conversations regarding the addition of shareduse path, pedestrian bridges, amenities, and wayfinding along Ditch C, Ditch E, and North Levee. Feedback is in progress. Met on 10/29/2024.

Once the study team developed the recommendation concepts, the team met with the Task Force and the community at-large. During these meetings, recommendation enhancements or refinements were part of the feedback, especially to try to progress projects in the timeline or to inform the study team of the recommendations that were already being implemented by the responsible party. There were no objections to the recommendations; instead, the feedback was overwhelmingly positive, embodying a collective enthusiasm and readiness to move forward.



Conclusion

As demonstrated by the endorsements and refinements included in this report, members in the Central Sugar Land area are eager to enhance and connect the area to neighborhoods and regional activity centers.

As described in the Existing Conditions Report, the City of Sugar Land seeks to remain at the forefront of positive change and trailblazing ideas as the Central Sugar Land area navigates through its life-cycle and contends with transportation challenges arising from its role as a significant employment hub, shopping destination, regional thoroughfare, and residential enclave.

Addressing these issues comprehensively enables the City to strategically plan multimodal investments that cater to local demands and investments towards sustainable infrastructure to aid in the reduction of vehicle miles traveled (VMT), improve of air quality, and focus on live, work, and play ideals of a wellconnected, human-scale, and accessible area for its members.

This Central Sugar Land Livable Centers Study is a plan to help find and explore opportunities that can serve as a starting point for the study area and other parts of the city.

This study not only considered infrastructure improvements but also investigated policy recommendations, placemaking, economic development, and potential land use as properties change hands in the future. The study also examined reduction in VMT and emissions. These are all necessary elements to make Central Sugar Land a safe, lively, interconnected, walkable, and accessible area.

By implementing this plan, the call for action will have been met. In the next 20 years, there will be a change to the Central Sugar Land area, and it will be produce an enhanced quality of life.





Appendix A – Public Engagement



A1 CENTRAL SUGAR LAND LIVABLE CENTERS STUDY



Appendix B – Project Cost Estimates



B1 CENTRAL SUGAR LAND LIVABLE CENTERS STUDY



Appendix C – Reduction in Vehicle Miles Traveled, Emission Calculations, and Transit Ridership Data

