



2020

Houston Complete Streets and Transportation Report



**PLANNING &
DEVELOPMENT
DEPARTMENT**



The 2020 Houston Complete Streets and Transportation Plan Annual Report documents the past year's accomplishments by the City of Houston and our partners in implementing Executive Order 1-15: Complete Streets.

The Planning and Development Department (PD) developed this report in close collaboration with Houston Public Works (HPW), Houston Parks and Recreation Department (HPARD), Houston Parks Board (HPB), Houston-Galveston Area Council (H-GAC), Metropolitan Transit Authority of Harris County (METRO), Harris County Precinct 1, Harris County Precinct 2, and other departments and agencies that play a role in furthering the goal of Houston Complete Streets. The accomplishments in this report reflect the combined efforts of all these parties and the support of the community.

TABLE OF CONTENTS

03

**FROM THE
DIRECTOR**



05

OUR VISION



06

**ACCOMPLISHMENT
HIGHLIGHTS**



10

**APPENDIX A:
YEAR IN FULL**



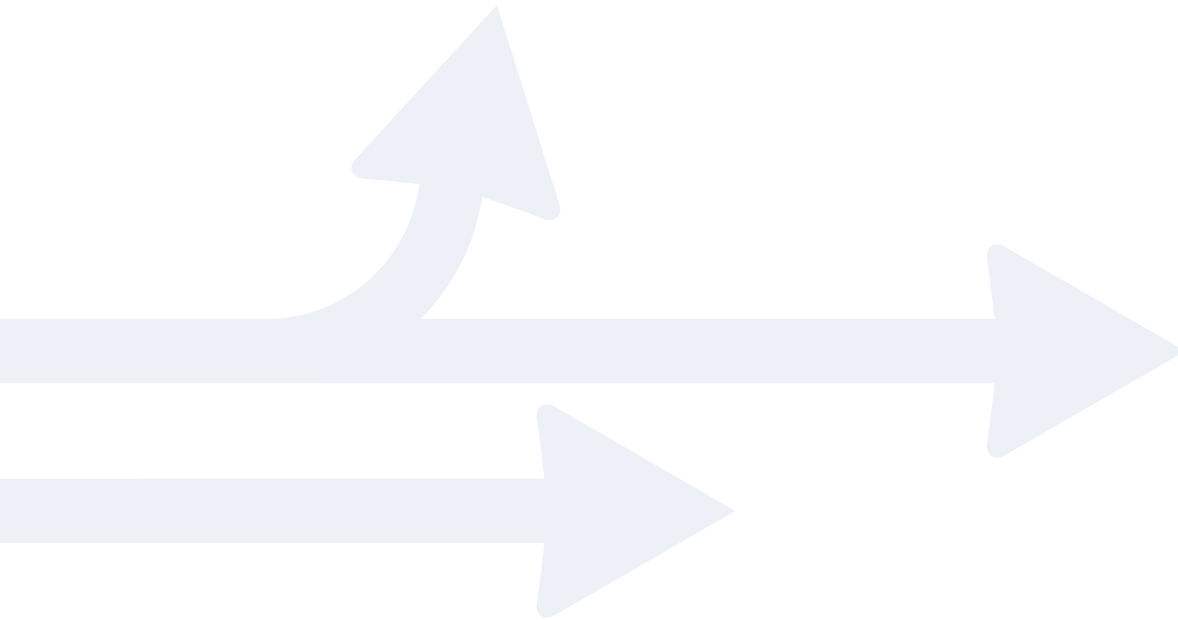
26

**APPENDIX B:
COMPLETE
COMMUNITIES**



30

**APPENDIX C:
PERFORMANCE
INDICATORS**





Source: Mark Taylor Cunningham / Shutterstock.com/ Main Street

FROM THE DIRECTOR

The Planning and Development Department has made significant progress over the past year to strengthen the City's commitment to improve mobility for all road users, make programs and processes more transparent, and leverage resources for maximum impact. Most notable are these:



Margaret Wallace Brown, AICP, CNU-A
Department Director

Vision Zero Action Plan was released in November with implementation of the plan starting the very next day. Vision Zero Houston is Houston's commitment to end traffic deaths and serious injuries by 2030. Vision Zero prioritizes safety and multimodal accessibility for people of all ages and all abilities. Houston's Vision Zero Action Plan is based on data analytics, community input, and international best practices.

North Houston Highway Improvement Project (NHHIP): The Planning and Development Department (PD) continued to build community consensus around Texas Department of Transportation's (TxDOT) planned reconstruction of I-45. The year began by engaging the public on a series of alternative design proposals developed in response to community concerns; feedback was gathered over three public meetings and an online survey. With this feedback and the guidance of the Facilitation Group, the Department drafted Mayor Sylvester Turner's letter of requests for the project to the Texas Transportation Commission, submitted in May. Since then, the Department has collaborated with TxDOT, METRO, Harris County, and the H-GAC Transportation Policy Council on a framework for how these requests will be incorporated in the project's design. Concurrently, PD advocated for Houstonians in the project's federal environmental review process. After TxDOT

released their Final Environmental Impact Statement (FEIS), PD held three virtual public meetings and developed robust user guides to help the public better understand the document and the process. PD also developed Mayor Turner's FEIS response on behalf of the City of Houston.

Bike Network Expansion with the support of our partners, Harris County Precinct 1, HPW, HPB, HPARD, METRO and TxDOT, the Build 50 Challenge projects are substantially complete, with the remaining projects in design or construction. This fast-paced implementation of high-comfort bicycle facilities has made it safer to bike throughout the city and help make Houston a more multimodal city.

No Parking in the Bike Lane Ordinance was approved by City Council to improve cyclist safety. This ordinance prohibits on-street parking of motor vehicles where striping and physical barriers designate the street space for the exclusive use of bicycles. This ordinance will ensure that cyclists don't have to swerve into the path of moving vehicles to avoid vehicles parked in designated bike lanes.



David Fields, AICP
Chief Transportation Planner

Houston BCycle now operates 123 stations with 800 bicycles. In 2020, Houston BCycle added 13 stations and 535 bikes to its fleet, including 100 electric bikes. Electric bikes are not only fun and engaging, but are equipped with pedal-assist, which means they use a small electric motor to make cycling easier, and reduces strain on the body.

Walkable Places and Transit-Oriented Development

Ordinance was passed by City Council to encourage more walkable development. The ordinance enhances the pedestrian experience throughout Houston's neighborhoods by creating customizable pedestrian-friendly rules to guide new development and redevelopment on private properties.

Chief Transportation Planner: Planning and Development hired David Fields as the first Chief Transportation Planner for the City of Houston. This staff position plays a crucial role in Houston's paradigm shift from single-occupancy vehicles to multimodal options such as walking, biking, and riding transit, with the highest priority of safe travel for all. The Chief Transportation Planner provides strategic leadership for the City's systems-level transportation planning efforts and connects equitable transportation with land use to improve quality of life and maximize economic development for the City and the region.

COVID-19 Responses

- **More Space Program** helps restaurants accommodate more customers while maintaining social distancing by appropriating unused parking space. The program allows any restaurant to convert 50% of their off-street parking spaces to serving space to keep customers socially distanced while the pandemic restrictions remain in place.
- **More Space: Main Street** recognizes the unique features of businesses on Main Street in Downtown Houston by reallocating vehicle lane space as table space for restaurants and bars. Due to the multiple modes used on Main Street (walking, biking, public transit, and driving), design and implementation required extensive coordination with multiple partners.
- **Slow Streets** provided more space for walking and biking by limiting selected streets to local vehicle traffic. The pilot streets were selected for their history of high-speed cut-through traffic. The selected streets could then be redirected out of the neighborhood and into neighborhood parks.

OUR VISION

To create a safe, equitable transportation system that supports all communities and modes, by planning for transportation with all users in mind.



ACCOMPLISHMENT HIGHLIGHTS

Highlights from the reporting period are listed below. More detailed descriptions are included in the Appendices.

Design, Construction, and Implementation



North Houston Highway Improvement Project:

Continued the collaborative effort led by PD to engage the community by working closely with the Facilitation Group, HPW, Harris County, and other partners to include the community in project planning. Drafted Mayor Turner's letter to the Texas Transportation Commission, identifying the City's vision and priorities for the project. Collaborated with TxDOT, METRO, Harris County, and H-GAC on framework for project design, and advocated for the City in the project's federal environmental review process, including drafting the City's response to the FEIS. For more information:

<http://www.houstontx.gov/planning/nhhip>.

Houston Bike Plan: Added 13 miles of high-comfort bicycle lanes, with nearly 50 additional miles in design or in construction. This is a continuing partnership between PD, HPW, Harris County Precinct 1, BikeHouston, and other partners to complete the bicycle lanes started by the Build 50 Challenge.

Bike Share Expansion: Expanded Houston BCycle facilities and fleet to 125 stations with over 1,000 bicycles, including the addition of 100 electric bikes. In addition to the City's contribution of over \$50,000, Harris County Precinct 1 funded the 100 electric bikes. See map of current Houston BCycle system on page 9.

Bike to Wherever Day: Partnered with BikeHouston and Houston BCycle to implement the first virtual Bike to Wherever Day. This continuing partnership is led by PD, supported by HPW, Harris County, BikeHouston, Houston BCycle, and the Mayor's Office of Special Events (MOSE).

Pothole Tracker Website: This street rehabilitation data management initiative, led by HPW, identifies potholes that are 5' by 5' with severely deteriorated pavement.

Shepherd/Durham Major Investment Project: Redesign of Shepherd Drive and Durham Drive to accommodate all modes and provide a safer street for all. This is a collaborative partnership led by the Memorial Heights Redevelopment Authority, with support from PD, HPW, and H-GAC.

Traffic Signal Retiming: Retimed traffic signals at 800 intersections to help minimize traffic delays while maintaining safety for all road users. HPW leads the implementation and is supported by PD's systems-level planning efforts.

High Speed Rail (HSR): Continued to support Texas Central Rail's efforts to advance high speed rail development between Houston and Dallas.

Infrastructure Design Manual (IDM): Revised IDM Chapter 10 definitions to better align with the City's Major Thoroughfare and Freeway Plan (MTFP) and reinforced the roundabout section to encourage wider usage of roundabouts as a method of traffic calming. Chapter 17 was also updated to address the Walkable Places and Transit-Oriented Development Ordinance, decrease repetition in the IDM, and make it consistent with Chapter 10. HPW leads this effort as part of their annual revision process and is supported by PD.

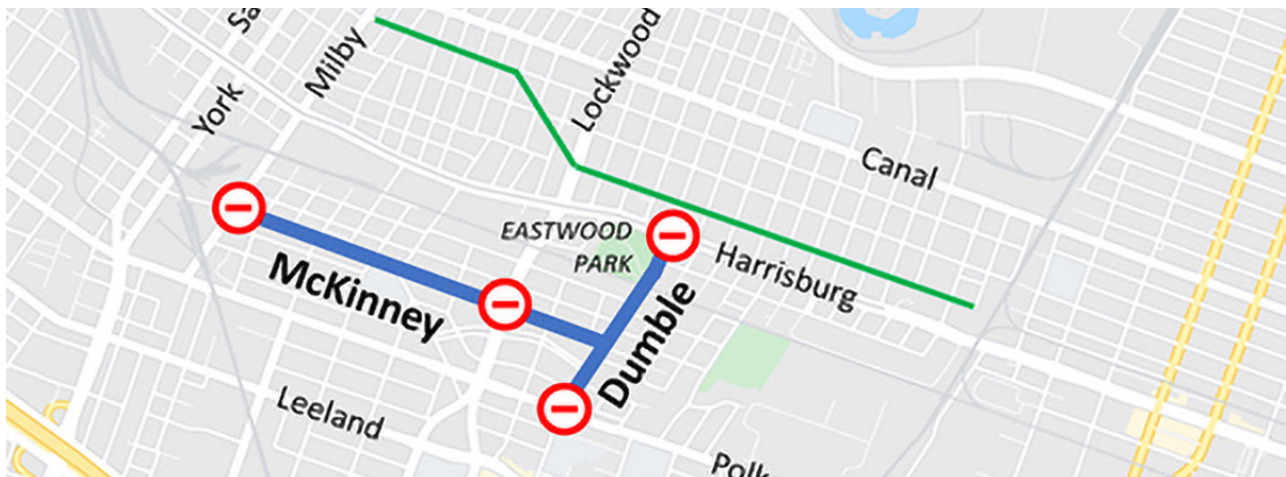
Highway Safety Improvement Program (HSIP) Funding: Submitted 16 applications to TxDOT requesting nearly \$8 million for HSIP grant funds. This project was led by HPW and supported by PD. Funding will be announced by TxDOT in fall of 2021.

Sidewalks: Constructed 50 miles of new/reconstructed sidewalks in fiscal year 2020, to help make Houston more pedestrian friendly. HPW leads the implementation and is supported by PD's systems-level planning efforts.

More Space and More Space Main Street Initiatives: Created and implemented the citywide program to allow restaurants to convert 50% of their unused parking spaces and use the space to serve customers. PD then extended the concept to Main Street, where the City will close certain blocks to vehicle traffic and allow restaurants and bars to serve customers in the roadway. PD led this effort in coordination with Downtown District and METRO, with support from HPW, HFD, and other partners.

Slow Streets Pilot Project: Provided more space for walking and biking by limiting selected streets to local vehicle traffic. PD led this effort with support from HPW.

Location for Slow Streets Pilot Project



Policy

Completed the **Vision Zero Action Plan**

Developed the **No Parking in the Bike Lane ordinance approved by City Council**

Approved **Walkable Places and Transit-Oriented Development Ordinance**

Facilitated the **Bicycle Advisory Committee**

Assessed City's parking standards in support of the **Livable Places Initiative**

Implemented several mobility-related **Resilient Houston** strategies



Planning and Advocacy

Updated the **Houston Bike Plan Map**

Represented the City of Houston as a stakeholder in H-GAC managed studies, including: **Southeast Houston Subregional Mobility Plan, Montrose Livable Center Study, and Greenspoint Livable Center Study**

Coordinated funding for the **Southwest Livable Center Study**

Conducted annual **Major Thoroughfare and Freeway Plan amendments**

Revisited the approach to the **Major Thoroughfare and Freeway Plan**

Partnered with Council Member Abbie Kamin to initiate the first inter-neighborhood **Montrose/Midtown Connectivity Study**

Coordinated the City's **COVID-19 Rapid Response Mobility Task Force**

Partnered with **METRO** on **BOOST Sidewalks Program**

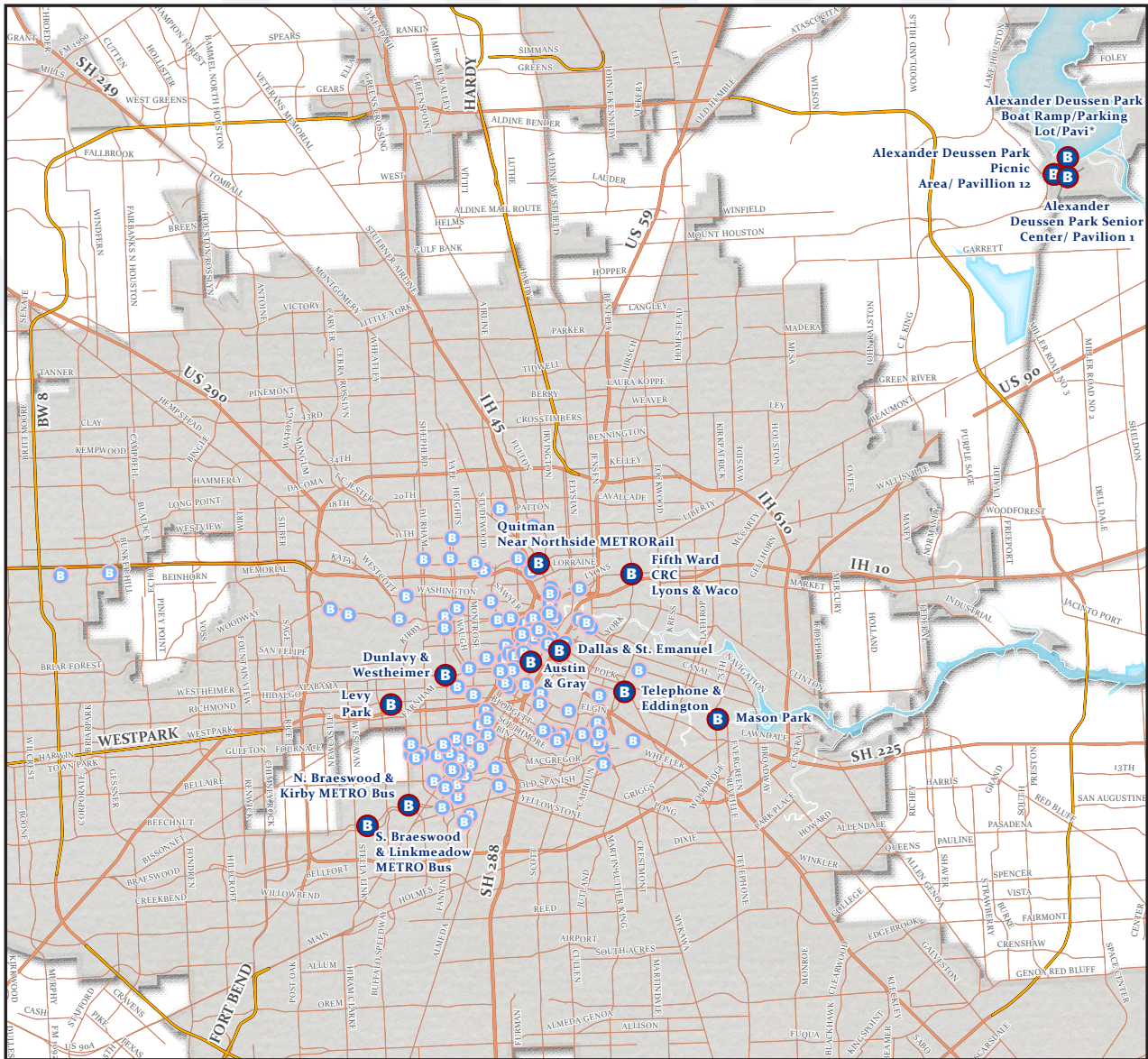
Supported **METRO Bus Rapid Transit and ADA Funding**

Hired **Chief Transportation Officer**

Supported **Complete Communities**



Houston's Bike Share System: Houston BCycle



- B Houston BCycle Stations - NEW
- B Houston BCycle Stations
- City Limits

Source: City of Houston information from Houston BCycle

APPENDIX A: YEAR IN FULL

The following actions were accomplished within the reporting period. Each action individually contributes to the collective standards that guide and direct the Complete Streets initiative.



Vision Zero Houston: Vision Zero is Houston's commitment to eliminate traffic deaths and serious injuries by 2030, while ensuring safe, healthy, and equitable mobility for all. On December 16, 2020, Mayor Turner unveiled the city's new Vision Zero Action Plan. The City's Vision Zero Implementation Group, led by PD, immediately put the plan into action.

More than 200 people die and nearly 1,000 people are seriously injured in crashes on Houston roadways every year. That means someone in Houston dies in a crash every other day and three people experience life-altering injuries each day.

Based on five years of crash data, the VZAP focuses safety improvements on streets that have the highest density of traffic deaths and serious injuries, known as the High Injury Network, and in communities that are more vulnerable to both natural and man-made crises. Research shows that:

- Nearly 60% of traffic deaths and serious injuries occur on only 6% of our streets.
- Of those 6% of streets, 52% are in vulnerable communities

who are mostly minority, experiencing poverty, lacking access to transportation, and living with older adults, young children or persons with a disability.

- One-third of traffic deaths involve a pedestrian even though less than 2% of residents walk to work.

To open the dialogue about Vision Zero in the community, the city's team of transportation planners hosted virtual open houses and socially-distanced outreach at transit centers, and launched an interactive community engagement platform over the course of the summer and fall 2020. Nearly 1,500 Houstonians used our interactive map to drop a pin on streets and intersections where they have a traffic safety concern. The plan identifies 50 actions, with 13 priority actions that will be the first for implementation. Priority actions include redesigning 10 high injury traffic locations and implementing construction within the following fiscal year. We also plan to construct at least 50 miles of sidewalks and 25 miles of high-comfort bicycle facilities each year.

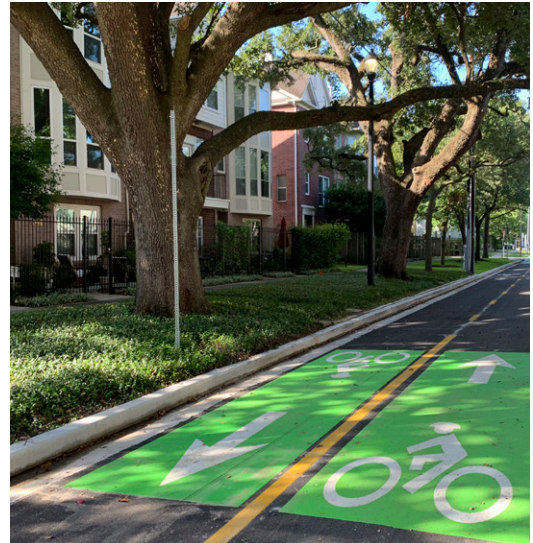
Houston Bike Plan (HBP): The Houston Bike Plan began as a 12-month planning effort to help make Houston a safer, more bike-friendly city. The plan was formally adopted by City Council in March of 2017 and memorialized in Chapter 33 of the City Code of Ordinances. The HBP is a collaborative effort led by PD, HPW, Harris County, Houston Parks Board, and METRO to help improve safety, accessibility, ridership, and maintenance of bicycle facilities. The HBP includes an updated Houston Bike Plan map that lists almost 1,800 miles of high-comfort bikeways that are existing, planned, programmed, or proposed for the City of Houston. The City of Houston and its partners completed about 13 miles of high-comfort bicycle facilities in 2020, with another 47 miles in design and construction. For more information, please visit <https://houstonbikeplan.org>.

Bike Share Expansion: Houston BCycle is the City's bike share program that fosters mobility, health, and recreation, by providing on-demand bicycle stations throughout multiple neighborhoods. PD and the city's bike share operator, Houston Bike Share, continued to implement a \$3.7 million grant to purchase and install 71 bike stations, 568 bicycles, and 2 transport vehicles secured through H-GAC's 2015 Transportation Improvement Program (TIP). Houston BCycle now maintains more than 1,000 bicycles, including 100 electric bikes and 125 stations. Thirteen new stations were installed this year: one at Austin and Gray, Westheimer and Dunlavy, Quitman and Main, Telephone & Eddington, Mason Park, Dallas & St. Emanuel, N. Braeswood and Kirby, S. Braeswood and Linkmeadow, Levy Park, Lyons and Waco, and three stations at Alexander Deussen Park. The Houston BCycle program is operated by Houston Bike Share and supported via the partnership between PD, HPW, and Harris County.

City-County Bikeway Partnership: Mayor Sylvester Turner and Harris County Precinct 1 Commissioner Rodney Ellis established a City-County partnership to connect neighborhoods with destinations and improve bicycle safety through rapid implementation of the Houston Bike Plan. PD, supported by HPW, is leading the effort to identify neighborhood networks, determine feasibility of selected routes, and continue the active construction of high-comfort bike lanes in the City's right-of-way.

Bike to Work/Wherever Day: Bike to Work Day is a national event that traditionally occurs on the third Friday in May. The event encourages people to bike to work en masse and raises awareness of cyclists throughout the wider community. This year, PD held Bike to Wherever Day, as the pandemic was the catalyst for most workers working from home instead of commuting to the office.

Bicycle Advisory Committee (BAC): The BAC advises and makes recommendations to the Planning Commission and the Planning Director on bicycling issues in Houston. These recommendations include, but are not limited to, amendments to the Bike Plan, bicycle



Austin Street bike lane

**125 BIKE STATIONS****100 ELECTRIC BIKES****1,000+ BIKES**

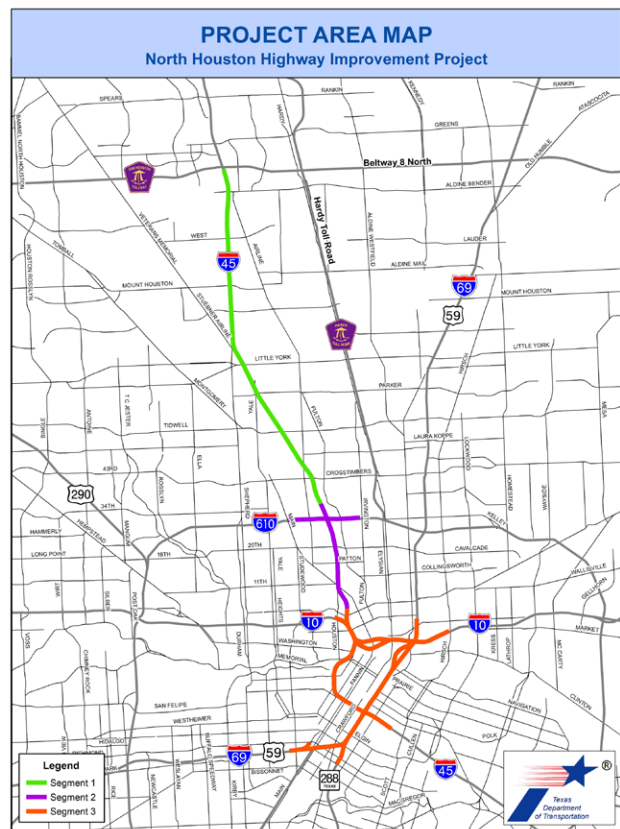
safety and education strategies for funding projects, and promoting public participation in bicycling. The BAC, facilitated by PD, has formed two subcommittees: Infrastructure and Education. These subcommittees meet in alternating months and assist the BAC with recommendations for bicycle related concerns. For more information on the BAC, please visit <https://houstonbikeplan.org>.

No Parking in the Bike Lane: City Council approved the No Parking in the Bike Lane Ordinance to prohibit on-street parking of motor vehicles where striping and physical barriers designate the street space for the exclusive use of bicycles. The ordinance will ensure that cyclists don't have to swerve into the path of moving vehicles to avoid vehicles parked in designated bike lanes. Once the ordinance went into effect, Park Houston issued warnings and educational flyers for the first 90 days. Offenders will now receive a \$100 fine on the first offense, but will have the option to take an online Bicycle Friendly Driver Training Class in lieu of the fine. City Council's approval of the No Parking in the Bicycle Lane Ordinance supports the Houston Bike Plan, protects the City's investment in the bikeway infrastructure, and supports the City's Vision Zero goal to eliminate traffic deaths and serious injuries by 2030. Details about the administration of the ordinance can be found here: <http://www.houstontx.gov/parking/bike-lanes.html>.

North Houston Highway Improvement Project (NHHIP):

The NHHIP is a TxDOT-planned reconstruction of I-45 and adjacent freeways from Beltway 8 to Downtown. This potentially transformative project will help chart a new course for transportation in the region, as it is the largest infrastructure project of this generation.

- **Bridge Design:** PD and HPW coordinated with TxDOT on the design of bridges and underpasses in the proposed NHHIP Segment 3 to ensure safe, comfortable space for all road users. As a result, each bridge will have a minimum 17' pedestrian realm on each side of the bridge where bike lanes are planned and a minimum 12' pedestrian realm on each side where there are no bike lanes. This design will serve as a template for bridges on Segments 1 and 2 of the project, as well as reconstruction of other bridges in the future.
- **PD Community Engagement:** PD led community engagement supported by HPW, Harris County, and other partners. The engagement consisted of five Facilitation Group meetings with stakeholders and subject-matter experts, three public outreach meetings on TxDOT's FEIS, three public engagement meetings on alternative designs, and an online survey. PD also prepared a letter to the Texas Transportation Commissioner and the City's response to the FEIS. For more information, please visit <http://www.houstontx.gov/planning/nhhip>.



Source: TxDOT

Citizen-reported potholes filled by next business day (from 311 reports).

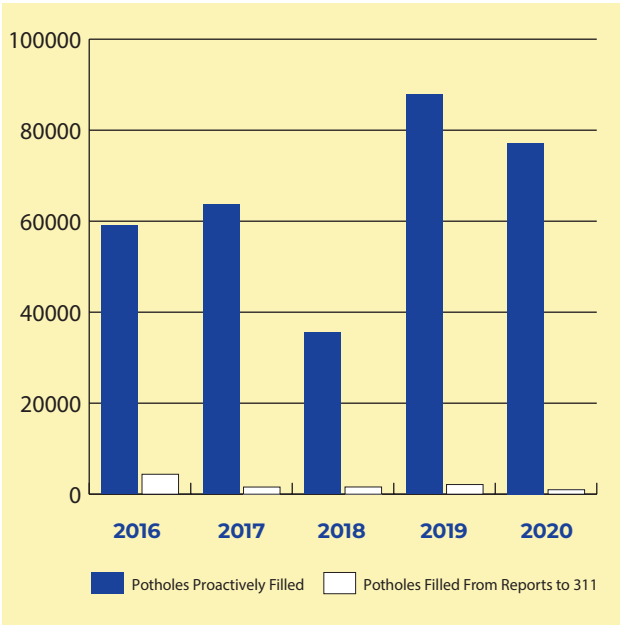


Source: <https://houstonpotholes.org/>

Pothole Tracking Website: HPW began leading the pothole initiative in 2016 and has been progressively expanding the program. Accordingly, the City has broadened its definition of a pothole from 4 square feet or smaller, to 5 feet across or up to 25 square feet. The creation of the Houston Potholes website by HPW aids with tracking and logging the information reported by our citizens to help make our streets safer. More information can be found on the website at www.houstonpotholes.org.

Shepherd and Durham Major Investment Project: The City partnered with Memorial Heights Redevelopment Authority on the Shepherd and Durham Major Investment Project. Once the reconfiguration is completed, Shepherd and Durham Drives will include three vehicle travel lanes, protected bike lanes, and improved pedestrian facilities. This new design will help reduce crash rates and facilitate better crossing movements for all road users.

Proactively filled pothole work orders and citizen-reported pothole cases (from 311 reports).



Source: <https://houstonpotholes.org/>

Traffic Signal Retiming: Traffic signal retiming is a cost-effective way to improve traffic flow and roadway safety. The City operates and maintains 2,499 signals; approximately 800 signals were retimed in 2020. Led by HPW, this effort helps to improve the City's traffic signal performance by maintaining the progression and coordination of corridors. This concerted effort helps to reduce travel delays, decrease crash rates, and decrease air pollution from vehicle emissions.

Update to the Infrastructure Design Manual (IDM), Chapters 10 and 17: The City of Houston's IDM Chapter 10 was updated with revised definitions to better align with the City's Major Thoroughfare and Freeway Plan (MTFP). The Chapter 10 updates also included a reduction in lane widths to a 10ft standard within Loop 610 (optional outside of Loop 610). This small, but significant modification will encourage safer vehicle travel. Other Chapter 10 updates included lowering the corner radius of residential streets to 15ft. This lower corner radius design will encourage slower vehicle speeds and help reduce pedestrian crossing distances. Chapter 10's new design criteria also included wider usage of roundabouts as a traffic device to further encourage traffic calming on the City's right of way. Chapter 17 of the IDM was revised to better meet the requirements of the newly implemented Walkable Places and Transit-Oriented Development Ordinance. As a result, Chapter 17 has new information on pedestrian design requirements to help build better communities.



Fulton Street at Deerfield Street



HOUSTON TRAFFIC SIGNALS

2,499



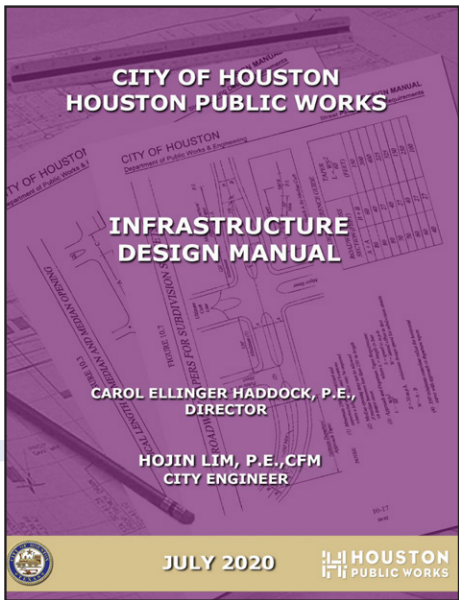
TRAFFIC SIGNALS RETIMED IN 2020

800



PORTION OF SIGNALS RETIMED IN 2020

32%



Highway Safety Improvement Program (HSIP): The HSIP provides funding for construction and operational safety improvements for locations on and off the state highway system. HSIP is administered by the Texas Department of Transportation (TxDOT), Unified Transportation Program (UTP). The HSIP grant funds are federally funded, and program funds are eligible to cover 90% of project construction costs. The remaining 10% of project construction costs are covered by state or local participation. HPW led the effort by requesting approximately \$8 million in HSIP funding for 16 sites, four of which were in Complete Communities, a project led by PD's Community and Regional Planning Division. TxDOT will announce the projects that have been selected to receive HSIP funds in the fall of 2021.

Sidewalks: The sidewalk program, led by HPW, is a collaboration of multiple partners, including PD and the Mayor's Office for People with Disabilities (MOPD). This program improves pedestrian safety by adding new sidewalks and ramps along streets leading to schools and along major thoroughfares. The Planning and Development Department reviews sidewalk widths and applications for sidewalk modifications within the city limits of Houston. For more information on this program, please visit <https://www.publicworks.houstontx.gov/sidewalk-program>.

High Speed Rail (HSR): The Houston-Dallas high-speed rail line, scheduled to open in 2026, will be built by Texas Central and is projected to attract about 6 million riders annually by 2029. For more information on HSR, please visit <https://www.hsrail.org/texas>.



Proposed traffic signals at Dashwood Drive



Main and Preston, downtown (Source: www.visithoustontexas.com)

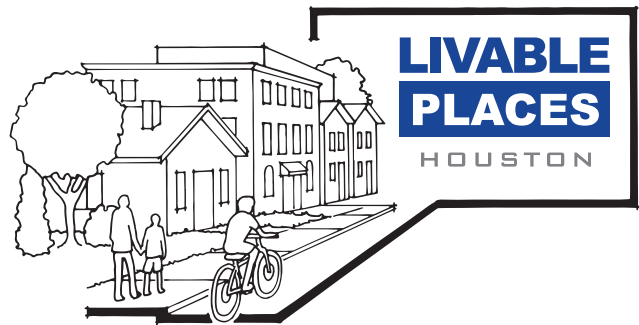


Walkable Places and Transit-Oriented Development

Ordinance: The Walkable Places Ordinance promotes higher density mixed-use development by creating more vibrant, walkable streets. The ordinance encourages the designation of walkable places in appropriate areas in the City and allows property owners to initiate amendments to the plan. Additionally, the ordinance amends the existing Transit-Oriented Development (TOD) rules, provides a more walkable environment for streets near transit stations, and encourages greater and better use of transit. PD partnered with HPW and provided research that enabled City Council to unanimously approve the ordinance. Information on the Walkable Places and TOD Ordinance can be found here: <http://www.houstontx.gov/planning/wp-committee.html>.



Livable Places and Parking Standards Analysis: The Livable Places Initiative continues PD's effort to update portions of Houston's development codes to create more opportunities for walkability, affordability, and equity. The Livable Places initiative follows the Walkable Places and Transit-Oriented Development Ordinance Committee's work. The Action Committee focuses on rules that encourage the development and preservation of affordable, quality housing for all. It also focuses on creating opportunities for increased infill development that will strengthen Houston's core, encourage use of multimodal transportation options, improve safety, and preserve great neighborhoods. For more information on Livable Places, visit <http://www.houstontx.gov/planning/livableplaces.html>.





VISION FOR A RESILIENT HOUSTON

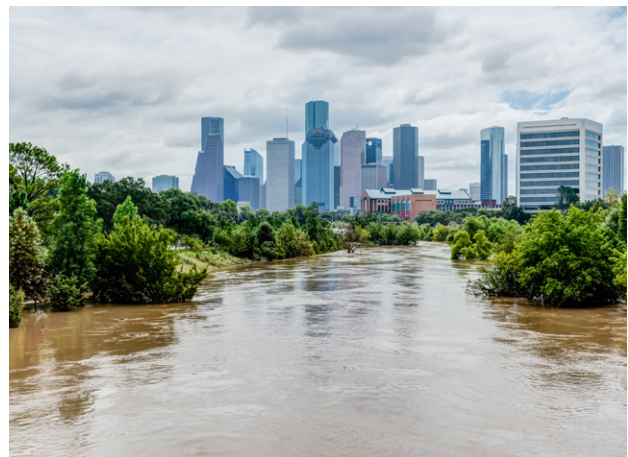
While the future is uncertain, we can expect that Houston will only face increasing challenges over the next 30 years. But we can create opportunity for all Houstonians in how we tackle these challenges—at the individual, neighborhood, bayou, city, and regional scale. The steps we take today can begin to shape the future for the next generation of Houstonians. What kind of city will Houston be in 2050?

Resilient Houston sets an aspirational vision for the future of our city. As we look toward the Houston we want to be in 2050, we see:

- + A HEALTHY PLACE TO LIVE
- + AN EQUITABLE, INCLUSIVE, AND AFFORDABLE CITY
- + A LEADER IN CLIMATE ADAPTATION
- + A CITY THAT GROWS UP, NOT OUT
- + A TRANSFORMATIVE ECONOMY THAT BUILDS FORWARD

Resilient Houston: Resilient Houston is a framework for collective action strategies led by the Mayor's Office. It is a strategy that links Houston's existing efforts with new efforts to help protect the City against future disasters. The Resilient Houston plan proactively provides strategies that address chronic stressors that make recovery from emergency impacts extremely challenging. This plan will help to strengthen the capabilities of neighborhoods, communities, and the region to not only withstand, but also to quickly recover from acute physical and socio-economic stressors that unexpectedly impact the Houston area. PD's actions that support Resilient Houston include:

- Drafting Vision Zero Action Plan
- Expanding Houston BCycle Bike Share Program
- Adding bike lanes to the City's infrastructure
- Establishing Livable Places Action Committee
- Approving the Walkable Places and TOD Ordinance
- Implementing sidewalk construction in Complete Communities areas
- Utilizing an AARP Grant for tactical urbanism in the Gulfton area
- Supporting H-GAC funding for Shepherd and Durham Drives reconstruction

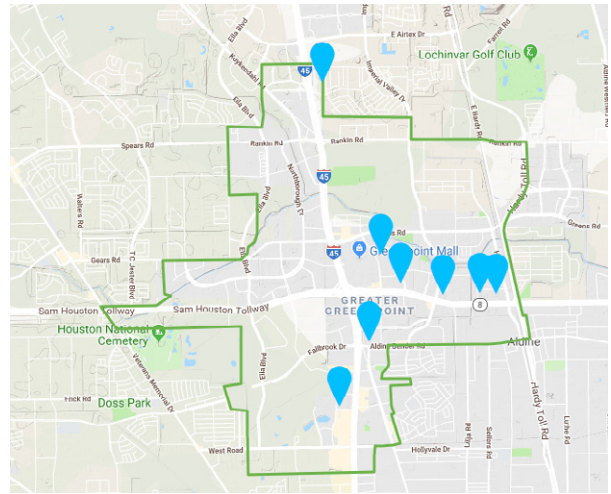


Source: Trong Nguyen / Shutterstock.com

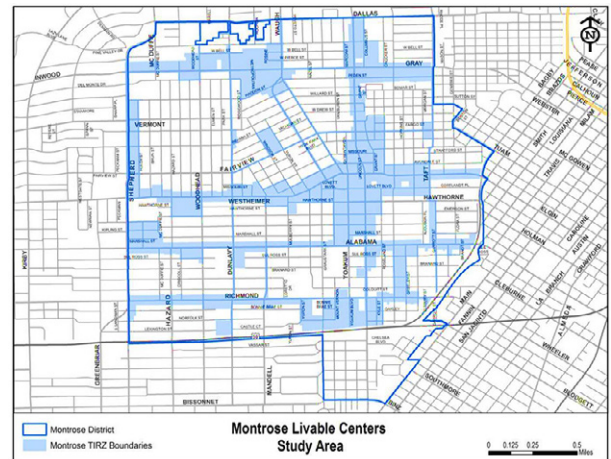
For more information on Resilient Houston and its strategies, please visit <http://www.houstontx.gov/mayor/chief-resilience-officer.html>.

Livable Center Studies: H-GAC’s Livable Centers Program helps local communities create walkable, mixed-use areas called livable centers. Livable centers, with a mixture of dense residential and employment land uses, support more trips by foot, bicycle, transit, or carpool. PD and HPW staff represent the City in studies led by H-GAC and other non-City entities. These studies help to identify future land use and infrastructure investments.

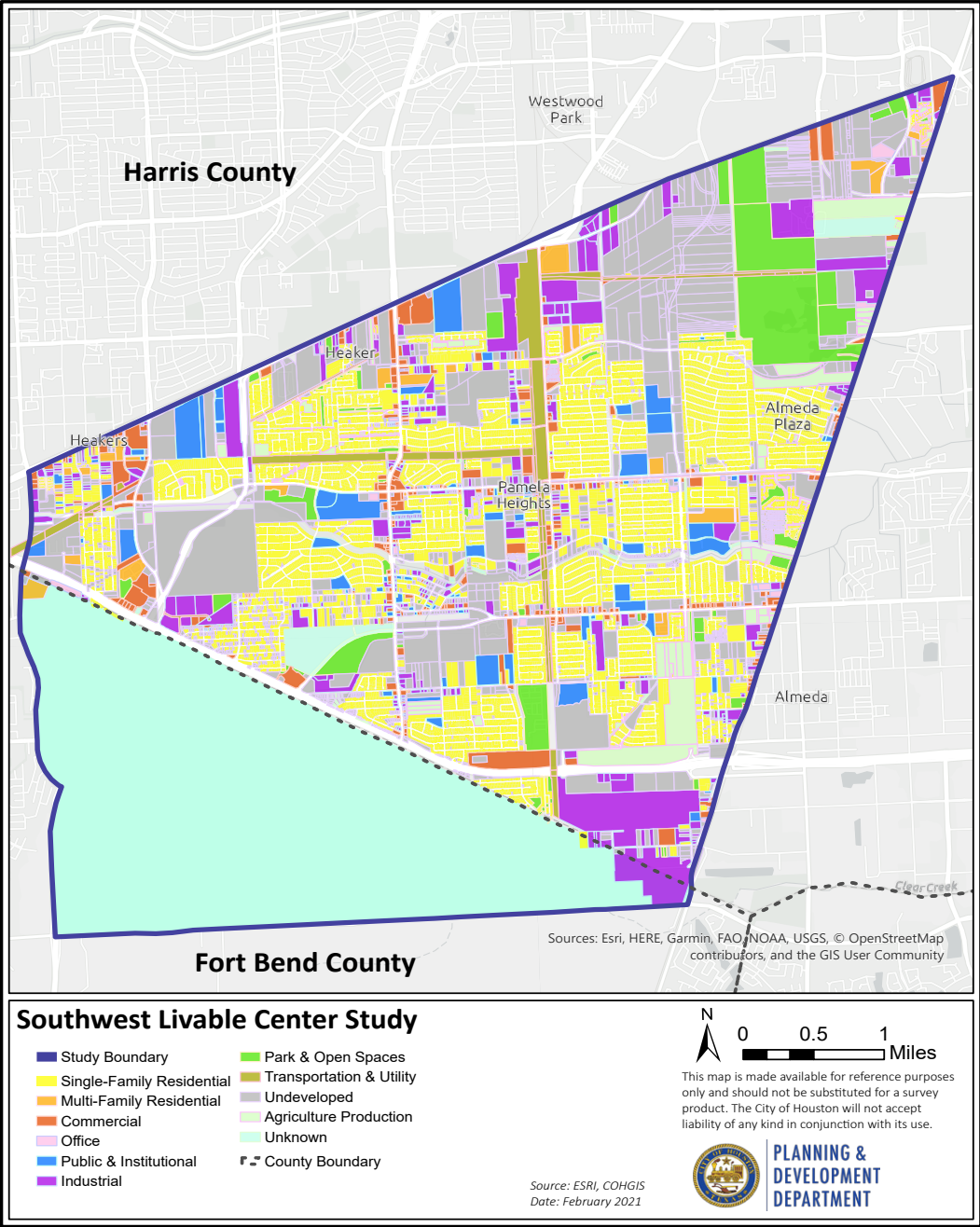
- The North Houston/Greenspoint Livable Centers Planning Study was completed in March. The study focused on the area bounded by East Hardy Road to the east, Rankin Road to the north, Interstate 45 to the west, and Beltway 8 the south. The study area included Greenspoint Mall and multi-family neighborhoods along Greens Road and Imperial Valley Drive. The focus of the study was to help foster multimodal access, connectivity, and a mix of land uses that would provide diversity in housing options and a sense of place. The results included new context-sensitive design standards for the Greenspoint community (now designated as the North Houston District).
- The Montrose Livable Center Planning Study began late in 2020 and is ongoing. The study area is southwest of downtown and is bound by West Dallas Street to the north, Spur 527 to the east, Interstate Highway 69/US 59 to the south, and South Shepherd Drive to the west. The study is community driven and focuses on improving pedestrian and bike infrastructure, greenspace amenities, housing and economic development, access to transit, connectivity, and enhancing mobility in the area.



North Houston District/ Greenspoint Livable Centers Study Area



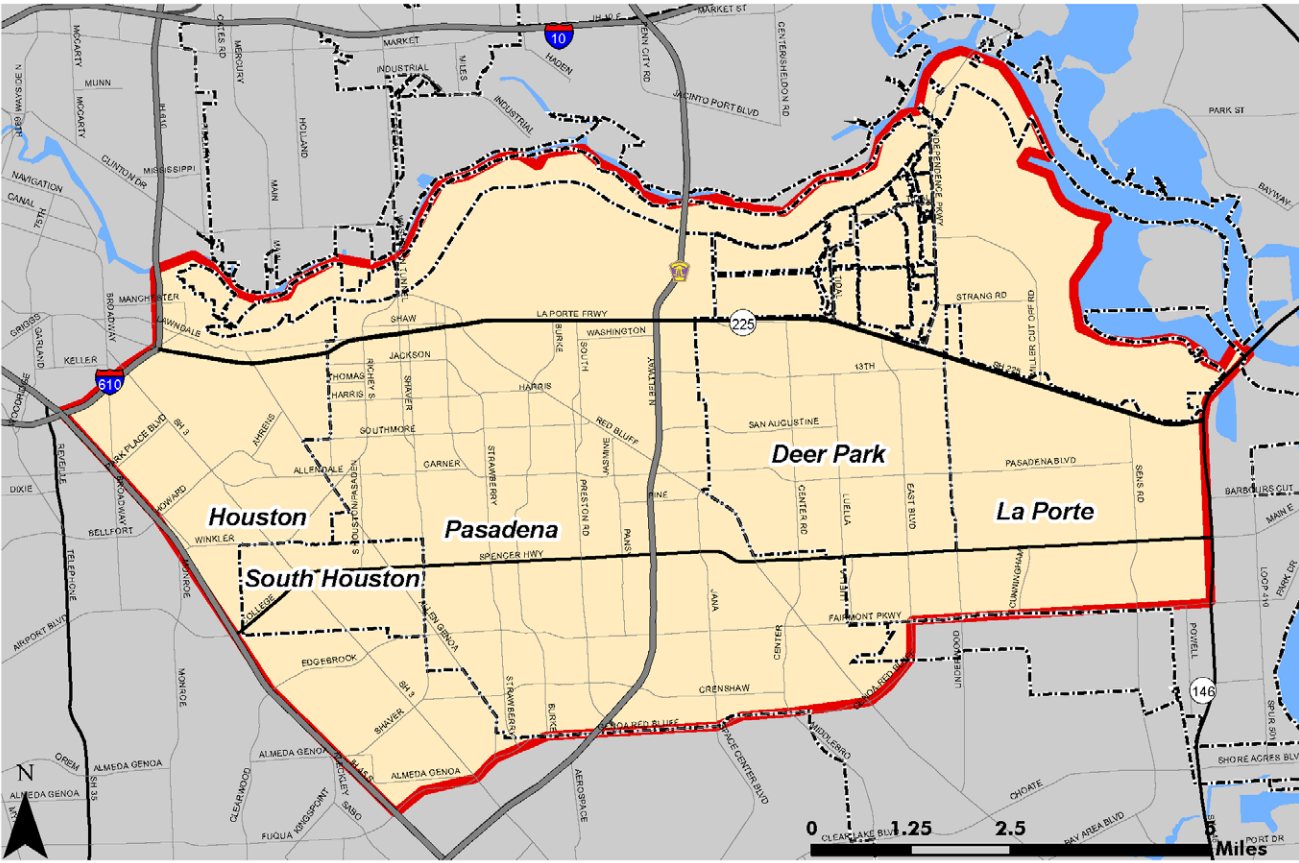
- Southwest Livable Centers Planning Study is scheduled to begin in April of 2021. The project study area is located south of Loop 610, bordered on the north by Main Street, to the south by McHard Road, to the east by Alameda Road and the west by Fondren Road. The planning study will focus on opportunities for development and redevelopment, strengthening accessibility to transit, and improving pedestrian and bicycle safety. PD led the coordination with the support of HPW and Houston Vice Mayor Pro Tem, Martha Castex-Tatum, District K's Council Member, to establish funding prior to the implementation of the study. Currently, PD is working closely with HPW, H-GAC, and Council District K to determine the scope of the project.



Sub-regional Mobility Studies: Sub-regional Mobility Studies are led by H-GAC, and help to achieve locally conceived transportation goals through long-range planning and definite implementation strategies. The purpose of a sub-regional mobility study is to identify recommendations to improve mobility, safety, and access to jobs, homes, and services.

portion of Harris County serves a growing amount of commuter, residential, and industrial traffic. This study will identify and propose solutions to address safety, multimodal transportation needs in the subregion, and help to facilitate the flow of truck traffic while providing mobility solutions for residents. Representatives from PD and HPW will serve as stakeholders to help integrate future goals for mobility, safety, and economic opportunity.

The Southeast Harris County Sub-regional Study began in November and is currently in progress. The southeastern

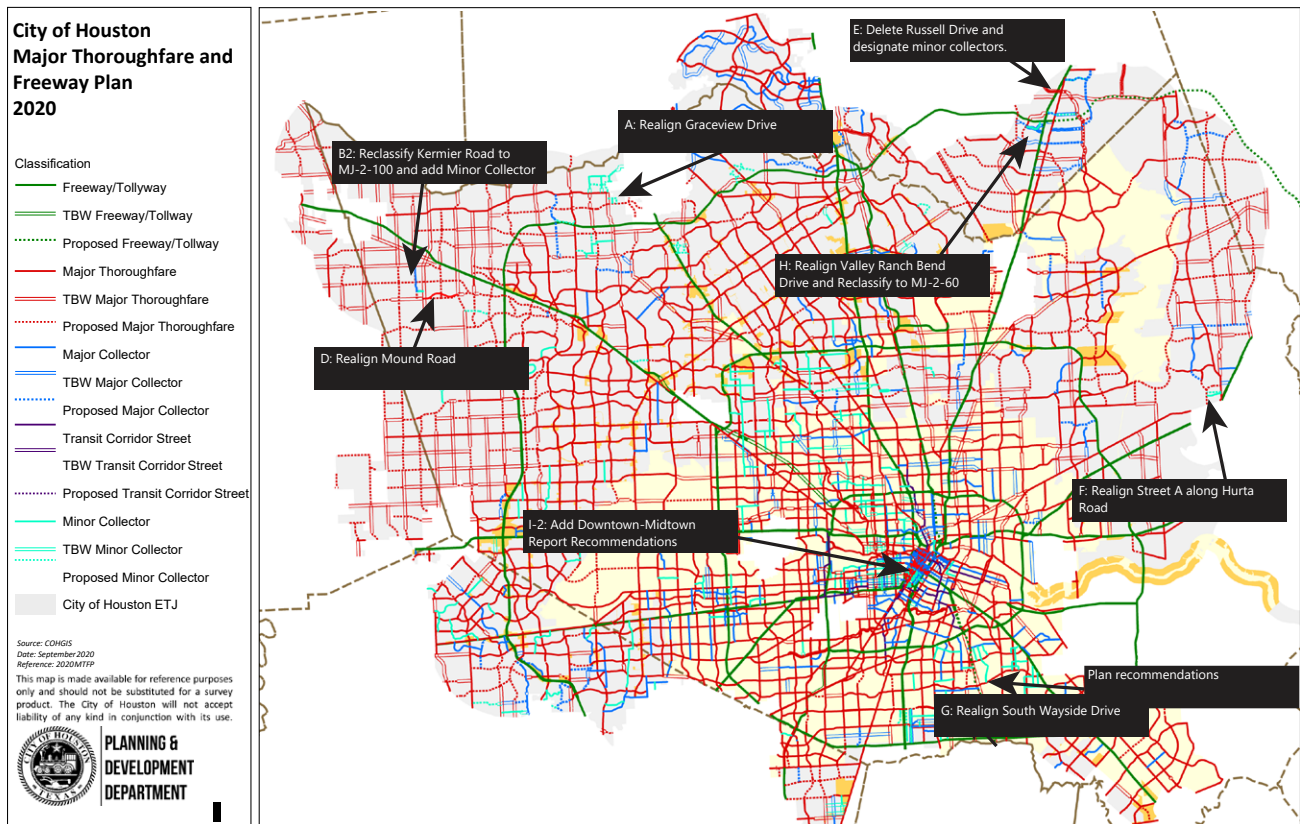


Southeast Harris County Subregional Study Area Study Area

Major Thoroughfare and Freeway Plan (MTFP): The MTFP is an integral tool in providing access and mobility for Houstonians. It provides a visual map to Houston’s existing and proposed road network, guiding development in the City and its extra-territorial jurisdictions. PD leads and administers the annual public review process for amending the MTFP, which includes multiple opportunities for soliciting and incorporating public comments. This annual collaborative effort is supported by HPW, Harris County, Harris County Flood Control District, METRO, and other partners. In 2020, PD processed 119 proposed amendments to the plan, as submitted by both private and public-sector applicants. Eleven amendments were submitted by private sector applicants, four by public sector applicants, including one from Harris County, one from Waller County, and two from the City of Houston. The City of Houston grouped their amendments together, including 48 amendments from the

Southeast Mobility Plan and 56 for the Downtown/Midtown area. Four amendments were withdrawn by applicants from the private sector. On September 30, 2020, the Planning Commission approved 115 MTFP amendments.

Revisit the Major Thoroughfare and Freeway Plan (MTFP): Staff from PD, HPW, Legal, and the Mayor’s Office assessed the current MTFP amendment process in reaching the City’s goals for mobility. Recommendations include clarifying the MTFP through a clear vision statement, clarifying the different roles of the MTFP for developed areas (network preservation) and undeveloped areas (network creation), and identifying considerations for evaluation of amendments. Revisiting the MTFP is an ongoing process that will take time to implement, but will serve as a forward-thinking guide for planning and developing the City’s mobility infrastructure.





Source: Keici Wallace /<https://www.unation.com/stuff-to-do/best-of-midtown-houston/>

Montrose/Midtown Connectivity: District C Council Member Abbie Kamin initiated a planning process to make traveling between Montrose and Midtown safer, easier, and more comfortable. PD facilitated a series of civic meetings and charrettes to develop potential improvements at 11 locations between the two neighborhoods, with six sites recommended for near-term improvements. This project will be used as the model for quick plan/build projects throughout the city.



COVID-19 Response

Rapid Response Mobility Task Force: At the onset of the pandemic, PD organized the City's multiple efforts to connect all people with needed services, especially supporting seniors, those without access to a private vehicle, people who are homeless, and people with disabilities. The result was a clear definition of services and eligible partners, as well as reduction of duplication of services and confusion of options for the public.

More Space Initiatives: The More Space initiative allows any restaurant to convert up to 50% of its off-street parking spaces to serve customers. The expanded outdoor dining space is designed to enhance operations for restaurants and allow Houstonians to patronize businesses while following strict health and safety guidelines in accordance with COVID-19 safe distancing requirements. For information on the More Space Initiative, visit <http://houstontx.gov/planning/MoreSpace.html>.



Courtesy of Phoenix on Westheimer

The Phoenix on Westheimer was the first restaurant to expand dining space into their parking lot as part of the More Space program.

More Space: Main Street: Main Street provided a tailored program for restaurants and bars along Main Street with no dedicated on-site parking. PD developed block-by-block designs to close portions of Main Street to vehicle traffic and rededicate that roadway space for businesses to serve customers. For information on the More Space: Main Street program, visit <http://www.houstontx.gov/planning/MoreSpace-MainStreet.html>.

Slow Streets Pilot Project: The Slow Streets pilot project was an effort to show that streets with lower vehicle volumes and lower vehicle speeds will encourage more people to walk and bike, especially connecting to neighborhood parks. The Eastwood neighborhood was chosen as the first Slow Streets pilot project based on community support and input from District I Council Member Robert Gallegos. This neighborhood has a history of higher vehicle speeds on smaller streets, and a street grid providing drivers with alternate routing choices. Lessons learned from this pilot project are being used to develop a citywide program.



METRO Support and Coordination: METRO's BOOST targets 17 high-ridership bus routes for enhancements, including but not limited to, new digital signage, bus shelters, bike racks, benches, better sidewalks and trail access. PD and HPW collaborated with METRO to help identify the routes and the appropriate treatments to improve those services. The 54-Scott and 56-Airline/Montrose bus routes were the first selected corridors to receive the BOOST improvements. Construction for the 56-Airline/Montrose and design for the 54-Scott are each scheduled to start in 2021.

METRO Bus Rapid Transit (BRT), is an expedited bus-based transit system that delivers fast, comfortable, and cost-effective services. PD and HPW partnered with METRO on the first BRT project in the City of Houston's right of way. The METRO Rapid Silver Line opened in August with dedicated bus lanes along Post Oak Boulevard connecting Uptown Houston to two major transit centers. The BRT stations will serve as pedestrian refuges providing a safer street design.

METRO applied for Universal Accessibility Project (UAP) funding to help bring all bus stops to current Americans with Disabilities Act (ADA) funding standards. Universal



Source: <https://www.ridemetro.org/pages/>



Source: <https://www.ridemetro.org/pages/>

Accessibility is the guiding principal that METRO utilizes to enhance the usability of its transit system for all persons, to the greatest extent possible. In early 2020, H-GAC's Transportation Policy Council approved \$30 million for the UAP via H-GAC's Transportation Improvement Program. Through the UAP funding, METRO will make bus stops ADA compliant by adding or replacing sidewalks, adding new ramps, and extending the new ramps to the nearest intersection.

PD and HPW are working closely with METRO to ensure continued City coordination as project development and implementation progresses. METRO is in the process of reviewing projects and strategies within their five-year Capital Improvement Program.



Source: <https://www.ridemetro.org/pages/>



Source: Conchi Martinez / Shutterstock.com

APPENDIX B: SUPPORT FOR COMPLETE COMMUNITIES

Complete Communities is Mayor Turner’s initiative to create a more equitable and prosperous city so that all of Houston’s residents and business owners can have access to quality services and amenities. Complete Communities is a collaborative effort involving residents, community stakeholders, and all City of Houston departments. PD’s Community and Regional planners completed action plans for 10 designated communities, and continue public engagement efforts. The action plans include actions that address mobility and accessibility improvements.

Acres Home

- PD and HPW are studying a potential road diet for West Little York Road from White Oak Bayou to Banjo Street, to be funded through the CIP. HPW applied for TxDOT HSIP grant funds for West Little York Road from TC Jester Boulevard to Wheatley Street. The notifications of receipt of the federal funds will be released in the fall of 2021. If the HSIP funds are approved, the funds will be used to implement a road diet, converting the street from four lanes to three vehicle lanes.

Alief-Westwood

- HPW applied for TxDOT Program HSIP grant funds for Maplecrest Drive at Beechnut Street. The notifications of receipt of the federal funds will be released in the fall of 2021. If the HSIP funds are approved, the funds will be used to improve crosswalks and curb ramps, add signage and pavement markings, and upgrade traffic signals.

Fort Bend Houston

- West Fuqua Street and Chimney Rock Road is in the 60% design phase of a CIP corridor reconstruction project, led by HPW. This project will include design and construction for concrete paving with storm drainage, curbs, sidewalks, driveways, street lighting, and necessary underground utilities. The anticipated construction date is spring 2022.

Gulfton

- HPW applied for TxDOT HSIP grant funds for several locations in the area, including Gulfton Street at Royalton Street, Renwick Drive at Dashwood Drive, and Hillcroft Street at Dashwood Drive. The notifications of receipt of the federal funds will be released in the fall of 2021. If the HSIP funding is approved, the funding for Gulfton Street at Royalton Street and Hillcroft Street at Dashwood Drive would be used to upgrade traffic signals and add curb ramps, crosswalks, pavement markings, and signage. A roundabout would be added at Renwick Drive and Dashwood Drive.
- The City is evaluating proposals for a sidewalk master plan in Gulfton, which will provide a citywide toolkit for resilient sidewalks. The Mayor’s Office of Recovery and HPW will serve as the project managers for this effort. The sidewalk master plan is currently in the planning phase.
- PD, with the support of HPW, held a successful tactical urbanism project (pop-up bicycle lane) to determine the feasibility of adding a bicycle lane on Westward Street, between Gulfton Street and Prestwood Drive. The event was well attended, and PD received positive input from the community.
- The City partnered with Connect Communities and Together for Safer Roads to identify safety improvements at the intersection of Hillcroft Street and High Star Drive.



Gulfton pop-up bike lane demonstration on Oct. 31, 2020.



Source: Greater Northside District

The design plans are at 95% and are being finalized by HPW. The project is being funded by the traffic signal rebuild program (METRO Fund 4040) and by TIRZ 20. The projected implementation date is early 2021. Some of the improvements will include:

- Signalized pedestrian crossings
- Wider sidewalks and new curbs
- Separated bike lanes
- Traffic calming measures on stretches between traffic lights
- Reduced vehicle lanes from eight to six on Hillcroft Street between Bellaire Boulevard and High Star Drive

Kashmere Gardens

- The City is evaluating proposals for a sidewalk master plan that will provide a citywide tool kit for resilient sidewalks. The Mayor’s Office of Recovery and HPW will serve as the project managers for this effort. HPW is evaluating Request for Proposals for the sidewalk master plan. The sidewalk master plan is currently in the planning phase, PD and HPW will work collaboratively on the master plan.

Near Northside

- HPW applied for TxDOT HSIP grant funds for the intersection of Irvington Boulevard and Patton Street. The notifications of receipt of the federal funds will be released in the fall of 2021. If the HSIP funding is approved, the funds will be used to design a roundabout at the intersection.
- The City partnered with the Clinton Foundation and Greater Northside Management District (GNMD) to implement decorative crosswalks at four intersections, improving safety for pedestrians. Two crosswalks have been completed on Hogan Street.
- New high-comfort, parking-protected bike lanes on Hardy Street and Elysian Street were built through the partnership between PD, HPW, Harris County Precinct 1, and other partners.
- Final arrangements are being made on the construction of new sidewalks on Quitman Street. GNMD, Harris County Precinct 2, METRO, and the City of Houston are coordinating on this project. The project is currently in the design phase.
- METRO is improving multimodal connections to the METRORail Light Rail (Red Line), by constructing bike lanes on Cavalcade Street and Quitman Street
 - Cavalcade Part I, between Airline Drive and Irvington Boulevard, construction is substantially complete.
 - Cavalcade Part II, between Irvington Boulevard and Hardy Street and Elysian Street. Design plans were approved by HPW. Construction of the project is scheduled to begin in the spring of 2021.
 - Quitman Bike Lane, from White Oak Drive to Cochran Street is in coordination between project partners including GNMD, City of Houston, Harris County Precinct 2, TxDOT, and METRO.
- City Council District H Office, HPW, and PD coordinated to improve bikeway access and expand the bicycle network by implementing a protected bike lane on North Main Street between Boundary Street and Pecore Street. Council Member Karla Cisneros, the District H Council Member, helped to secure funding for the project. Construction is scheduled to begin in spring of 2021.

Magnolia Park-Manchester

- CIP funds will be used for a reconstruction project including stormwater drainage, paving improvements, and utility upgrades. It is currently at the 60% design phase, and construction is projected for summer 2023.

Second Ward

- CIP funds will be used to implement a 0.7-mile off-street bicycle lane on Lockwood Drive between Harrisburg Boulevard and Crites Street. The project is currently in design phase, scheduled for construction in July 2024.

Sunnyside

- Houston Parks Board has begun construction on a new hike and bike trail along Sims Bayou that touches the southern edge of Sunnyside. The full scope of the project will span from Buffalo Speedway to Scott Street. Sims Bayou Greenway is a part of a citywide project called Bayou Greenways 2020. Houston Parks Board leads the partnership in close cooperation with PD, HPW, and the HCFCD.
- A major rehabilitation project is planned for Airport Boulevard from State Highway 288 to Scott Street. This project will replace asphalt and concrete pavement sections, including replacement of damaged curbs, sidewalks, and storm inlets where necessary. New pavement markings will be implemented at various levels depending on the roadway surface rehabilitation.

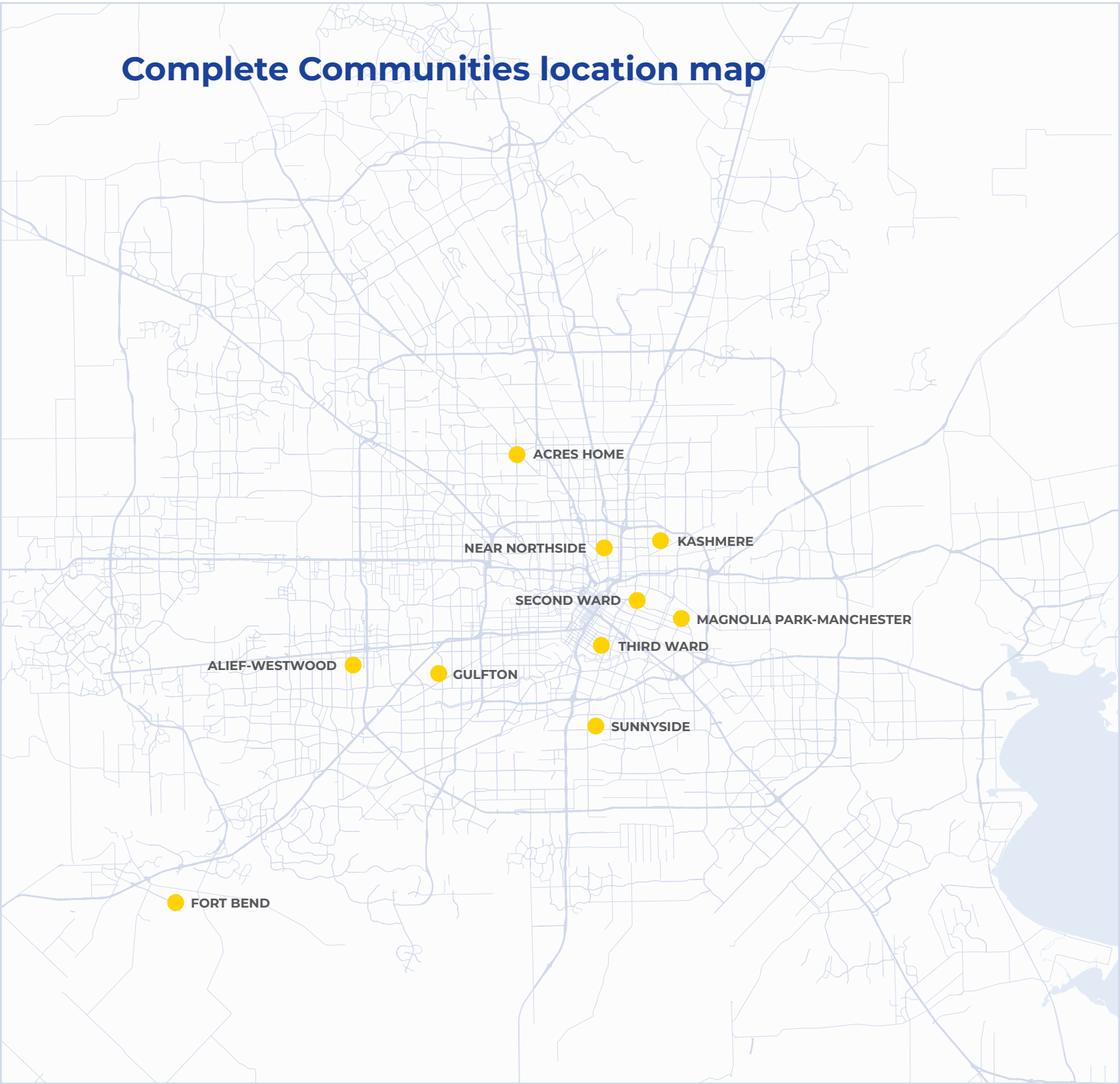
Third Ward

- Harris County Precinct 1, in partnership with PD and HPW, constructed a protected bike lane on Gray Street from Bagby Street to Live Oak Street.
- Full signal installation was completed in the spring.
- Harris County Precinct 1 in partnership with PD and HPW, completed bike lanes on Cleburne Street between LaBranch Street and Hutchins Street and between Gray Street and Cleburne Street.
- The planned Blodgett Street bicycle facility between Scott Street and Ennis Street is currently at 60% design. This project is being led by Harris County – Precinct 1, in collaboration with PD and HPW.



Bike lane on Gray Street

Complete Communities location map



APPENDIX C: PERFORMANCE INDICATORS

The Complete Streets Executive Order requires that the city measures its success in implementing the Houston Complete Streets and Transportation Plan providing system wide totals within city limits, and detailing efforts that support fulfillment of the Plan.

The E.O. stipulates that Fiscal Year 2014 serves as a baseline for improvements implemented. Additional indicators may be developed and included in future reports.

Roadway Improvements

The City of Houston is continuing its path toward the development of complete streets by improving infrastructure for all modes: walking, biking, and roadway improvements.

City of Houston Indicators	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Lane miles of overlaid streets	129	222	223	198	142	171	187
Lane miles of new/reconstructed streets	32	70	98	92	73	70	71
New/reconstructed curb ramps	1,710	1,116	1,772	1,368	1,593	1,273	1,237
Linear miles of new/reconstructed sidewalks	79	52	60	57	49	73	50
Lane miles of new/restriped on-street bicycle facilities	60	87	34	14	21	43	43

Houston BCycle Facility Expansion

The Houston BCycle system was established by the City of Houston. Houston Bike Share operates Houston BCycle for the City via contractual agreement. The chart below lists the significant growth of the bike share program. During the COVID 19 pandemic, Houston BCycle saw a significant increase in shared cycle use, as more people utilized active transportation options as a viable transportation mode.

Houston BCycle Indicators	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Riders	23,777	31,164	37,170	52,332	56,372	70,021	96,429
Bikes	200	200	220	360	550	650	800
Stations	28	31	33	51	86	108	123
Trips	80,956	98,411	113,283	142,257	165,585	240,624	313,377
Minutes of ride time	4,874,150	5,726,154	6,625,308	7,675,338	7,695,749	9,848,893	16,934,386
Miles travelled	449,649	608,571	777,792	964,526	966,648	1,195,548	2,034,198
Pounds of reduced carbon emissions	426,243	576,296	736,739	913,273	917,067	1,138,036	1,931,273
Calories burned (est.)	17,926,736	24,254,532	31,009,744	38,446,635	38,559,074	47,751,506	81,212,744

Bikeways Constructed

The City of Houston and its partners have constructed about 13 miles of bicycle facilities in 2020, with about 47 miles in design or in construction. In addition, HPW rehabilitated 43 lane miles of bike facilities through restriping.

Agencies	Miles
City of Houston	0.3
Harris County Precinct 1	4.5
Houston Parks Board	4.2
METRO	1.3
Spring Branch Management District	2.3
Clear Lake Water Authority	0.3
Total	12.9

Bikeways Constructed by Location

Street Name	Extent	Agency	Bikeway Type	Length (Miles)
Enid St	Sylvester Rd to Link Rd	City of Houston	Shared On-Street	0.3
Clear Lake Trails	El Dorado Blvd to Reseda Dr	Clear Lake City Water Authority	Off-Street Path	0.3
Cleburne St	La Branch St to Hutchins St	Harris County Precinct 1	Dedicated On-Street	0.4
Gray St	Bagby St to Sauer St	Harris County Precinct 1	Dedicated On-Street	1.4
Hutchins St	Gray St to Cleburne St	Harris County Precinct 1	Dedicated On-Street	1.1
La Branch St / Calumet St / Crawford St	Winbern St to Hermann Dr	Harris County Precinct 1	Shared On-Street	1.3
Sauer St/Webster St	Gray St to Columbia Tap	Harris County Precinct 1	Shared On-Street	0.3
Greens Bayou	Normandy St to Greens Bayou	Houston Parks Board	Off-Street Path	0.4
Halls Bayou	Tidwell Rd to Mesa Dr, Brock Park	Houston Parks Board	Off-Street Path	3.3
Utility Corridor	W Orem Dr to Sims Bayou	Houston Parks Board	Off-Street Path	0.6
Cavalcade St	Airline Dr to Irvington Blvd	METRO	Dedicated On-Street	1.3
Centerpoint Corridor	Blalock Rd to Wirt Rd	Spring Branch Mgmt Dist	Off-Street Path	2.3
			Total	12.9

Programmed Bikeways (In Design or Under Construction)

Street Name	Extent	Agency	Bikeway Type	Length (Miles)
11th St	Shepherd Dr to Michaux St	City of Houston	Dedicated On-Street	1.5
High Star Dr	Rookin St to Hillcroft Ave	City of Houston	Dedicated On-Street	0.2
Hillcroft Ave	US 59 to Bellaire Blvd	City of Houston	Dedicated On-Street	0.9
Jackson Hill St	Blossom St to Scotland St	City of Houston	Dedicated On-Street	0.3
N Main St	Pecore St to Boundary St	City of Houston	Dedicated On-Street	0.7
Westpark Dr	Dairy Ashford Rd to Kirkwood St	City of Houston	Dedicated On-Street	0.9
Egbert St	TC Jester Blvd to Moy St	City of Houston	Off-Street	0.2
Larkin St	TC Jester Blvd to Shepherd Dr	City of Houston	Off-Street	0.5
Lockwood Dr	Harrisburg Blvd to Crites St	City of Houston	Off-Street	0.7
Westward St	Hillcroft Ave to Gulfton Dr	City of Houston	Off-Street	0.4
Blossom St	Patterson St to Jackson Hill St	City of Houston	Shared On-Street	0.3
Patterson St	Blossom St to White Oak Bayou	City of Houston	Shared On-Street	0.9
Austin St	Holman St to Commerce St	Harris County Precinct 1	Dedicated On-Street	2.0
Blodgett St	Ennis St to Scott St	Harris County Precinct 1	Dedicated On-Street	0.9
Polk St	Emancipation Ave to Cullen Blvd	Harris County Precinct 1	Dedicated On-Street	1.1
Tierwester St	Blodgett St to Wheeler Ave	Harris County Precinct 1	Dedicated On-Street	0.1
Cleburne St	Ennis St to Scott St	Harris County Precinct 1	Off-Street	0.8
Cullen Blvd	Polk St to Brays Bayou	Harris County Precinct 1/METRO/ University of Houston	Off-Street/Dedicated On-Street	2.1
Buffalo Bayou	Fannin St to Elysian St	Houston Parks Board	Off-Street	0.4
Greens Bayou	Tidwell Rd to City Limits	Houston Parks Board	Off-Street	0.8
Halls Bayou	Mesa Dr to Banting St	Houston Parks Board	Off-Street	1.1
Hunting Bayou	Autumnwood Dr to Maxey Rd	Houston Parks Board	Off-Street	3.8
Sims Bayou	Buffalo Speedway to Scott St	Houston Parks Board	Off-Street	6.0
Utility Corridor	Sands Point Dr to Beechnut St	Houston Parks Board	Off-Street	1.7
Cavalcade St	Irvington Blvd to Elysian St	METRO	Dedicated On-Street	0.6
Leeland St	Velasco St to Cullen Blvd	METRO	Dedicated On-Street	0.6
East Fwy/Federal Rd/Maxey Rd	Nola St to Normandy St/ Greens Bayou Dr	METRO	Off-Street	2.2

Programmed Bikeways (In Design or Under Construction), continued

Street Name	Extent	Agency	Bikeway Type	Length (Miles)
Quitman St/White Oak Dr	Houston Ave to Elysian St	METRO/City of Houston/Harris County – Precinct 2	Dedicated On-Street	1.4
Clear Lake Trails	Exploration Green	Clear Lake City Water Authority	Off-Street	3.1
Bagby St/Dallas St	Clay St to Franklin St	Downtown TIRZ	Off-Street/Dedicated On-Street	0.7
Durham Dr	I-610 to I-10	TIRZ 5	Dedicated On-Street	2.4
Shepherd Dr	I-610 to I-10	TIRZ 5	Dedicated On-Street	2.4
Deerwood Rd	River View Dr to W Sam Houston Pkwy	Westchase Management District	Dedicated On-Street	0.3
Walnut Bend Ln	Westheimer Rd to Westpark Dr	Westchase Management District	Dedicated On-Street	1.2
Briar Forest Dr	Walnut Bend Ln to Citywest Blvd	Westchase Management District	Off-Street	0.2
Citywest Blvd	Briar Forest Dr to Westheimer Rd	Westchase Management District	Off-Street	0.8
Elmside Dr/ Richmond Ave/ Woodchase Dr	Westheimer Rd to Woodchase Dr Greenspace	Westchase Management District	Off-Street	1.3
W Sam Houston PkwY 5	Terry Hershey Trail to Deerwood Rd	Westchase Management District	Off-Street	0.4
Blue Willow Dr/ Cedar Creek Dr/ River View Dr	Deerwood Rd to Briar Forest Dr	Westchase Management District	Shared On-Street	0.8
			Total	46.7

To explore existing and programmed bikeways in Houston, please visit our interactive map at <https://tinyurl.com/HouBikeMap>.

¹Bikeways data as of December 3, 2020



**PLANNING &
DEVELOPMENT
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