City of Houston
Bicycle Advisory Committee

City Hall Annex Council Chambers, 900 Bagby Street, Public Level
Wednesday, January 22, 2020
2:30-4:30pm

Agenda

Discussion and Possible Action Regarding the Following Items:

1. Director's Report
2. Chair's Report
3. Approval of October Minutes
4. Public Comment
5. BikeHouston Bike Friendly Drivers Program Evaluation
6. Houston Bike Summit
7. Vision Zero Update
8. Houston CIP Funding Update
9. Complete Streets Report Discussion
10. Announcements

The public is invited to speak for up to two (2) minutes each either at the beginning of the meeting or at the end. The public is also encouraged to submit written comments to bac@houstontx.gov. Updates and committee notes will be available

DRAFT Minutes of the Bicycle Advisory Committee (BAC)

January 22, 2020
Meeting held in
Council Chambers, Public Level, City Hall Annex
2:30 p.m.

Call to Order
Chair Maya Ford called the meeting to order at 2:37 p.m. with a quorum present.

Maya Ford, Chair	
Clark Martinson, Vice Chair	
Toloria Allen	Absent
Kristine Anthony	
Oni Blair	Absent
Neil Bremner	Absent
Robin Holzer	
Beth Martin	Absent
Yuhayna Mahmud	Absent
Veon McReynolds	
Amar Mohite	
Alejandro Perez	Absent
Ana Ramirez Huerta	
Sandra Rodriguez	
Mike VanDusen	
Adam Williams	

EXOFFICIO MEMBERS

Ian Hlavacek	
Jennifer Ostlind	
Juvenal Robles	Absent

1. DIRECTOR'S REPORT
The Director's Report was given by Assistant Director Jennifer Ostlind. Ostlind reported that Planning & Development is scheduling a meeting between ARA, Houston Public Works, Mayor's Office of Special Events, and the Mayor's Office to discuss BAC recommendations to develop an internal city policy and a citywide ordinance to prohibit parking in bike lanes. Ostlind stated that the next round of bikeway projects is dependent on funding agreement between the City of Houston and Harris County Precinct 1.

2. CHAIR'S REPORT
Chair Maya Ford and Vice Chair Clark Martinson provided the Chair's Report. Chair Ford asked the Committee to repeat this statement while looking at other members around them. "Service to others is not about me, it's about others. Thank you for serving me." Chair Ford stated that the Committee has work to do to educate the public on how to use our new bike facilities and become more multimodal safely. She said that is important to set a clear vision for 2020 and she was excited to hear from BikeHouston about what they are doing this year. She encouraged Committee members to participate

in at least one of two subcommittees on education and infrastructure.

Vice Chair Clark Martinson just came from a presentation with LINK Houston and Houston Tomorrow at H-GAC about the North Houston Highway Improvement Program.

3. APPROVAL OF OCTOBER MINUTES
Committee action: Approve the October 23, 2019 Bicycle Advisory Committee (BAC) meeting minutes.

Motion: **Holzer** Second: **Anthony-Miller** Vote: **Unanimous** Abstaining: **None**

4. PUBLIC COMMENT
Public comment was invited after approval of the minutes and again at the end of the meeting.

Chris Jardine wrote in and Staff Member Melissa Beeler read his email into the record. Jardine stated he works downtown and lives in Museum District. “I used to commute downtown from the Northside and loved the fully dedicated trail that made it possible along White Oak. However, now that I live in the Museum District, I find myself unable to commute by bike. I'm incredibly excited about the new Austin Corridor trail but am also incredibly disappointed to learn the La Branch segment won't be a dedicated set of lanes. With parking on both sides of the street, it creates a narrow two-lane road in segments with impatient drivers squeezing through that I don't feel safe using my bike on a daily basis. Is there not a way to eliminate one of these parking lanes and create a fully dedicated trail between Downtown and the Museum District that could connect the Museums/Rice/Med Center to Midtown/Downtown? You're so close... it's only another 1-mile segment and the space appears to be there to connect these two major centers.”

Ed Pettit, a cyclist with Tour de Hood and Chair of 3rd Ward Civic Club, spoke about encouraging more public engagement for bikeways. He would like to see a public formal presentation given before construction begins at a Super Neighborhood meeting. He mentioned that a bike lane on McGowen is widely supported by the community, especially after a pop-up bike lane event in June 2019 by BikeHouston and Tour de Hood. He urges coordination with METRO as they prepare to implement BOOST corridor improvements along McGowen as part of METRONext. He encouraged the City to prioritize McGowen in the next round of bike projects.

Tom Compson, long time member of BikeHouston and resident near Brays Bayou trail, heard about buying a bike lane sweeper and was interested in knowing the status of purchasing that equipment either at the Count or the City. Member Amar Mohite (Harris County Precinct 1) shared that once the facility is 100% complete and closed out with the contractor, the County will maintain the infrastructure for one year after which it will be taken over by the City. Harris County is looking into equipment to maintain the facilities.

5. BIKEHOUSTON BIKE FRIENDLY DRIVERS PROGRAM EVALUATION
Vice Chair Clark Martinson briefed the Committee on BikeHouston’s Bike Friendly Drivers Program and shared an infographic on road safety for bicyclists and drivers. More information on the program can be found at https://bikehouston.org/bicyclefriendlydriver/. BikeHouston is also working with the State driver’s education program to see how this could fit in as well. Discussion ensued, particularly around expansion of the program to fleet operators and other private sector companies. Houston Police Department is working with BikeHouston to add the program to online training for police officers.

6. HOUSTON BIKE SUMMIT

Vice Chair Martinson updated the Committee on planning efforts for the Houston Bike Summit taking place at St. Arnold's on May 11 from 5-6pm. At 6pm, speakers will begin in the hall. He would like to work with the members of the Committee to determine the message for the event and awardees (e.g. Volunteer, Bicycle Friendly Business, biggest contributor to bicycling). The message or vision would launch a large initiative to improve bicycling in Houston.

7. VISION ZERO UPDATE

Assistant Director Ostlind shared an update on Vision Zero, stating that the Vision Zero Action Plan is expected to be delivered in September. Several partners, department representatives, and outside agencies are collaborating on the Task Force that meets monthly to understand the universe of work being done around road safety and to identify and prioritize opportunities and solutions. The Communications Subcommittee is working on messaging, branding and communications strategy to launch to social media. The Data Subcommittee is meeting twice a month to identify the High Injury Network, which will show where most crashes occur on Houston's streets. Discussion ensued. Many spoke to a need to communicate the story behind why infrastructure improvements are needed.

8. HOUSTON CIP FUNDING UPDATE

Assistant Director Ostlind shared that designers are already brought on board by Houston Public Works with $800,000 of CIP funding allocated to bike facilities. Planning is still working on getting the rest of the $1.1 million allocated to construct the designed projects. Next fiscal year Planning will be prepared to have the rest of the $5.5 million released for spending.

Staff Member Melissa Beeler gave an update on Build 50 projects. Corridors complete (but may be waiting on signals to be installed) include Hardy & Elysian, Lyons Avenue, Downtown Connector streets and Wheeler Side Path. Near Northside projects were funded by Harris County Precinct 1. Wheeler Side Path was funded by METRO. Facilities programmed (in design or under construction) include Gray Street (awaiting signals), Hutchins Street (awaiting striping), Cleburne Street (pavement improvements), La Branch (pavement improvements. Centerpoint Easement corridor funded by Spring Branch is going into construction and Halls Bayou in the Northeast is programmed by Houston Parks Board. The construction contact has been awarded for Polk and Cullen north of I-45. Construction expected to begin in Spring 2020. Quitman Street is in design. A portion of Cavalcade is under construction. Curb ramps are being installed on Austin Street, followed by pavement improvements. Lockwood off-street path is in design with CIP funding. 11th Street Patterson Street is still in conceptual design phase. Planning is holding a pop-up bike lane and intersection improvement on Saturday, January 25 from 11am to 1pm to gather input.

It was requested to tally the number of other improvements that are being made while the bike lane construction is underway. There were concerns of lack of signage or temporary signal/signage for contraflow section of cycle track on Gray Street to indicate to cyclists to be cautious at intersections as they are waiting for signals to be installed.

9. COMPLETE STREETS REPORT DISCUSSION

Transportation Division Manager Sharon Moses-Burnside presented an overview of the Planning Department's Complete Streets Report, 2018-2019. The report can be found here: https://www.houstontx.gov/planning/transportation/CompleteStreets/Complete_Streets_Annual_Report_2018-2019.pdf

It was requested to allow the Committee to review the report for a week and request any edits to the Department individually.

10. ANNOUNCEMENTS

Vice Chair Martinson announced a tour of White Oak Bayou and murals in Inwood starting at White Oak Conference Center on Antoine. Precinct 1 is bringing bicycles for folks to ride. The event will be held at 7:30am on Saturday, February 1. Registration is 7:30-8am with a short bike safety training before the tour.

Ana Ramirez Huerta announced that project selection will be finalized in early February for Safe Routes to Schools (SRTS) TxDOT funding. The City and Committee members may want to review the projects selected to consider connectivity to future projects.

Yuhayna Muhmud announced the HGAC Bike/Ped Subcommittee put together some recommendations for the next TIP process and funding allocations for active transportation. The Subcommittee may need Committee member support later in the year to finalize recommendations.

VI. ADJOURNMENT

There being no further business brought before the Committee, Chair Maya Ford adjourned the meeting at 4:47 p.m.

_____ _____

Maya Ford
Chair

Jennifer Ostlind
Executive Secretary

Bicycle Advisory Committee

BAC Mission

To advise and make recommendations to the commission and the director on issues related to bicycling in the city including, but not limited to, amendments to the Bike Plan, bicycle safety and education, implementation of the Bike Plan, development of strategies for funding projects related to bicycling, and promoting public participation in bicycling.

BAC Vision

By 2027, the City of Houston will be a Safer, More Accessible, Gold Level Bike-Friendly City

PLANNING & DEVELOPMENT DEPARTMENT

January 22, 2020 2:30-4:30pm
City Hall Annex Council Chamber

Agenda

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- Chair's Report
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- Public Comment
- BikeHouston Bike-Friendly Drivers Program
- Houston Bike Summit
- Vision Zero Update
- Houston CIP Funding Update
- Complete Streets Report
- Announcements

BikeHouston Bike-Friendly Drivers Program

BikeHouston

PLANNING & DEVELOPMENT DEPARTMENT

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Vision Zero Update

Jennifer Ostlind

Planning & Development Department

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Houston CIP Funding Update & Build 50 Update

Jennifer Ostlind & Melissa Beeler

Planning & Development

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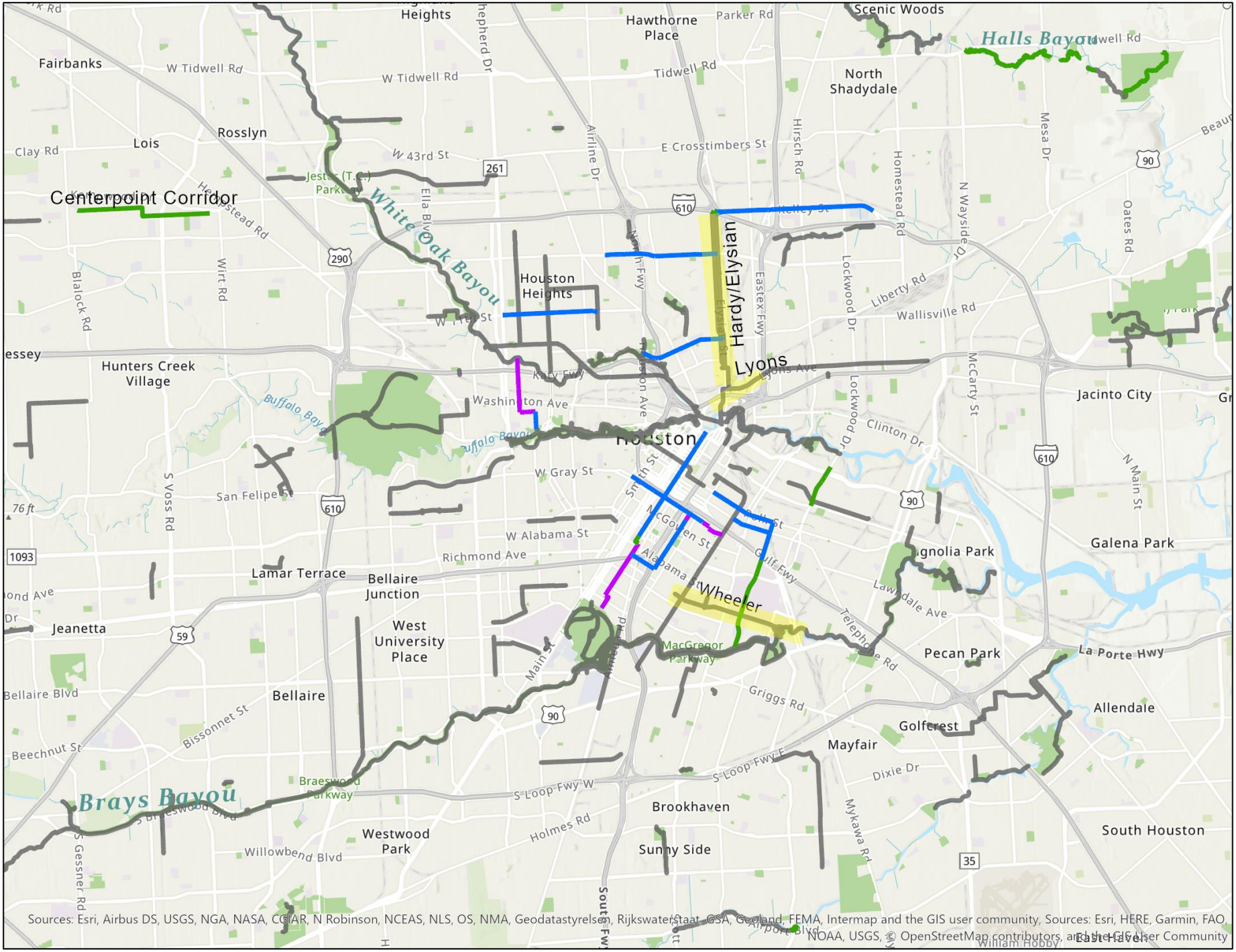
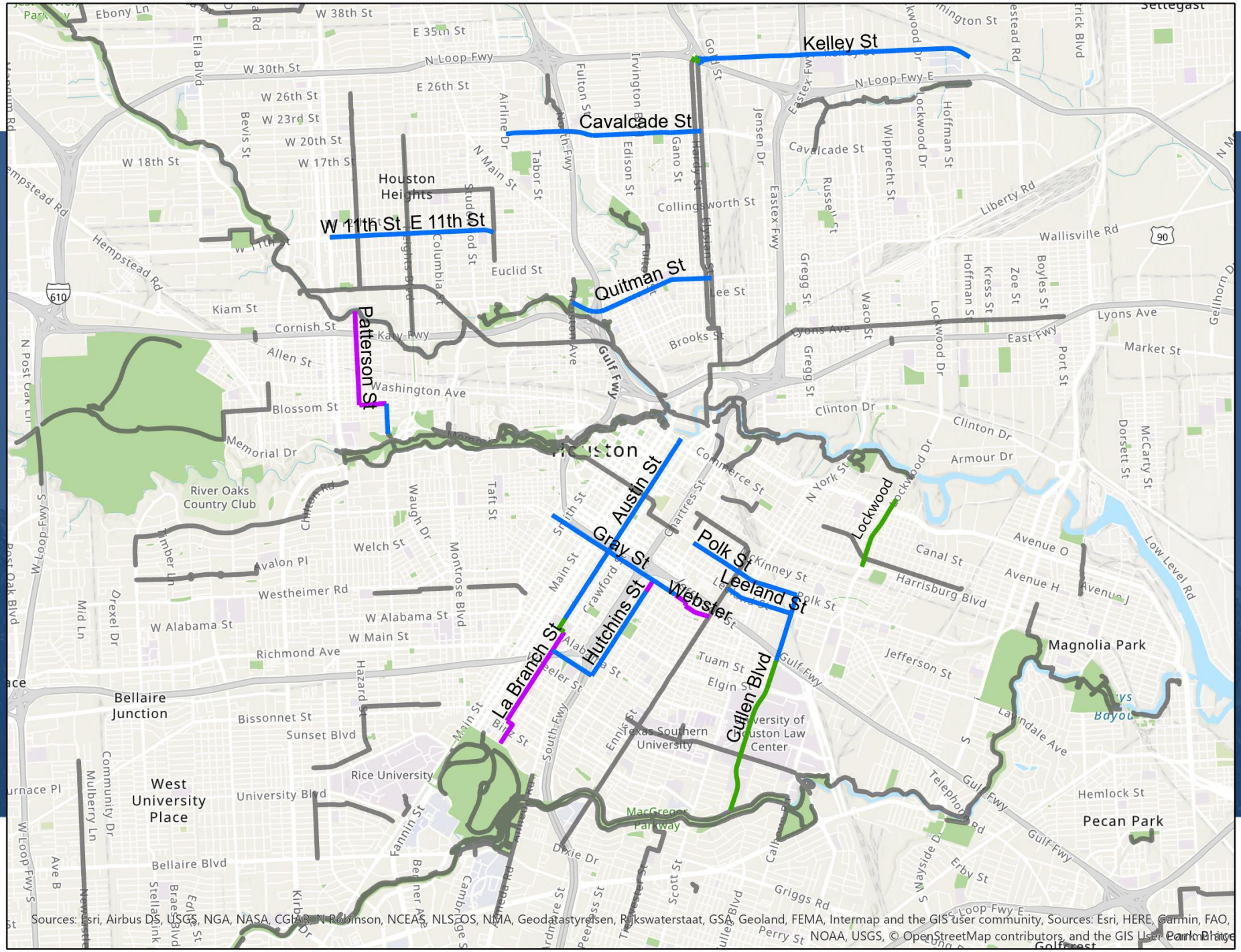


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community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Quitman St
Patterson St
Austin St
Gray St
Polk St
Leeland St
Webster
Hutchins St
La Branch St
Gullen Blvd
Lockwood
Houston Heights
Houston
River Oaks Country Club
Bellaire Junction
West University Place
Rice University
Texas Southern University
University of Houston Law Center
Magnolia Park
Pecan Park
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Looking Ahead

- Collaborating with METRO on priority BOOST corridor designs with bikeways
  - McGowen
- Following through on Third Ward priority routes
  - Elgin, Blodgett study phase
- Phasing CIP projects into design and construction
- Moving forward with Southeast Network
  - MLK Blvd.
- Ismaili Center & Dallas Street bikeways (BikeHouston)
- Developing partnerships and building on community conversations

2018-2019
Complete Streets Report

Sharon Moses-Burnside

Planning & Development Department

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Complete Streets

A transportation and design approach

Requires streets to be planned, designed, operated

In a manner that is safe for all users of all abilities

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Complete Streets

Addresses the approach of how we build and design streets

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Complete Streets Requirements

- *Design and operate our streets differently*
- *Maintain safe streets that are comfortable*
- *Think outside the box*
- *Include persons of all ages and all abilities*
- *Regardless of their mode of transportation*

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Complete Streets Background

- *In 2015, Mayor Annise Parker issued an Executive Order to develop the Complete Streets and Transportation Plan*
- *The Plan was created to provide safe, accessible and convenient use by motorist, public transit riders, pedestrians, people of all abilities and* ***BICYCLISTS!***

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Complete Streets Background

- *The Policy was written and executed with the full knowledge that it would take time to achieve our goals*

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Complete Streets

The ultimate goal is to create…

- *Walkable, bike friendly neighborhoods with amenities such as trees, landscaping, public art and street furniture*

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Complete Streets

How Do We Measure Success?

- *Systemwide totals within City limits*
- *Detail efforts that support fulfillment of the Plan*
- *Fiscal year 2014, serves as the baseline for improvement*
- *Additional indicators may be developed and included in the report*

Complete Streets

Mayor Sylvester Turner is continually building upon the Complete Streets Executive Order

- *Complete Communities Initiative*
- *Resiliency Officer*
- *Sidewalk Initiative*
- *Safer Streets – Road Safety Audit (RSA)*
- *Proposed Walkable Places Ordinance*
- *Vision Zero, et al.*

Complete Streets

- *Builds upon existing programs*
  - *Plan Houston*
  - *City's Mobility Planning*
  - *Major Thoroughfare and Freeway Plan (MTFP)*
  - *Houston Bike Plan (HBP)*
  - *Chapter 17 – Infrastructure Design Manual (IDM)*
  - *Complete Communities**
  - *Vision Zero**

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* Programs implemented after Complete Streets E.O., but included in the Plan

Complete Streets – Highlights

42 Miles

High-Comfort Bike Lanes

1,000 *additional Houstonians live less than* **½** *mile from a bike lane*

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Complete Streets – Highlights

Safer Streets Initiative

- **12** *Intersections identified by the community as dangerous for biking and walking*
  - ***Improved safety:*** **3,900** *people walking and biking*
  - *More than* **367,000** *cars and trucks/daily*

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Complete Streets – Highlights

Bcycle

- 109 Stations
- *700 Bicycles*
- ***Go Pass:*** *Cash-based lower cost alternative for residents in the 3rd Ward area*
  - ***22*** *New members*
  - ***357*** *Trips*
  - ***1,467*** *Miles traveled*

Complete Streets – Changes

Page 3



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Complete Streets – Changes

Appendix A –
Detailed Program Description – Page 4

Appendix B –
Chart Indicators – Page 10

Appendix C –
2020 and Beyond– Page 13

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Complete Streets – Changes
Support for Complete Communities

- Acres Homes
- Gulfton
- Near Northside
- Third Ward

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*Please refer to page 9 in the Complete Streets Report

Complete Streets – Challenges

- **Data Collection:**
  - How we collect and maintain data – silos
- **Resources:**
  - Increase resources
  - Include all partners to help update information
  - Including data and project tracking
- **Improve Public Access:**
  - Easily accessible information

Complete Streets – Next Steps

- Publish Framework
- Implement HPW's new Project Management Software (AURRIGO)
- Incorporate Mayor's Sidewalk Initiative
- Revise data collection methods to track progress
- Integrate Resiliency measures into the report
- Revamp MTFP/CIP process to include Complete Streets objectives

Complete Streets

Questions?

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- Announcements

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Next Meetings & Announcements

BAC appointments: January 29th City Council meeting

Infrastructure Subcommittee

February 19, 2:30-4:30pm, 611 Walker, 6th Floor

Education Subcommittee

March 25, 2:30-4:30pm, 611 Walker, 6th Floor

Bicycle Advisory Committee

April 22, 2:30-4:30pm, City Hall Annex Council Chambers

PLANNING & DEVELOPMENT DEPARTMENT

CITY OF HOUSTON

Planning & Development Department

Interoffice

Correspondence

To: Mayor Sylvester Turner

From: Margaret Wallace Brown
Director

Date: January 7, 2020

Subject: **2018/2019 ANNUAL REPORT: HOUSTON COMPLETE STREETS AND TRANSPORTATION PLAN**

Attached you will find the 2018/2019 Houston Complete Streets and Transportation Plan (HCSTP) Annual Report. The Complete Streets and Transportation Plan calls for City Streets to provide safe, accessible and convenient use by pedestrians, motorists, public transit riders and bicyclists.

This report is called for in Executive Order (E.O.) 1-15, commonly referred to as the Complete Streets Executive Order. This report documents the past two years' accomplishments by the City of Houston and our partners in carrying out the HCSTP. It also identifies steps to be taken in the future.

The Planning and Development Department (P&D) developed this report in close collaboration with Houston Public Works (HPW) and the other departments and agencies that play a role in furthering Houston's Complete Streets Plan.

Significant progress has been made over the past two years to strengthen the City's commitment to improving mobility for all road users, making programs and processes more transparent, and leveraging resources for maximum impact. Most notable are these three:

- With the completion of 42 miles of high-comfort bike lanes, 1,000 additional Houstonians live less than one-half mile from a bike lane that supports all riders and abilities.
- HPW kicked off the Safer Street Initiative with safety audits at 12 intersections identified by the community as dangerous for walking and biking. These audits, and the improvements planned as a result of them, will improve the safety at those intersections for more than 3,900 people walking and biking and for people in more than 367,000 cars and trucks every day.
- B-Cycle now operates 109 stations with 700 bicycles. In 2019, B-Cycle and Change Happens! collaborated to launch the Go Pass, creating a cash-based, lower cost alternative for residents of Third Ward. Since the launch, 22 new members have utilized the pass for 357 trips, totaling 1,467 miles traveled in and around the Third Ward-area stations.

I am available to discuss this report at your convenience.

MWB/JO:smb

cc: Andy Icken, Chief Development Officer
Carol Ellinger Haddock, P.E., Director, Houston Public Works

Houston Complete Streets and Transportation Plan

2018/2019 Report

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2018/2019 Accomplishment Highlights (Further detailed in APPENDIX A)

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

Design and Construction:

- **Infrastructure Design Manual (IDM) Chapter 17**: new pedestrian, bicycle and transit facilities standards
- **Road diets**: Gemini Street
- **Houston Bike Plan**: partnered with Harris County, Bike Houston and others to build 42 miles
- **North Houston Highway Improvement Project (NHHIP)**: created Facilitation Group and conducted community engagement
- **Safer Streets Initiative**: conducted 12 Road Safety Audits
- **Bike Share (BCycle)**: expanded facilities and fleet to 109 stations with 700 bicycles and created the Go Pass to provide a lower cost, cash-based way to rent bikes in the Third Ward area

Policy:

- Established the **Bicycle Advisory Committee** (BAC)
- Commenced **Vision Zero-Houston** planning effort
- Completed **Walkable Places/Transit-Oriented Development** ordinance development

Planning and Advocacy:

- Successfully achieved **METRONext** bond passage
- Completed the **Southeast Houston Regional Mobility Plan**
- Conducted annual **Major Thoroughfare and Freeway Plan (MTFP)** amendments
- Analyzed and developed recommendations for $30 million in **TIP** funding to METRO
- Launched **Interactive Infrastructure Project** mapping tool: www.buildhoustonforward.org
- Participated in **Livable Center** studies for the Westchase District and Sprint Branch

Measuring Success (Further detailed in APPENDIX B)

The E.O. requires that the City measure its success in implementing the HCSTP, providing systemwide totals within City limits 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.

The City recognizes that many of the metrics collected and published in this report depict an incomplete picture of Houstonians' ***increased*** access to equitable transportation options. Houston Public Works' data collection is tied closely to its project delivery process where infrastructure repair is often ***combined*** with

new projects; the information cannot be separated. Adapting it will take time. In the meantime, P&D and HPW are investigating ways to provide a clearer picture of the work being done.

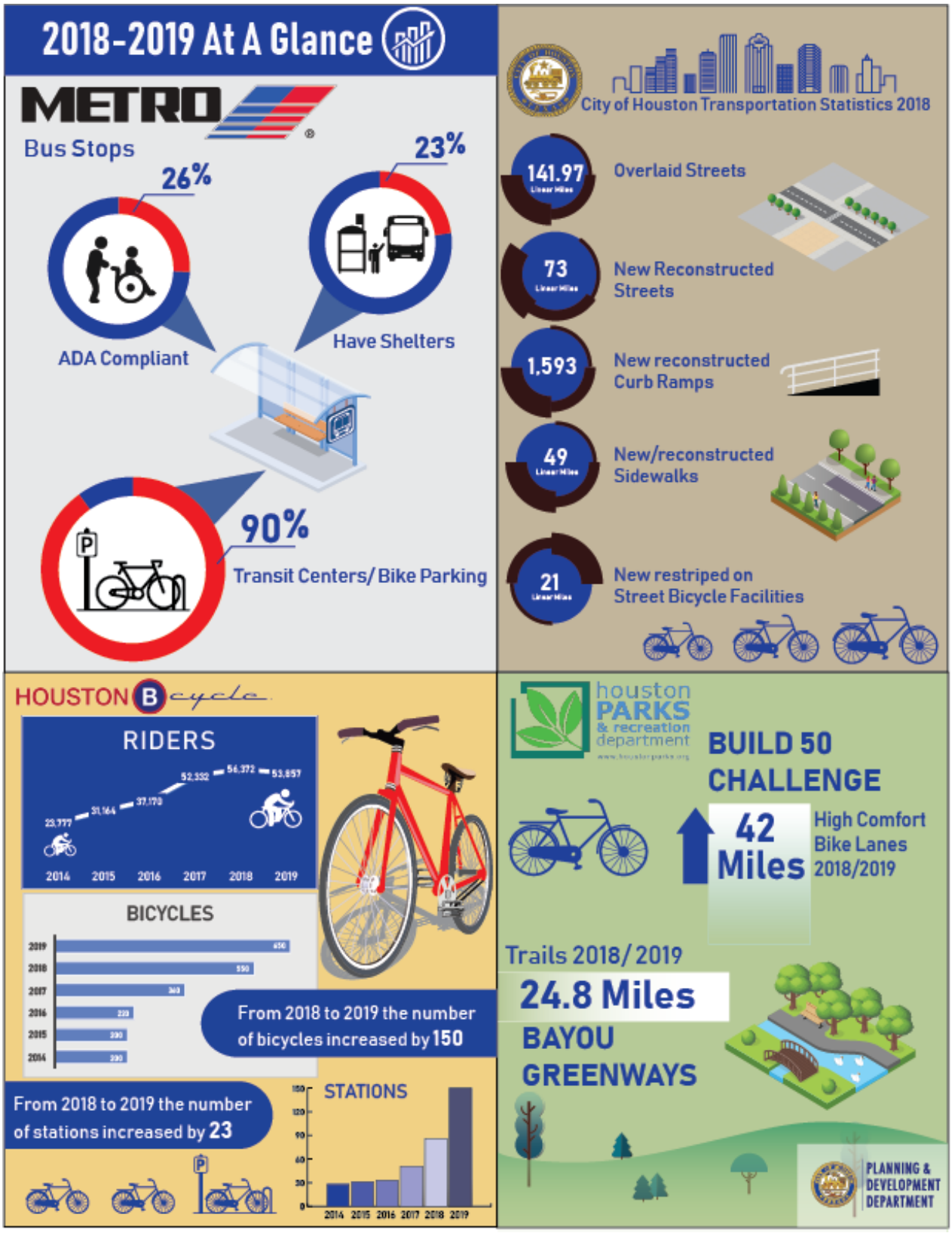
Providing complete and useful reports on an annual basis remains a challenge for the City and its partners. Following the delivery of this report, P&D will convene partner agencies and develop solutions for improvements to be carried out in the following report. Existing issues to be revolved include, but are not limited to:

- Eliminating siloed and disparate data collection;
- Increasing resources across all partners to update data collection and project tracking; and
- Improving public access to project information.

Next Steps (Further detailed in APPENDIX C)

The HCSTP Framework, to be published in 2020, will include suggestions for additional indicators to measure progress towards the goal of implementing complete streets as defined in the E.O. Planning & Development and Houston Public Works are working together to ensure the timely adoption of these indicators.

- Publish Framework
- Implement HPW's New Project Management Software (AURRIGO)
- Incorporate Mayor's Sidewalk Initiative into the complete streets report
- Revise data collection methods to provide a more meaningful way to track progress
- Integrate resiliency measures into the complete streets process and report
- Revamp MTFP/CIP process to include Complete Streets objectives


2018-2019 At A Glance
METRO
Bus Stops
26%
ADA Compliant
23%
Have Shelters
90%
Transit Centers/ Bike Parking
City of Houston Transportation Statistics 2018
141.97
Overlaid Streets
73
New Reconstructed Streets
1,593
New reconstructed Curb Ramps
49
New/reconstructed Sidewalks
21
New restriped on Street Bicycle Facilities
HOUSTON Bicycle
RIDERS
2014 2015 2016 2017 2018 2019
BICYCLES
From 2018 to 2019 the number of bicycles increased by 150
From 2018 to 2019 the number of stations increased by 23
STATIONS
houston PARKS & recreation department
BUILD 50 CHALLENGE
42 Miles
High Comfort Bike Lanes 2018/2019
Trails 2018/2019
24.8 Miles
BAYOU GREENWAYS
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APPENDIX A - Detailed Program Description

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.

Design and Construction:

1. Update to the Infrastructure Design Manual (IDM), Chapter 17: The City of Houston's IDM was updated with new design criteria for pedestrian, bicycle and transit facilities, including new facility types such as separated bikeways and floating bus stops.

2. Road Diet: A road diet reduces the number of travel lanes and/or width of the road to achieve systemic improvements. The City of Houston is slowly implementing this process in areas where it serves as a solution to improve road safety. In 2019, as part of a rehabilitation project, the City implemented a Road Diet on Gemini Street in the Clear Lake area. Gemini Street was re-striped and reduced from four to three lanes and an on-street bicycle facility was added. This project will be used as a pilot for establishing road diets on other road segments in the future.

3. City-County Bikeway Partnership and "Build 50 Challenge": On April 16, 2018, Mayor Sylvester Turner and Harris County Precinct 1 Commissioner Rodney Ellis, initiated a City-County partnership to connect neighborhoods with destinations and improve pedestrian and bicycle safety through rapid implementation of the Houston Bike Plan. The Planning Department established a team with representatives from various City Departments, Harris County Precinct 1, and BikeHouston to engage the public, identify neighborhood networks, determine feasibility of selected routes, and construct bike lanes.

   At the same time, BikeHouston challenged the City to build 50 miles of bike lanes. The result of the "Build 50 Challenge," reflects the hard work of the City, the County and other partners including Council Member Karla Cisneros, Harris County Precinct 2 Commissioner Adrian Garcia, Houston Parks Board, Metro, and several TIRZ and management districts, to make Houston multi-modal within pressurized time constraints and an unprecedented implementation process.

   The bike lanes created as part of this partnership include 6.2 miles of parking-protected, high-comfort lanes along Elysian Streets in the Near Northside Complete Community. In addition, there is a dedicated bike lane on Kelley Street and Lyons Avenue in Fifth Ward.

   Cumulatively, 42 miles of high-comfort lane miles were added to the City's infrastructure. Additional miles are forth coming.

4. North Houston Highway Improvement Project (NHHIP): The NHHIP is a TxDOT Project to reconstruct I-45 and adjacent freeways from Beltway 8 to Downtown. This project poses significant impacts, as well as opportunities for our region.

   - **Public Engagement**: Mayor Turner has asked P&D to engage the community in discussing impacts the project will have on local mobility among others and potential solutions. The purpose is to listen to community concerns and ensure the City's interests are considered in the design and construction of this massively transformative transportation project.
   - **Bridge Design**: P&D 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, the bridge will have a minimum 17' pedestrian realm on each side of the bridge where bike lanes are planned and a minimum 10' 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.

5. Safer Streets Initiative and Road Safety Audits (RSA): A Road Safety audit is a formal safety performance examination of a road or intersection by an independent, multidisciplinary team. It is a service offered by the Federal Highway Administration (FHWA) to cities such as Houston, to help maintain a Pedestrian and Bicycle Safety Focused City.
   FHWA establishes a multi-disciplinary team of safety experts that undertake a forensic analysis of various intersections by observing behavior at multiple periods and debriefing at length to make recommendations for improvement in the short, medium and long-term range.

   In April 2018, following several high-profile fatal crashes, involving vulnerable road users, Mayor Turner charged the City and its partners to identify and develop solutions for the 10 most dangerous intersections in Houston. Advocacy groups such as LINK Houston and BikeHouston, researched data analysis and membership surveys respectively, then advised the City on what became a selection of 12 intersections accepted by Mayor Turner in July. This is called the Safer Streets Initiative and a Road Safety Audit ensued. These intersections were studied over the course of two Road Safety Audits.

   The FHWA worked with HPW, Bike Houston, Link Houston and other partners to evaluate and determine the safety of our current infrastructure. Upon completion of their review, the FHWA recommended both short and long-term recommendations to help make our intersections safer. Implementation of many recommendations are being pursued through bikeway implementation, CIP projects and other programs. Many of the solutions have already been implemented.

   To ensure continued improvements in street safety, HPW has created a position for a Safer Streets Coordinator.

6. Bike Share Expansion: Houston BCycle is the City's premier Bike Share Program. It is an equitable access bike share program that fosters recreation, mobility and personal wellness.

   P&D and Houston Bike Share continued to implement a $3.7 million grant to purchase 71 bike stations, 568 bicycles, and 2 transport vehicles secured through a 2015 Transportation Improvement Program (TIP) Call for Projects. In 2018, stations were installed in many new areas including the Texas Medical

Center, University of Houston, University of Houston-Downtown, Texas Southern University and other surrounding neighborhoods.

Houston BCycle enjoyed record ridership in 2018. By December 2019, BCycle maintains 700 bicycles and 109 stations.

Policy:

1. Bicycle Advisory Committee (BAC): The Bicycle Advisory Committee (BAC) was established by ordinance Section 33-401. The committee 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 safety and education, strategies for funding projects and promoting public participation in bicycling.

   In April 2018, Houston's Bicycle Advisory Committee (BAC) held its first quarterly meeting. At their inaugural meeting, the BAC formed two subcommittees, respectively focused on Infrastructure and Education. Each subcommittee meets during the months the full BAC is not in session.

   In April 2019, the BAC drafted a Resolution in support of Vision Zero. The Planning and Development Department presented the Resolution to the Planning Commission to garner more support and inform them of the proposed Vision Zero strategy.

2. Vision Zero-Houston: Vision Zero is a commitment strategy to eliminate traffic fatalities and severe injuries while increasing safe healthy, equitable mobility for all. A small committee representing several City Departments convened to discuss a plan for adopting and implementing a Vision Zero strategy for the City. Committee members researched best practices, developed a draft Executive Order and framework for moving forward.

   In August 2019, Mayor Turner held a press conference at the Julia Ideson Library to show his support for the Vision by signing the Executive Order for Vision Zero-Houston. The Mayor appointed an Executive Committee and a Task Force that will guide development of a Vision Zero Action Plan for achieving zero deaths on Houston's roads by 2030.

3. Walkable Places and Transit-Oriented Development Draft Ordinance: Walkable Places Ordinance is a proposed ordinance focused on exploring opportunities to promote higher density mixed use development in Houston, by creating more vibrant, walkable streets that support multimodal transportation options. The ordinance as proposed, would encourage designation of walkable places in appropriate areas in the City and allow property owners to initiate amendments to the plan.

   In addition, the ordinance amends the existing Transit-Oriented Development (TOD) rules to establish mandatory standards along certain streets adjacent to Transit stations. The new rules will provide a more walkable environment for streets near transit stations and encourage greater use of transit in Houston.

Planning:

1. Livable Center Studies: Livable Centers Study is a program sponsored by the Houston-Galveston Area Council (H-GAC) that helps local communities identify specific recommendations such as improved transit, pedestrian and bicycle facilities that 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. P&D and HPW staff represent the City in studies led by H-GAC and other non-City entities. These studies help to provide a more accurate analysis for future land use and infrastructure investments.

   The Westchase District Livable Centers Study was completed in 2018. The extent of the study area was between Rogerdale Road and Gessner Road (east of Sam Houston Tollway/Beltway). The Westchase study examined ways to better connect the area to the District's western side, by considering transportation options for commuters, and mixed-use development with multi-modal options. Recommendations to reclassify streets on the City's Major Thoroughfare and Freeway Plan (MTFP) were implemented during the 2017 MTFP amendment process.

   The Spring Branch Livable Centers Study was completed in 2019. The study focused on the Long Point corridor from Gessner to Hwy 290. A recommendation from the study to convert Long Point from four lanes to three is a pilot project being implemented by the management district with input from HPW and P&D. For the Spring Branch community, this pilot project aims to transform, pedestrian and transit-enabled mixed-use destinations.

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

   P&D and HPW, in partnership with H-GAC are implementing Phase II of the City Mobility Planning (CMP) to study areas within the City of Houston and its extraterritorial jurisdiction (ETJ), to identify short, medium and long-term projects intended to promote better mobility, and to consider and develop a multi-modal classification for streets within the study area.

   The 2018 Southeast Mobility Plan was created in collaboration with community and regional stakeholders. The plan identified multimodal needs and challenges in the Southeast Houston sub-area. The study obtained input from the community that would serve to implement projects in the area, to help improve mobility and access inclusive of the community's perspective.

   The Study entailed 12 months of intensive research and public engagement to research and review Houston's short, mid and long-term multimodal mobility planning efforts. The study concluded in February 2019 and the report published in June of that year.

   The process is important because it helps to define context of the MTFP. This study will help the City design safer complete streets and implement development codes. The next step would be to amend the MTFP based upon the recommendations determined by this mobility study.

3. Major Thoroughfare and Freeway Plan (MTFP): The MTFP is an integral tool in providing mobility for Houstonians throughout the City. It provides a visual map to Houston's highways and street infrastructure where improvements are needed, it is a framework for guiding development in the City and extra-territorial jurisdiction.

   This year, P&D continued to incorporate a context-sensitive approach when considering proposed amendments to the City's Major Thoroughfare and Freeway Plan. In 2018, P&D processed 91 amendments to the plan submitted by both private and public-sector applicants. Many of those resulted in classification changes to better serve all road users. In 2019, P&D processed 11 amendments, 2 amendments were withdrawn by the applicant, with 1 amendment recommended as a denial to the Planning Commission. Accordingly, P&D submitted 8 of the amendments to City Council for approval.

4. METRONext: The METRONext Moving Forward Plan is a vision plan that accounts for public feedback, current needs and financial projections. It includes system-wide improvements and prioritizes key projects. The Metropolitan Transit Authority of Harris County kicked off METRONext in 2017, with a series of public meetings and events to gather public feedback in developing an updated regional transit plan.

   The plan builds upon past successes and explores potential investments in various transit modes that would serve to connect more people to more places. P&D and HPW are working closely with METRO to ensure City interests are reflected in the plan and are paying close attention as Metro prepares to carry out the plan.

5. METRO ADA Funding: METRO applied for the Universal Accessibility Project funding to help bring all bus stops to current Americans with Disabilities Act (ADA) standards. The TIP funding was approved and the Transportation Policy Council (TPC) made the commitment to fund $30 million dollars to the project. Currently the funding is being processed to go through the Statewide Transportation Improvement Program (STIP), at which point the state will submit the request to the Federal Highway Administration (FHWA) for allocation to the Federal Transit Authority (FTA); maybe as early as this year.

6. Interactive Mapping Tool – Build Houston Forward: Build Houston Forward is the City's program to enhance, improve and maintain City streets and drainage systems without accruing additional debt. After Hurricane Harvey, the City committed to be forward thinking as it builds new streets and rebuilds old drainage facilities. Build Houston Forward is the plan to meet challenges effectively, efficiently and without taking on new debt. The Interactive mapping tool allows the user the opportunity to choose which layer of information to display, as well as the area where the information is being reviewed.

Support for Complete Communities

Several improvements made to Houston's Complete Streets effort directly benefitted Complete Communities. They include:

Acres Home:

- The City has identified a high comfort bike network connecting important destinations like schools and parks.
- Planning and HPW are studying a potential road diet for Little York to be funded through the CIP.

Gulfton:

- The City installed 2 speed cushions on El Camino del Rey between Chimney Rock and Alder
- The City partnered with Connect Communities and Together for Safer Roads to identify safety improvements at the intersection of Hillcroft and High Star. As a result, Houston Public Works earmarked $500,000 for the following:
    - Signalized pedestrian crossings,
    - Wider sidewalks,
    - New curbs,
    - Bigger bus shelters,
    - Delineated bike safety lanes,
    - "Traffic calming" measures on stretches between traffic lights, and
    - Possible reduction of motor vehicle lanes

Near Northside:

- City partnered with the Clinton Foundation and Northside Management District to implement decorative cross walks at four intersections, improving safety for pedestrians.
- New high-comfort, parking protected bike lanes on Hardy and Elysian streets built through the partnership between Harris County Precinct 1 and the City of Houston.
- Northside Management District will construct new sidewalks on Quitman Street.
- Metro is improving connections to the Red Line by constructing bike lanes on Quitman and Cavalcade Streets.
- The City will extend the bike lane on Quitman Street to connect with the new lanes on Hardy and Elysian Streets using CIP funds.

Third Ward:

- Metro constructed a separated bike lane on Wheeler Street connecting the TSU campus to light rail; Harris County Precinct 1 constructed a protected bike lane on Gray Street. The City worked with the community to identify a high comfort bike network connecting to destinations inside and outside the neighborhood. Harris County Precinct 1 is designing and will construct bike lanes on Cleburne and Hutchins Streets.

APPENDIX B – Chart Indicators

The HCSTP Framework indicators on the charts below are populated with the most recent information and level of detail available. Each chart represents a specific area/agency of growth that contributes to the City's complete streets objective as stated in the E.O.

City of Houston roadway improvements:

The City of Houston is continuing its path toward the development of complete streets, and there is steady progressive movement to implementing the task. Linear miles of new/reconstructed streets are imperative, as bike facilities cannot be placed on crumbling infrastructure. The chart below establishes the City's progress towards minimizing obstructions in public pedestrian travel ways.

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

BCycle facility expansion:

The BCycle bike sharing system is owned and operated by Houston Bike Share and it continues to expand. The chart below lists the exponential growth of the bike share program.

BCycle Indicators	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY2019*
Riders	23,777	31,164	37,170	52,332	56,372	53,857
Bikes	200	200	220	360	550	650
Stations	28	31	33	51	86	99
Trips	80,956	98,411	113,283	142,257	165,585	178,329
Minutes of ride time	4,874,150	5,726,154	6,625,308	7,675,338	7,695,749	7,280,385
Miles traveled	449,649	608,571	777,792	964,526	966,648	883,540
Pounds of carbon offset (est.)	426,243	576,296	736,739	913,273	917,067	842,032
Calories burned (est.)	17,926,736	24,254,532	31,009,744	38,446,635	38,559,074	35,311,550

*2019 reporting still in progress

Bikeways constructed:

The Build 50 Challenge has helped the City make great strides in constructing on-street high-comfort bicycle facilities. All totaled, 42 miles was completed as a result of this challenge. The Chart below represents streets where high-comfort facilities have been added to the City's infrastructure.

Bikeway Facilities summary by City/County Partnership

Projects funded in partnership with Harris County Precincts 1 and 2, as well as funding from Council Member Karla Cisneros. These are 100% designed and contracted, but some projects have not broken ground.

Street	Extents	Miles
Lyons	Hardy to Maury	0.8
Hardy and Elysian	Kelley to Heritage Trail	6.2
Kelley	Hardy to LBJ Hospital	2.6
Austin/La Branch/ Crawford	Commerce to Hermann	3.45
Hutchins – Cleburne	Gray to Austin	1.6
Gray	Brazos to Columbia Tap	1.75
Polk	Emancipation to Cullen	1.1
Total		**17.5**

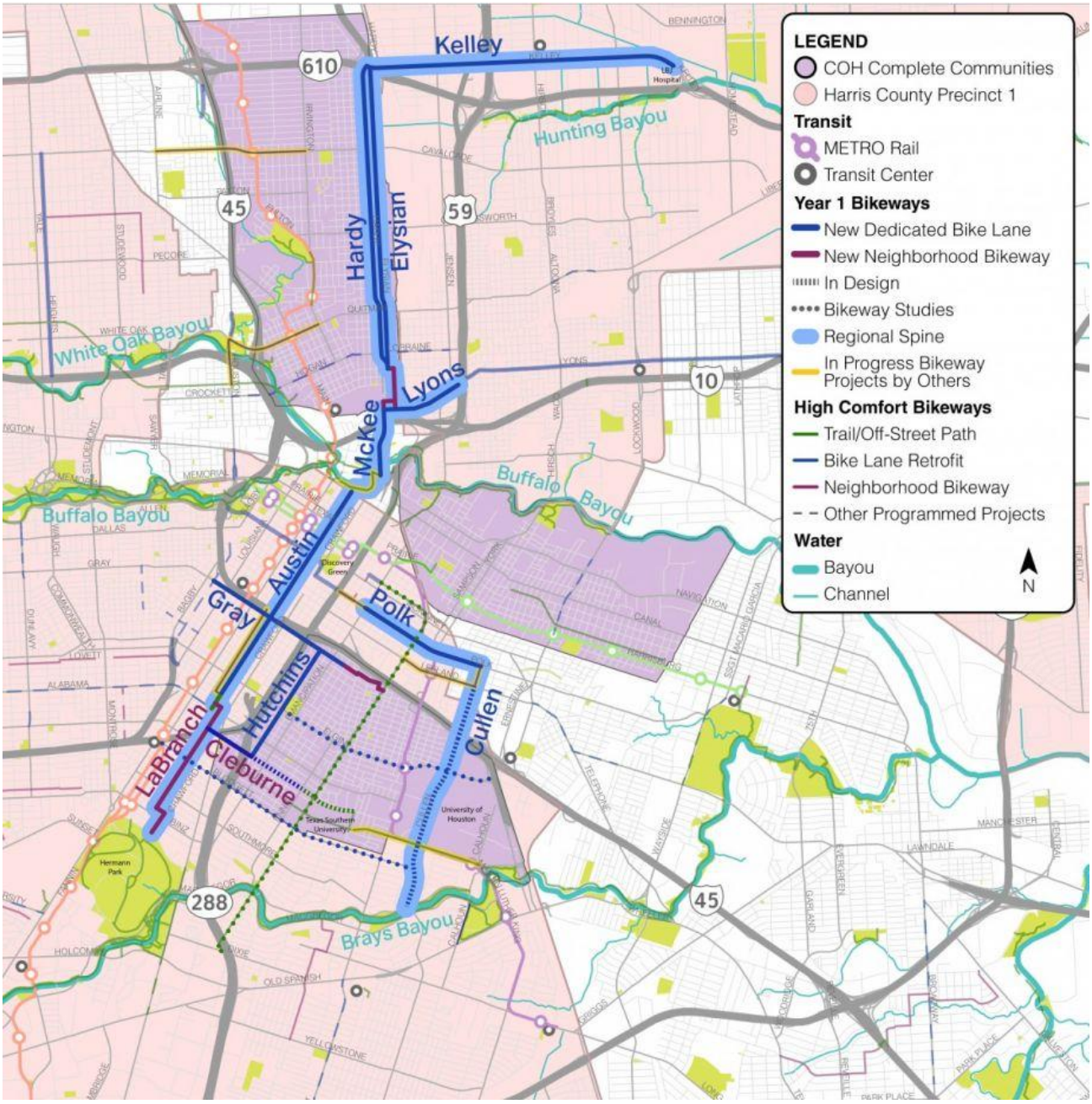
Bikeway Facilities Summary by Outside Agencies

The Build 50 Challenge could not have been accomplished without our partners. The Chart below indicates the miles of high-comfort bicycle facilities added by other agencies.

Agencies	Miles
Houston Parks Board	24.8
METRO	1.1
TIRZ #5	0.5
Westchase MD	0.3
Other – Precinct 1	7.6
Total	**34.3**

Harris County/City Partnership Map

The Harris County/City Partnership helps to establish Multi-Modal Classification (MMC) as required by the E.O. The Map below provides a visual indicator of the high-comfort bicycle facilities being added to the City's infrastructure.



APPENDIX C – 2020 And Beyond:

The following initiatives for completing the HCSTP component plans and other items mandated by the E.O. are planned or underway:

Task	Lead	Status
Publish HCSTP Framework The HCSTP Framework (a guide for street reconstruction projects) is in the final draft stage and publication is expected by the end of 2020.	P&D	In Progress
CIP Process Manual Update Significant changes were made to the CIP Process in the wake of Hurricane Harvey. • Primary focus on drainage • Increase from 10% to 30% design • New title: "Build Houston Forward." • HPW is working to identify opportunities to include complete streets elements in these projects.	HPW	In Progress
Publish HCSTP Database and Map The launch of Build Houston Forward includes a new, comprehensive mapping tool with several improvements over the previous CIP viewer. HPW and P&D are working to make additional improvements to this tool and are working to include partner projects. www.buildhoustonforward.org	P&D, HPW	Complete
Create a Pedestrian Plan The Planning and Development Department and Houston Public Works will develop a City-wide Pedestrian plan in 2020.	P&D, HPW	In 2020
Create a Master Parking Plan ARA and P&D are currently working to prioritize the use of the curb along City ROWs to align with City initiatives. ARA is also considering Market Share Parking.	ARA, P&D	Planned
Develop a Rail Plan The Gulf Coast Rail District rail network supports safe freight movement and safe reliable passenger movement. Work to separate grades at crossings to improve safety and mobility on roadways and rail and maximize use of rail to minimize roadway congestion.	HPW, Gulf Coast Rail District	Planned