City of Houston
Bicycle Advisory Committee
Infrastructure Subcommittee

611 Walker, 6th Floor, John B Raia Conference Room
Wednesday, February 19, 2020
2:30-4:30pm

Agenda

Discussion Regarding the Following Items:

1. Welcome and Introductions
2. Chair's Report
3. Public Comment
4. Bikeway Project Updates
5. Strategy to Develop, Fund and Construct a Short-term Priority Bikeway Network
    a. Project Prioritization
6. Strategy to Fund and Construct 500 miles of High-Comfort Bikeways by 2025
7. 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

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

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February 19, 2020 2:30-4:30pm
611 Walker, 6th Floor

Bikeway Projects Update

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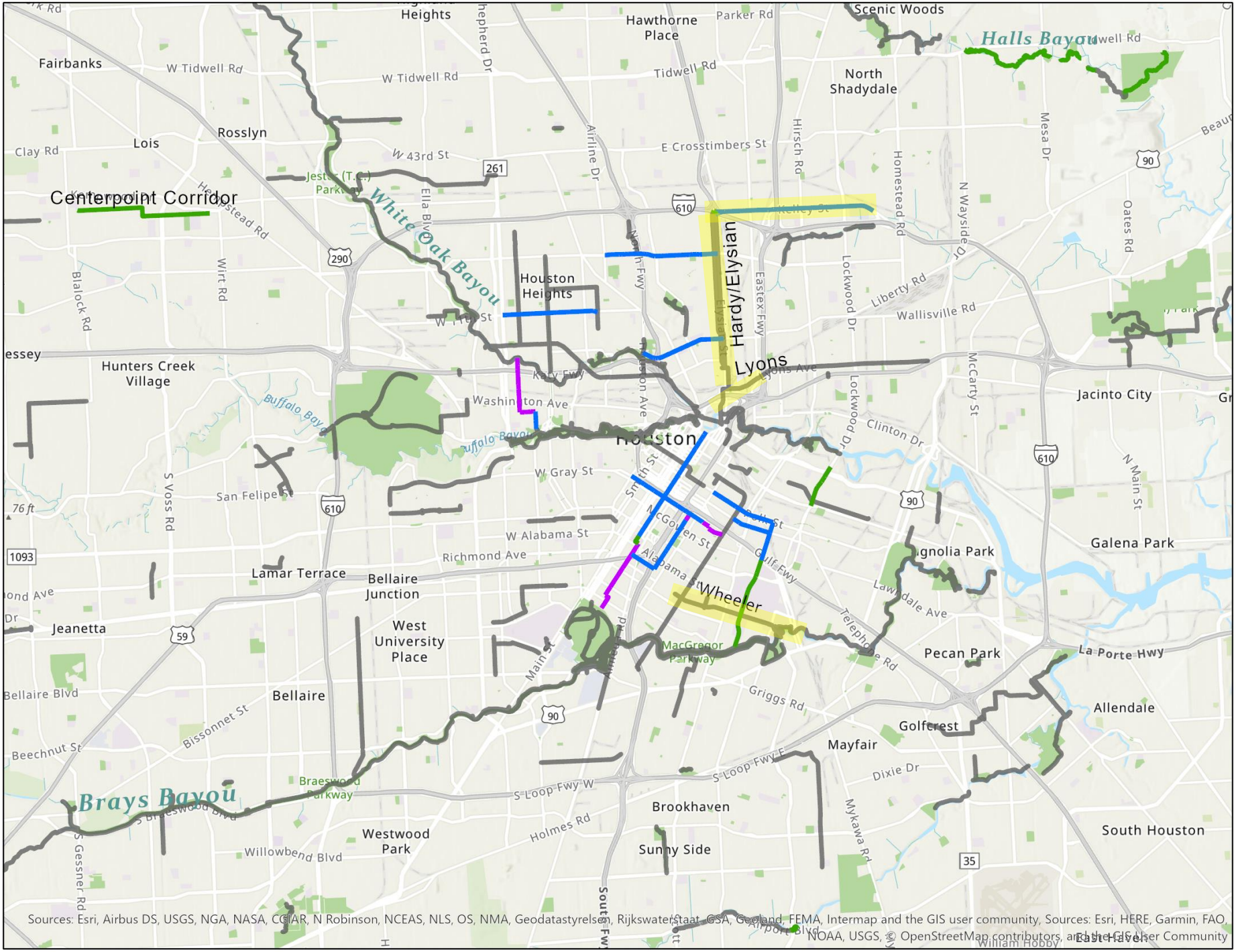
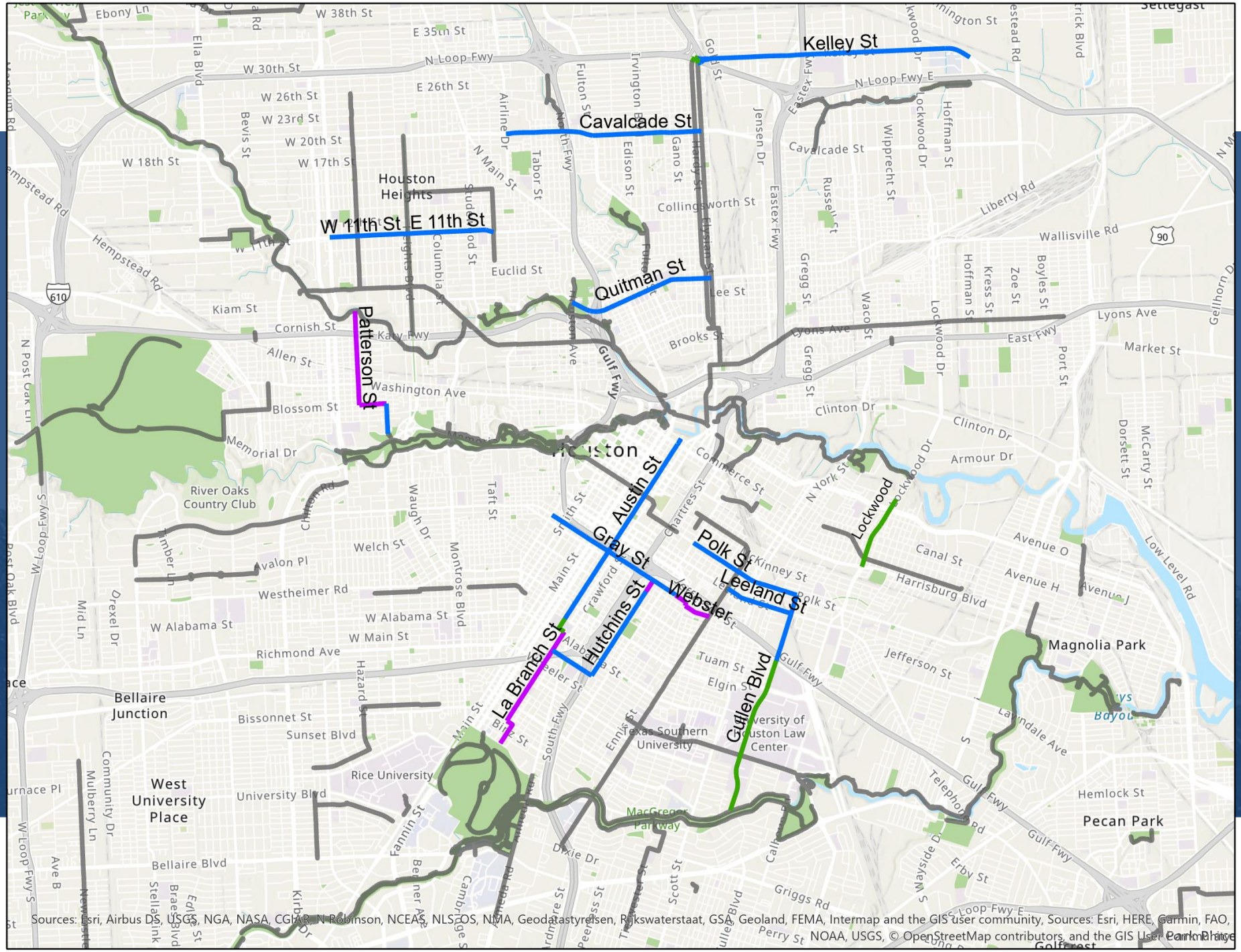


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community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Quitman 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

Strategy to Develop a Short-term Priority Bikeway Network

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Goals

VISION

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

GOALS



Improve Safety

To provide a safer bicycle network for people of all ages and abilities through improved facilities, education, and enforcement



Increase Access

To create a highly accessible, citywide network of comfortable bike facilities that connects neighborhoods to transit, jobs, and activity centers, including schools, universities, parks, and libraries



Increase Ridership

To exceed average ridership levels in peer cities by implementing policies and programs that enable more people to ride bicycles and encourage healthy, active transportation choices



Develop and Maintain Facilities

To develop and sustain a high-quality bicycle network, including both bikeways and end-of-trip facilities

Challenges

- Funding challenges
- Regulatory changes
  - Political support
- Competing priorities
  - Multimodal approach
- Strong partnerships needed
  - HGAC, Parks Board, TIRZs, Harris County, TxDOT, etc.

Implementation Strategies and Key Recommendations for the Houston Bike Plan

1. Manage Performance Against Goals

1.1 Develop and present an annual Houston Bikeways Program Strategic Report.

1.2 Develop approach to capture data to assess performance on a regular basis and develop performance targets.

2. Prioritize and Collaborate on Policies and Programs

2.1 Develop agreed-upon roles with city departments including Houston Bikeways Program staff and partners for implementation of policies and programs identified in the Bike Plan.

2.2 Develop prioritization approach for tackling policies and programs considering resources, staffing levels, and partnership opportunities.

3. Project Development and Implementation

3.1 Develop packages of short-term bikeway projects that can be implemented within existing street rights-of-way and seek funding to implement.

3.2 Prepare key connection recommendations as a package of projects detailing benefits and costs. This package should be utilized to recruit funding partners and apply for grants as opportunities become available.

4. **Develop Resource and Staffing Needs**
   - 4.1 Increase Houston Bikeways Program staff in appropriate departments in the City.
   - 4.2 Establish the Bicycle Advisory Committee as a regular standing committee that works with City staff to implement the Bike Plan.
5. **Leverage Funding Opportunities**
   - 5.1 Create a spending target with dedicated funds from the City's budget for bikeway projects and programs.
   - 5.2 Identify and pursue funding partnerships and support from other local agencies, City departments, and private entities to leverage funds.
   - 5.3 Pursue funding for short-term and key connection projects.
   - 5.4 Develop bicycle facility maintenance prioritization criteria and incorporate bicycle facility maintenance as part of roadway maintenance activity as possible.
6. **Build Momentum Through Pilot Projects**
   - 6.1 Create conceptual plans for specific bikeway treatments across the city.
   - 6.2 Implement and celebrate bikeway projects to build momentum to implement the Plan.
7. **Connect to Major Bicycle Thoroughfares (e.g., Bayous and Other Greenways)**
   - 7.1 Develop specific plans and policies for access to major greenway corridors to ensure safe access to these "bicycle highways" from neighborhoods and activity centers.
   - 7.2 Coordinate with adjacent jurisdictions to provide a connected network across city lines.
8. **Engage Neighborhoods to Translate Plan to a Local Level**
   - 8.1 Incorporate and refine the provided approach and tools for neighborhood level planning to connect to citywide bikeway network, in future planning projects.
   - 8.2 Identify opportunities to apply specific policies or programs at the neighborhood level to support the growth of safe, healthy opportunities to bicycle.
   - 8.3 Continue proactive outreach to neighborhoods and other civic groups on the Bike Plan
9. **Continue to Engage the Public in the Development of Bicycle Facilities.**
   - 9.1 Incorporate public engagement on bikeway projects beginning no later than preliminary engineering i.e. the design phase of the project.

Scoring Criteria

	Factor (Weight)	Variables	Data Source
Quantitative Analysis	**Safety (7)**	Bicycle Crash Rate	HGAC
	Demand (10)	Population Density	ACS Data
		Employment Density	ACS Data
		# of Parks, Schools and Community Centers within ¼ Mile	COH GIS
		# of LRT Station, Transit Center and P&R Locations within ¼ Mile	COH GIS
		% 0-3 Mile Vehicular Trips	HGAC
		Connection to Major Activity Center	COH GIS
	Connectivity (5)	# of Connection to Existing and Programmed High Comfort Bikeways	COH GIS
	Equity (3)	% Population Younger than 18	ACS Data
		% Households with No Auto	ACS Data
		% Households in Poverty	ACS Data

Qualitative Analysis

- Identified needs from existing City and partner projects
  - Complete Communities
- Bike Plan comments
- Potential feasibility
- Potential funding partners

Potential Bike Facilites- Year One Houston Bike Plan Implementation

Existing High Comfort Bikeways
- Dedicated On-Street
- Shared On-Street
- Off-Street

Proposed High Comfort Bikeways
- Dedicated On-Street
- Shared On-Street
- Off-Street
- Fiscal Year 1 Projects

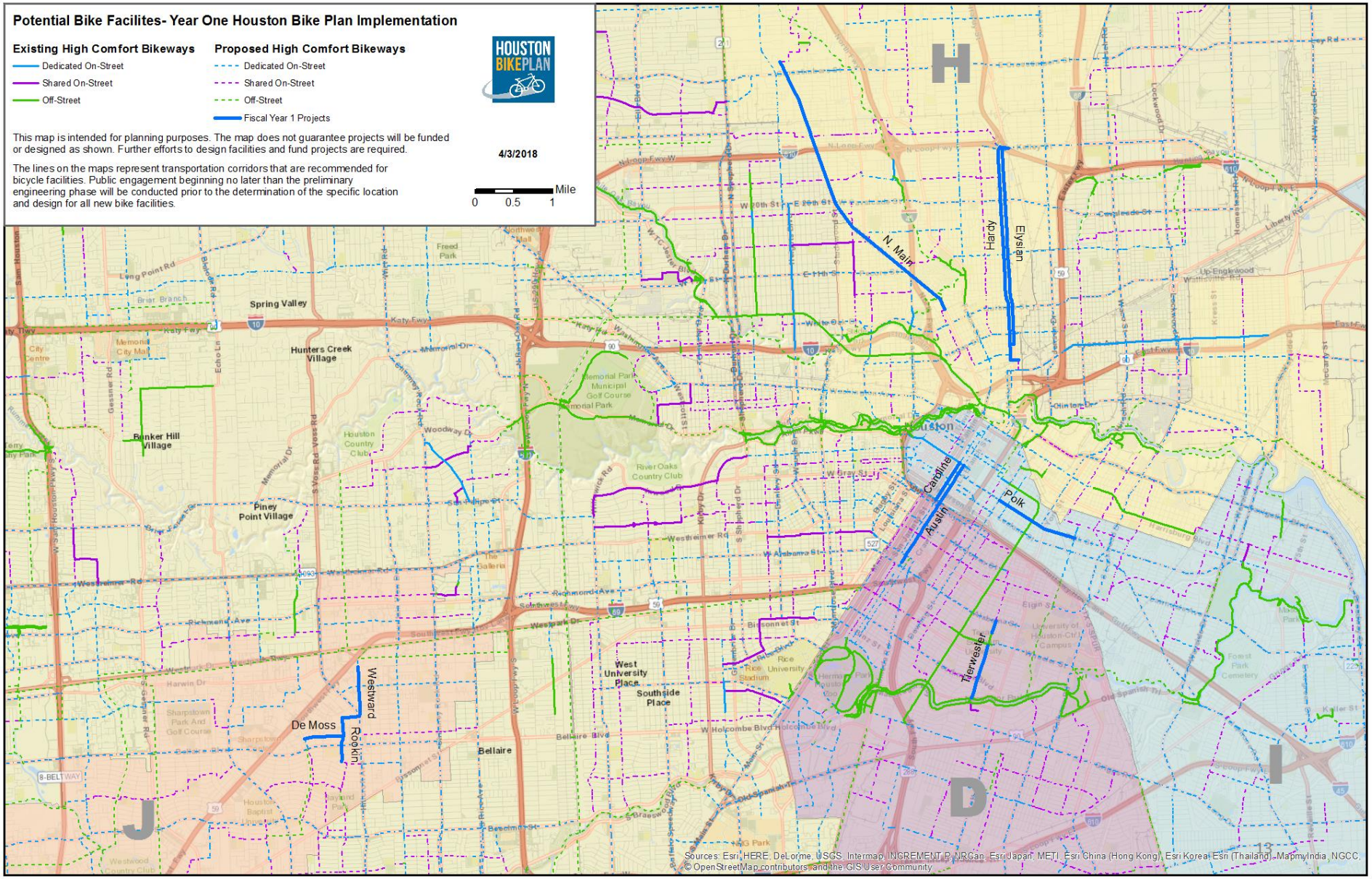
HOUSTON BIKEPLAN

This map is intended for planning purposes. The map does not guarantee projects will be funded or designed as shown. Further efforts to design facilities and fund projects are required.

The lines on the maps represent transportation corridors that are recommended for bicycle facilities. Public engagement beginning no later than the preliminary engineering phase will be conducted prior to the determination of the specific location and design for all new bike facilities.

4/3/2018

0 0.5 1 Mile



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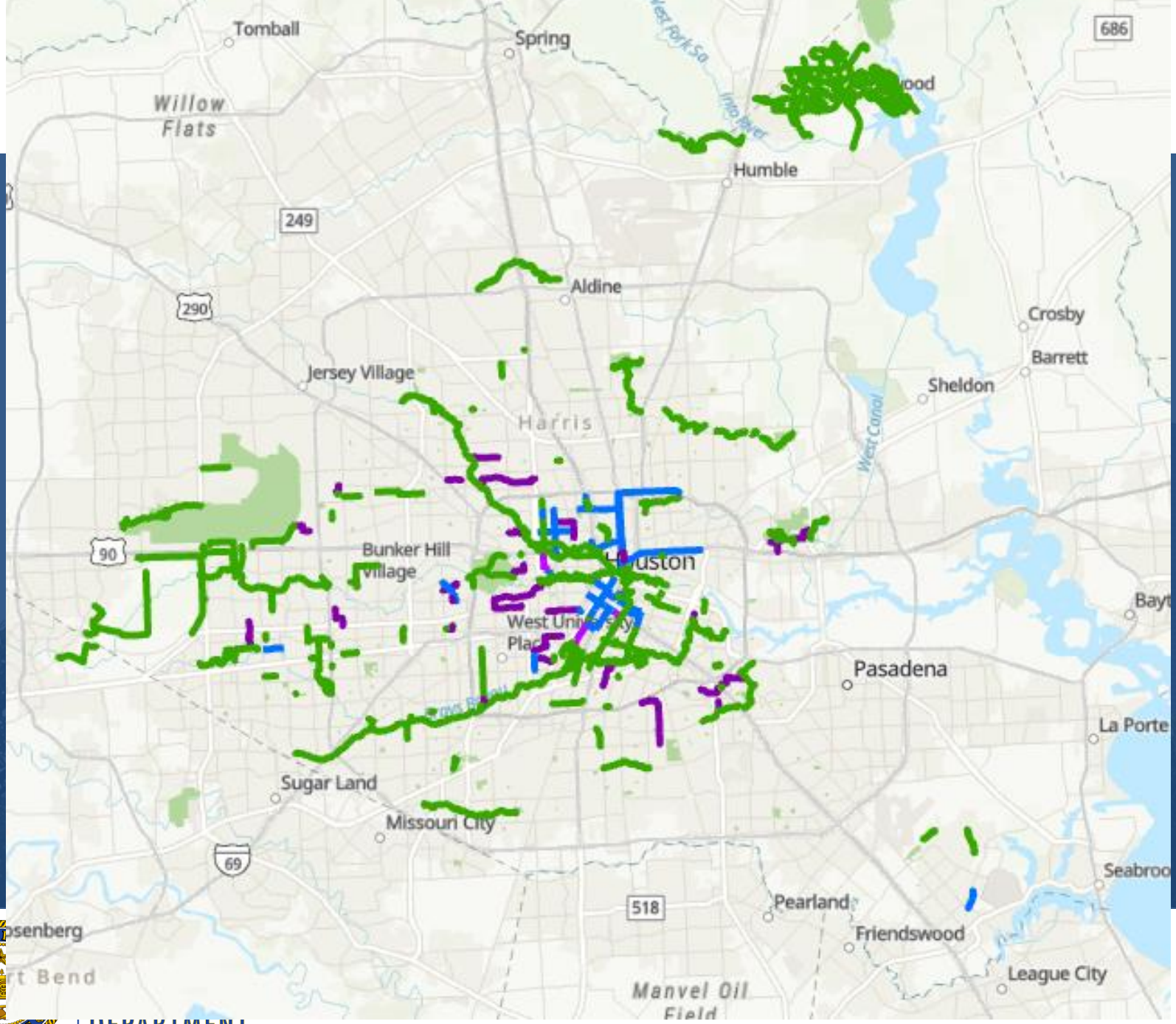
Tomball
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Willow Flats
Humble
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Aldine
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Crosby
Barrett
Jersey Village
Harris
Sheldon
West Canal
90
Bunker Hill Village
Houston
West University Place
Pasadena
La Porte
Sugar Land
Missouri City
69
518
Pearland
Friendswood
League City
Manvel Oil Field
686

Strategy to Develop a 500 Miles of Bikeway by 2025

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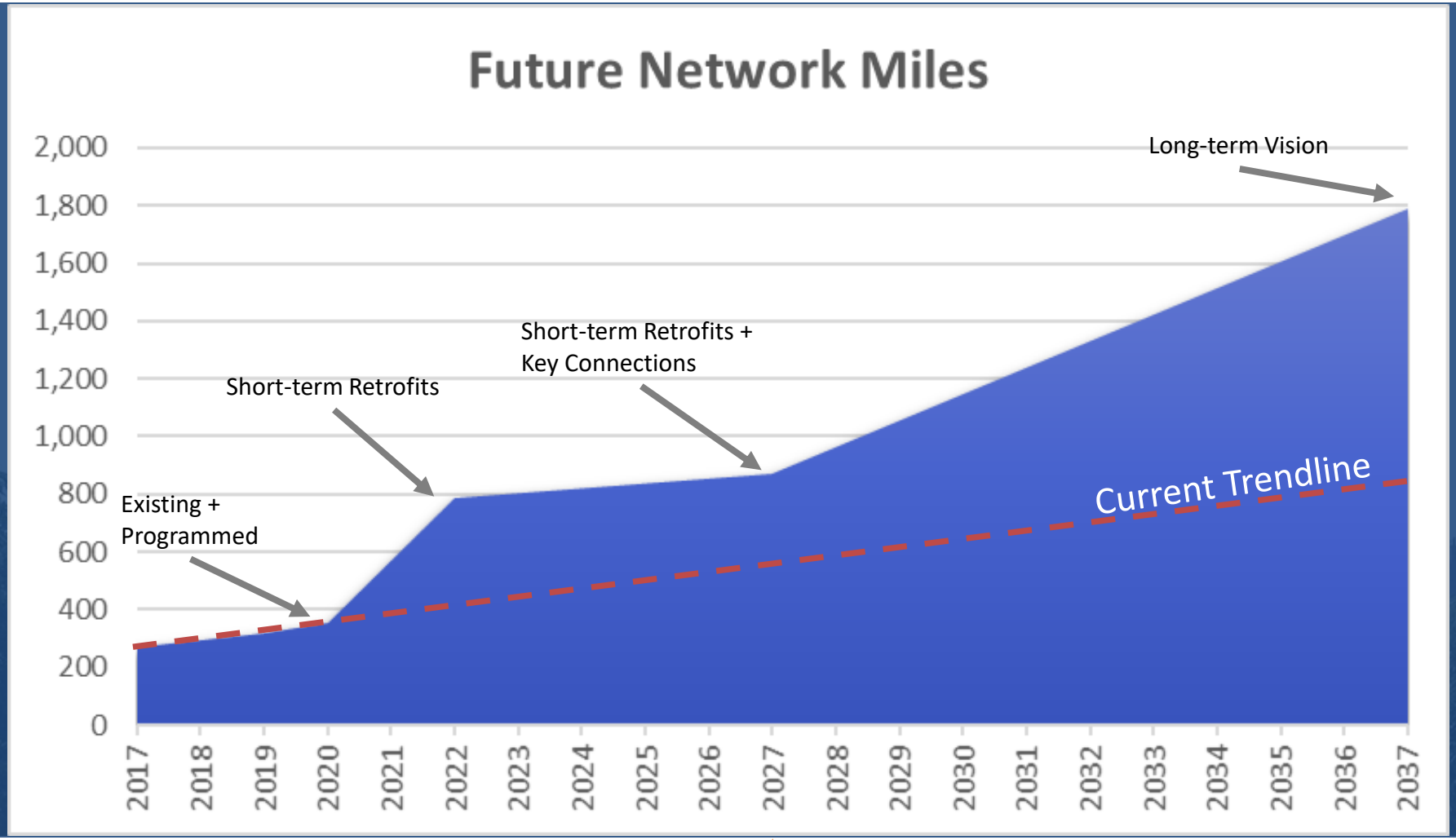
Building out the Bike Plan



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Gold-Level Bike-Friendly Community

DRAFT- For Discussion Purposes Only

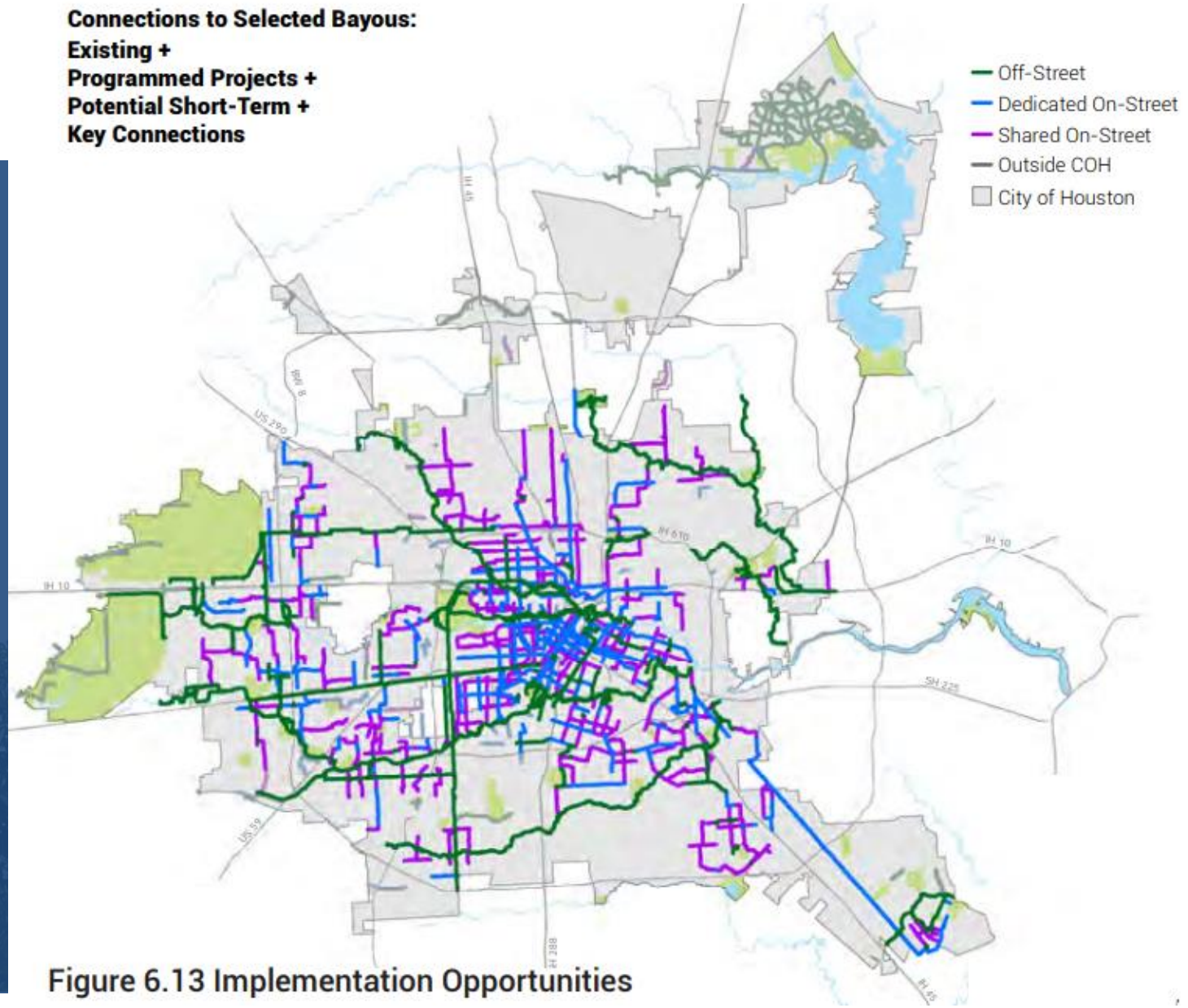

Figure 6.13 Implementation Opportunities

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Implementation Category	Miles of Bikeway			Average Cost per Mile* Low-High Range ($Thousands)			Planning Level Cost Range ($Millions)
	Dedicated in Street ROW	On-Street Shared	Off-Street	Dedicated in Street ROW	On-Street Shared	Off-Street	
Existing High-Comfort Bikeway Network	8	30	232	-			-
Programmed Projects	42	1	91	-			-
Short Term Potential	138	242	-	$90-210	$10-140	n/a	$27 - $51
Key Connections	8	4	75	$90-210	$10-140	$600-1,700	$73 - $119
Full Bikeway Network	620	28	269	n/a**	$10-140	$600-1,700	$235 - $382
Total Network	816	305	668				$335 - $552

Figure 6.14 Planning Level Cost Summary for Bikeway Network Implementation

* Cost per mile estimates are based on data from the 2014 H-GAC Regional Bikeway Plan, general planning estimates from comparable projects. Total cost estimates assume a 75%-25% and 25%-75% mix of low and high cost projects to develop range. Cost per mile estimates also include 20% to 40% for contingency, survey, engineering, and project management.

** Dedicated in Street R.O.W. bikeways will have a cost as part of the full network build-out but these would be included in the cost of street reconstruction and therefore are not included here.

Infrastructure Strategies from Biennial Report Discussions

- Policies and Processes
  - **Create a Bikeway Maintenance Plan (HPW)**
  - Update traffic detour plan for safe passage during construction (HPW)
  - Create clear internal process for bikeway inclusion in street reconstruction and repaving; prioritize projects with bikeways in CIP (HPW)
  - Secure bike/ped improvements during development process (PDD)
  - Allow E-bikes on trails (PDD)
- Funding
  - Leverage existing projects and funding
    - Build on TIRZ/MD projects
    - Harris County partnerships
    - Bayou Greenways/Beyond the Bayous
  - Pursue dedicated funding for multimodal mobility initiatives, including build-out of the Bike Plan
  - Submit comprehensive package(s) for next TIP Call for Projects

More funding ideas

- Leverage community partnerships
  - Developers, businesses, hospitals, philanthropy, nonprofits, universities, METRO
- Federal grant programs
- Parking Benefit Districts

Figure 6.16 Federal Funding Sources and Eligible Bicycle Project Activities

Bicycle Project Type: Eligible Activity	TIGER	FTA	CMAQ	HSIP	NHPP	STBGP	TAP	405	RTP	SRTS	402
Access enhancements to public transportation	X	X	X			X	X				
Bicycle lanes on road	o	X	X	X	X	X	X			X	
Bicycle parking	o	X	X		X	X	X		X	X	
Bike share	X	X	X		X	X	X				
Bicycle storage or service centers	o	X	X			X	X				
Crosswalks (new or retrofit)	X	X	o	X	X	X	X		X	X	
Data collection and monitoring	o	X			X	X	X		X	X	
Helmet promotion						X	*			X	X
Landscaping, streetscaping (bicycle route; transit access)	o	X				X	X				
Lighting (pedestrian and bicyclist scale associated with bike project)	X	X		X	X	X	X		X	X	
Maps		X	X			X	X			X	
Paved shoulders	X		o	X	X	X	X			X	
Police patrols/ Enforcement Campaign						*	*	X		X	X
Safety brochures, books						*	*	X		X	X
Separated bicycle lanes	X	X	X	X	X	X	X			X	
Shared use paths	X	X	o	X	X	X	X		X	X	
Signs/signals/signal improvements	X	X	X		X	X	X			X	
Signed bicycle routes	X	X	X		X	X	X			X	
Spot improvement program	X	X		X		X	X		X	X	
Traffic calming	X	X		X	X	X	X			X	
Training			X			X	X	X	X	X	X

X = eligible o = eligible, only competitive as part of a larger project * = only eligible under srts program

TIGER: Transportation Investment Generating Economic Recovery
FTA: Federal Transit Administration Capital Funding (includes Section 5307 and 5339 programs)
CMAQ: Congestion Mitigation & Air Quality Improvement Program
HSIP: Highway Safety Improvement Program
NHPP: National Highway Performance Program
STBGP: Surface Transportation Block Grant Program
TAP: Transportation Alternatives Program (set-aside of STBGP)
Section 405 National Priority Safety Programs
RTP: Recreational Trails Program (set-aside of STBGP)
SRTS: Safe Routes to School Program (set-aside of STBGP)
402: State & Community Highway Safety Grant Program

Next Meetings & Announcements

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

Infrastructure Subcommittee

May 27 TBD

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