Houston Bike Plan Biennial Report

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Planning & Development Department

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Purpose & Scope

Purpose: To support and assess performance of Plan implementation

The Plan recommends the report include the following:

- Align with Plan Houston goals and approach for implementation

- Highlight progress made on implementation

- Determine relative performance against the previous two years and assess trends

- Make map exhibits publicly available online

- Determine if new metrics may be more relevant

    - Adjust current metrics if not aligned with overall goals

- Identify priority opportunities to continue to improve

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Bike Plan Vision

VISION

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

Bike Plan Goals

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
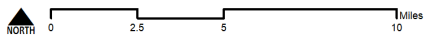
Existing + Programmed Bikeways = 342.4 miles

As of September, 2019

	Existing	Programmed
Off-Street	274	5
Dedicated On-Street	16	15
Shared On-Street	30	2
Total	**320**	**23**

Legend

High-Comfort Bikeways

- - - - Programmed, Shared On-Street
- - - - Programmed, Dedicated On-Street
- - - - Programmed, Off-Street
───── Existing, Shared On-Street
───── Existing, Off-Street
───── Existing, Dedicated On-Street
───── Existing Trail by Others

Parks

City of Houston

NORTH   0   2.5   5   10   Miles

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Existing + Programmed Bikeways

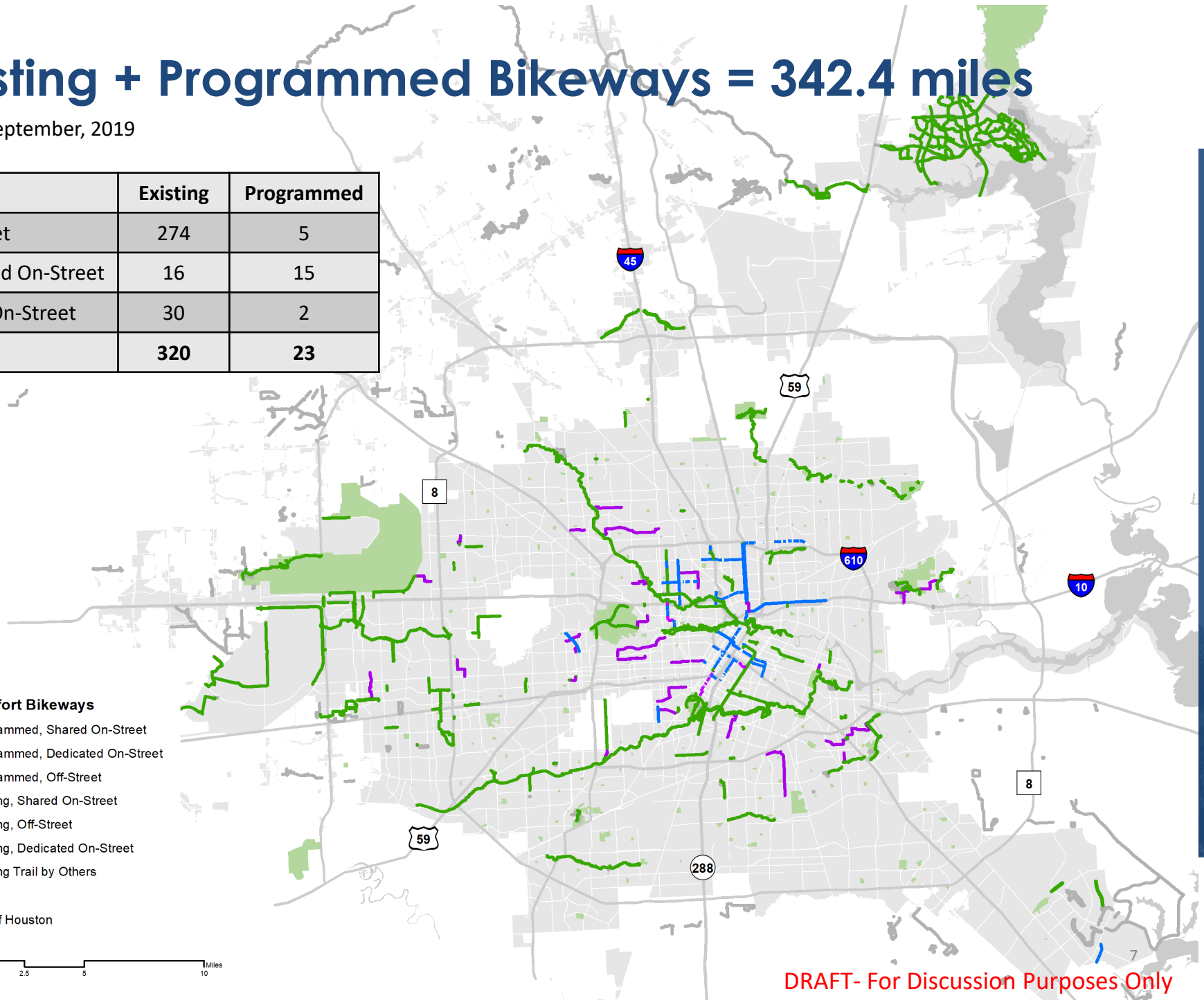As of September, 2019

Legend

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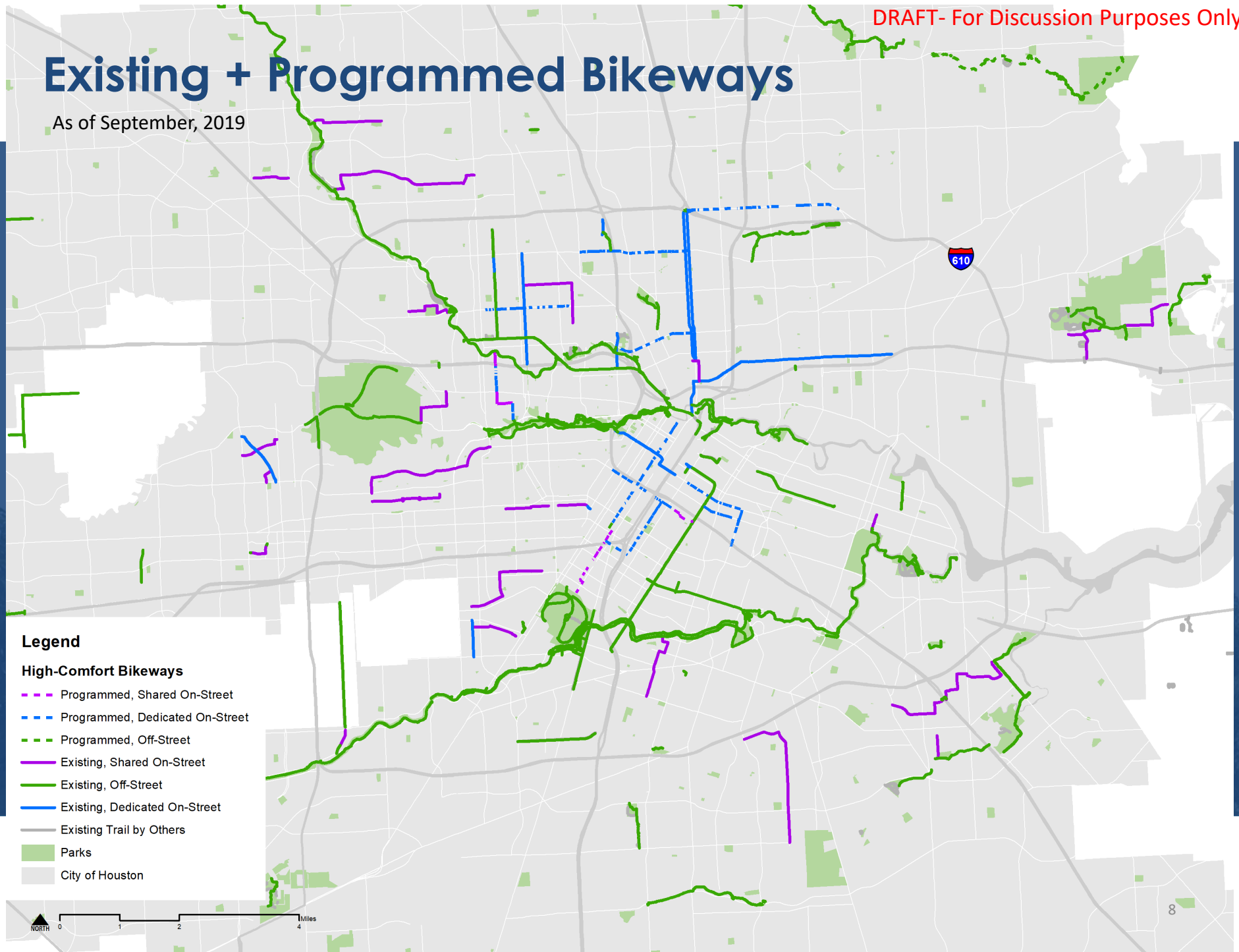—— Existing Trail by Others
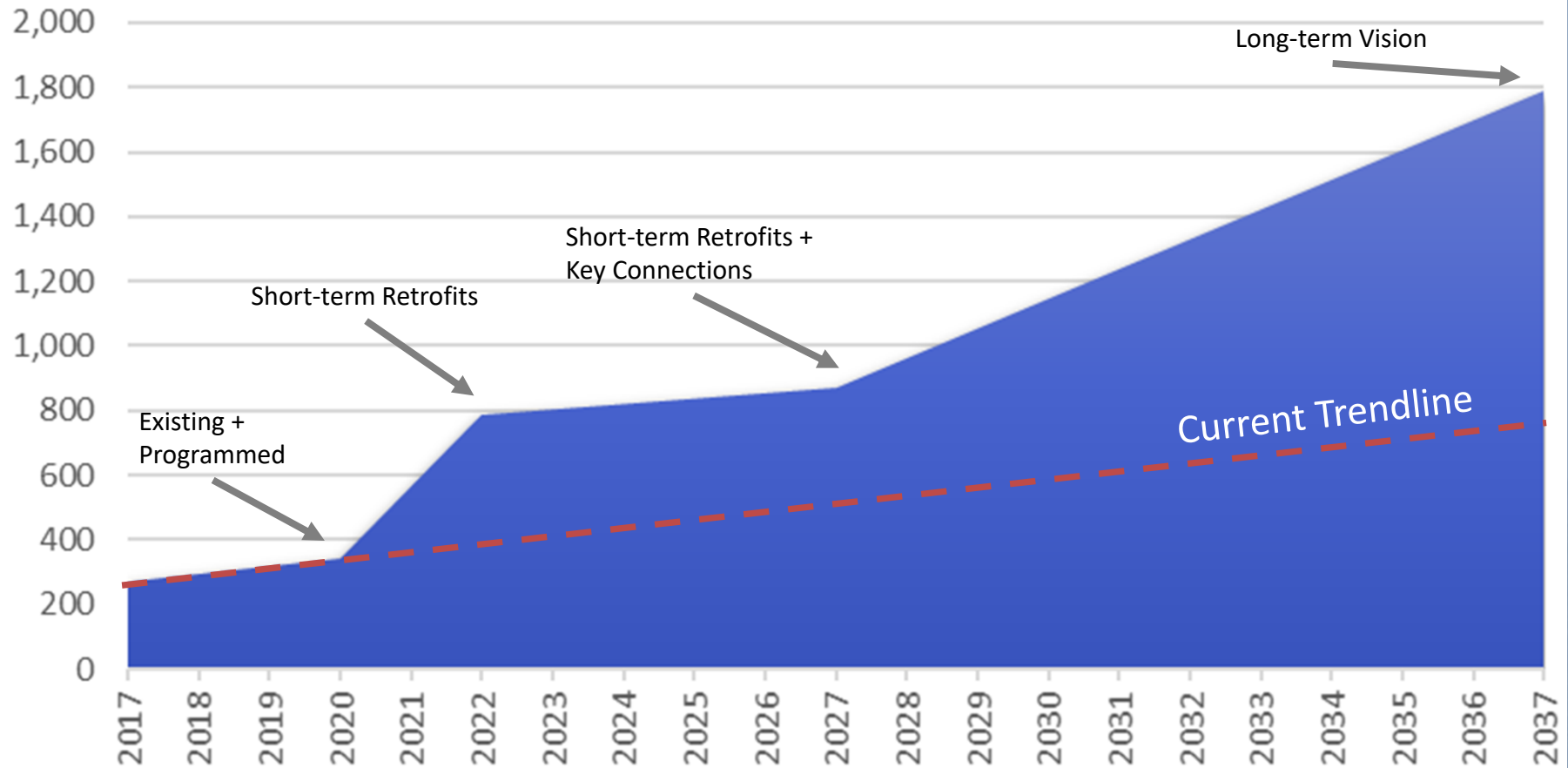▮ Parks
▮ City of Houston

0   1   2   4   Miles

NORTH

8

Change in Network Miles 2017-2019

Type	2017 Miles	2019 Miles	% Change	2019 Existing + Programmed	% Change
Dedicated On-Street - HC	8	16	98%	31	291%
Off-Street	232	274	18%	279	20%
Shared On-Street - HC	30	30	0%	33	8%
Grand Total	270	320	18%	342	27%

Building out the Bike Plan

Future Network Miles

- Long-term Vision
- Short-term Retrofits + Key Connections
- Short-term Retrofits
- Existing + Programmed
- Current Trendline
- Gold-Level Bike-Friendly Community

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Building out the Bike Plan

Future Network Miles by Type

Goals Performance Metrics:
Improve Safety

| Performance Metrics	2016 (BP)	2018	Trend	Data Source
# of bicycle related crashes reported	361	485	↗ (red)	HPD
# of bicycle fatalities per 10,000 commuters	7.4	11.5	↗ (red)	HPD/Census
Disparity in bicycle mode share versus fatalities	3.8	TBD	TBD	HPD/Census
# of people who complete an approved bicycle education program (Learn to Ride, LCI classes)	TBD	TBD	TBD	BH/Bike League
# of "Bicycle Friendly Businesses" and Universities	4	8, plus 1 university	↗ (green)	Bike League

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Goals Performance Metrics: Increase Access

Performance Metrics	2016 (BP)	2018	Trend	Data Source
% jobs within ½ mile of a high-comfort bike facility	46%	71%	↗	COH/LEHD 2017
% population within ½ mile of a high-comfort bike facility				
1. Overall population	38%	51%	↗	Census 2010
2. Minority population	32%	46%	↗	Census 2010
3. Low-income population (map)	32%	42%	↗	Census 2017

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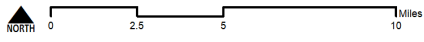Job Density and the High-Comfort Bikeway Network
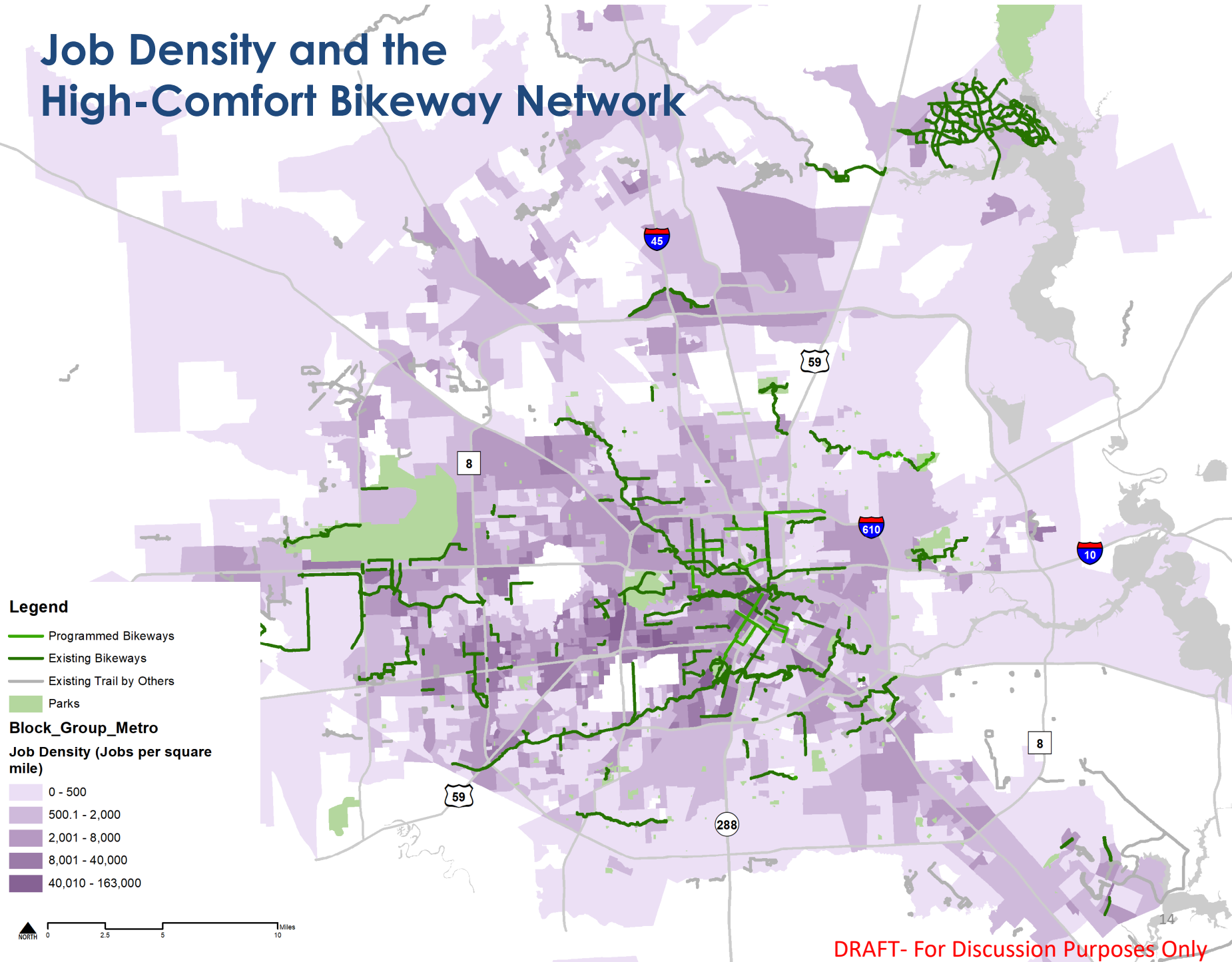
Legend

— Programmed Bikeways
— Existing Bikeways
— Existing Trail by Others
Parks

Block_Group_Metro

Job Density (Jobs per square mile)

- 0 - 500
- 500.1 - 2,000
- 2,001 - 8,000
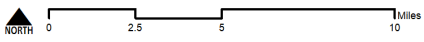- 8,001 - 40,000
- 40,010 - 163,000

Population Density and the High-Comfort Bike Network
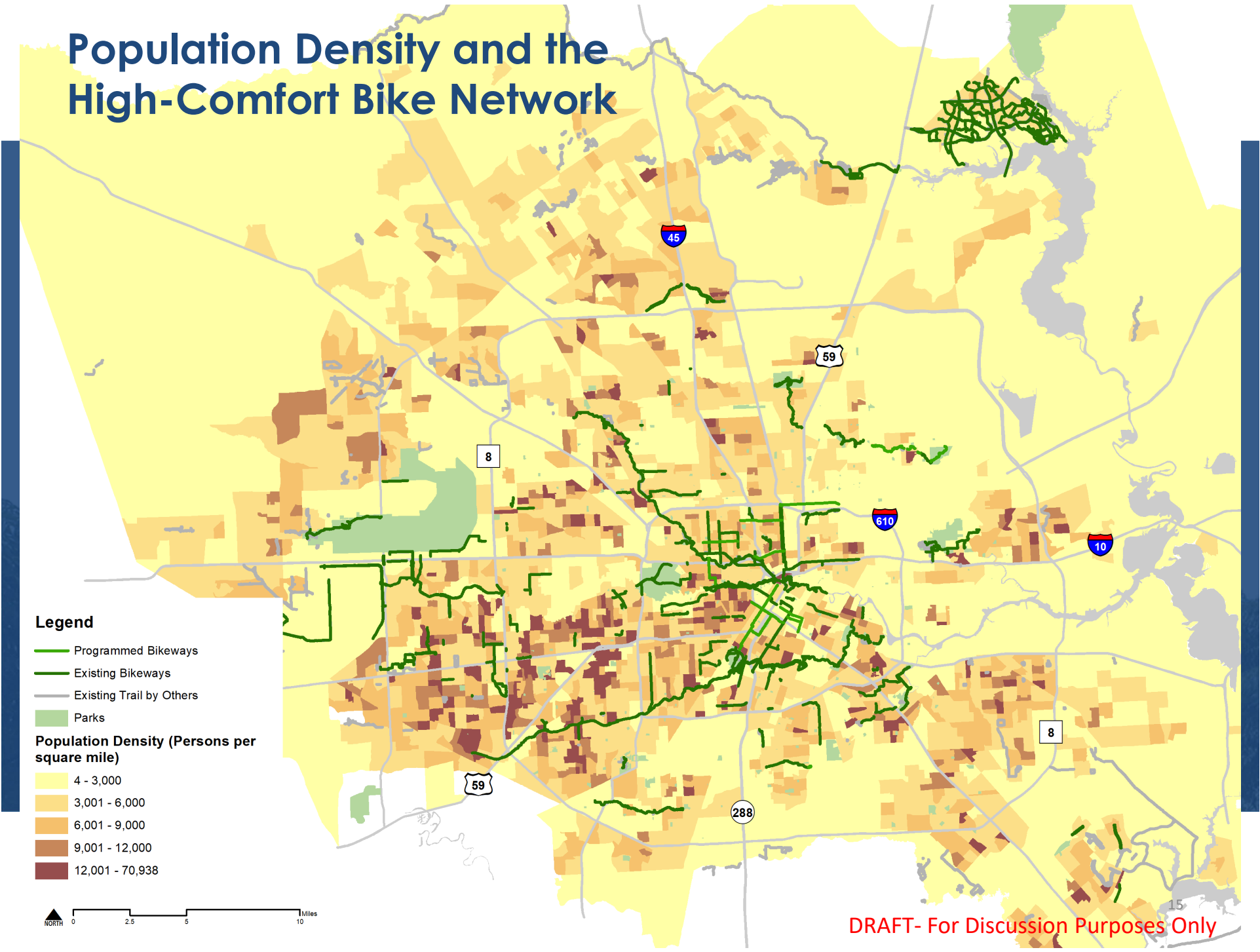
Legend

— Programmed Bikeways
— Existing Bikeways
— Existing Trail by Others
Parks

Population Density (Persons per square mile)

- 4 - 3,000
- 3,001 - 6,000
- 6,001 - 9,000
- 9,001 - 12,000
- 12,001 - 70,938

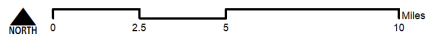NORTH   0   2.5   5   10 Miles

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Minority Population and the High-Comfort Bikeway Network

Legend

— Programmed Bikeways
— Existing Bikeways
— Existing Trail by Others
▨ Parks

Percent Non-White
- 0% - 29%
- 30% - 50%
- 51% - 71%
- 72% - 88%
- 89% - 100%

NORTH
0   2.5   5   10   Miles

16

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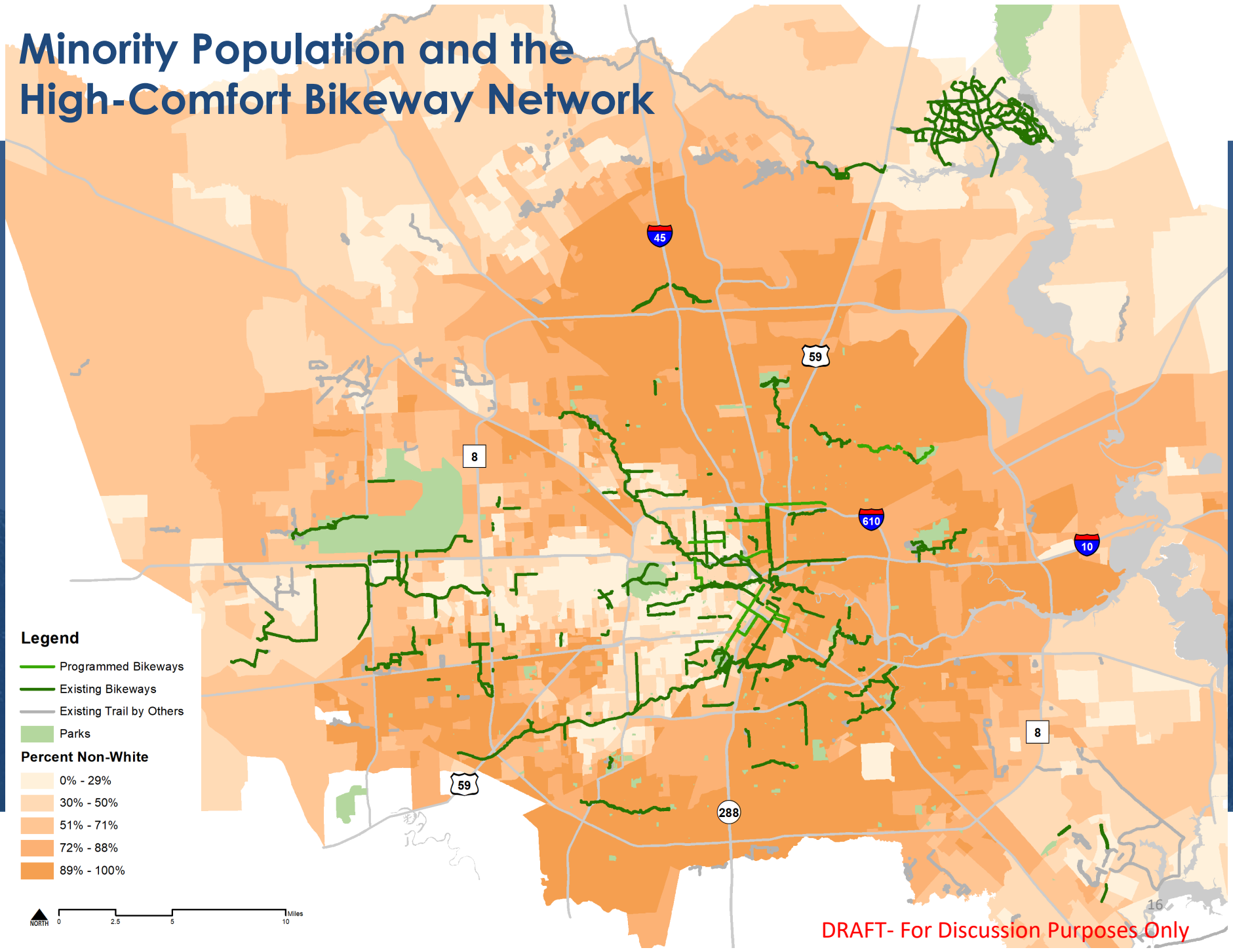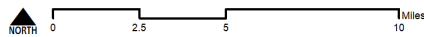# Household Income and the High-Comfort Bikeway Network

Legend

— Programmed Bikeways
— Existing Bikeways
— Existing Trail by Others
■ Parks

% Individuals in Poverty

■ 0% - 10%
■ 11% - 15%
■ 16% - 30%
■ 31% - 50%
■ 51% - 100%
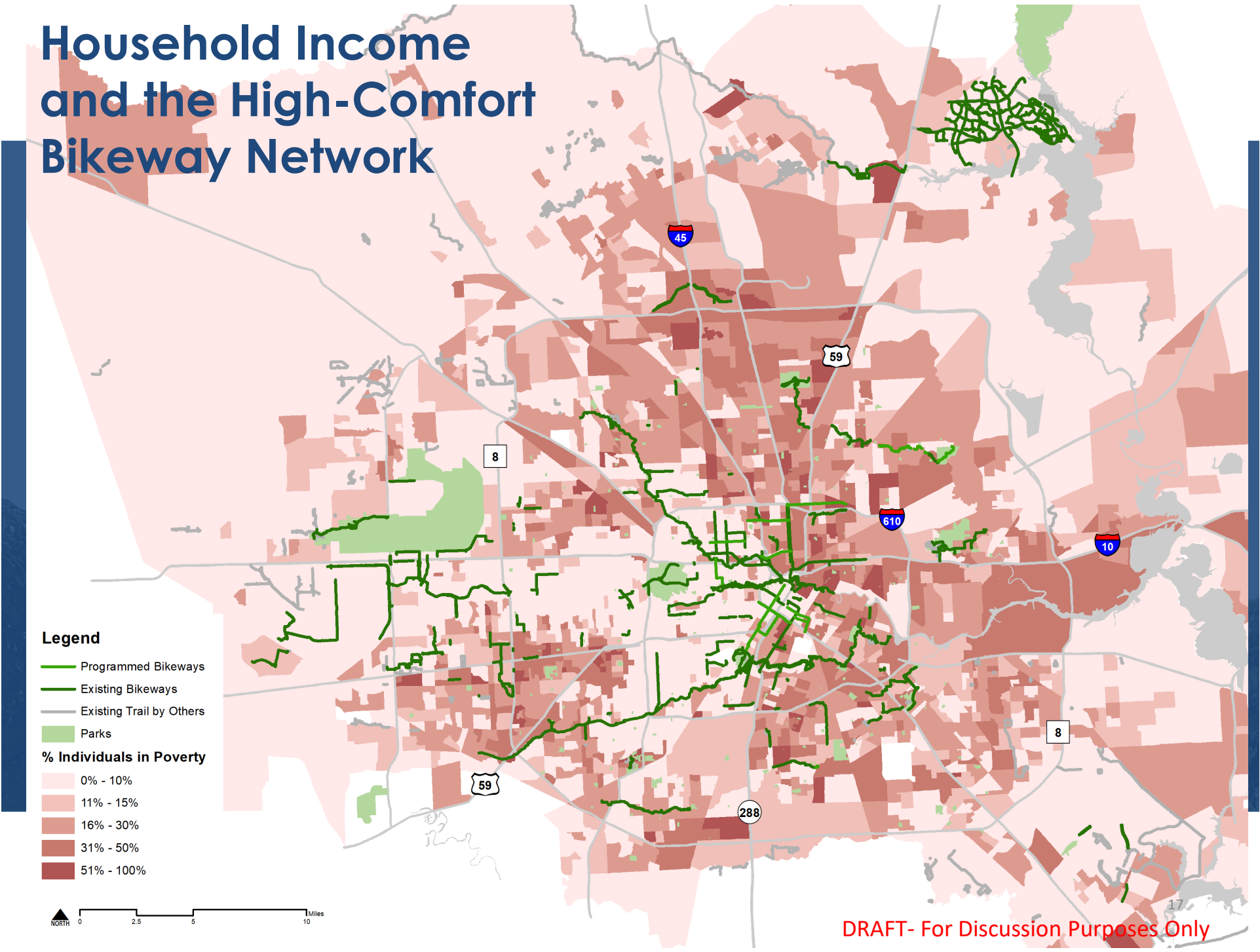
Goals Performance Metrics: Increase Access

Performance Metrics	2016 (BP)	2019	Trend	Data Source
% of facilities within ¼ mile of a high-comfort bike facility: (map)				
1. Transit nodes (transit centers, Park & Rides, and light rail stations)	37%	51%	↗	METRO/Bike Shapefile
2. Schools and libraries	23%	28%	↗	COH
3. Community and multi-service centers	33%	39%	↗	COH
% population with comfortable access to greenways system (bayous and other trails)	21%	42%	↗	Houston Parks Board/COH

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Access to Major Transit Nodes

○ ¼ mile distance from Existing METRO Transit Nodes (Transit Centers, Park & Rides, and Rail Stations)

Legend

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▇ City of Houston

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NORTH

0   2.5   5   10 Miles

19
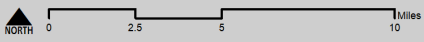
Libraries and Schools Within ¼ Mile of High-Comfort Bikeways

Legend

- ▲ Libraries Within 1/4 Mile of a Bike Facility
- ● Schools Within 1/4 Mile of a Bike Facility
- ▲ Library Outside 1/4 Mile of a Bike Facility
- ● School Outside 1/4 Mile of a Bike Facility
- ━ Programmed Bikeways
- ━ Existing Bikeways
- ━ Existing Trail by Others
- Parks
- City of Houston

NORTH

0   2.75   5.5   11   Miles

Multi-Service Centers & Community Centers

Legend

▲ MSC Within 1/4 Mile of a Bike Facility

● Community Center Within 1/4 Mile of a Bike Facility

▲ MSC Outside 1/4 Mile of a Bike Facility

● Community Center Outside 1/4 Mile of Bike Facility

━━ Programmed Bikeways

━━ Existing Bikeways

━━ Existing Trail by Others

▇ Parks

▇ City of Houston

NORTH

0   2.75   5.5   11   Miles

21
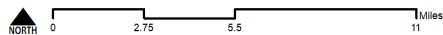
Complete Communities Short-Term Network Plans

Legend

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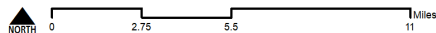——— Existing Trail by Others

Complete Communities with Short-Term Network Plans

Complete Communities

Parks

City of Houston
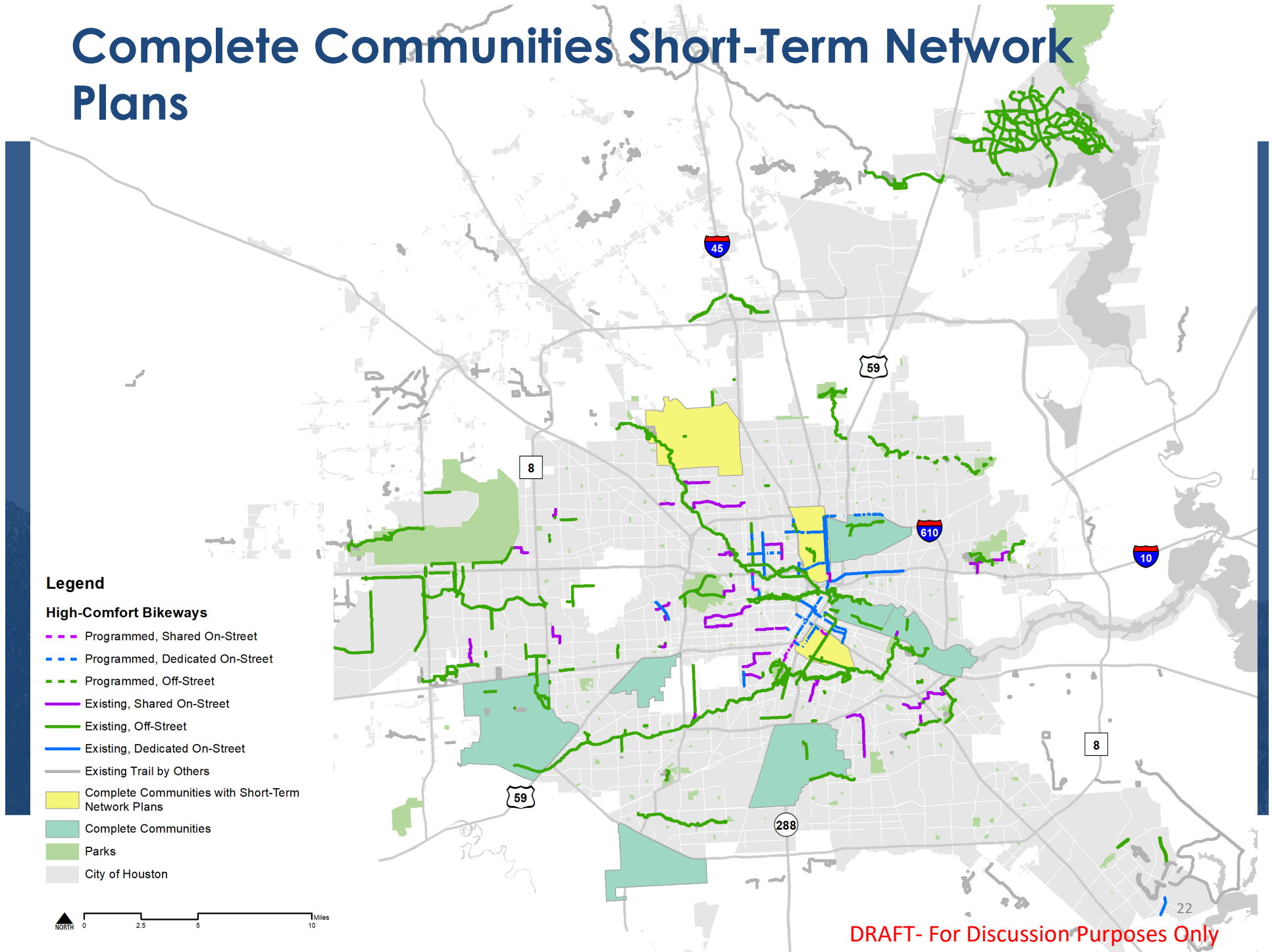
Goals Performance Metrics:
Increase Ridership

Performance Metrics	2016 (BP)	2019	Trend	Source
Commute mode share	0.54%	0.53%	➡️	Census
# of permanent count stations	2	4	↗️	H-GAC
% growth in bicyclists observed through permanent count stations	TBD	TBD	TBD	H-GAC
# of bike boardings on Metro per year	258,094	279,338	↗️	METRO
# of bike share checkouts per year	98,449	165,585	↗️	B-Cycle
Annual City events that support increased ridership (e.g., Bike to Work Day, Sunday Streets, Tour de Houston, Bicycle Advisory Committee meetings)	11	TBD	↗️	COH/all

Goals Performance Metrics:
Develop and Maintain Facilities

Performance Metrics	2016 (BP)	2019	Trend	Data Source
Miles of high comfort bikeways per capita (per 10,000 people) (constructed and programmed)	1.17	1.50	↗	COH/Census
~~% of bikeways in good or better condition~~	~~TBD~~	~~TBD~~		---
Population within ¼ mile of a bike share station	27,900	100,179	↗	COH/B-Cycle
Jobs within ¼ mile of a bike share station	155,600	417,294	↗	COH/B-Cycle
% of major transit nodes with secured bike parking	4%	~4%	→	METRO
Dedicated city staff (FTE) for bikeway program	1	5	↗	COH
% of bikeways that are high comfort	55%	60%	↗	COH

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Draft Strategies: Implement within 6 Months

Strategy	Priority	Category
Begin bike safety education as a routine part of education in schools	**High**	Education
Pass a No Parking in the Bike Lane ordinance and internal policy	**High**	Enforcement
Perform a comprehensive crash analysis to assist in guiding future bike/ped improvements to improve safety	**High**	Evaluation
Survey people's satisfaction with the network and programming (level of comfort evaluation). Continue incorporating bike rides as part of engagement strategy	**High**	Evaluation
Perform regular and robust counts on high-comfort bike facilities (on-street)	**High**	Evaluation
Establish milestone and goals for number of miles of bikeway network through 2027	**High**	Engineering/Evaluation
Planning & Development develop a consistent partnership with Sunday Streets to demonstrated bike facilities; Evaluate number of people reached and their perceptions of bike facilities	**Medium**	Encouragement/ Evaluation

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Draft Strategies: Implement within 1-2 Years

Timeframe	Strategy	Priority	Category
1 year	Provide a clear internal process to ensure CIP-funded street reconstruction projects include high-comfort bike facilities	**High**	Engineering
	Revise Chapter 17 of the Infrastructure Design Manual	**High**	Engineering
	Address internal barriers to traffic calming restrictions and develop a bike boulevard program and toolkit. Prioritize routes to schools.	**High**	Engineering
	Dedicate funding for ongoing maintenance of new bike facilities	**High**	Engineering
2 years	Create Safe Routes to School programming for all K-12 schools	**Medium**	Engineering/ Education
	Pursue dedicated funding for multimodal mobility initiatives, including the build-out of the bikeway system	**Medium**	Engineering
	Pursue opportunities to secure bike and ped improvements during development process. Consider amending the MTFP and development code.	**Medium**	Engineering

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Discussion

- What are reasonable short-term milestones to establish for the next two years?

- Are there any new metrics that may be more relevant, or are any current metrics not aligned with overall goals?

- What strategies do you think the City of Houston should prioritize in the next two years?

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