

HOUSTON BIKEPLAN



May 29, 2015

Kicking Off the Houston Bike Plan

Bicycle Advisory
Committee Meeting #1

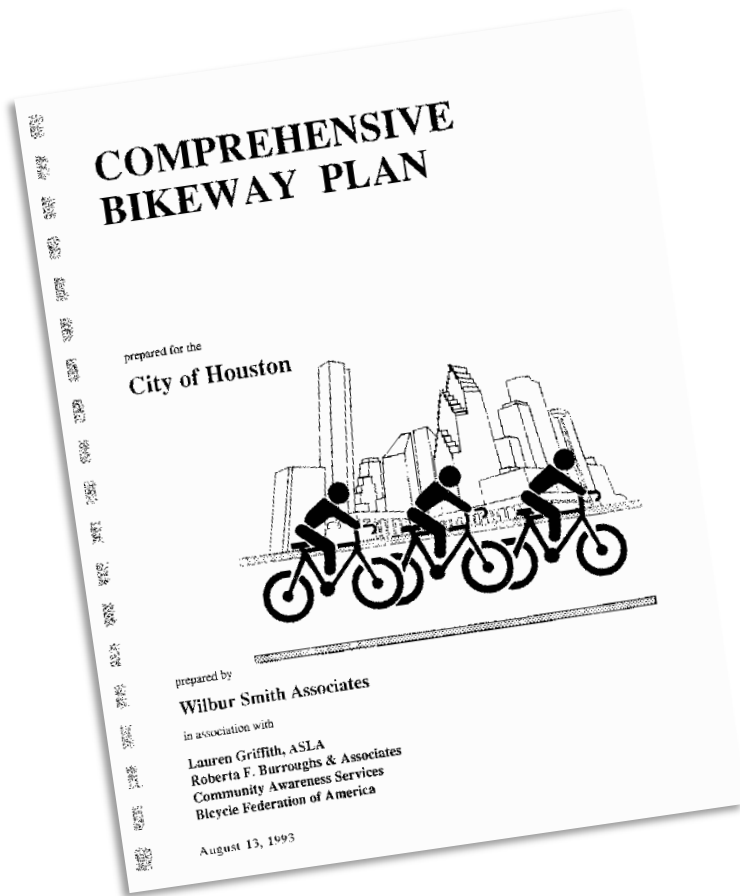
Overview & Objectives

- Why do we need a new bike plan?
- What is the Role of the Bicycle Advisory Committee?
- What is the scope and schedule?
- How can the community provide input?



Bill Coats Bridge (Brays Bayou)

Why do we need a new bike plan?



- 20 years since plan update
- Complete Streets Executive Order
- Rebuild Houston
- Bayou Greenways
- Significant benefits

Plan is being developed in partnership

Lead Agency



Funding Partners



Multiple Departments

- Planning & Development
- Public Works & Engineering
- Parks & Recreation



Supported by **Bicycle Advisory Committee**

Bicycle Advisory Committee (BAC)

- Community leaders representing...
 - A diverse cross section of Houston
 - Responsible for implementation
 - Bicycle riding community
 - Geographic areas
- Serves as sounding board and guides the direction of the plan
- Reviews and provides feedback on plan goals and recommendations
- Promotes participation in the plan

BAC Members

- AARP
- Alief Independent School District
- Bike Houston
- Bike Barn
- City of Houston – Health Department
- City of Houston – Mayor’s Office of Sustainability
- City of Houston – Parks & Recreation
- City of Houston – Planning & Development
- City of Houston – Police Department
- City of Houston – Public Works & Engineering
- Critical Mass
- Greater Houston Partnership
- Houston B-cycle
- Houston Complete Streets Coalition
- Houston – Galveston Area Council
- Houston Independent School District
- Houston Parks Board
- Management District - Energy Corridor
- Management District - Houston Downtown
- METRO
- Neighborhood representative
- Neighborhood Centers
- Super Neighborhood Alliance
- TxDOT – Houston District
- Urban Land Institute (ULI)



Our Request of BAC Members

Be present

- We will be respectful of your time and schedule. We know you are busy.
 - Please make the time to attend each of the events and meetings
-

Engage

- Meetings will be most valuable to you and us if you truly engage in the discussions
- Ask questions and share ideas even if you don't feel like you are “an expert”

Our Request of BAC Members

Communicate

- Share the goals of your community or organization but also be prepared to think regionally
 - Serve as a champion to your community by sharing information and collecting input about the plan
-

Follow Through

- Continue to engage the community about the findings and recommendation of the Bike Plan
- Work toward implementation with the city, your organization and other partners

Poll Q1: What is the primary reason you bike?

1. Recreation
2. Commuting or other non-recreational trips
3. Health/Exercise
4. To Save Money
5. I Don't Bike
6. Peer Pressure
7. Other

Poll Q2: What % of all trips in the City of Houston are Home to Work trips?

1. Less than 10%

2. 10-15%

3. 15-25%

4. 25-40%

5. 40-50%

6. Over 50%

What is the Bike Plan Project Schedule?



Major Public Engagement Periods



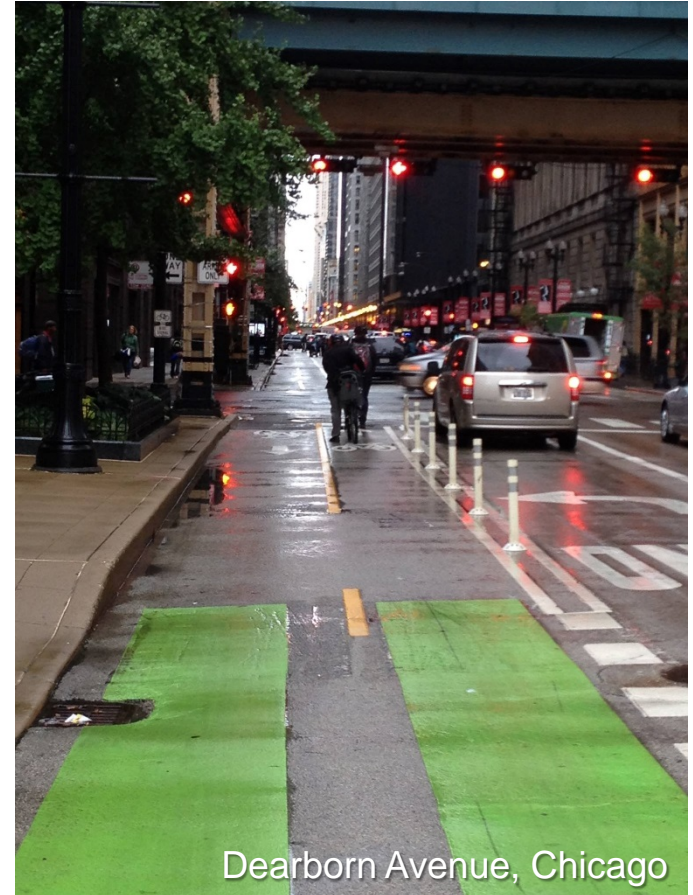
Phase 1: Existing Conditions and Opportunities

Timing	<ul style="list-style-type: none">■ March-May 2015
Deliverables	<ul style="list-style-type: none">■ Existing Conditions Report■ Case For Action/Opportunity Statement
Meetings	<ul style="list-style-type: none">■ Kick off meetings<ul style="list-style-type: none">● City Staff & Funding Partners

The Opportunity and Case for Action

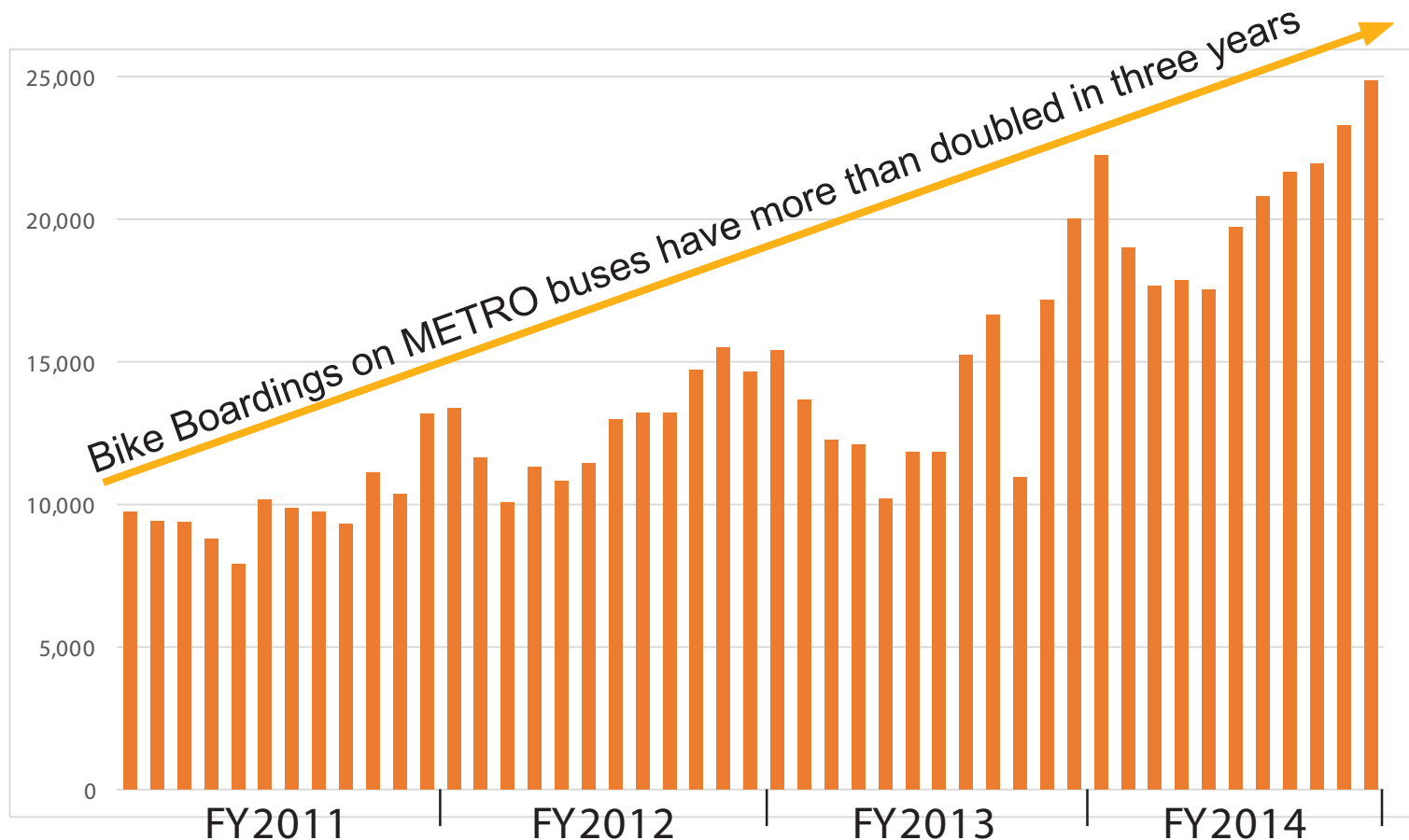
The Houston Bike Plan is a **transformative opportunity** to...

1. Provide a safer, more comfortable environment for the growing number of people riding bicycles in Houston
2. Provide affordable access to opportunities
3. Improve community health and wellness
4. Compete with peer cities who are setting the bar
5. Benefit everyone, not just people who bike



Better Serve Growing Ridership

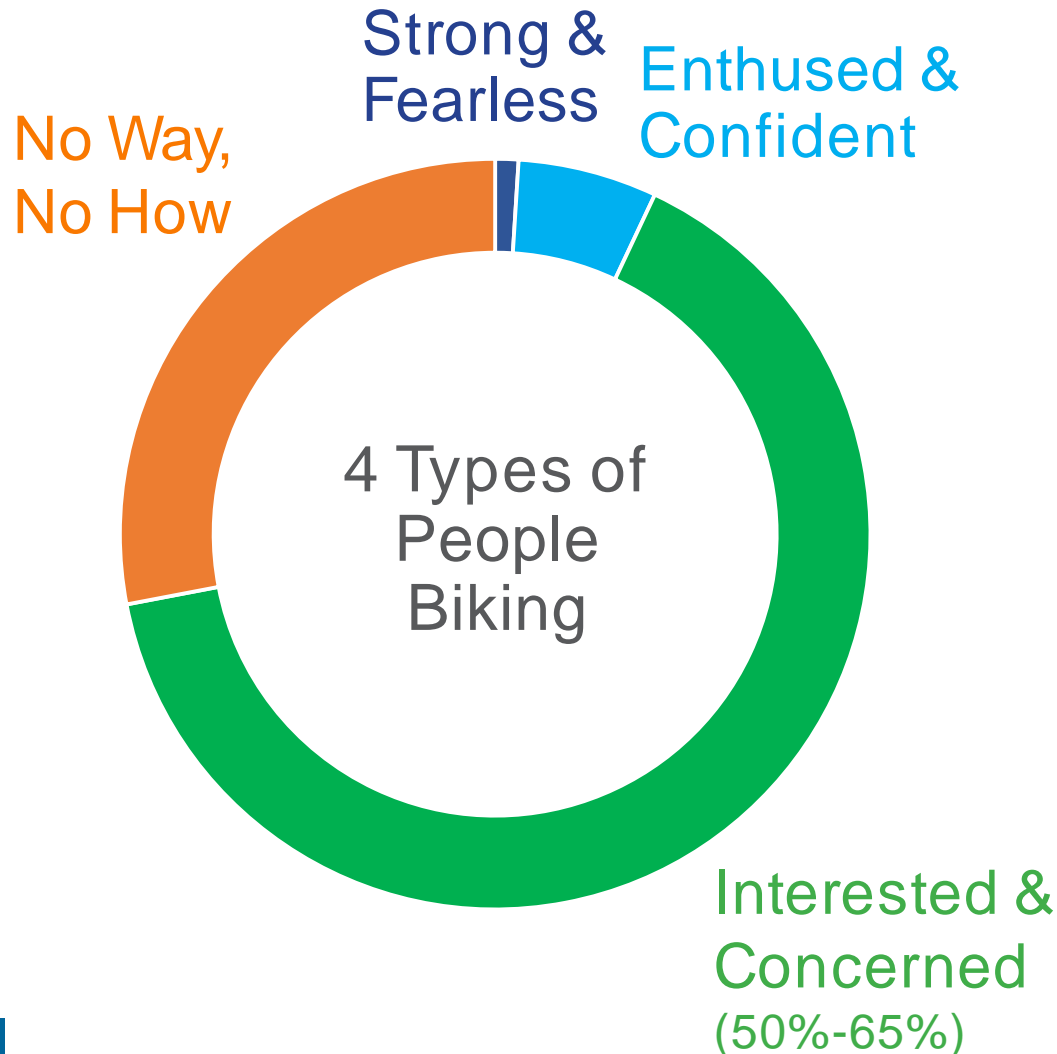
Significant increase in cycling activity and interest



Source: Houston METRO Bicycle Boarding Data



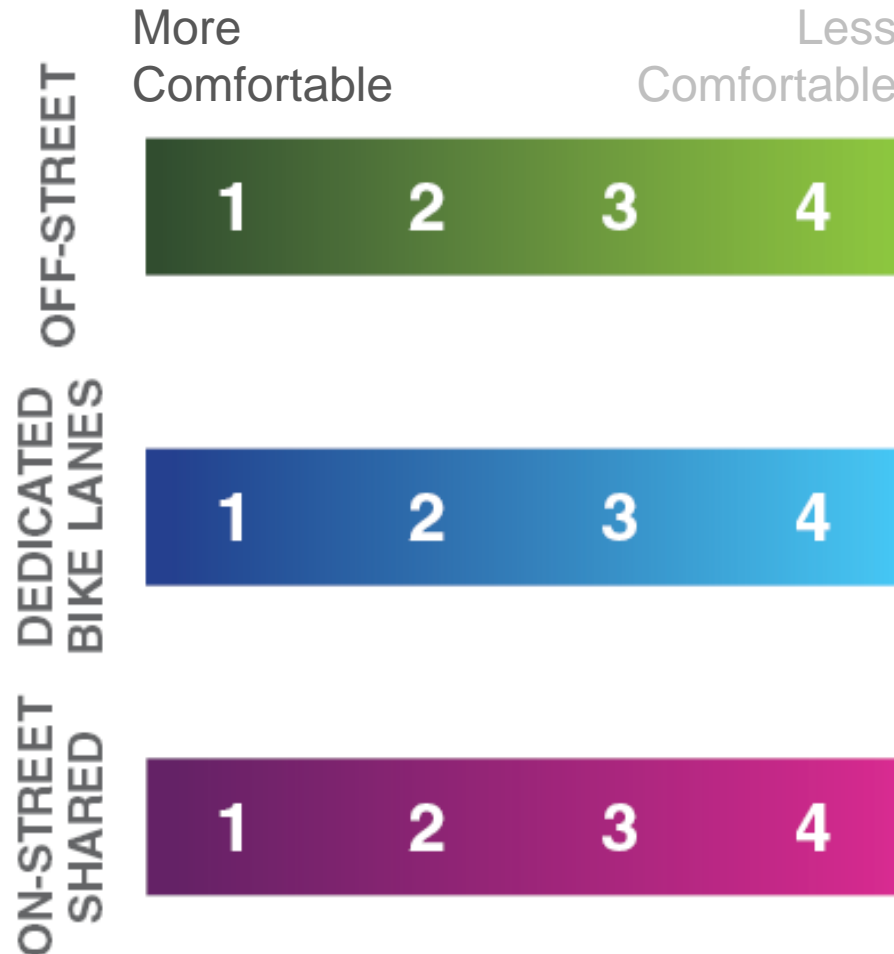
Who is Our Design Rider?



- People in the **Interested & Concerned** category typically most attracted to bicycle facilities with higher comfort levels
- Current network introduces enough gaps and high stress locations to limit frequent bicycle use to **Strong & Fearless** riders

Defining Bicycle Level of Comfort

Existing Bicycle Facilities Assessed on Four Levels of Comfort

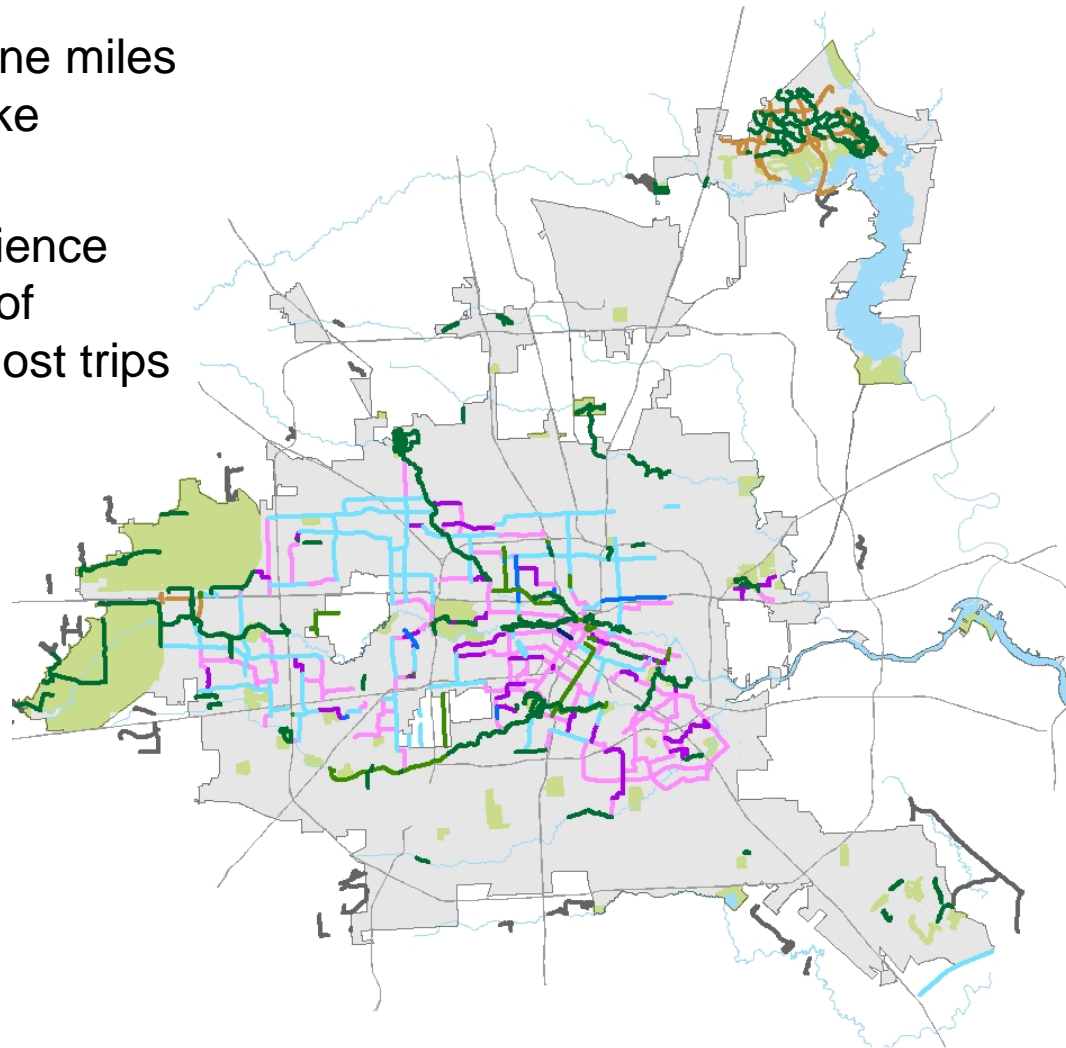


Level of Comfort assessment based on:

- Bicycle facility width
- Adjacent traffic volumes & speeds
- Separation from vehicle traffic
- Intersections & crossings

Existing Network – All Facilities

- ~500 centerline miles of existing bike facilities
- Riders experience broad range of comfort on most trips



Legend

Off-Street Facilities

- High-Comfort Shared-Use Path
- Shared-Use Path
- Shared Sidewalk

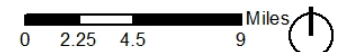
Dedicated Bike Lanes

- Separated Bike Lanes
- Bike Lanes
- Low-Comfort Bike Lanes

Shared On-Street Facilities

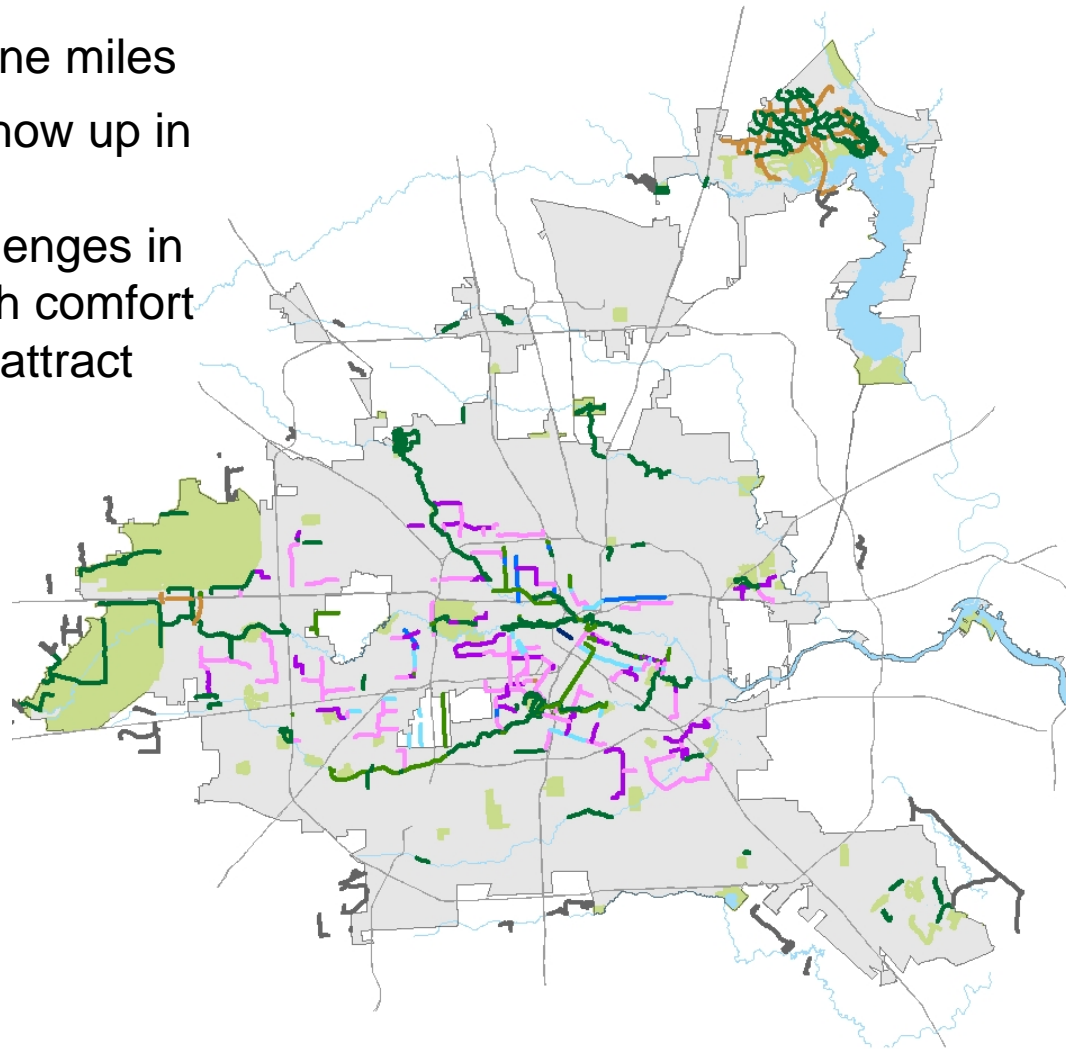
- Neighborhood Bikeways
- Shared Lane/Bike Route
- Facility outside of City of Houston

Existing Bike Facilities in the City of Houston
(All Facilities)

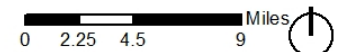


Existing Network – Level of Comfort 1-2-3

- ~350 centerline miles
- More gaps show up in network
- Creates challenges in providing high comfort trips likely to attract more riders

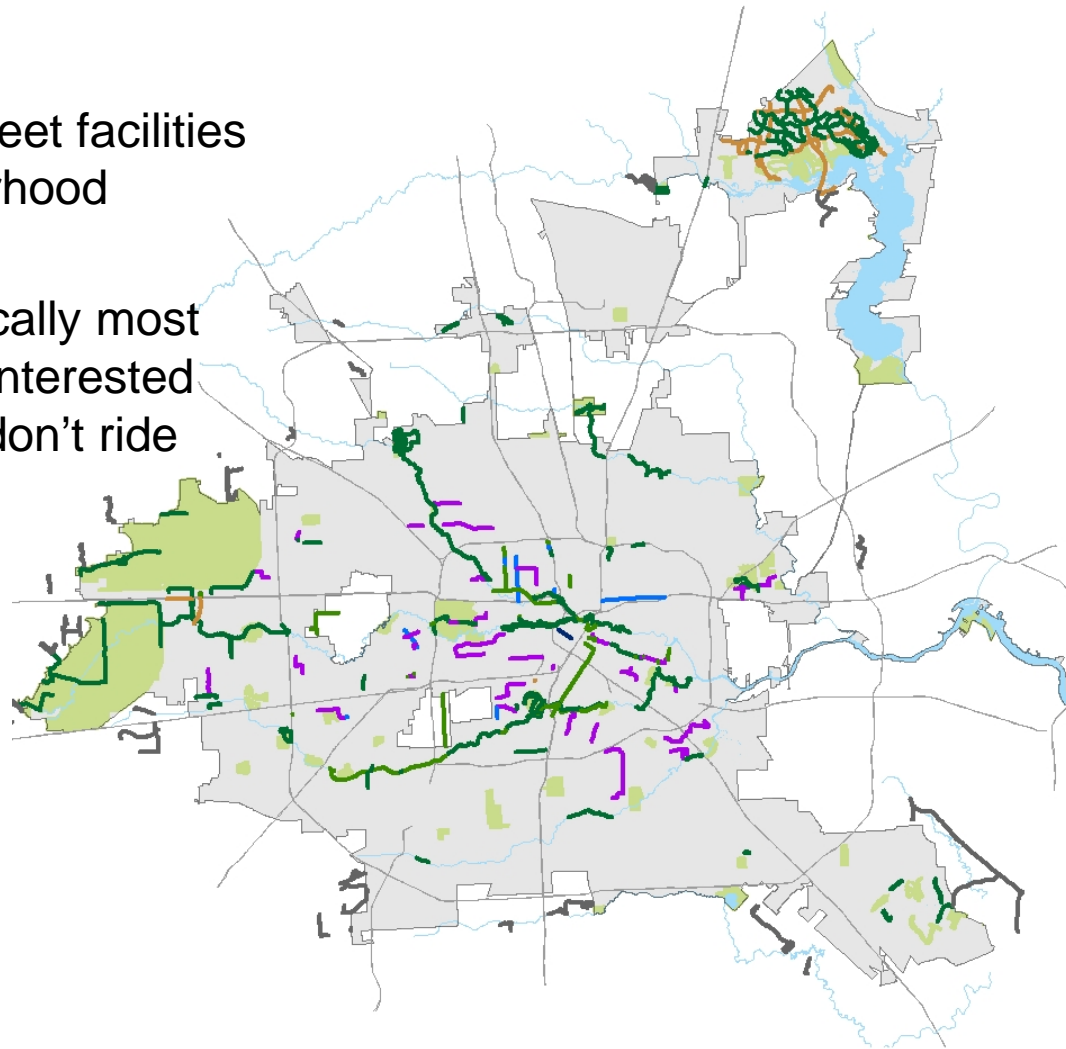


Existing Bike Facilities in the City of Houston
(Level of Comfort 1, 2 & 3; Map excludes lowest comfort facilities)



Existing Network – Level of Comfort 1-2

- ~250 miles
- Mostly off-street facilities and neighborhood bikeways
- Network typically most attractive to interested people who don't ride today



Legend

Off-Street Facilities

- High-Comfort Shared-Use Path
- Shared-Use Path
- Shared Sidewalk

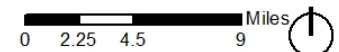
Dedicated Bike Lanes

- Separated Bike Lanes
- Bike Lanes
- Low-Comfort Bike Lanes

Shared On-Street Facilities

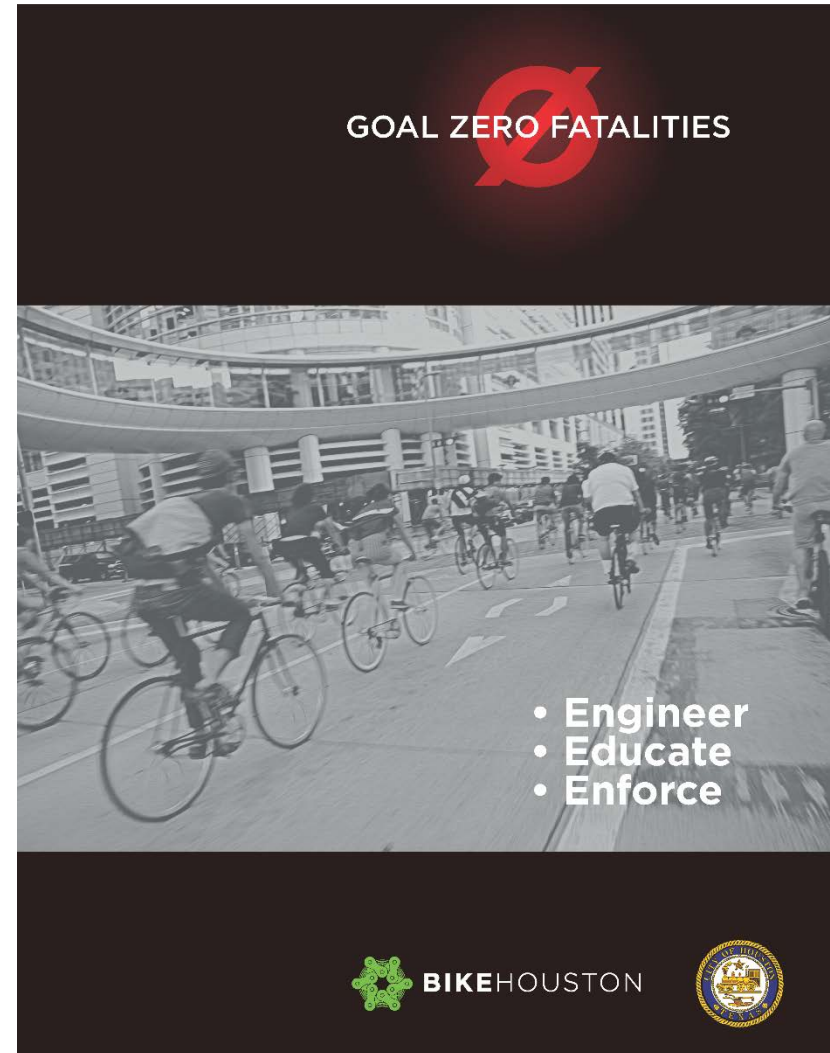
- Neighborhood Bikeways
- Shared Lane/Bike Route
- Facility outside of City of Houston

Existing Bike Facilities in the City of Houston
(Level of Comfort 1 & 2; Map excludes medium-low and lowest comfort facilities)



Goal Zero

- In 2014, the City of Houston and BikeHouston partnered to launch the Goal Zero Campaign
- Campaign focuses on safety education for drivers and bicyclists
- Partnership has supported the development of the City's Bicycle Master Plan

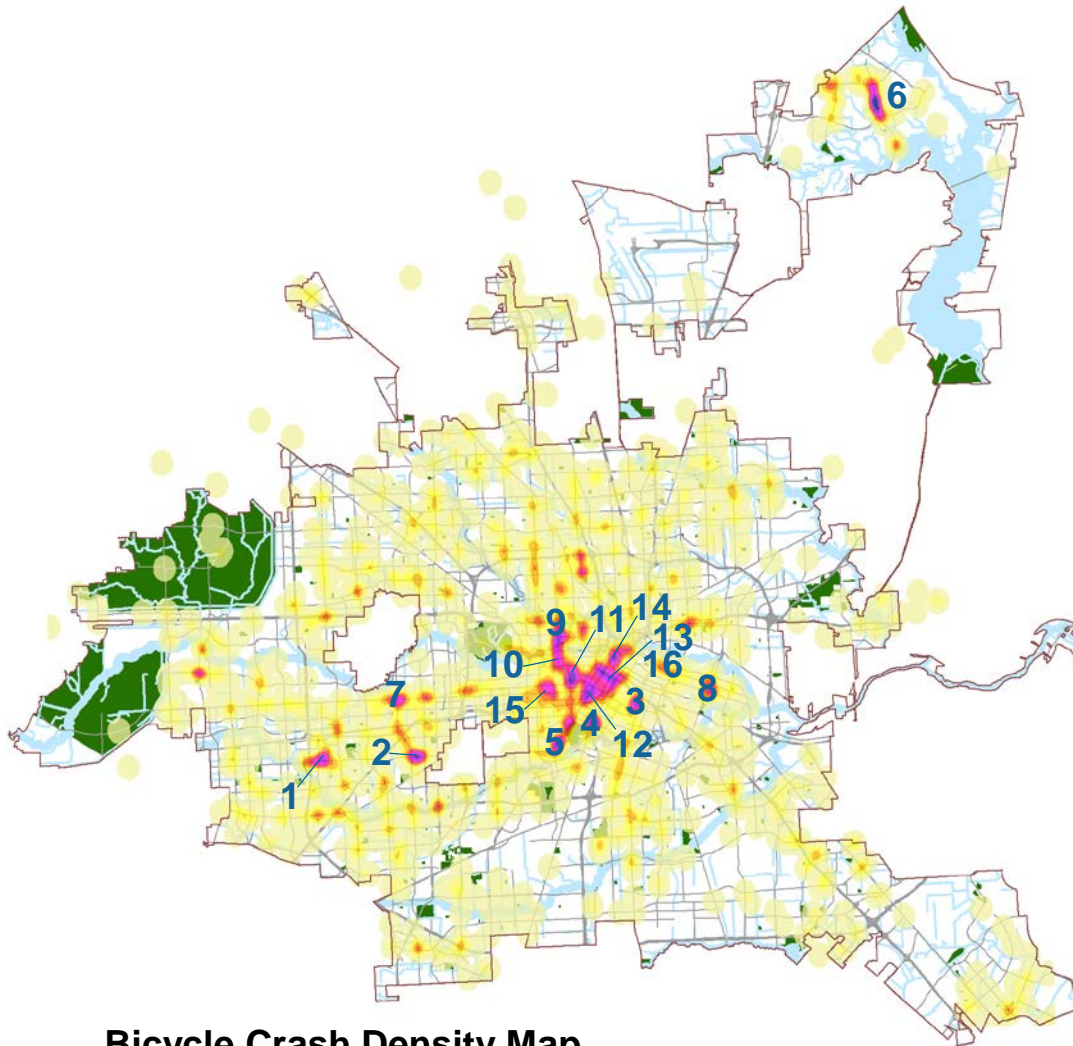


Improved Safety for All Users

- Over 1,500 reported bike crashes reported in COH (2010-2014)
- 25 bike related fatalities over same period
- Indicator of high bike use areas to focus for plan development

Areas with 10+ Bike Crashes within ½ mile (2010-2014)

1. Bellaire and Corporate - Chinatown
2. Bellaire and Renwick – Gulfton/Sharpstown
3. Scott Street between 45 and Elgin
4. 3rd Ward – Riverside Terrace
5. Med Center
6. Kingwood – Kings Crossing – Along Lake Houston Parkway
7. Westheimer and Voss/Hillcroft
8. Wayside and Canal – Magnolia Park
9. Waugh – North of Buffalo Bayou
10. Waugh – South of Buffalo Bayou
11. East Montrose
12. Midtown
13. Downtown – Pierce Elevated
14. Downtown
15. Woodhead/Dunlavy – Lanier MS
16. Lockwood and IH10 – Denver Harbor/Port Houston

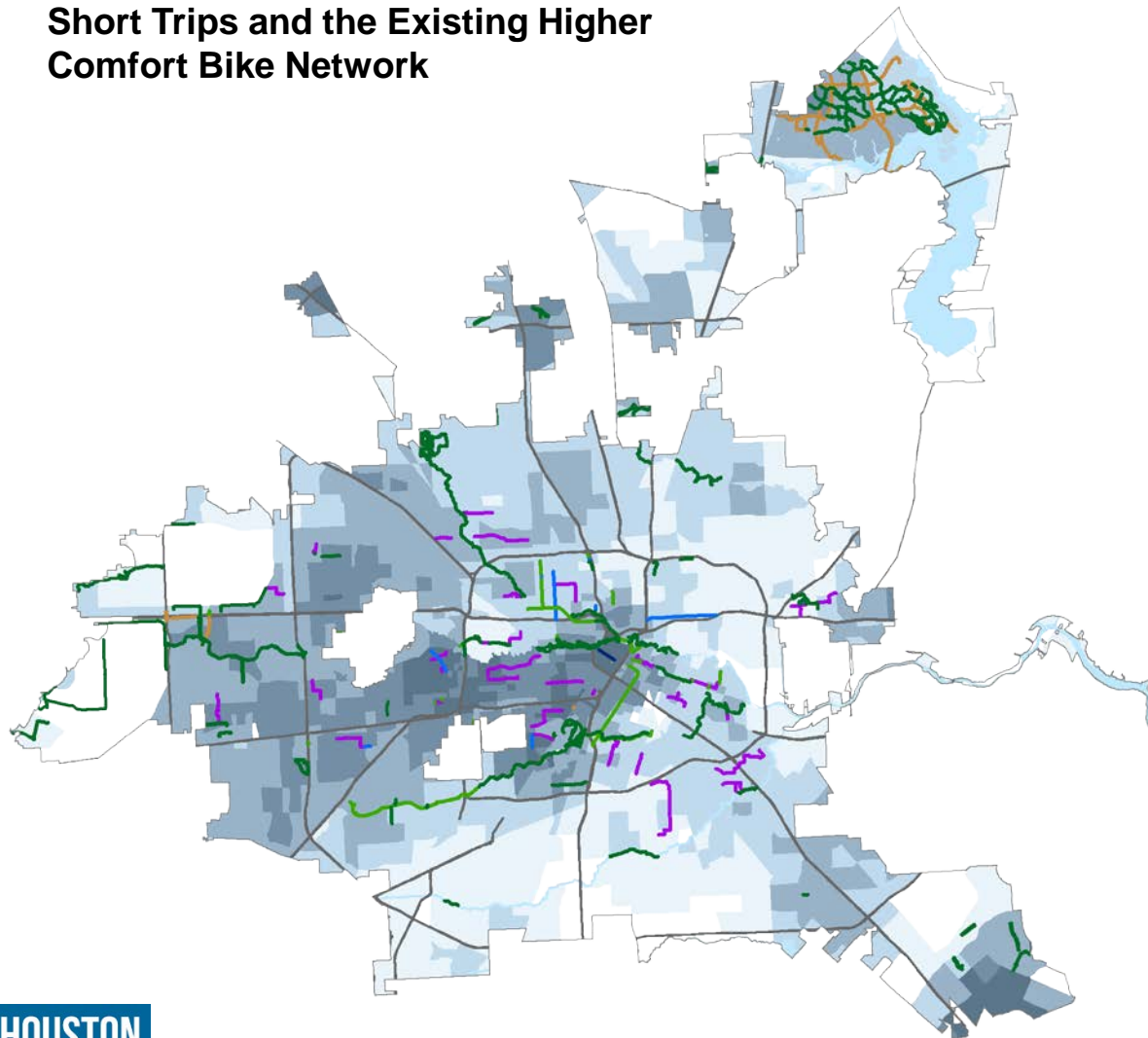


Bicycle Crash Density Map

Source: TxDOT Crash Record Information System (2010-2014)

Bicycles Faster and More Convenient for Many Short Trips

Short Trips and the Existing Higher Comfort Bike Network



LEGEND

All Trips

Percentage of Trips 3 Miles or Less

- 1.1% - 10%
- 10.1% - 20%
- 20.1% - 30%
- 30.1% - 40%
- 40.1% - 50%
- 50.1% - 65%

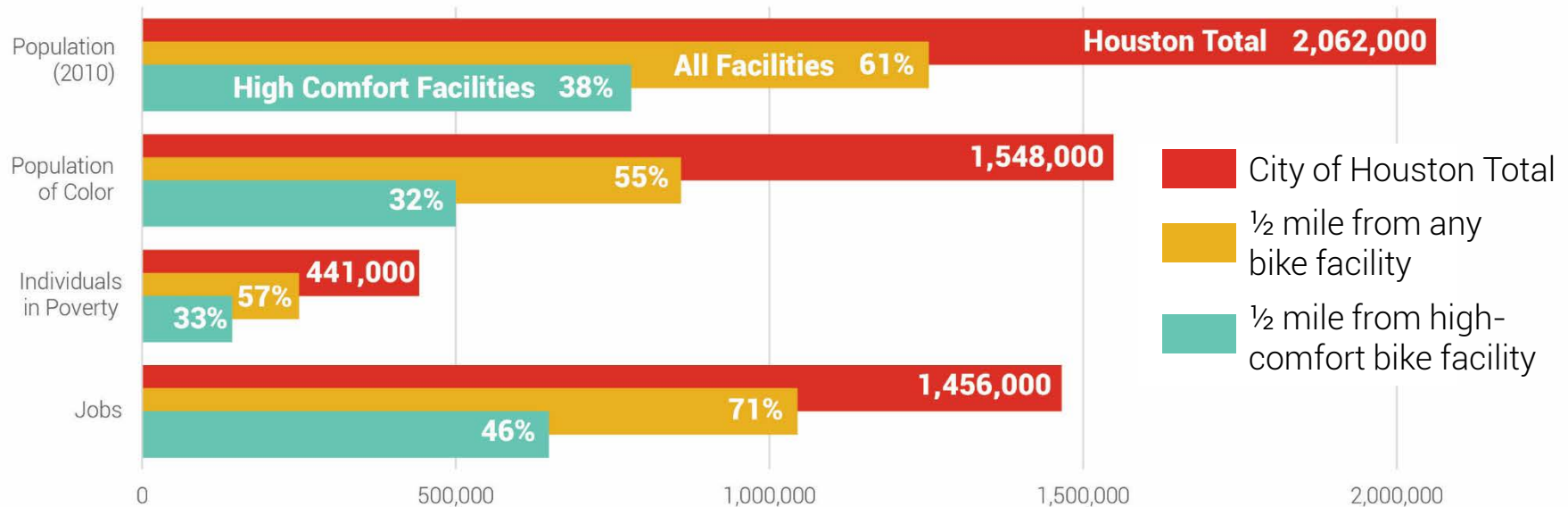
- Bicycle travel times are especially competitive on short trips
- 10 million daily trips in the City of Houston; 33% are under 3 miles
- 15% of home-to-work trips are under 3 miles; 46% over 10 miles

Source: H-GAC Regional Travel Demand Model; Team Analysis



Access Metrics

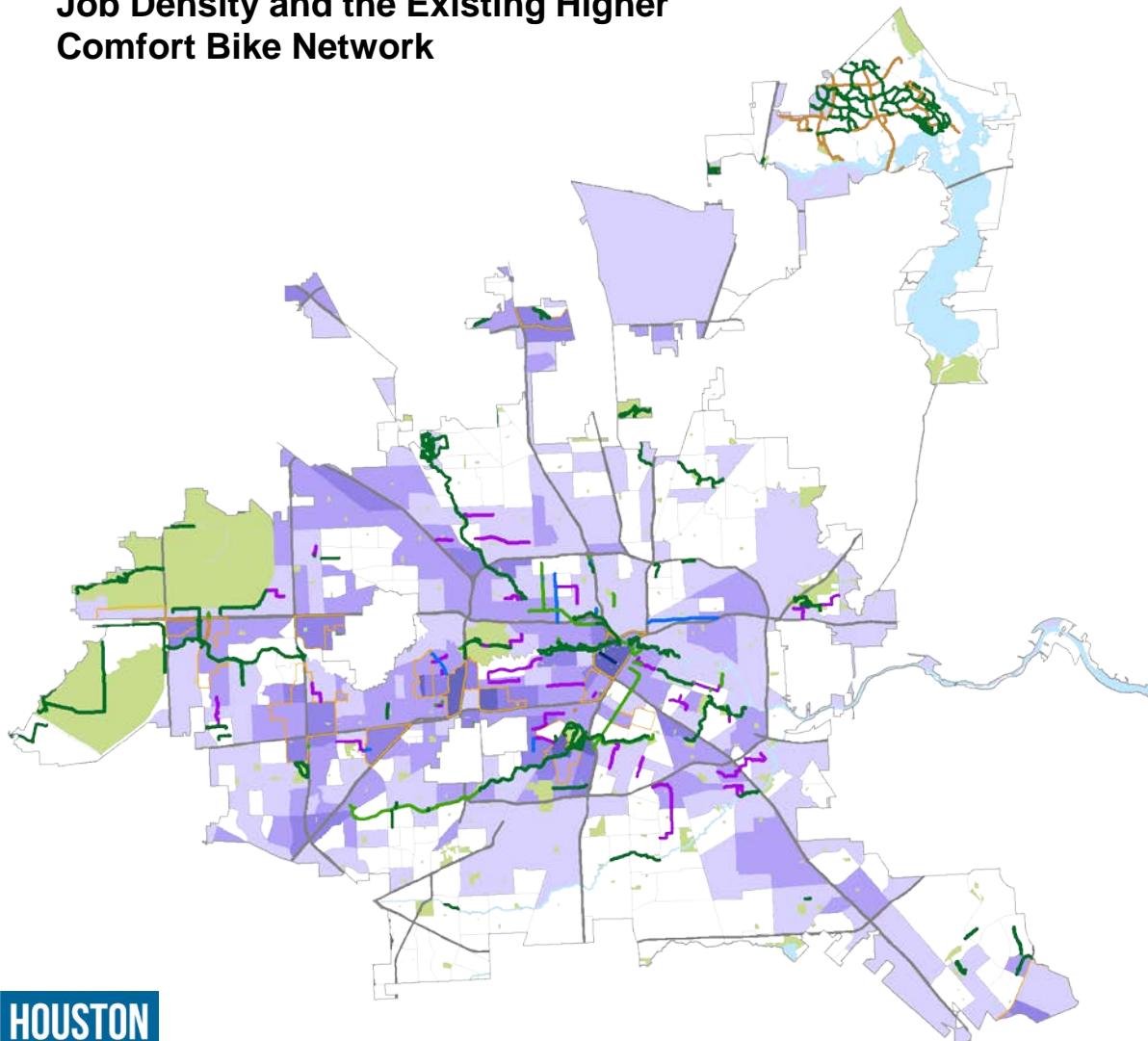
Access Metrics for Population & Jobs



- Overall network provides proximate access to over 60% of people and jobs
- About 38% of the population is proximate to high-comfort bicycle facilities, but barriers to access and last mile challenges still exist
- Access is slightly lower for populations of color and households living below the poverty line

Low Cost Access to Opportunity

Job Density and the Existing Higher Comfort Bike Network



LEGEND

Employment Centers

Employment Density

(Persons per square mile)

0 - 500

501 - 2,000

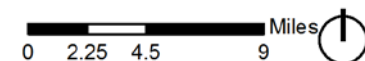
2,001 - 8,000

8,001 - 40,000

40,001 - 97,309

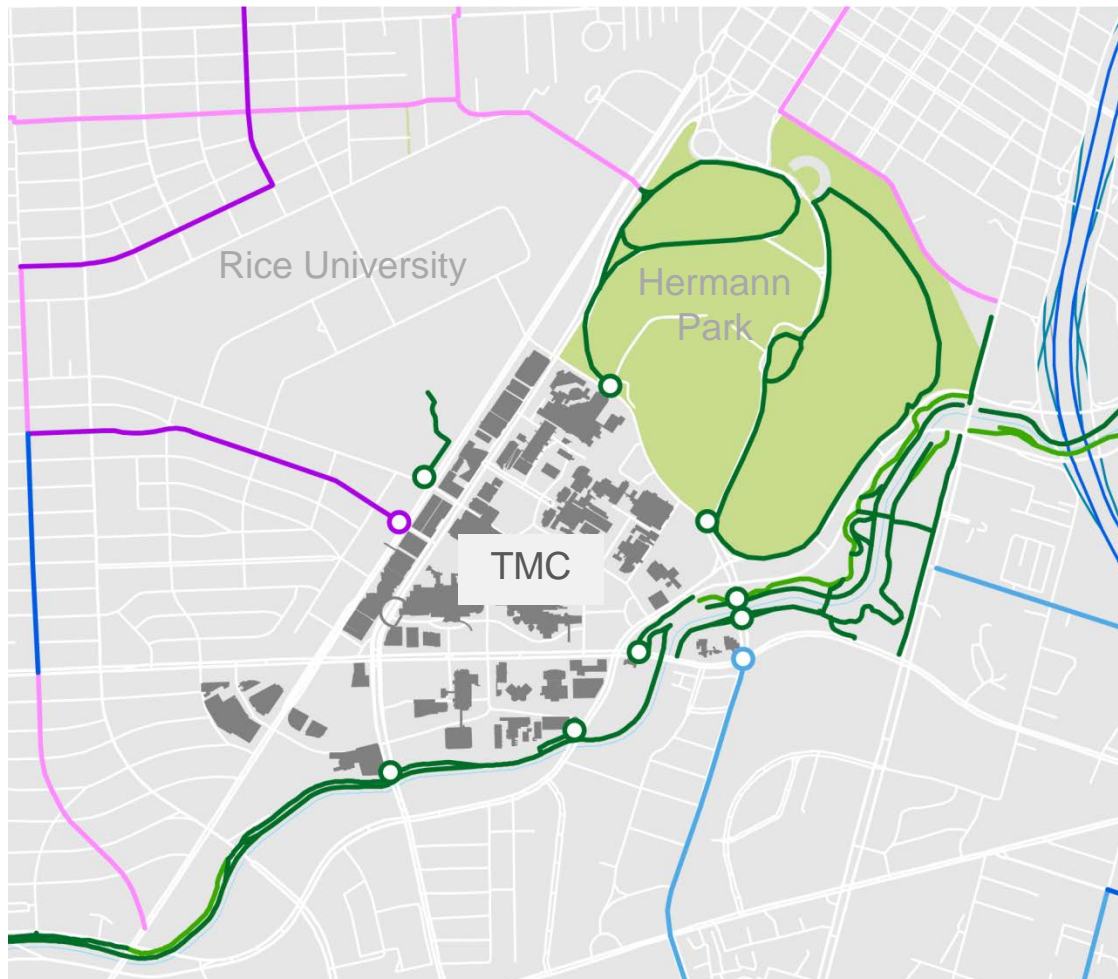
- Low Cost: annual cost of operating a bicycle is ~\$300 vs. over \$8,000 for a car
- 71% of jobs are within ½ mile of an existing bicycle facility
- Only 46% of jobs are within a ½ mile of high comfort bicycle facility

Source: Census & ACS Data; AAA; Team Analysis



The Challenge – Last Mile Connections

Trails and bike lanes are often near major job centers but rarely connect to the center or core of activity



Legend

Off-Street Facilities

- High-Comfort Shared-Use Path
- Shared-Use Path
- Shared Sidewalk

Dedicated Bike Lanes

- Separated Bike Lanes
- Bike Lanes
- Low-Comfort Bike Lanes

Shared On-Street Facilities

- Neighborhood Bikeways
- Shared Lane/Bike Route

- Facility outside of City of Houston

- Facility Ending near TMC

Existing Bike Network around Texas Medical Center



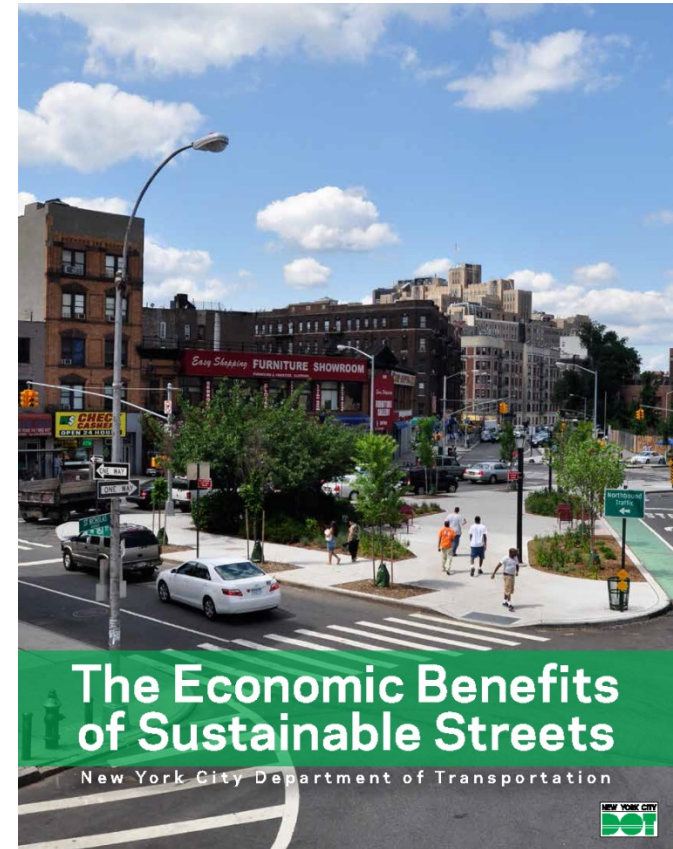
Lagging Peers Cities

					0.9	San Francisco, CA	<div>BETTER</div>
					1.1	Portland, OR	
					1.1	Washington, D.C.	
					1.5	Denver, CO	
					1.6	Atlanta, GA	
					1.7	Seattle, WA	
					2.3	Minneapolis, MN	
					2.4	Austin, TX	
					3.9	Chicago, IL	
					4.3	Los Angeles, CA	
					5.4	San Antonio, TX	
					7.8	Average	
					7.9	Miami, FL	<div>BELOW</div>
					11.2	Houston, TX	
					17.6	Dallas, TX	
					19.3	Phoenix, AZ	
					41.9	Fort Worth, TX	

A great bicycle network benefits everyone.... not just cyclists

Benefits For everyone

- **Fewer cars** on the road
- **Less conflicts** with people biking
- **Economic development**
- **Environmental and Health**
- **Maximize investments**
 - Bayou Greenways
 - Transit expansions



Phase 2: Defining Goals

Timing	<ul style="list-style-type: none">■ Late May 2015 - July 2015
Deliverables	<ul style="list-style-type: none">■ Draft Goals Statement, Preliminary Performance Metrics and Definition of Target Riders■ Public engagement summary report
Meetings	<ul style="list-style-type: none">■ BAC Kickoff meeting■ Public meetings, stakeholder focus groups and interviews■ Elected Official and Stakeholder Briefings (assumes 15 total)

Poll Q3: What are the top two goals to focus on to improve biking in Houston? (Pick 2)

1. Provide a well-connected, lower stress bicycle network
2. Improve safety for all road users
3. Capture significant potential for growth in people biking
4. Provide affordable access to jobs & opportunities
5. Improve community health and wellness
6. Better compete with peer cities who are setting the bar
7. Support community benefits for everyone, not just people who bike

Poll Q4: What are the two most important barriers to address to improve biking in Houston? (Pick 2)

1. Weather
2. Lack of bike parking
3. Lack of end-of-trip amenities (e.g., showers)
4. Lack of a network of comfortable bike facilities
5. Lack of direct access to jobs and activities
6. Feeling of safety (e.g., challenging intersections, speed & quantity of vehicles)
7. Poor lighting
8. Lack of bicycle and driver education
9. Other

Plan will identify goals for biking

Examples of Potential Goals

Safety

Goals Zero

- Reduction in crashes
- Reduction in injuries & fatalities)

Facilities for design riders

Access

Better access to

- Jobs
- Neighborhoods
- Other Destinations (e.g., Parks, Bayous, Libraries, Schools)

Bike

Ridership

Increase in mode share

___% increase in total trips

(Especially short trips 0-3 miles)

Facilities

Linear miles of dedicated bikeways

___% of facilities in good or better condition

Bike parking at transit nodes

Goal setting
will involve
significant
community
input

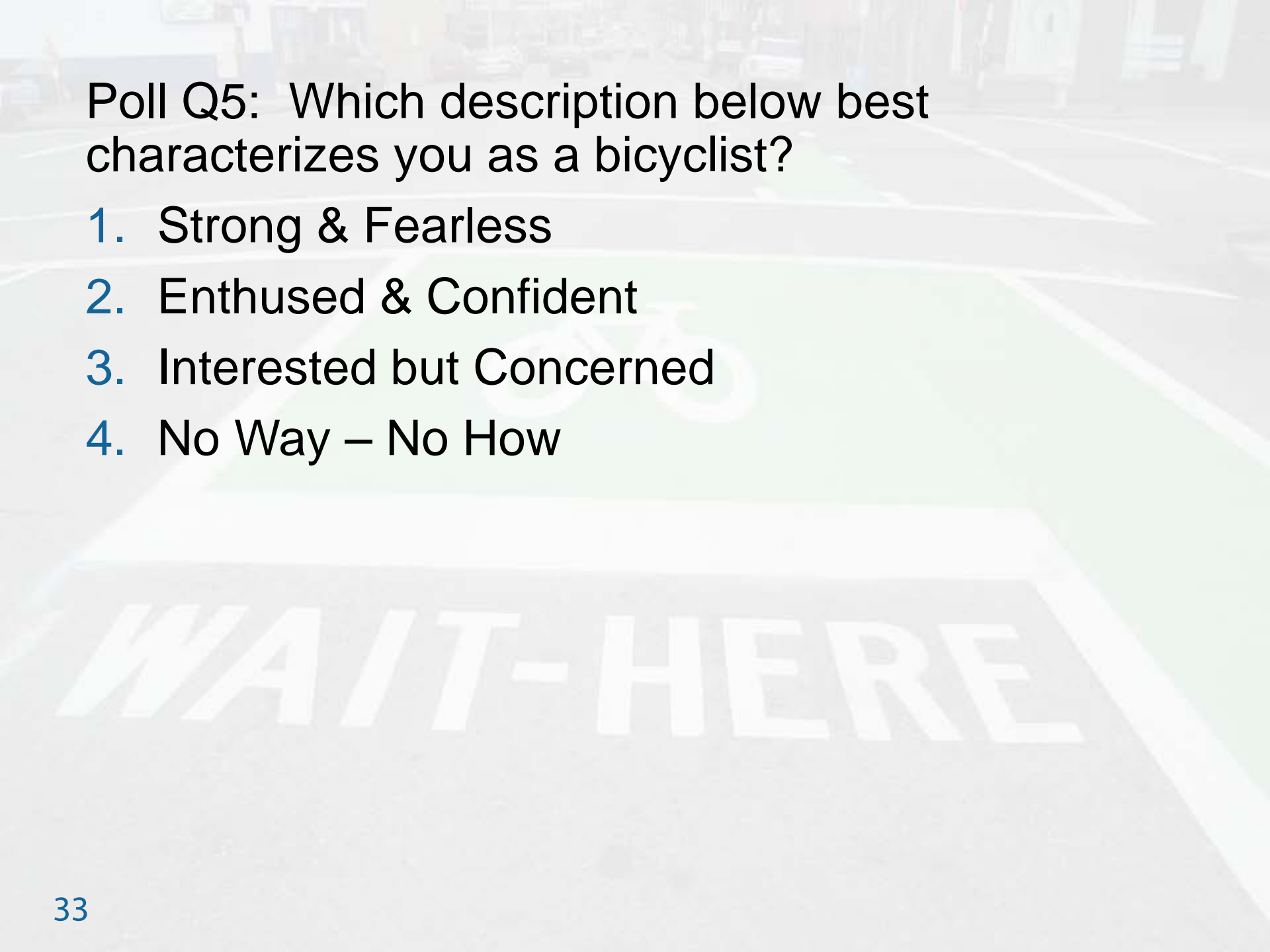


Design Riders: Who are we planning for?

Post a photo of yourself with your bike using the hashtags **#ibikehtown** and **#houstonbikeplan** on Twitter, Instagram or Facebook.

<p>BE A PART OF THE</p>  <p>Learn more online: www.houstonbikeplan.com @houstonbikeplan Houston Bikeway Program</p>	<p>Post a photo of yourself with your bike using the hashtags #ibikehtown and #houstonbikeplan on Twitter, Instagram, or Facebook.</p>  <p>I'm a student and #ibikehtown #houstonbikeplan</p> 	<p>PARTICIPA EN EL</p>  <p>Más información online: www.houstonbikeplan.com @houstonbikeplan Houston Bikeway Program</p>	<p>Sube una foto tuya con tu bicicleta usando los hashtags #ibikehtown y #houstonbikeplan a tu Twitter, Instagram, o Facebook.</p>  <p>Soy una trabajadora social y #ibikehtown #houstonbikeplan</p> 
---	--	---	---





Poll Q5: Which description below best characterizes you as a bicyclist?

1. Strong & Fearless
2. Enthused & Confident
3. Interested but Concerned
4. No Way – No How

Poll Q6: Of the Bicycle facility types below, which two would you most prefer riding on?



1. Shared-use path or trail,
2. Bike lane
3. Separated bike lane
4. Shared roadway, Neighborhood street,

5. Shared roadway, mixed use street with sharrow marking
6. Shared roadway, mixed use/commercial street

Poll Q7: Of the bike parking facilities shown below, which two would you most prefer using to park your bike?



1. Bike station

2. Bike locker

3. Bike lid

4. Regular bike rack

5. Sign post

6. Whatever is available

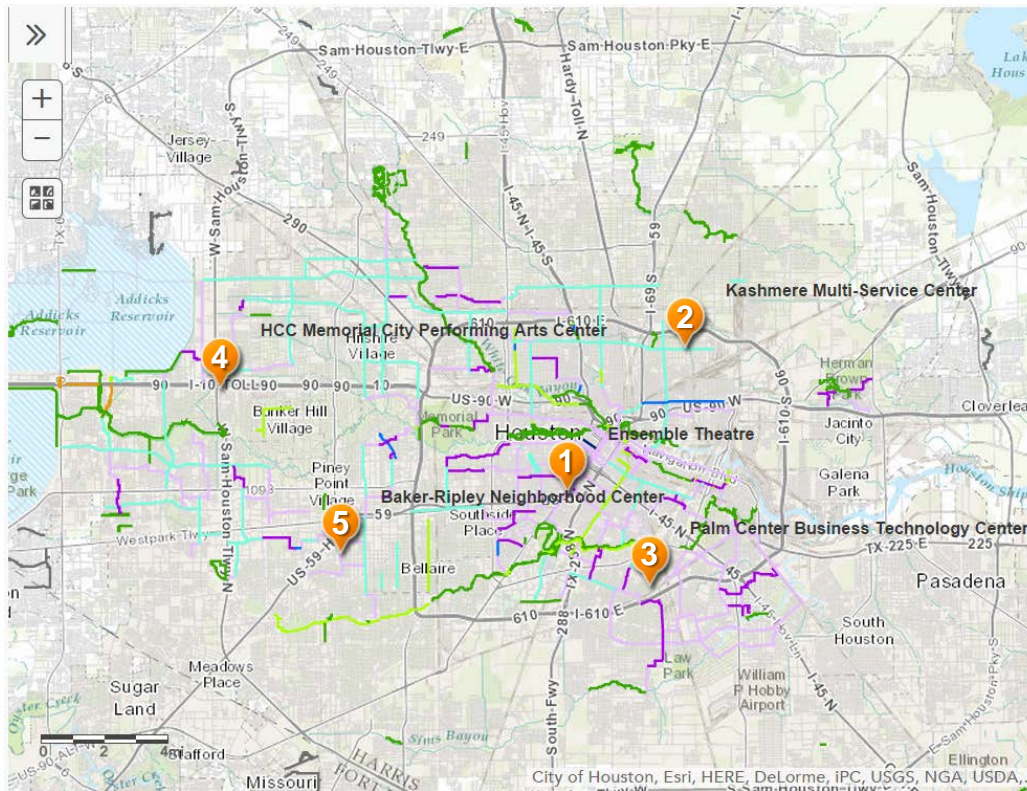
Public Engagement Kick-off Event

Saturday, May 30, 9am – 1pm

- Organized ride
 - Examples of different facility types and comfort levels
 - Major opportunities, barriers and challenges
- Open House
 - Share overview of plan and Existing Conditions
 - Community input on plan goals
 - Specific input on biking in Houston
 - Tools for how to stay involved
- Four more meetings across Houston through June



Community Meeting Locations Map



**Interactive Map to Allow People to Plan
Their Route at HoustonBikePlan.org**

- 1** **Bike Ride & Open House Kickoff**
Saturday May 30th, 9:00am-1:00pm
Ensemble Theater
3535 Main Street, Houston, TX 77002
- 2** Thursday, June 4, 2015, 6:00-8:00 pm
Kashmere Multi-service Center
4802 Lockwood Drive, Houston, TX 77026 /
Auditorium #172 Meeting #3
- 3** Tuesday, June 9, 2015, 6:00-8:00 pm
Palm Center Business Technology Center
5330 Griggs Road, Houston, TX 77021
Conf. Room C101
- 4** Tuesday, June 16, 2015, 6:00-8:00 PM
HCC Memorial City Performing Arts Center
1060 W Sam Houston Pkwy N,
Houston, TX 77043
Theat. II Room 411
- 5** Tuesday, June 23, 2015, 6:00-8:00 PM
Baker-Ripley Neighborhood Center
6500 Rookin, Houston, TX 77074



www.HoustonBikePlan.org

Destination site for all project materials and feedback

Discussion Forums

Topics Join the discussion and add to current topics. [View All Topics](#)

Map Question #1 Posted May 21 0 Interactions 117 Days Remaining

What would make Houston's bike network better?

Description

This map shows our existing bike network. Blues and purples represent on-street facilities and greens and browns represent off-street facilities. The darker the color is, the more "comfortable" a bicycle facility is. Where do you like to bike? Which facilities do you like using? Where would you like to bike? What are the barriers that need to be overcome?

Share [Launch the Map](#)

Vision Question #1 Posted May 21 0 Interactions 117 Days Remaining

Houston would be a safer, healthier, more bike friendly city if...

My idea is...

[Learn More](#) [Share](#) [Continue](#)

Vision Question #2 Posted May 21 0 Interactions 117 Days Remaining

My favorite place to bike is...

My idea is...

[Learn More](#) [Share](#) [Continue](#)

Vision Question #3 Posted May 21 0 Interactions 117 Days Remaining

I wish it was easier to bike...

My idea is...

[Learn More](#) [Share](#) [Continue](#)

Map Tools

Map Question #1 [What would make Houston's bike network better?](#) Views: 12 Interactions: 0 Days Remaining: 48

[Add an Idea in this Topic](#)

TOPICS

Map Question #1

Vision Question #1

Vision Question #2

Vision Question #3

Vision Question #4

Vision Question #5

Select Language [Powered by Google Translate](#)

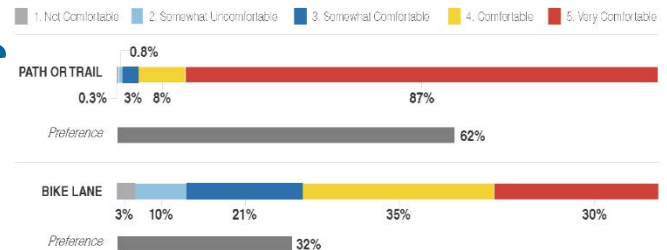
[Map Image](#)

This map shows our existing bike network. Blues and purples represent on-street facilities and greens and browns represent off-street facilities. The darker the color is, the more "comfortable" a bicycle facility is (select "image" above to see a legend).

Where do you like to bike? Which facilities do you like using? Where would you like to bike? What are the barriers that need to be overcome?

Surveys

16. Of the bicycle facility types shown in Images 1-6 below, on which two would you most prefer riding?



Public Engagement to Date

- City Council CIP Meetings (Feb-March 2015)
- Bike Houston Annual Meeting (3/24/15)
- Sunday Streets (Westheimer) (3/29/15)
- Bayou Greenways Day (4/4/15)
- Earth Day – Discovery Green (4/11/15)
- Earth Day – Houston Arboretum (4/18/15)
- Critical Mass (4/24/15)
- Sunday Street (19th Street) (4/26/15)
- Houston Dragon Boat Festival (5/2/15)
- Bike to Work Day – TMC (5/8/15)
- Bike to Work Day - Greenway Plaza/Galleria (5/14/15)
- Bike to Work Day – Energy Corridor District (5/14/15)
- Bike to Work Day - Downtown Celebration (5/15/15)
- Sunday Streets – Navigation (5/17/15)
- Green Office Challenge – (5/20/15)
- NUSA Conference (Hyatt Regency) (5/20-23/15)
- METRO RailFest (5/23/15)
- Critical Mass (5/29/15)

1,039 people on
mailing list
(as of 5-27-15)

193+ Interested in
going to first meeting
on Facebook



Future Public Engagement

- Ongoing event outreach (be where people are)
 - Flyers
 - Posters
 - Email sign up
- Leverage stakeholders to get the word out
 - Meeting in box
 - Newsletters/email blasts
 - Coordination at events

Please let us know if you have events where you would like Bike Plan information

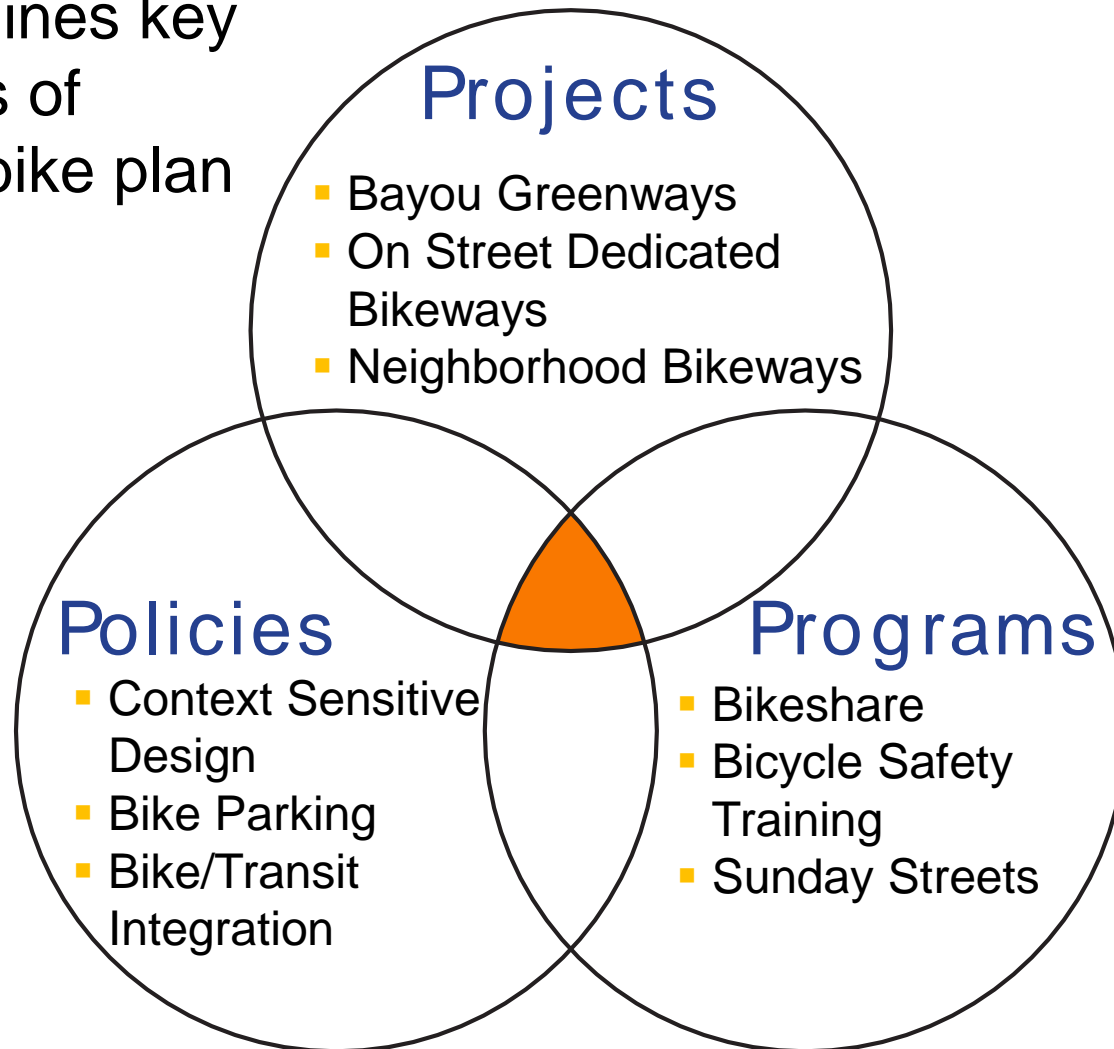


Phase 3: Bicycle Tool Box

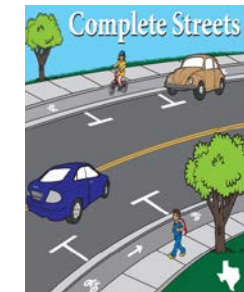
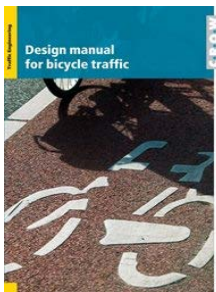
Timing	<ul style="list-style-type: none">■ July 2015 - August 2015
Deliverables	<ul style="list-style-type: none">■ Draft Bicycle Toolbox (facility standards, policies, and programs)■ Supporting materials for public outreach/education
Meetings	<ul style="list-style-type: none">■ BAC Meeting■ Council & Commission Briefings on Proposed Goals

Phase 3: Bicycle Toolbox

Toolbox outlines key components of successful bike plan



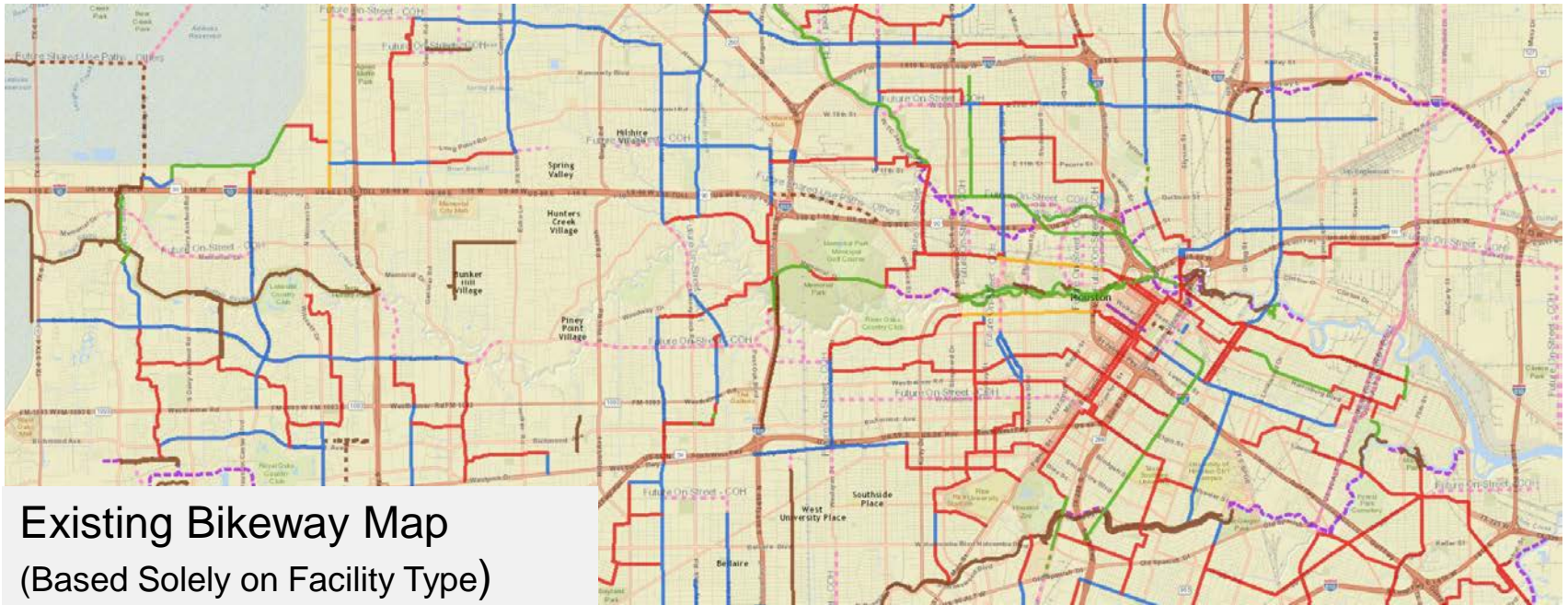
Phase 3: Bicycle Toolbox



Phase 4: Developing the Draft Plan

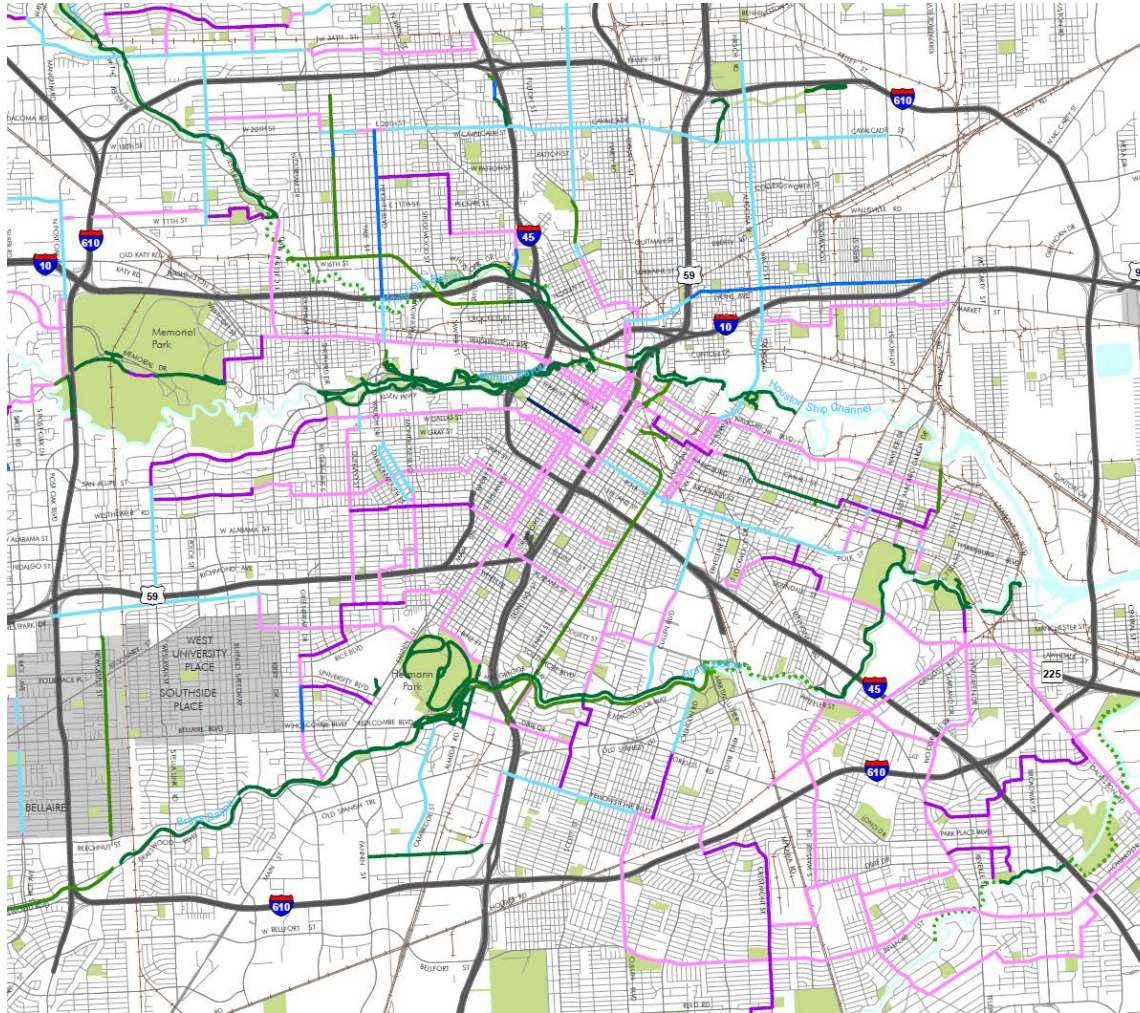
Timing	<ul style="list-style-type: none">■ July 2015 – November 2015
Deliverables	<ul style="list-style-type: none">■ Draft Bicycle Network Map■ Analysis of plan against Project Goals From Phase 2■ Potential pilot projects
Meetings	<ul style="list-style-type: none">■ BAC meeting: Share the draft Bicycle Network Map and analysis against project goals■ Briefings for City of Houston staff and senior administrators

Bicycle Plan Map Linked to Goals



Develop a New Bike Map

Plan will Update Existing Conditions Bike Map



Zoom Map of Existing Conditions in IH-610 Loop Area

- Based on facility types and comfort levels
- Focused on citywide bikeway network
- Will include:
 - Existing facilities
 - Near, Mid, & Long term implementation opportunities
- Easy to read graphical style to support trip planning



From Map → Potential Projects

Existing Facilities

Comfortable for a broad range of cyclists

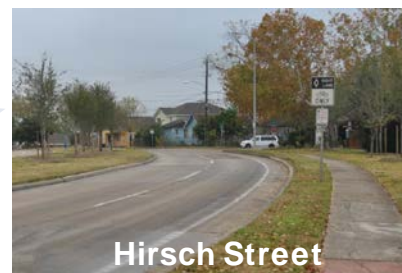
- Shared use trails
- Separated bikeways
- Bike lanes
- Neighborhood bikeways



White Oak Bayou Trail

Potential improvement areas

- Narrow/low comfort bike lanes
- Shared lanes on higher speed/volume streets
- Challenging intersections
- Existing network gaps



Hirsch Street

Recommended Projects

Near term implementation

- Paint, signs & signals to improve bike options in existing street corridor & ROW
- Funded trail improvement



Sawyer Street

Medium/long term implementation

- Require new roadway infrastructure
- New trails segments
- Bridge crossings/grade separations
- ROW acquisition



Clear Creek Bayou



Phase 5: Public Input on Plan

Phase 6: Finalize the Plan

Timing	<ul style="list-style-type: none">■ Phase 5: Nov 2015 - Feb 2016■ Phase 6: Feb 2016 - Apr 2016
Deliverables	<ul style="list-style-type: none">■ Summary of Public Feedback■ Proposed Revisions to the Draft Map■ Implementation Plan with Project Prioritization■ Finalized Houston Bike Plan
Meetings	<ul style="list-style-type: none">■ 5 community meetings on draft plan■ BAC Meeting■ Committee and Commission Meetings

Implementation & Pilot Projects



Lamar Street

From Plan to Action

1. Finalize Recommendations:
 - Policies
 - Programs
 - Projects
2. Prioritize projects to near term/long term projects
3. Define implementation and funding strategies
4. Develop pilot projects:
 - New on-street facilities
 - Neighborhood bikeways
 - Intersection treatments



Next Steps

- Attend May 30th Bike Ride & Open House
- Help promote June Meetings
 - Facebook events
 - Newsletters and email blasts
 - Postcards and posters available
- Next BAC Meeting
 - Weds., July 8th 1-3 or 3-5; or
 - Thurs., July 10th 11-1 or 1-3
 - Discussion Topics
 - Summary of public feedback
 - Draft goals
 - Draft toolbox

JOIN US AT THESE UPCOMING MEETINGS
TO SHARE YOUR IDEAS FOR THE

HOUSTON BIKEPLAN

TO HELP MAKE HOUSTON A SAFER,
HEALTHIER, MORE BIKE-FRIENDLY CITY



Bikes created by Oliver & W. Paul, PTAPPA Director David Clark
Illustrations by Jennifer, Art: PHOTOS FROM THE HOUSTON PROJECT



HOUSTONBIKEPLAN.ORG

f HOUSTONBIKEWAYS

@HOUSTONBIKEPLAN

BIKE RIDE & OPEN HOUSE

SATURDAY MAY 30TH, 9AM-1PM

ENSEMBLE THEATER

3535 MAIN STREET
HOUSTON, TX 77002

Parking is available at the HCC
lots located on Berry Street at
San Jacinto (next to Adkins
Architectural Antiques) and on
Berry Street at Fannin.

Participants may enter to win
one of several raffle prizes.



This project is funded by the
City of Houston, BikeHouston,
Houston Parks Board, H-GAC,
FTA, FHWA, and TxDOT.

Join us at one of the four public meetings for a
presentation on the Houston Bike Plan, and an
opportunity to give input on biking in Houston.

1 KASHMERE MULTI-SERVICE CENTER

THURSDAY, JUNE 4, 2015, 6:00-8:00 PM / AUDITORIUM #172
4802 LOCKWOOD DRIVE, HOUSTON, TX 77026

2 PALM CENTER BUSINESS TECHNOLOGY CENTER

TUESDAY, JUNE 9, 2015, 6:00-8:00 PM / CONF. ROOM C101
5330 GRIGGS ROAD, HOUSTON, TX 77021

3 HCC MEMORIAL CITY PERFORMING ARTS CENTER

TUESDAY, JUNE 16, 2015, 6:00-8:00 PM / THEATER II ROOM 411
1060 WEST SAM HOUSTON PKWY N, HOUSTON, TX 77043

4 BAKER-RIPLEY NEIGHBORHOOD CENTER

TUESDAY, JUNE 23, 2015, 6:00-8:00 PM
6500 ROOKIN, HOUSTON, TX 77074

www.HoustonBikePlan.com

Bikeways@houstontx.gov

832-395-2700



@HoustonBikePlan



Houston Bikeways Program

HOUSTON
BIKEPLAN

