HOUSTON BIKEPLAN



Kicking Off the Houston Bike Plan

Bicycle Advisory Committee Meeting #1

May 29, 2015

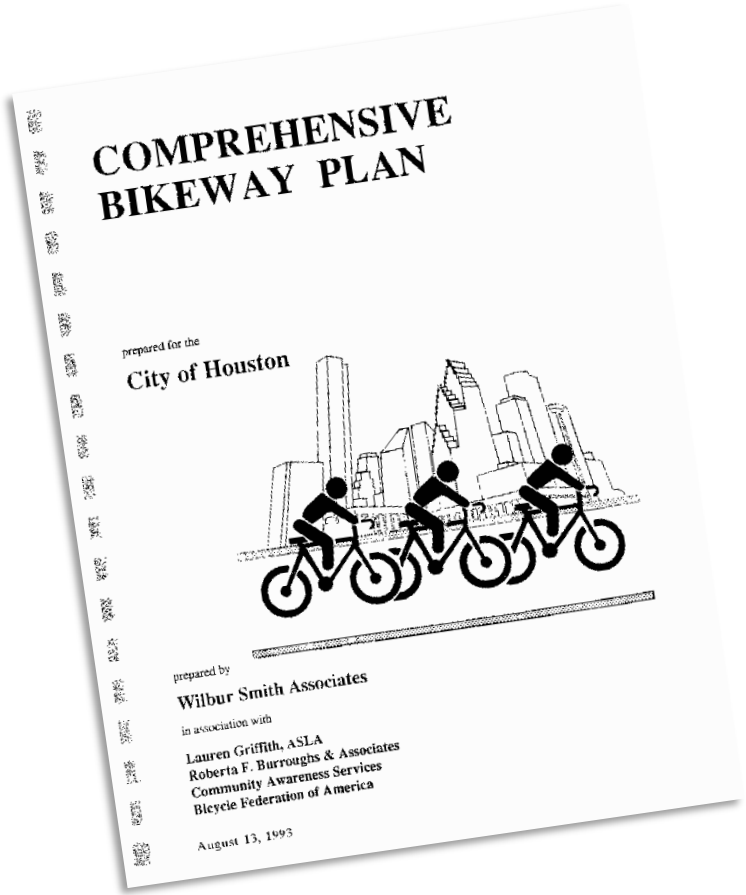
Overview & Objectives

- 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)

HOUSTON BIKEPLAN

Why do we need a new bike plan?



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

HOUSTON BIKEPLAN

Plan is being developed in partnership

Lead Agency

Multiple Departments

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

Funding Partners

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?

Phase	Timeline
1 Existing Conditions and Opportunities	May 2015
2 Defining Goals	July 2015
3 Bicycle Toolbox	Aug 2015
4 Developing Draft Plan	Nov 2015
5 Public Outreach on the Plan	Feb 2016
6 Finalize Plan	April 2016



Major Public Engagement Periods

Phase 1: Existing Conditions and Opportunities

Timing	▪ March-May 2015
Deliverables	▪ Existing Conditions Report ▪ Case For Action/Opportunity Statement
Meetings	▪ Kick off meetings • City Staff & Funding Partners

The Opportunity and Case for Action

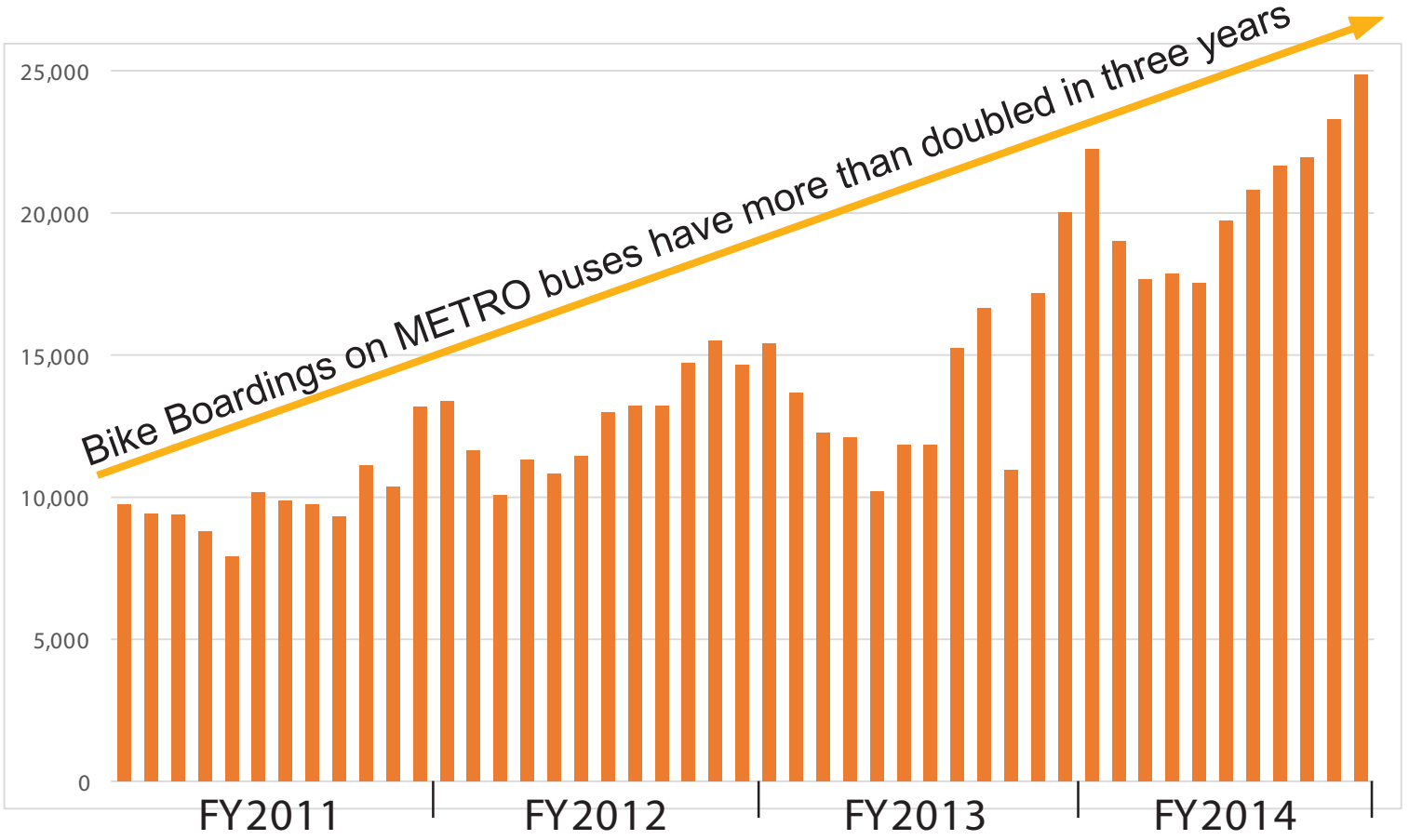
The Houston Bike Plan is a **transformative opportunity** to...

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


Dearborn Avenue, Chicago

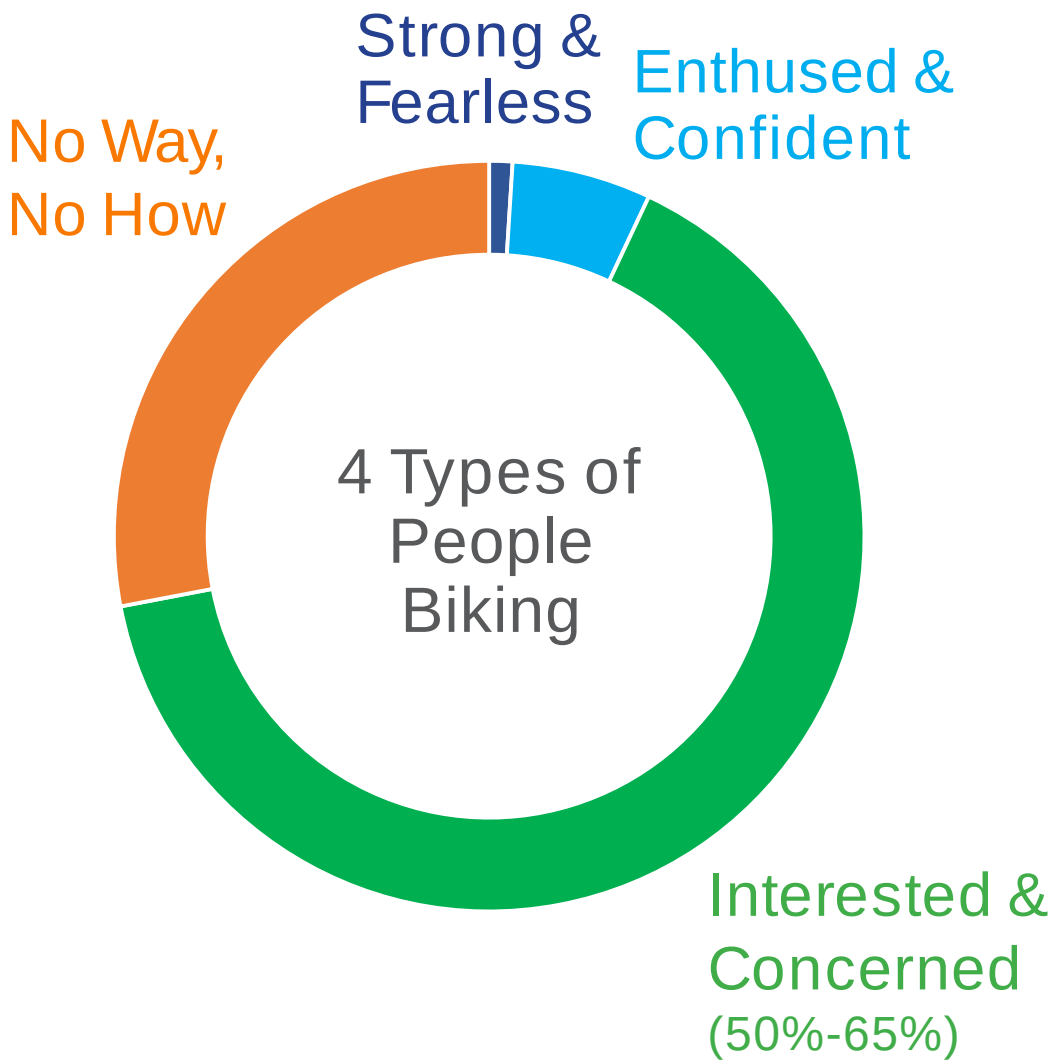
Better Serve Growing Ridership

Significant increase in cycling activity and interest



Source: Houston METRO Bicycle Boarding Data

Who is Our Design Rider?

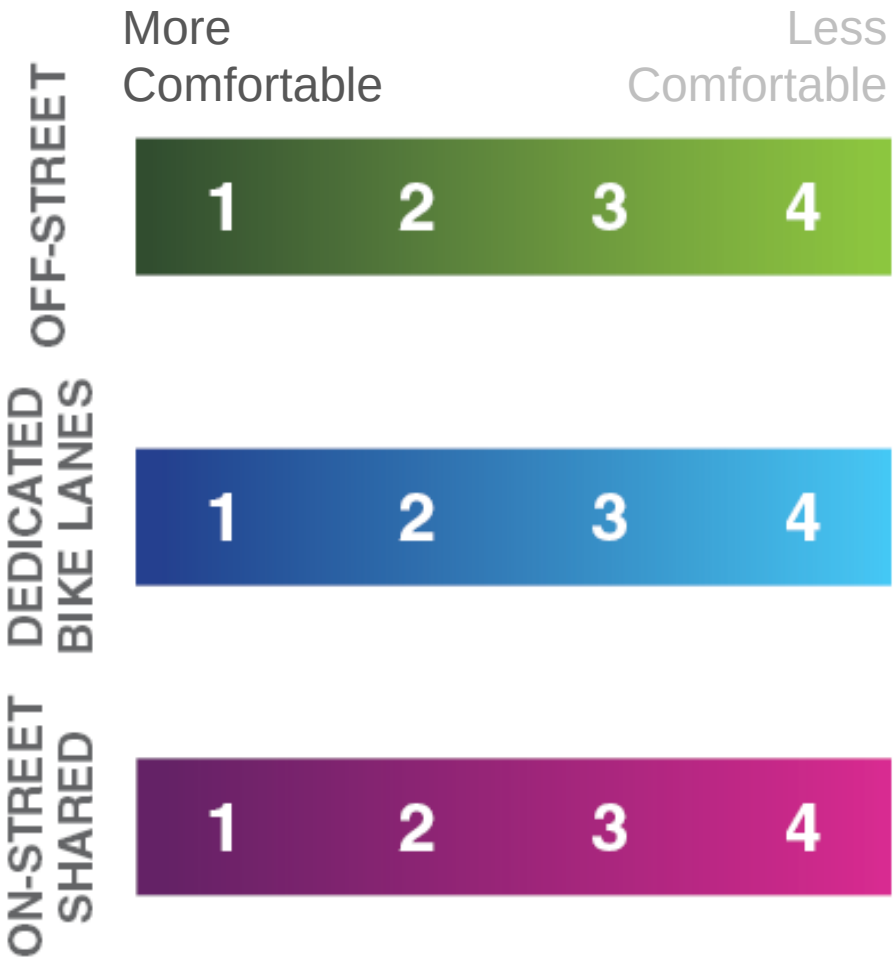


- People in the Interested & Concerned category typically most attracted to bicycle facilities with higher comfort levels
- Current network introduces enough gaps and high stress locations to limit frequent bicycle use to Strong & Fearless riders

Source: Dill & McNeil: Four Types Of Cyclists?.2012. Portland State University

Defining Bicycle Level of Comfort

Existing Bicycle Facilities Assessed on Four Levels of Comfort



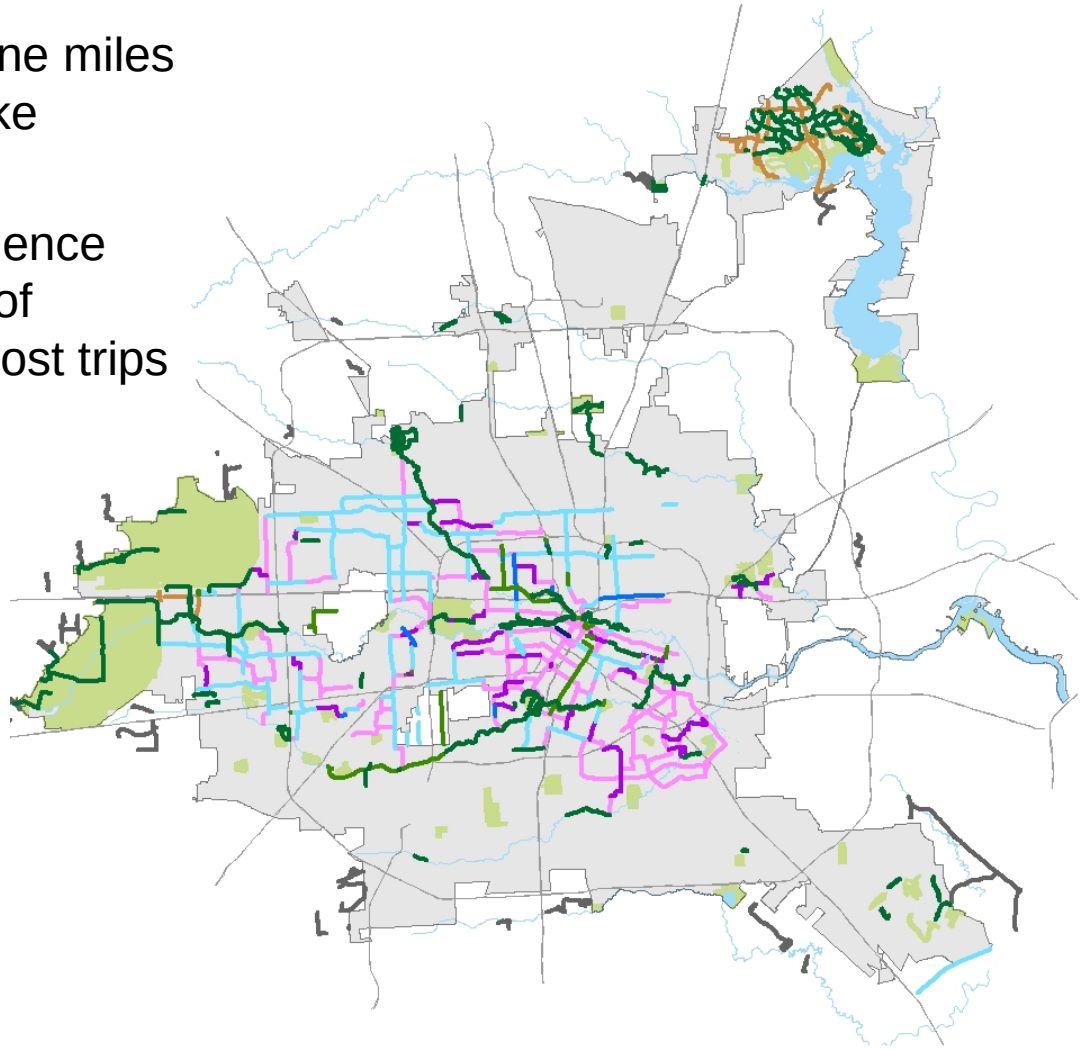
Level of Comfort assessment based on:

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

Source: Mineta Transportation Institute: *Low-Stress Bicycling and Network Connectivity* (2015); Team Analysis

Existing Network – All Facilities

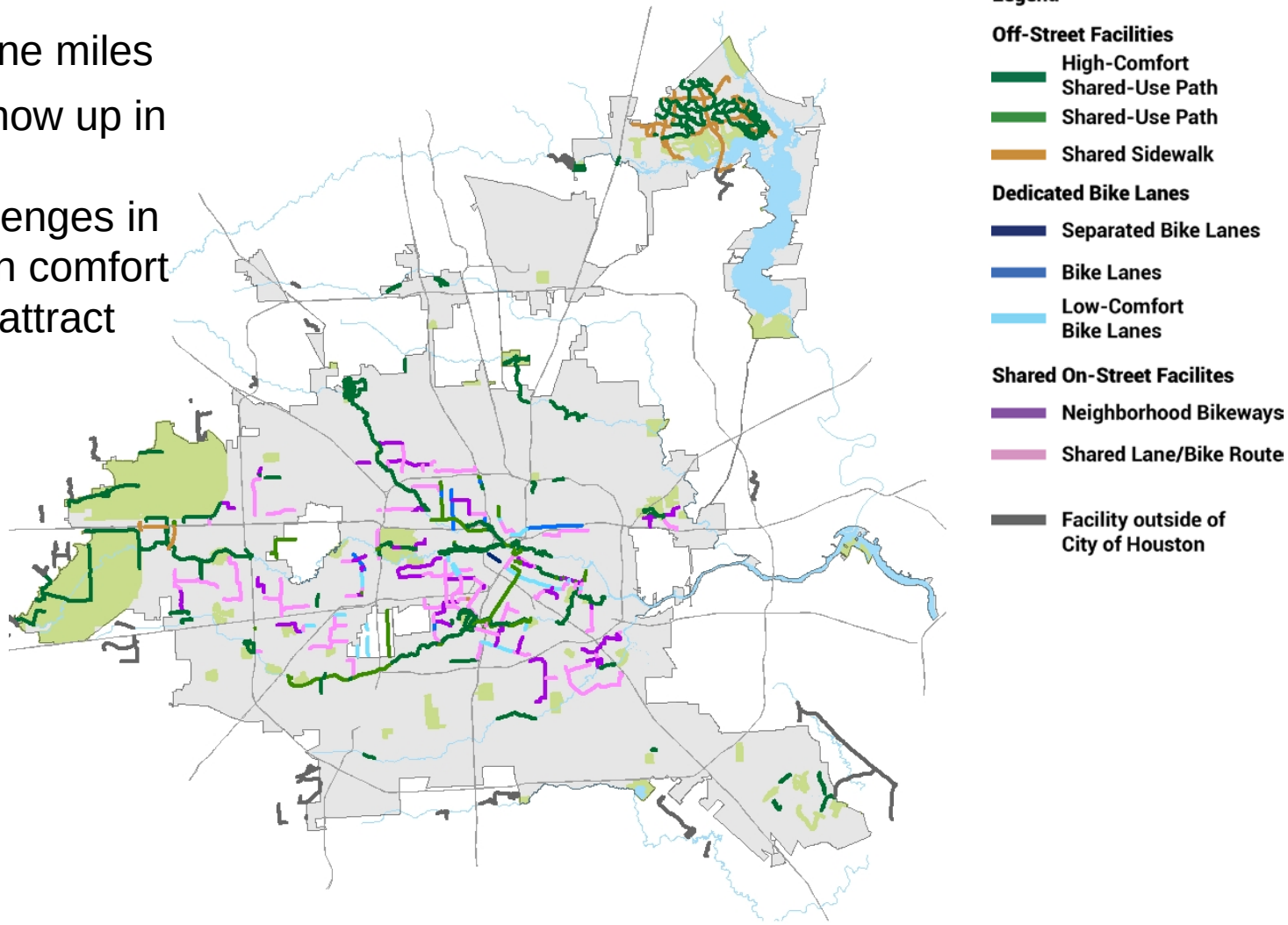
- ~500 centerline miles of existing bike facilities
- Riders experience broad range of comfort on most trips



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

Existing Network – Level of Comfort 1-2-3

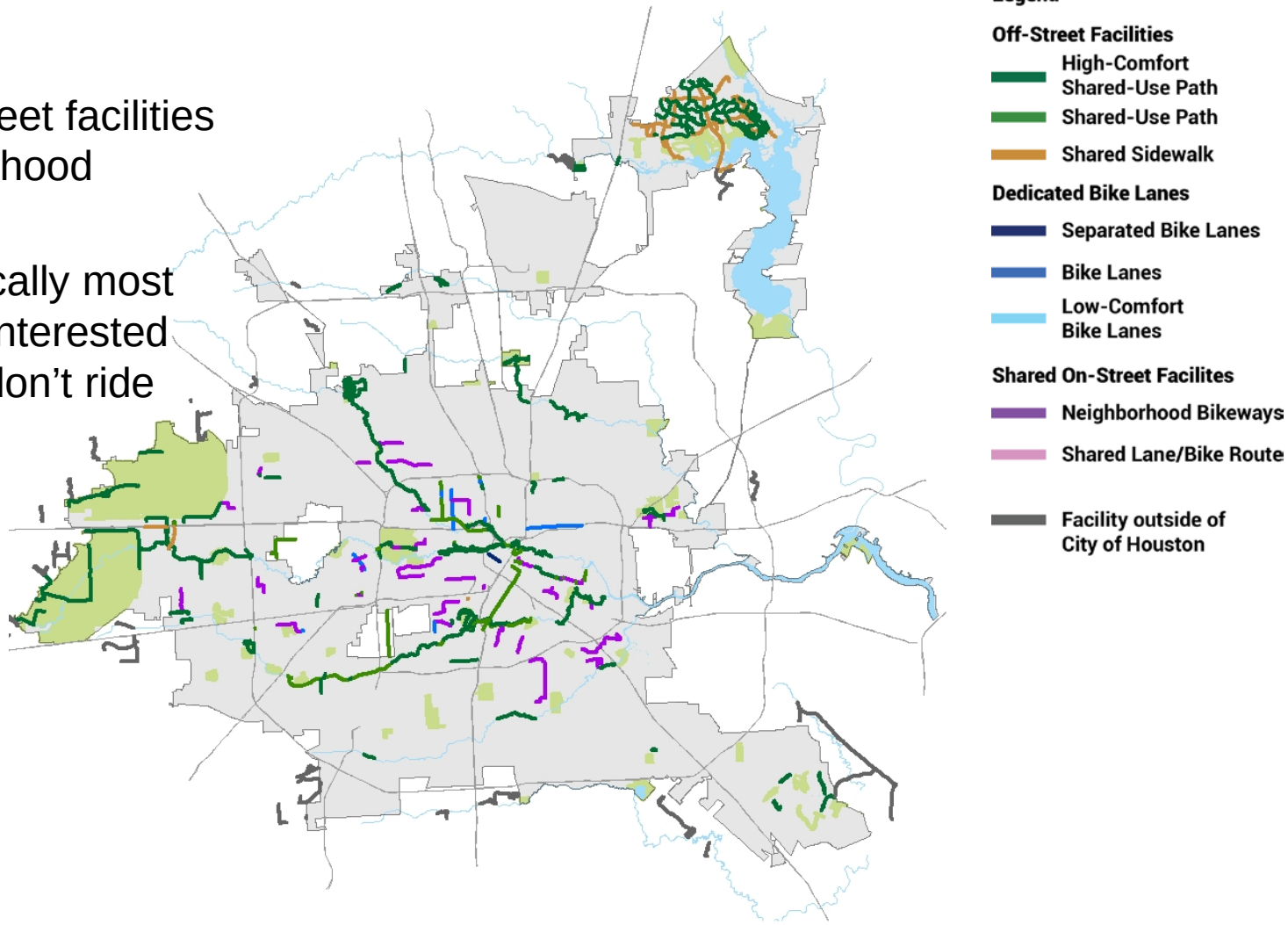
- ~350 centerline miles
- More gaps show up in network
- Creates challenges in providing high comfort trips likely to attract more riders



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

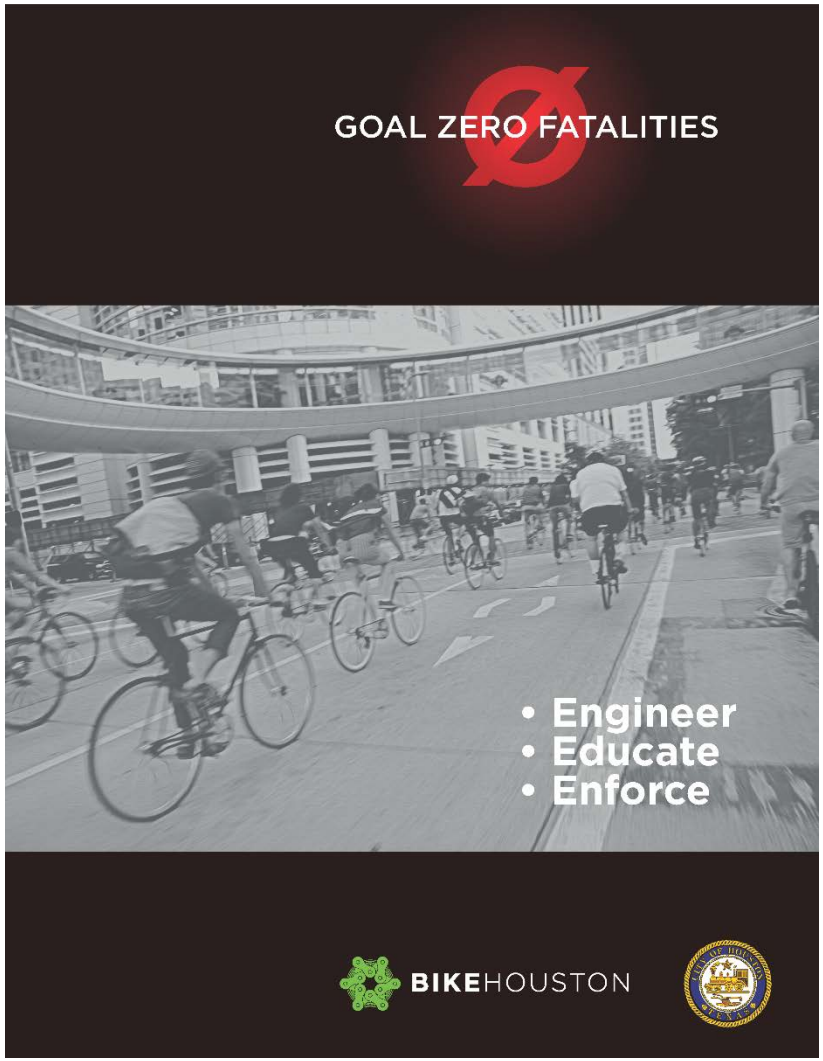
- ~250 miles
- Mostly off-street facilities and neighborhood bikeways
- Network typically most attractive to interested people who don't ride today



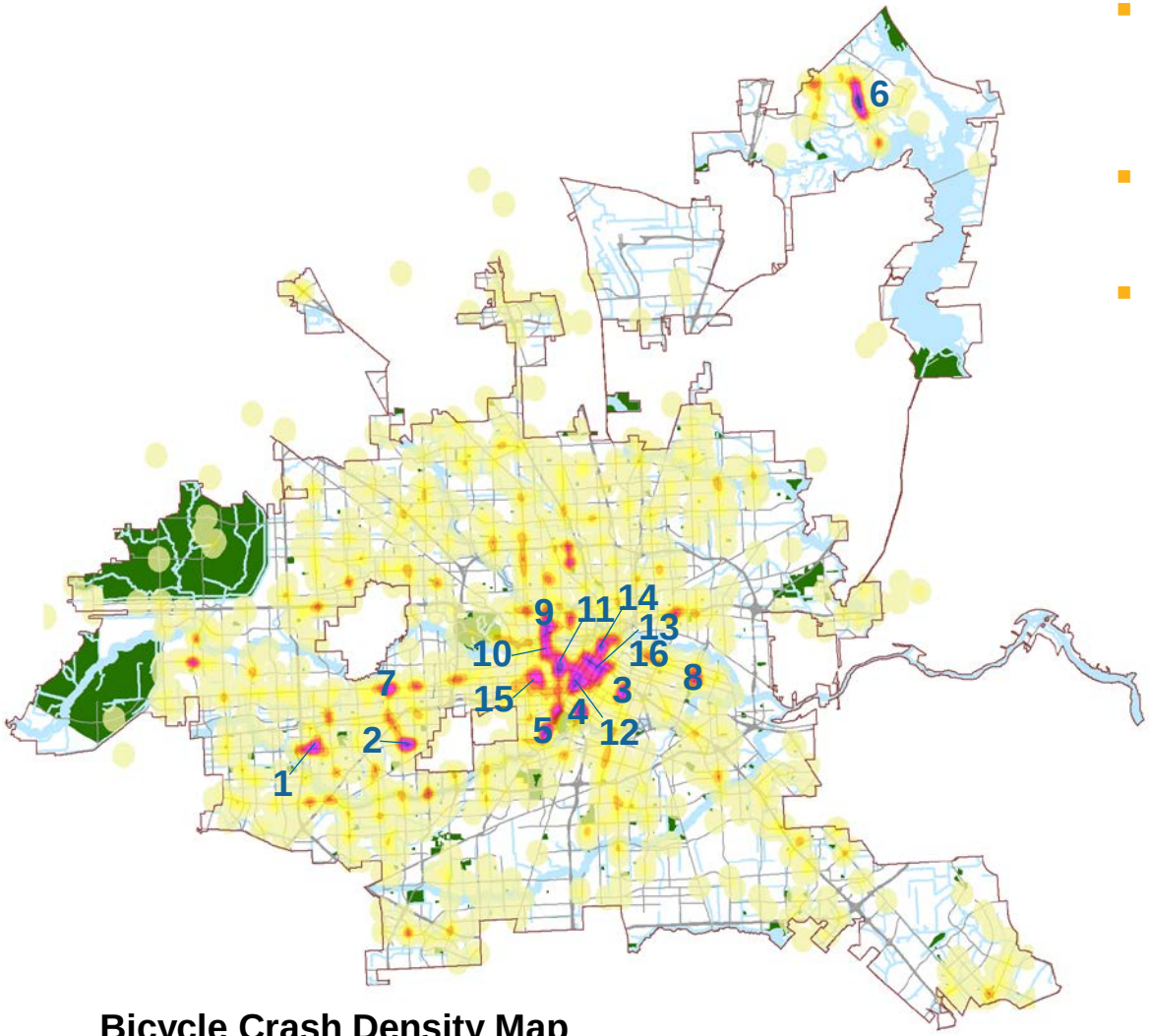
Existing Bike Facilities in the City of Houston
(Level of Comfort 1 & 2; Map excludes medium-low and lowest comfort facilities**)**

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



Bicycle Crash Density Map

- 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

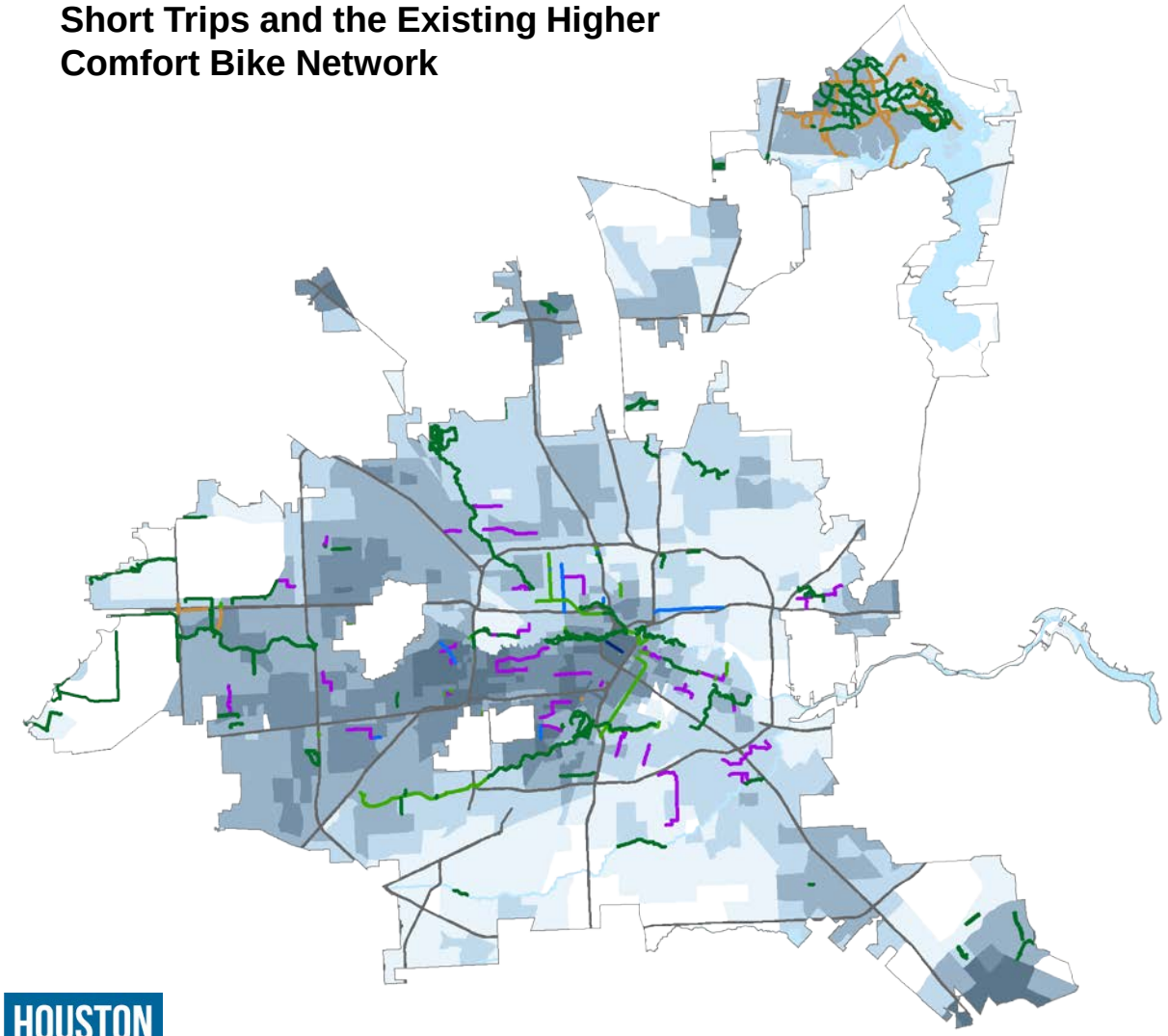
Areas with 10+ Bike Crashes within ½ mile (2010-2014)

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

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

Bicycles Faster and More Convenient for Many Short Trips

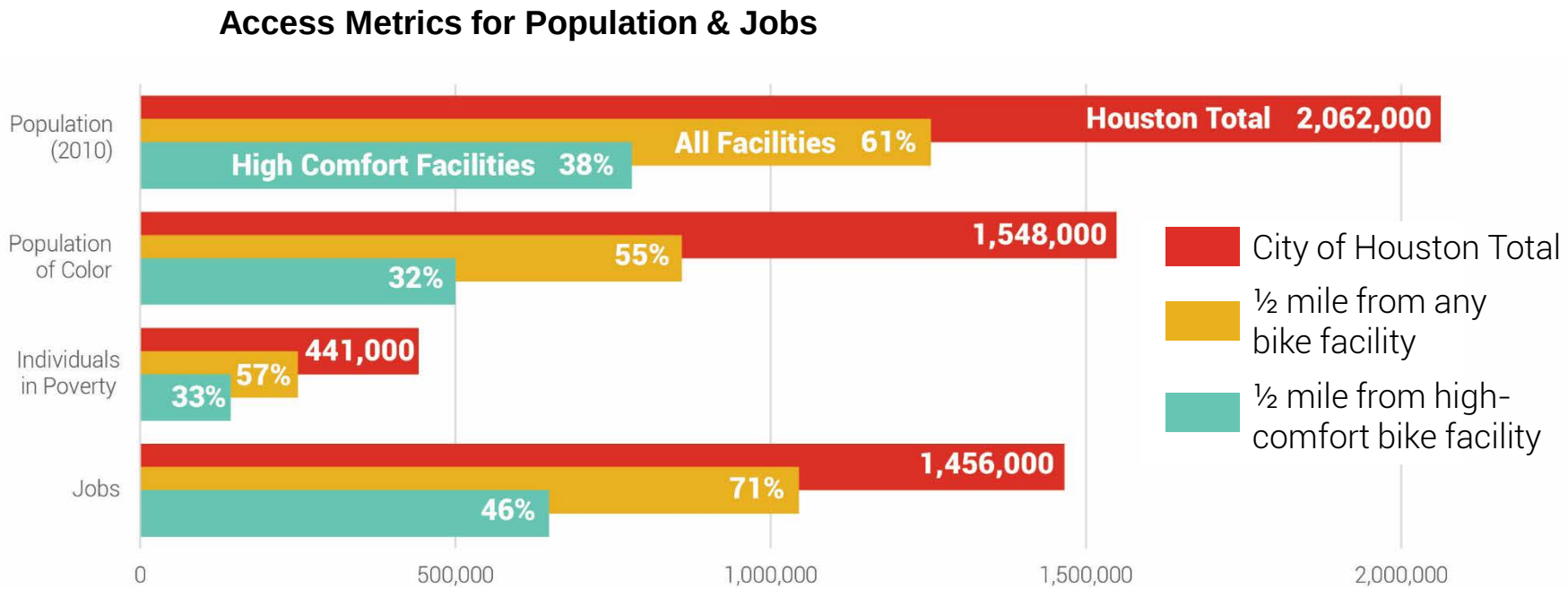
Short Trips and the Existing Higher Comfort Bike Network



- 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

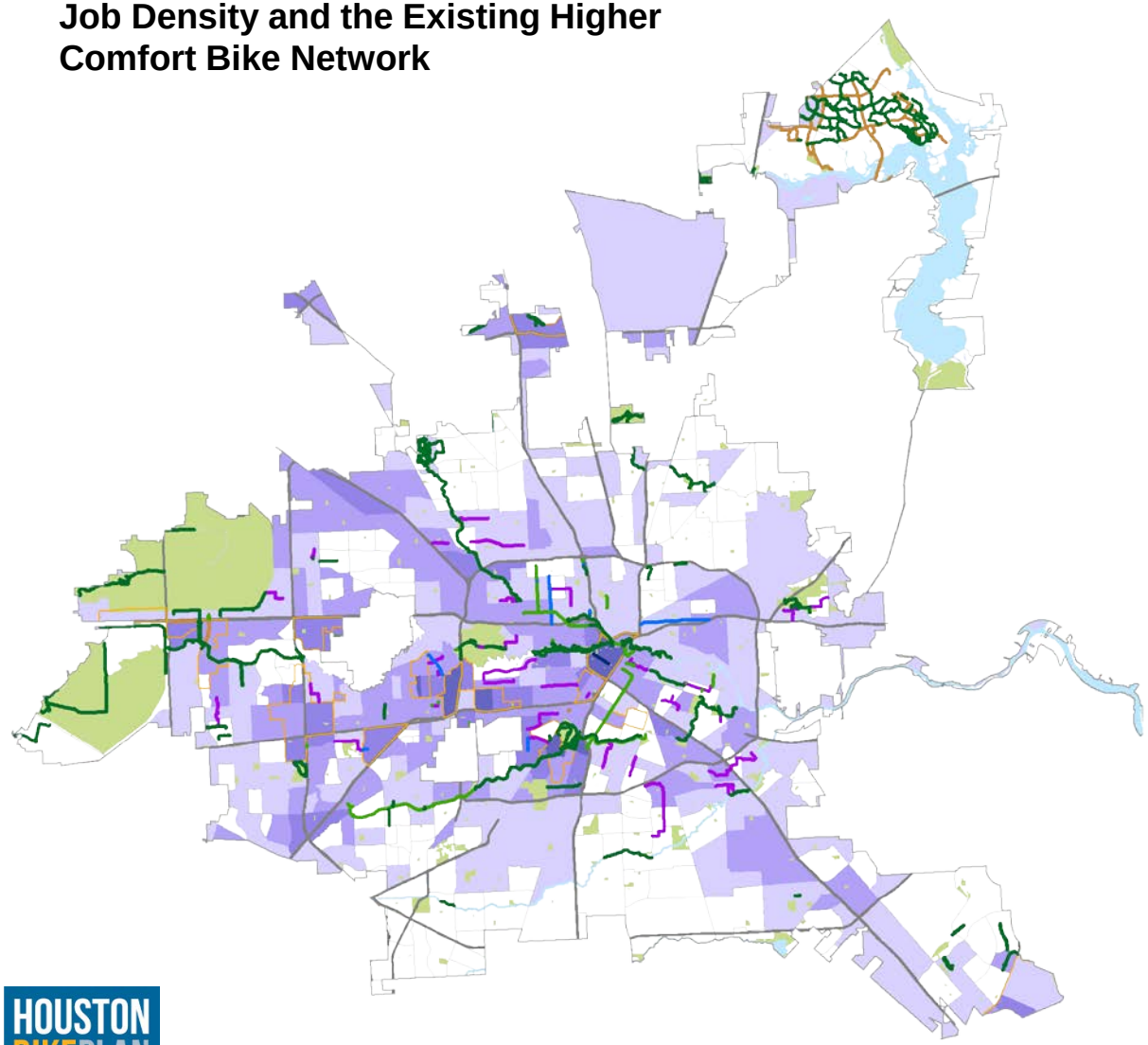


- Overall network provides proximate access to over 60% of people and jobs
- About 38% of the population is proximate to high-comfort bicycle facilities, but barriers to access and last mile challenges still exist
- Access is slightly lower for populations of color and households living below the poverty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

Source: Census & ACS Data; Team Analysis

Low Cost Access to Opportunity

Job Density and the Existing Higher Comfort Bike Network

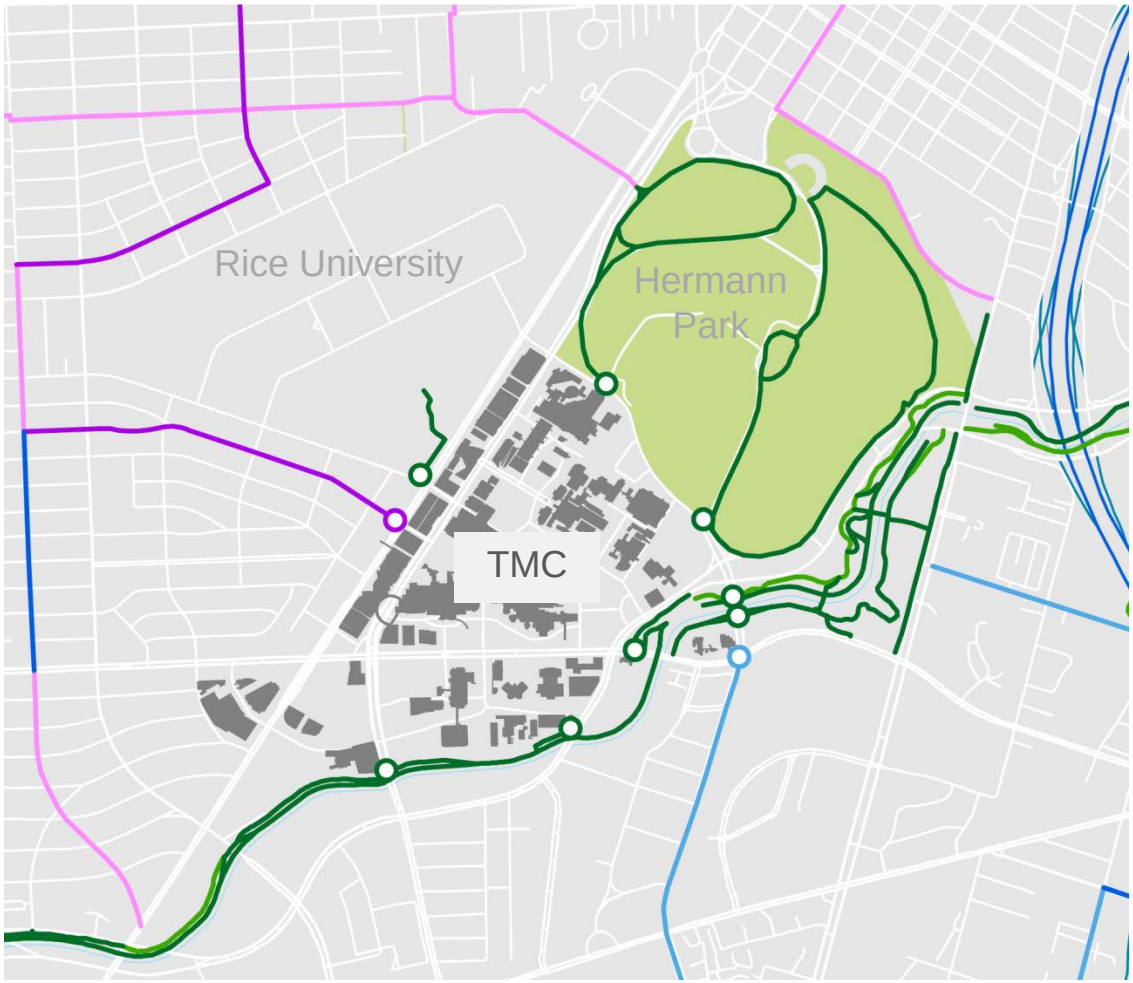


- Low Cost: annual cost of operating a bicycle is ~$300 vs. over $8,000 for a car
- 71% of jobs are within ½ mile of an existing bicycle facility
- Only 46% of jobs are within a ½ mile of high comfort bicycle facility

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



Existing Bike Network around Texas Medical Center

Lagging Peers Cities

6.1	Portland, OR
3.6	Minneapolis, MN
3.4	Seattle, WA
3.3	San Francisco, CA
2.9	Washington, D.C.
2.2	Denver, CO
1.8	Average
1.3	Austin, TX
1.3	Chicago, IL
1.1	Atlanta, GA
1.0	Los Angeles, CA
0.7	Miami, FL
0.7	Phoenix, AZ
0.5	Houston, TX
0.2	Dallas, TX
0.2	San Antonio, TX
0.1	Fort Worth, TX

% of Bicycle Commuter Mode Share

7.8	San Francisco, CA
4.6	Austin, TX
3.9	Seattle, WA
3.9	Minneapolis, MN
3.8	Washington, D.C.
3.1	Denver, CO
3.0	Portland, OR
2.7	Average
2.6	Chicago, IL
2.5	Dallas, TX
1.5	Phoenix, AZ
1.3	Los Angeles, CA
1.3	Miami, FL
1.1	Houston, TX
1.1	San Antonio, TX
0.7	Atlanta, GA
0.5	Fort Worth, TX

Total Existing Miles of Bicycle Facilities / Sq Mile

1741	San Antonio, TX
1680	Los Angeles, CA
1296	Dallas, TX
1100	Austin, TX
1000	Fort Worth, TX
962	Portland, OR
640	Chicago, IL
632	Average
523	Seattle, WA
311	Denver, CO
277	Miami, FL
275	Minneapolis, MN
125	Washington, D.C.
98	Houston, TX
60	Atlanta, GA
19	San Francisco, CA
5	Phoenix, AZ

Miles of Planned Bicycle Facilities

62.4	San Francisco, CA
61.5	Denver, CO
60.6	Miami, FL
60.3	Portland, OR
56.0	Los Angeles, CA
55.9	Austin, TX
55.5	Minneapolis, MN
55.3	Average
54.9	Washington, D.C.
54.5	Seattle, WA
52.9	Phoenix, AZ
52.3	Chicago, IL
52.1	Atlanta, GA
51.1	Houston, TX
50.3	San Antonio, TX
48.8	Dallas, TX

% Adults Meeting Recommended Minimum Weekly Aerobic Physical Activity*

0.9	San Francisco, CA
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
11.2	Houston, TX
17.6	Dallas, TX
19.3	Phoenix, AZ
41.9	Fort Worth, TX

Bicyclist Fatalities per 10k bicycling commuters

BETTER — AVERAGE — BELOW

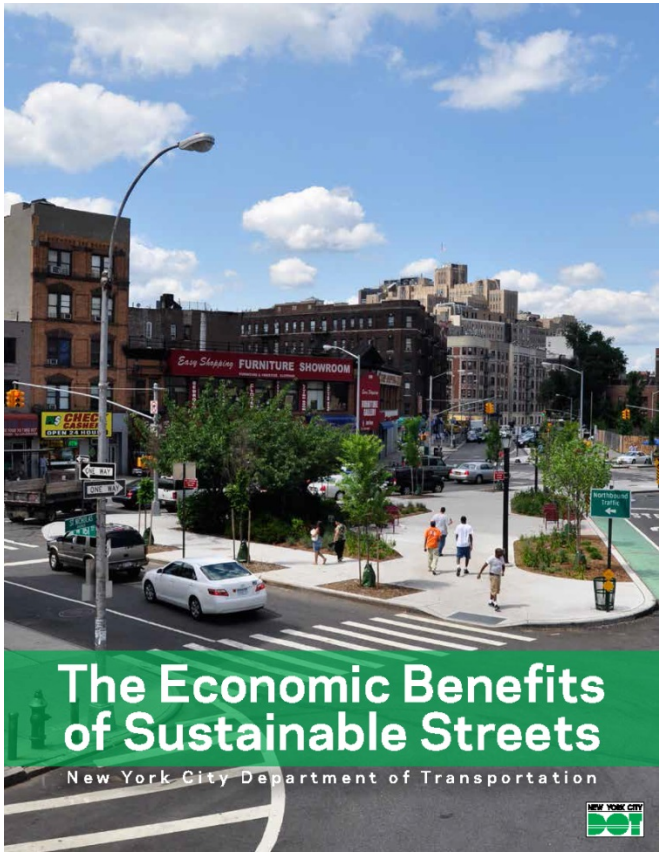
*Data was unavailable for Fort Worth, TX

Source: Alliance for Biking & Walking's 2014 Benchmarking Report for Bicycling and Walking in the United States

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	▪ Late May 2015 - July 2015
Deliverables	▪ Draft Goals Statement, Preliminary Performance Metrics and Definition of Target Riders ▪ Public engagement summary report
Meetings	▪ 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.



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?

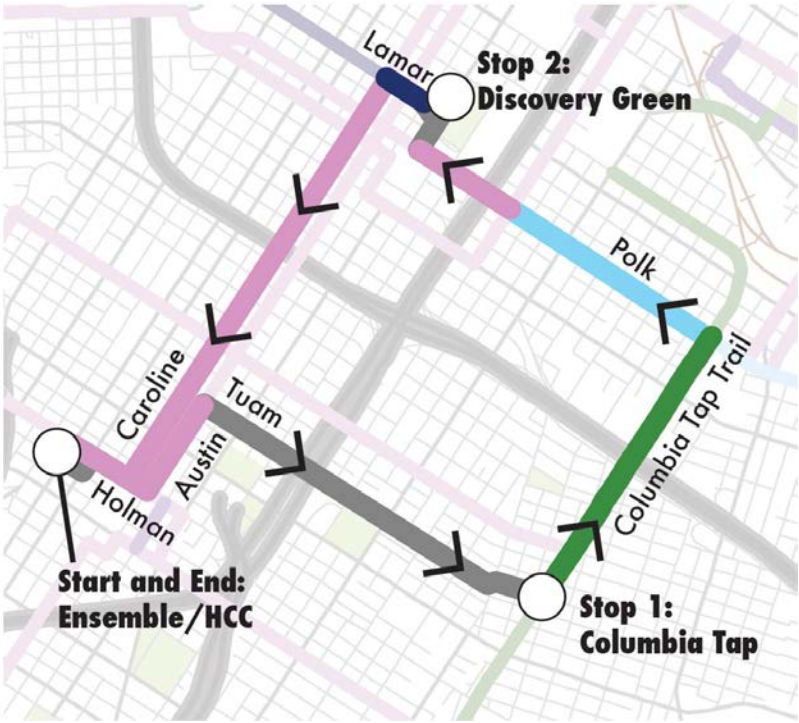


1. Bike station
2. Bike locker
3. Bike lid
4. Regular bike rack
5. Sign post
6. Whatever is available

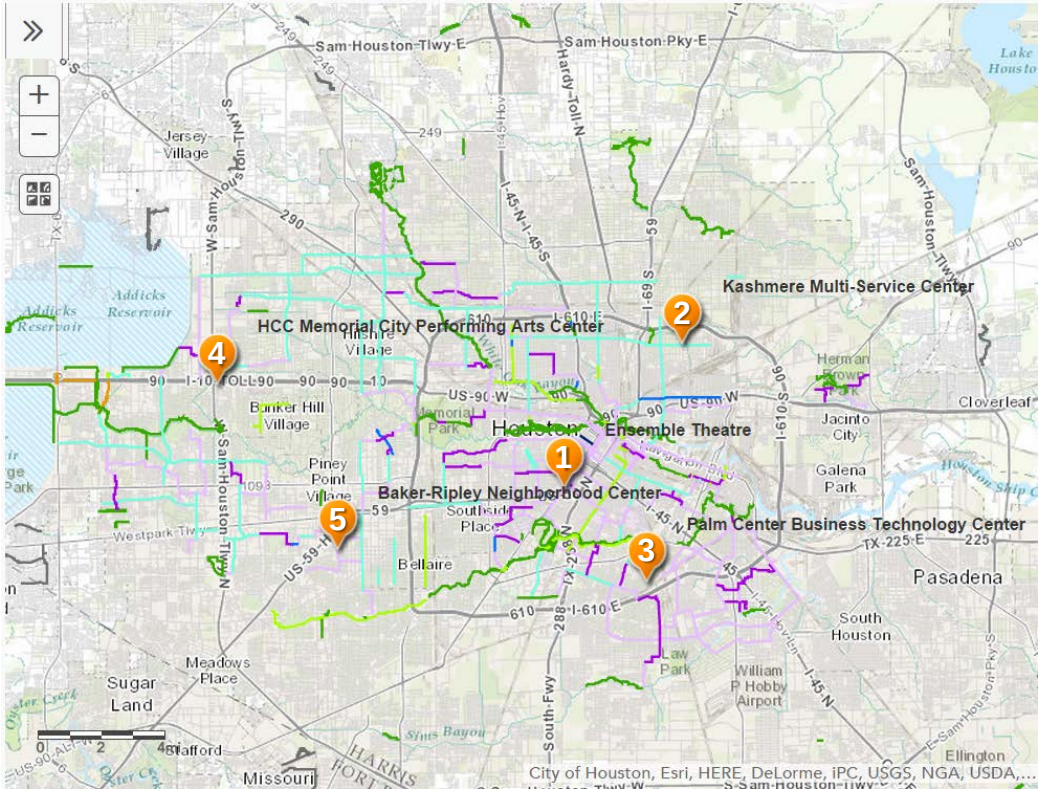
Public Engagement Kick-off Event

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



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 #172Meeting #3

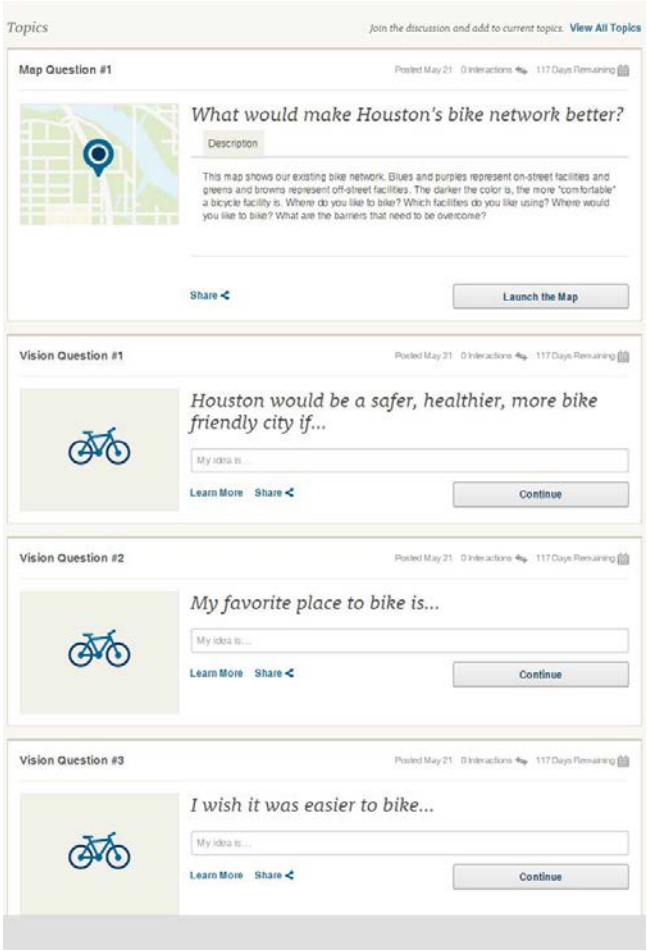
3. Tuesday, June 9, 2015, 6:00-8:00 pm
   Palm Center Business Technology Center
   5330 Griggs Road, Houston, TX 77021
   Conf. Room C101

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

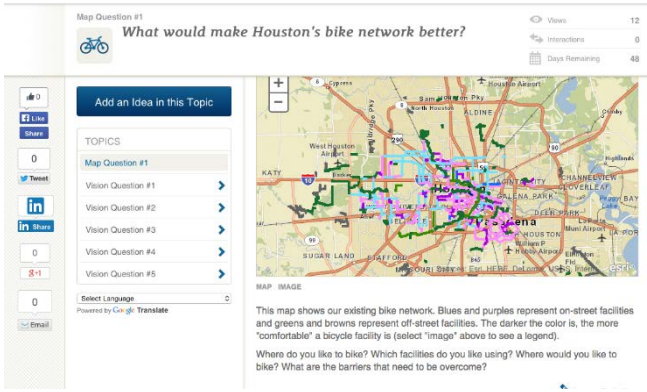
5. Tuesday, June 23, 2015, 6:00-8:00 PM
   Baker-Ripley Neighborhood Center
   6500 Rookin, Houston, TX 77074

HOUSTON BIKEPLAN

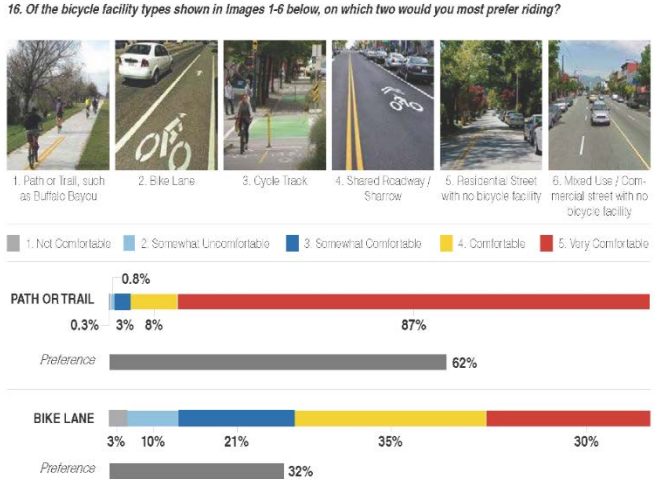
Discussion Forums



Map Tools



Surveys



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





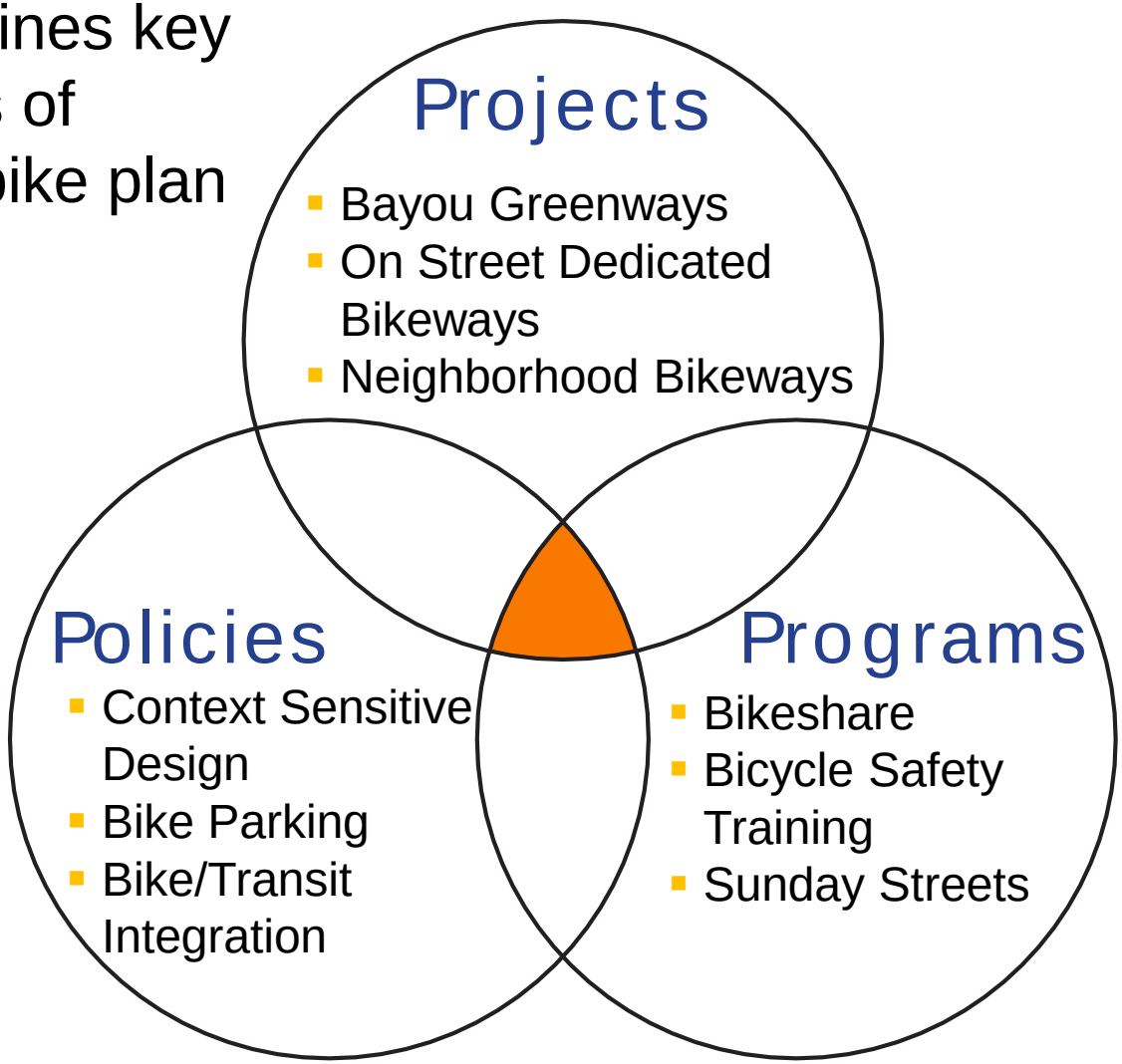
Please let us know if you have events where you would like Bike Plan information

Phase 3: Bicycle Tool Box

Timing	▪ July 2015 - August 2015
Deliverables	▪ Draft Bicycle Toolbox (facility standards, policies, and programs) ▪ Supporting materials for public outreach/education
Meetings	▪ BAC Meeting ▪ Council & Commission Briefings on Proposed Goals

Phase 3: Bicycle Toolbox

Toolbox outlines key components of successful bike plan



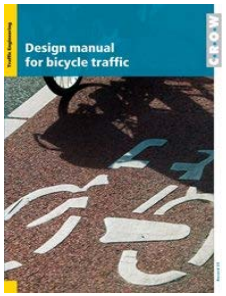
Phase 3: Bicycle Toolbox







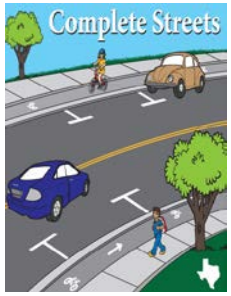






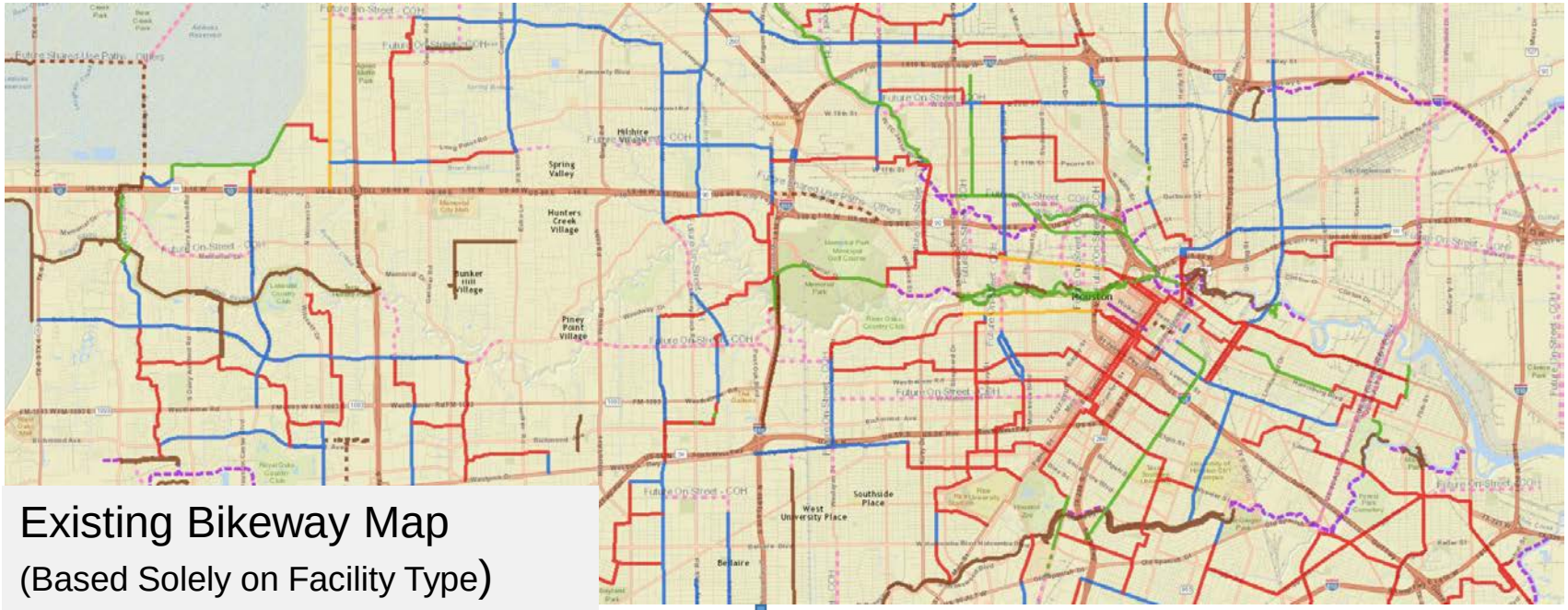




Phase 4: Developing the Draft Plan

Timing	▪ July 2015 – November 2015
Deliverables	▪ Draft Bicycle Network Map ▪ Analysis of plan against Project Goals From Phase 2 ▪ Potential pilot projects
Meetings	▪ 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



Existing Bikeway Map
(Based Solely on Facility Type)



New Facilities In Development (White Oak)



Clarity on Goals
(e.g., Job Access)

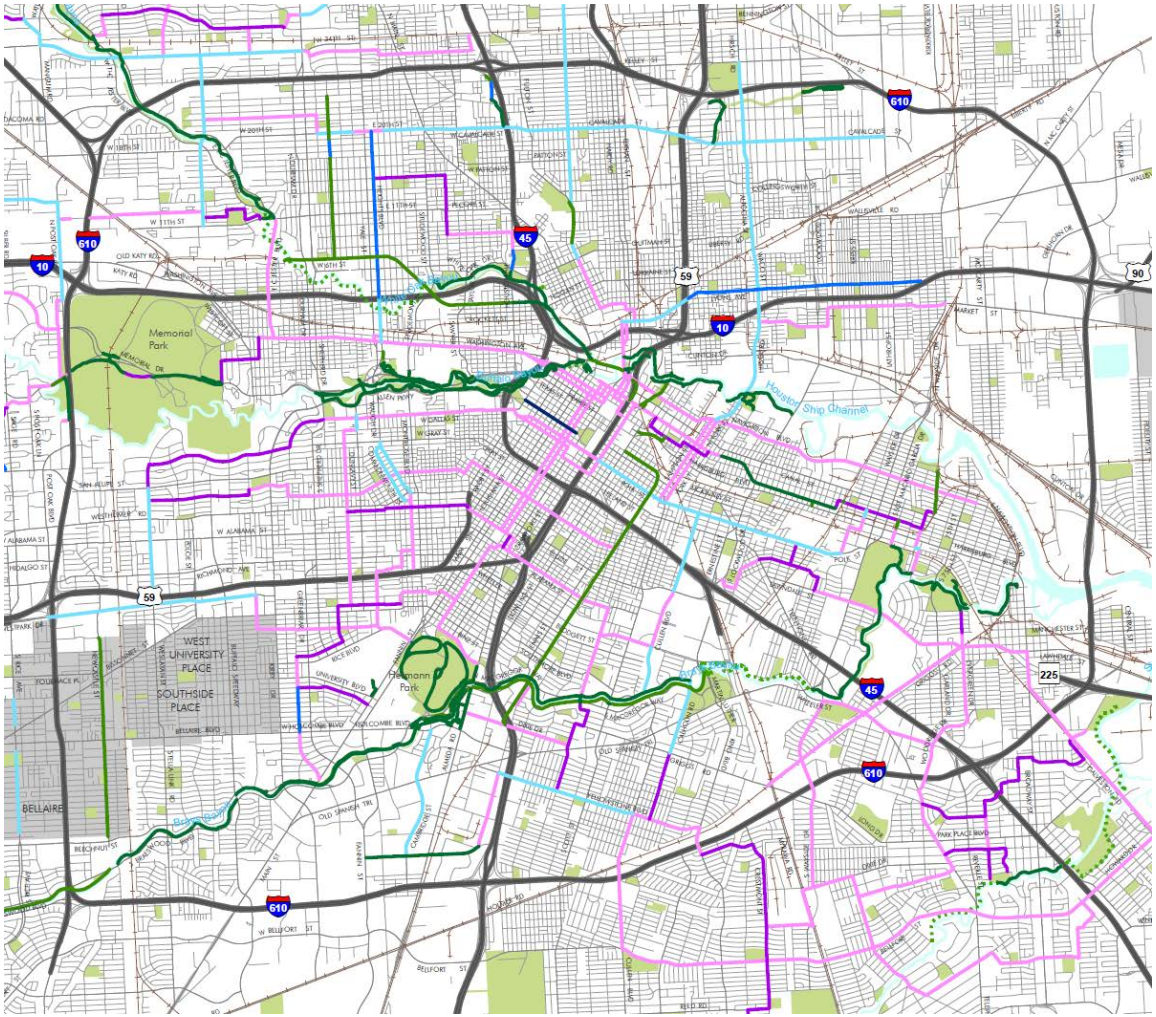


Well Defined Toolbox
(e.g., Separated Bikeways)

HOUSTON BIKEPLAN

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

HOUSTON BIKEPLAN

Phase 5: Public Input on Plan
Phase 6: Finalize the Plan

Timing	▪ Phase 5: Nov 2015 - Feb 2016 ▪ Phase 6: Feb 2016 - Apr 2016
Deliverables	▪ Summary of Public Feedback ▪ Proposed Revisions to the Draft Map ▪ Implementation Plan with Project Prioritization ▪ Finalized Houston Bike Plan
Meetings	▪ 5 community meetings on draft plan ▪ BAC Meeting ▪ Committee and Commission Meetings

Implementation & Pilot Projects



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

HOUSTON BIKEPLAN

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