Today's Objectives

- Share Draft Bicycle Master Plan Presentation for discussion and feedback
- Discuss outreach plan and opportunity for BAC to support plan
The Houston Bike Plan

- Develops a Vision and Supporting Goals for Bicycling in Houston
- Incorporates Feedback from Stakeholders Across the City
- Defines Approach to Expand Bikeways To Create Citywide Network in Both Short and Long Term
- Develops Policy Framework and Programs to Support a More Bicycle Friendly City
- Develops Approach to Build Momentum for Implementation
The Case for Action

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

1. Provide a safer, more comfortable environment to help support the increase in people riding bicycles in Houston
2. Provide affordable access to jobs and opportunities across the City
3. Improve community health and wellness
4. Compete with peer cities in attracting talent and investment
5. Benefit everyone, not just people who bike
### Where Are We?

<table>
<thead>
<tr>
<th>Phase</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Existing Conditions and Opportunities</td>
<td>May 2015</td>
</tr>
<tr>
<td><strong>2</strong> Defining Goals</td>
<td>July 2015</td>
</tr>
<tr>
<td><strong>3</strong> Bicycle Toolbox</td>
<td>Feb 2016</td>
</tr>
<tr>
<td><strong>4</strong> Developing Draft Plan</td>
<td></td>
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<tr>
<td><strong>5</strong> Public Outreach on the Plan</td>
<td></td>
</tr>
<tr>
<td><strong>6</strong> Finalize Plan</td>
<td>April - May 2016</td>
</tr>
</tbody>
</table>

Major Public Engagement Periods
Houston Bike Plan: Developed Through Partnership...

Lead Agency

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

Funding Partners

- BIKE HOUSTON
- Houston-Galveston Area Council
- Houston Parks Board
- Federal Highway Administration
- Texas Department of Transportation
...with Significant Community Input

- Bicycle Advisory Committee
- 16 Public Meetings, Online Survey, Discussion Forum, Interactive Map, & Meeting in a Box
- Built awareness at 45 events
- Level of Input:
  - 4,083 email signups from events
  - 2,895 online surveys
  - 800+ map comments from meetings & events
  - 387 online map ideas
  - 237 Public Meeting Attendees
    - 258 Goals & Needs Comments
    - 35 General Comment Cards Received
  - 130 online forum comments
- Partner Outreach including BikeHouston and Energy Corridor
How can the Houston Bike Plan encourage more women to bike?

please join us for a

WOMEN & BIKING

FOCUS GROUP

During the month of September, we are convening women (who bike a little, a lot, or not at all) to better understand how to encourage more women to bike. Please sign up to participate in a 1.5-hour long focus group. If you are selected, we will contact you to schedule a date based on respondents' availability. Kids are welcome to attend with you, just indicate their age(s) when you sign up so that we can plan accordingly. Participants will be entered into a drawing for a $100 Office Depot gift card.

Sign up to participate!

Online: www.surveymonkey.com/r/HBPWOMENBIKE
Phone: 832-395-2700

This project is funded by the City of Houston Department of Transportation, Houston Parks Board, and Texas A&M Center for Transportation Studies.

HOUSTON BIKE PLAN
www.houstonbikeplan.org
@HOUSTONBIKEPLAN
Houston Bike Plan Vision

By 2026, Houston will be a Safer, More Accessible, **GOLD** Level Bicycle Friendly Community
Goals to Support the Vision

**VISION:** By 2026, the City of Houston will be a Safer, More Accessible, **Gold** Level Bike-Friendly City

**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 & Maintain Facilities**
To develop and sustain a high-quality bicycle network, including both bikeways and end-of-trip facilities.
Who is the plan for?
Grow ridership across all ages, skills and abilities

- 4 Types of People Who Bike
- Plan goals aligned with largest opportunity to increase ridership (who account for $\frac{3}{4}$ of all people who bike)
  - Enthused & Confident
  - Interested & Concerned

Source: Dill & McNeil: Four Types Of Cyclists?.2012. Portland State University
Who is the plan for?

A city-wide network of high comfort bike facilities

Existing Bike Network

Focus of Recommendations

More Comfortable

1 2 3 4

Less Comfortable

1 2 3 4

ON-STREET SHARED

OFF-STREET DEDICATED BIKE LANES
Who is the plan for?
Access to all communities


<table>
<thead>
<tr>
<th>Population</th>
<th>City of Houston Total</th>
<th>(2010 Census)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,052,190</td>
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</table>

<table>
<thead>
<tr>
<th>Population Access</th>
<th>Existing High Comfort Network</th>
<th>Existing High Comfort Network + Programmed</th>
<th>Existing High Comfort Network + Programmed + Potential Short Term Opportunities</th>
<th>Existing High Comfort Network + Programmed + Potential Short Term Opportunities + Key Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Houston Total</td>
<td>2,052,190</td>
<td>38%</td>
<td>48%</td>
<td>76%</td>
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<th>Jobs</th>
<th>City of Houston Total</th>
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<td>1,465,643</td>
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<th>Long Term Vision</th>
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<td>City of Houston Total</td>
<td>1,465,643</td>
<td>46%</td>
<td>63%</td>
<td>82%</td>
<td>97%</td>
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<td>82%</td>
<td>95%</td>
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</table>
How do we get there?
Existing Bike Network (All Facilities)

<table>
<thead>
<tr>
<th>Type</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Street</td>
<td>221</td>
</tr>
<tr>
<td>Dedicated On-Street</td>
<td>109</td>
</tr>
<tr>
<td>Shared On-Street</td>
<td>165</td>
</tr>
<tr>
<td>Total</td>
<td>495</td>
</tr>
</tbody>
</table>

- High Comfort Shared-Use Paths
- Shared-Use Paths
- Separated Bike Lane
- Bike Lanes
- Low Comfort Bike Lanes
- Neighborhood Bikeways
- Shared Lanes/Signed Bike Routes
- Shared Sidewalks
- Outside CDH
- City of Houston
How do we get there?
Existing High Comfort Bike Network
How do we get there?
Existing High Comfort Bike Network + Programmed Projects

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Street</td>
<td>298</td>
</tr>
<tr>
<td>Dedicated On-Street</td>
<td>50</td>
</tr>
<tr>
<td>Shared On-Street</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>380</td>
</tr>
</tbody>
</table>

- Off-Street
- Dedicated On-Street
- Shared On-Street
- Outside COH
- City of Houston
Short Term Opportunities

- **Lower cost** implementation typically not requiring major capital projects
- Largely accomplished though “Paint & Signs”
- Many projects designate already comfortable streets as bikeways
- Some projects may require reallocating street space on streets with excess lane capacity or on-street parking
- Require vetting through final engineering design and community dialogue
Short Term Opportunities
Example: 4-3 Conversion

- 3-Lane Streets can carry equal or higher traffic volumes than 4-lane due to elimination of left turn conflicts on the Inside Lanes
- Can reallocate space to add dedicated bikeway
- Highlighted in recent FHWA Safety Program
How do we get there?

Existing High Comfort Bike Network + Programmed Projects + Potential Short Term Opportunities
How do we get there?
Existing High Comfort Bike Network + Programmed Projects + Potential Short Term Opportunities + Key Connections
How do we get there?

Long Term Vision

Off-Street: 616 miles
Dedicated On-Street: 786 miles
Shared On-Street: 254 miles
Total: 1,656 miles

Legend:
- Green: Off-Street
- Blue: Dedicated On-Street
- Purple: Shared On-Street
- Black: Outside COH
- Gray: City of Houston

Population:
- 2010 Census: Total for City: 2,062,000
- 2011 ACS: Total for City: 1,948,000

Jobs:
- 2010 LEHD: Total for City: 1,445,000

Individuals In Poverty:
- 2011 ACS: Total for City: 441,000

HOUSTON BIKE PLAN
How do we get there?

Projects: Designed expand High-Comfort Network
How do we get there?

Policies & Programs: Creating a Framework and Support for a Bike Friendly City
How do we get there?

Policies: Enhancing the Regulatory Framework to Support a Bike Friendly City
How do we get there?

Programs: Supporting
Implementation Strategies & Key Recommendations

1. Manage Performance Goals
2. Prioritize and Collaborate on Policies and Programs
3. Project Development and Implementation
4. Develop Resource and Staffing Needs
5. Leverage Funding Opportunities
6. Build Momentum Through Pilot Projects
7. Connect to Major Bicycle Thoroughfares (e.g., Bayous and Other Greenway Trails)
8. Engage Neighborhoods to Translate Plan to Local Level
# Implementation

Using Metrics to Manage Performance

<table>
<thead>
<tr>
<th>Improve Safety</th>
<th>Increase Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disparity rate of bicyclist fatalities &amp; bicycle mode share = 3.8</td>
<td></td>
</tr>
<tr>
<td>Bicyclists comprise:</td>
<td></td>
</tr>
<tr>
<td>0.6% of all trips (3-year average)</td>
<td></td>
</tr>
<tr>
<td>2.3% of all roadway fatalities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase Access</th>
<th>Develop &amp; Maintain Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>46% of jobs and 38% of people are within ½ mi. of a high-comfort facility</td>
<td></td>
</tr>
<tr>
<td>23% of schools and libraries are within ¼ mi. of a high-comfort facility</td>
<td></td>
</tr>
</tbody>
</table>

| 11 City events supported increasing bicycle ridership in 2015 |
| 2015 bike share checkouts = 98,449 |

| Miles of high-comfort bikeways/10,000 population = 1.17 |
| Within ¼ mi. of a bike share station: |
| 155,600 jobs & 27,900 people |
| 4% transit nodes have secure bike parking |
### Implementation
#### Planning-Level Cost Estimates

<table>
<thead>
<tr>
<th></th>
<th>Miles</th>
<th>Planning Level Cost $ (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing network</td>
<td>Off Street: 220</td>
<td>$214 – 347*</td>
</tr>
<tr>
<td></td>
<td>On Street Dedicated: 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On Street Shared: 31</td>
<td></td>
</tr>
<tr>
<td>Programmed</td>
<td>Off Street: 78</td>
<td>$68 – 110</td>
</tr>
<tr>
<td></td>
<td>On Street Dedicated: 19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On Street Shared: 24</td>
<td></td>
</tr>
<tr>
<td>Short-Term Potential</td>
<td>Off Street: -</td>
<td>$24 - 45</td>
</tr>
<tr>
<td></td>
<td>On Street Dedicated: 133</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On Street Shared: 193</td>
<td></td>
</tr>
<tr>
<td>Key Connections</td>
<td>Off Street: 72</td>
<td>$68 – 110</td>
</tr>
<tr>
<td></td>
<td>On Street Dedicated: 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On Street Shared: 6</td>
<td></td>
</tr>
<tr>
<td>Long-Term projects</td>
<td>Off Street: 245</td>
<td>$214 – 347*</td>
</tr>
<tr>
<td></td>
<td>On Street Dedicated: 595*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On Street Shared: 21</td>
<td></td>
</tr>
</tbody>
</table>

*Cost Estimates for Long-Term Projects do not include On Street Dedicated projects, as these will require full street reconstruction and may be built as dedicated bike lanes or side paths within R.O.W. Estimated cost will be included in roadway projects.
### Implementation
Will Require Multiple Funding Approaches

<table>
<thead>
<tr>
<th>Local</th>
<th>Federal</th>
<th>Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Regular Operations &amp; Maintenance Funds</td>
<td>• FHWA &amp; FTA grants</td>
<td>• Municipal Management Districts</td>
</tr>
<tr>
<td>• Other General Funds</td>
<td>• H-GAC funding</td>
<td>• TIRZs</td>
</tr>
<tr>
<td>• CIP Projects</td>
<td>• Discretionary grants (i.e. TIGER)</td>
<td>• Developers</td>
</tr>
<tr>
<td>• Municipal Bonds</td>
<td>• TIFIA</td>
<td>• Businesses</td>
</tr>
<tr>
<td>• Impact Fees</td>
<td>• Non-USDOT Funding: Health, Job Access, Housing etc.</td>
<td>• Hospitals &amp; Health Service Providers</td>
</tr>
<tr>
<td>• Voter-Approved Fees</td>
<td></td>
<td>• Philanthropic Organizations</td>
</tr>
<tr>
<td>• Parking Benefit Districts</td>
<td></td>
<td>• Non-Profits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Universities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transit Agencies</td>
</tr>
</tbody>
</table>
Build Momentum
Pilot Projects to Show What is Possible
Build Momentum
Greenway Access to Connect More People
Build Momentum
Neighborhood Plan to Make Citywide Plan Local

Gulfton-Sharpstown
Neighborhood Study Area
How You Can Support the Houston Bike Plan

- Help get the word out about the plan.
  - Share Interactive Houston Bike Plan Summary
  - Distribute plan information brochure
  - Share website www.HoustonBikePlan.com
  - Express Support to Elected Officials

- Provide Feedback
  - Interactive Map
  - Comment Cards – attached to brochure
  - Online Feedback
www.HoustonBikePlan.com
Bikeways@houstontx.gov
832-395-2700
@HoustonBikePlan
Houston Bikeways Program
Questions & Discussion on Plan & Presentation
Todays Objectives

- Share Draft Bicycle Master Plan presentation for discussion and feedback
- Discuss outreach plan and opportunity for Bicycle Advisory Committee to support plan
Community Engagement Approach
Building Momentum

Public Meetings/Events

- Kick-off Meeting to Release the Plan
- Town Hall Webinar
- Attend City of Houston District CIP Meetings
- Additional Meetings Identified by BAC, Council Members and Others to reach more people
- BikeHouston Ambassadors
- Flyers/Feedback Forms in Public Venues
Community Engagement Approach
Building Momentum

Online

- Interactive StoryMap of the Plan
- Full Report and Maps (PDF and Google Earth Files)
- Interactive Maps (with feedback option)
- Brief Feedback Form (“I support the Houston Bike Plan Because…”) with email collection
- Regular social media postings
- Draft Letters of Support
- Links to Videos by BikeHouston
How You Can Help

- Help us leverage your networks through social media and email blasts
- Provide information on important community meetings where Houston Bike Plan information/presentation should be provided
- Help us place information in the community’s hands
- Provide letters of support from your organization
- Speak in front of City Council in support of the Plan
Spreading the Word

- Any additional avenues to reach people that would be valuable?

- Are there any additional materials that would help you support outreach on the plan?

- Anything else to help build momentum for plan adoption?
Next Steps

- Presentation to City Council TTI Subcommittee
- Gulfton-Sharpstown Neighborhood Planning
- Conceptual Pilot Project and Bayou Access Plan Development
- Develop Calendar for Public Outreach Events