Kimley-Horn and Associates, Inc.

City Mobility Planning
The Heights-Northside Mobility Study
March 26th, 2013

Introductions

- Thanks to the Heights Christian Church
- Project Team
  - COH, H-GAC & METRO
  - Kimley-Horn and Associates, Gunda Corporation
- Council Districts C & H

City Mobility Planning

- Previous studies
  - Near Northside Livable Center Study
  - ULI Study
  - Go-Neighborhoods
  - Urban Corridor Planning
  - Northside Village Economic Revitalization Plan
  - White Oak Bayou Watershed Study
  - Halls Bayou Watershed Study

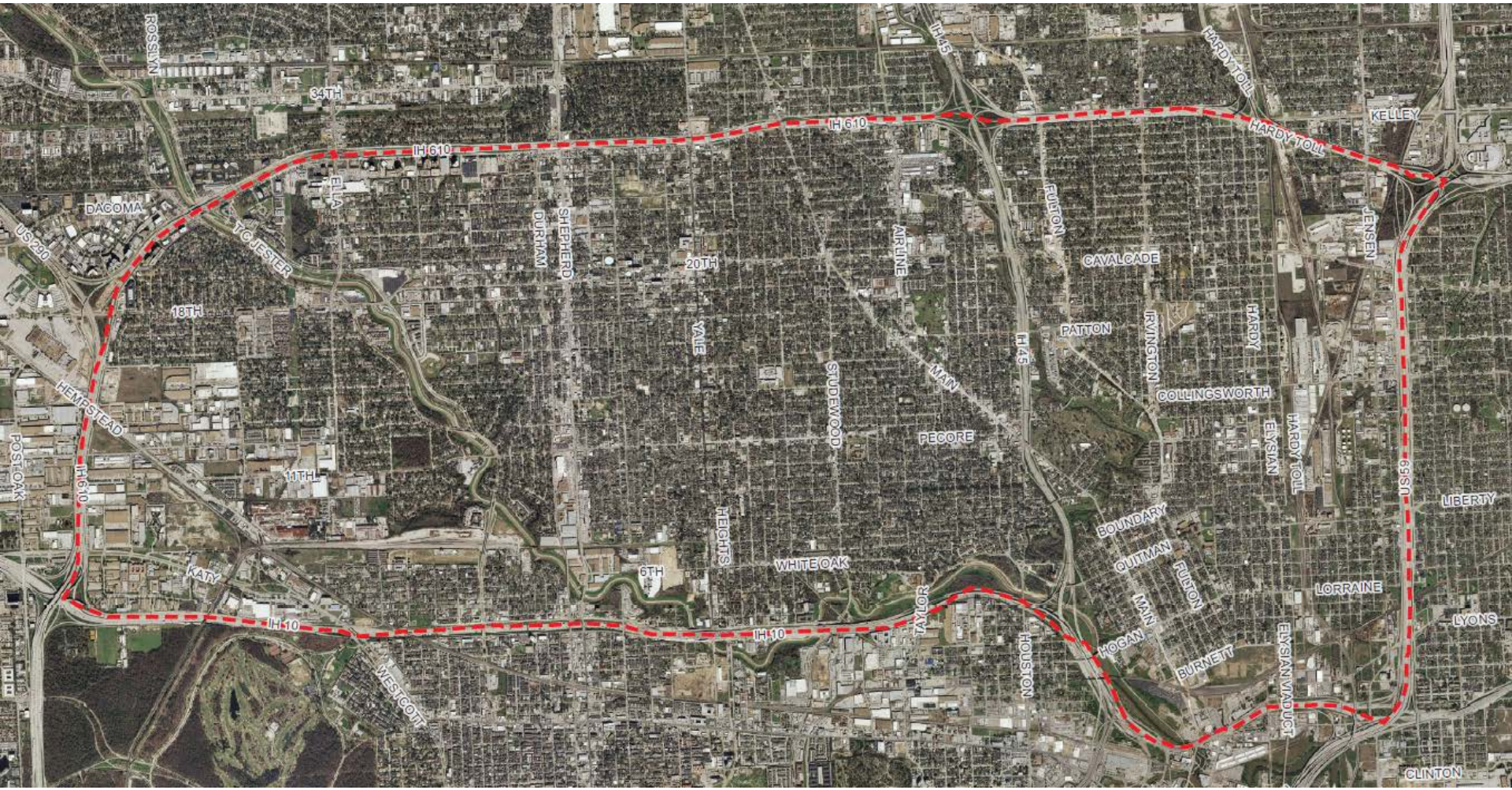
Why are we here?

- What are we studying
- What are we using as a basis from previous plans
  - Greater Heights Super Neighborhood begins grassroots study in 2011 to study transportation and mobility in the GHSN area
- How can we make the overall system more efficient
- How does this relate to and differ from other studies that have been done or are ongoing
- Where does the project lead – RTP, CIP, TIP, etc.
  - What is the project outcome – a report, potential projects, a series of proposed policies/designations?

Schedule Overview

- Data Collection – February to March
- <u>First Public Meeting – March 26th & 27th</u>
- Existing Conditions Analysis - April
- First Stakeholder Meeting - April
- Future Conditions Analysis – April - May
- Mitigation Strategies & Potential Project Development - May
- Second Stakeholder Meeting – June - July
- Second Public Meeting – July
- Development of Draft and Final Report – July - August

Aerial (2012)


ROSSLYN
34TH
IH 610
IH 610
IH 45
HARDY TOLL
HARDY TOLL
KELLEY
DACOMA
ELA
TC JESTER
US 290
DURHAM
SHEPHERD
20TH
AIRLINE
FULTON
CAVALCADE
JENSEN
18TH
YALE
STUDEWOOD
MAIN
IH 45
PATTON
IRVINGTON
HARDY
COLLINGSWORTH
HEMPSTEAD
POST OAK
IH 610
11TH
PECORE
ELYSIAN
HARDY TOLL
US 59
LIBERTY
HEIGHTS
WHITE OAK
BOUNDARY
OUITMAN
KATY
6TH
FULTON
MAIN
LORRAINE
LYONS
IH 10
IH 10
TAYLOR
HOUSTON
HOGAN
BURNETT
ELYSIAN VIADUCT
WESTCOTT
CLINTON

Street Hierarchy (2011)

City Mobility Planning
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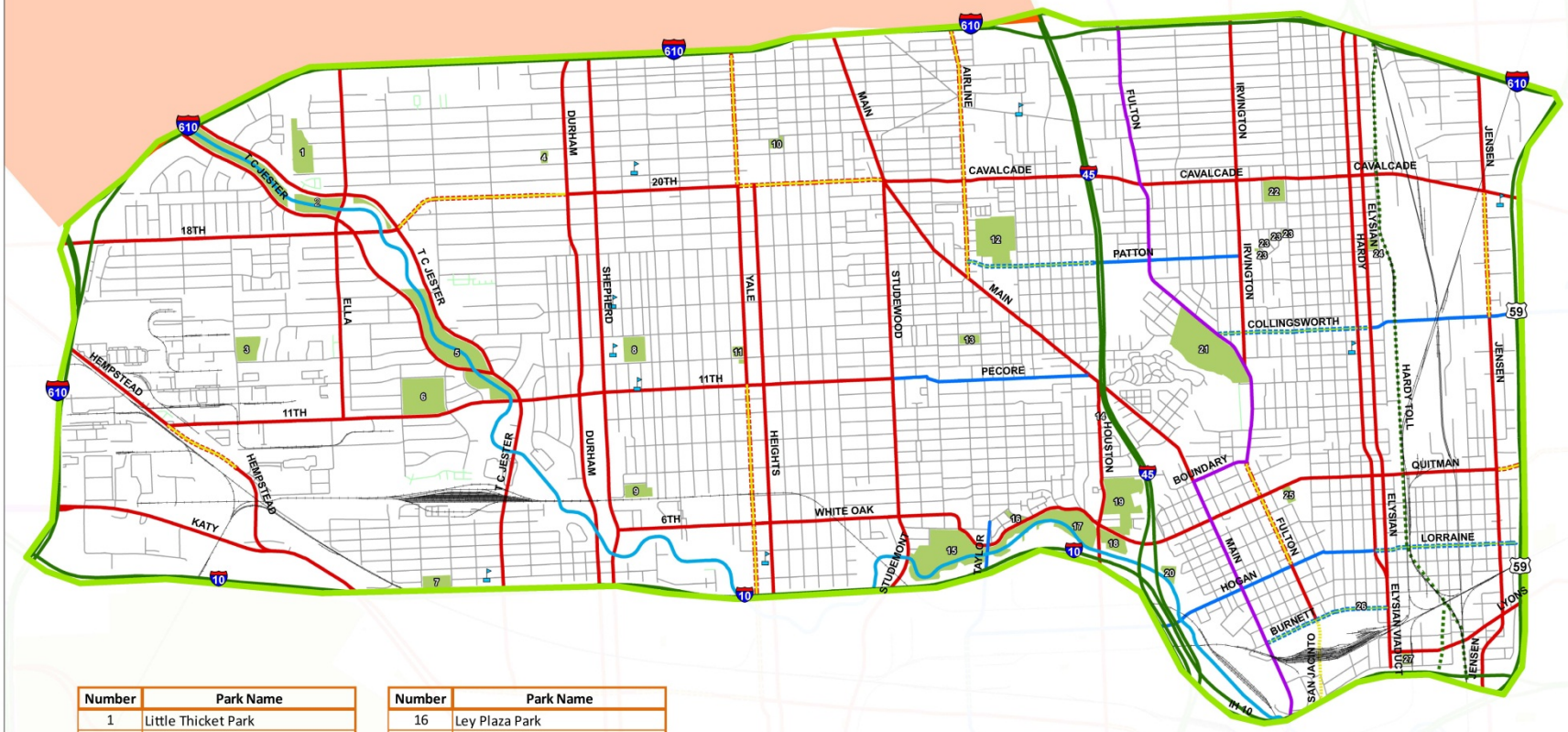
Northwest Study Area



Number	Park Name
1	Little Thicket Park
2	TC Jester
3	Jaycee Park
4	Wright-Bembry (23rd St) Park
5	Timbergrove Manor Park
6	West 11th St Park
7	Cottage Grove Park
8	Love Park
9	Larence Park
10	Halbert Park
11	Milroy Park
12	Montie Beach Park
13	Proctor Plaza Park
14	North Houston Avenue Triangles
15	Stude Park

Number	Park Name
16	Ley Plaza Park
17	White Oak Parkway
18	Freed Art & Nature Park
19	Woodland Park
20	Hogg Park
21	Moody Park
22	Irvington Park
23	Avenue Place Future Park Site
24	Henderson (Earl) Park
25	Castillo Park
26	Burnett Street Park
27	Hennessy Park

Heights-Northside Mobility Study

Existing Thoroughfare Plan

- Major Thoroughfare
- TBW Major Thoroughfare
- Proposed Major Thoroughfare
- Major Collector
- TBW Major Collector
- Proposed Major Collector
- Transit Corridor Street
- Freeway/Tollway
- Proposed Tollway
- Heights Boundary
- North West Boundary
- Park
- School
- Freeways
- Water
- Railroad

2,000 1,000 0 2,000 Feet

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Management Districts

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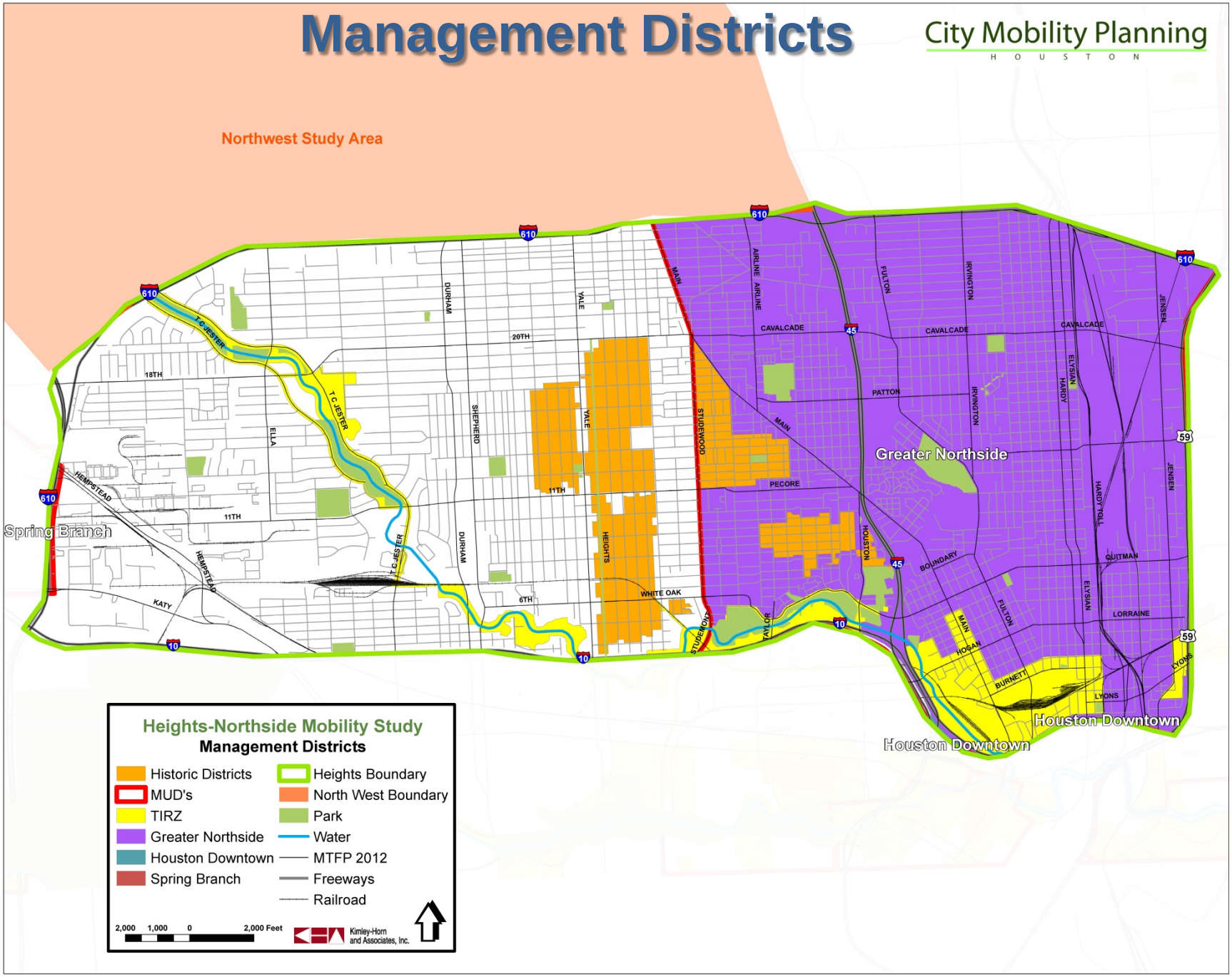
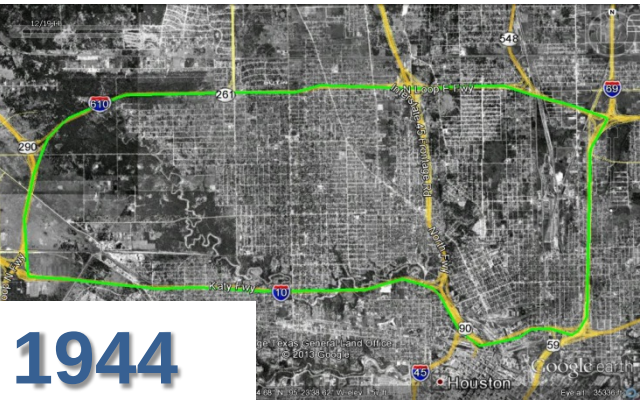
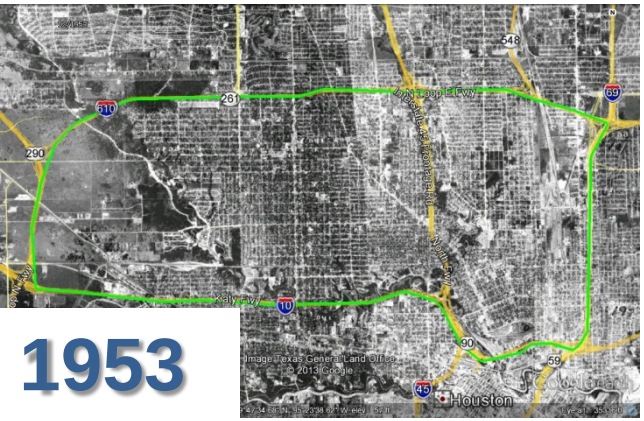


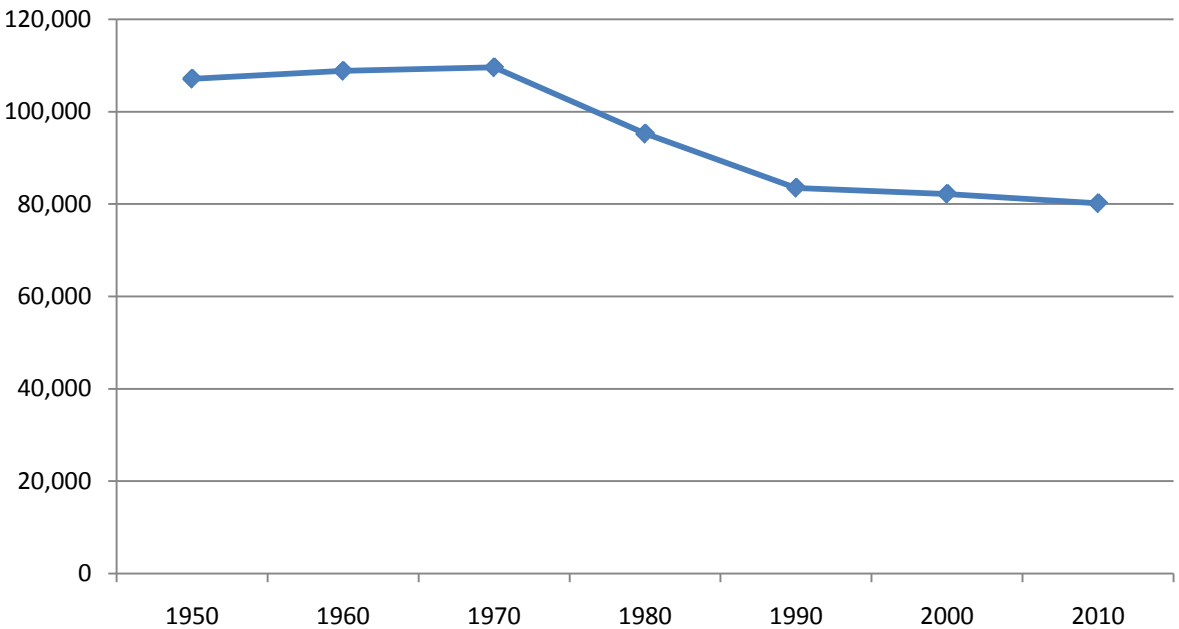
What are we studying?

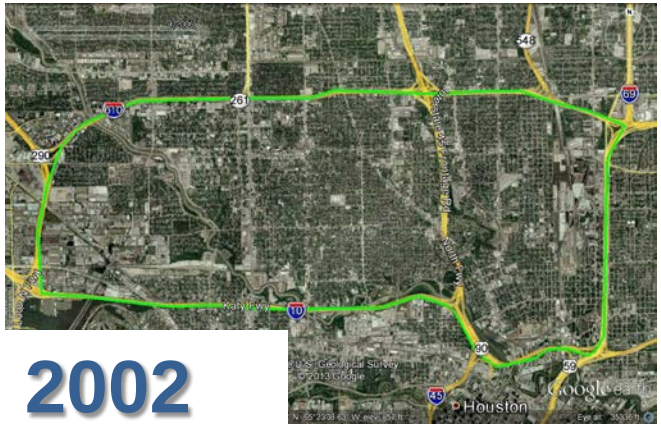
- Roadway and intersection improvements
  - Improve the efficiency of the system we have
- Pedestrian connectivity
- Bicycle connectivity
- Transit connectivity and access
- Multi-Modal street classification

Population Change









Heights-Northside: Population Density

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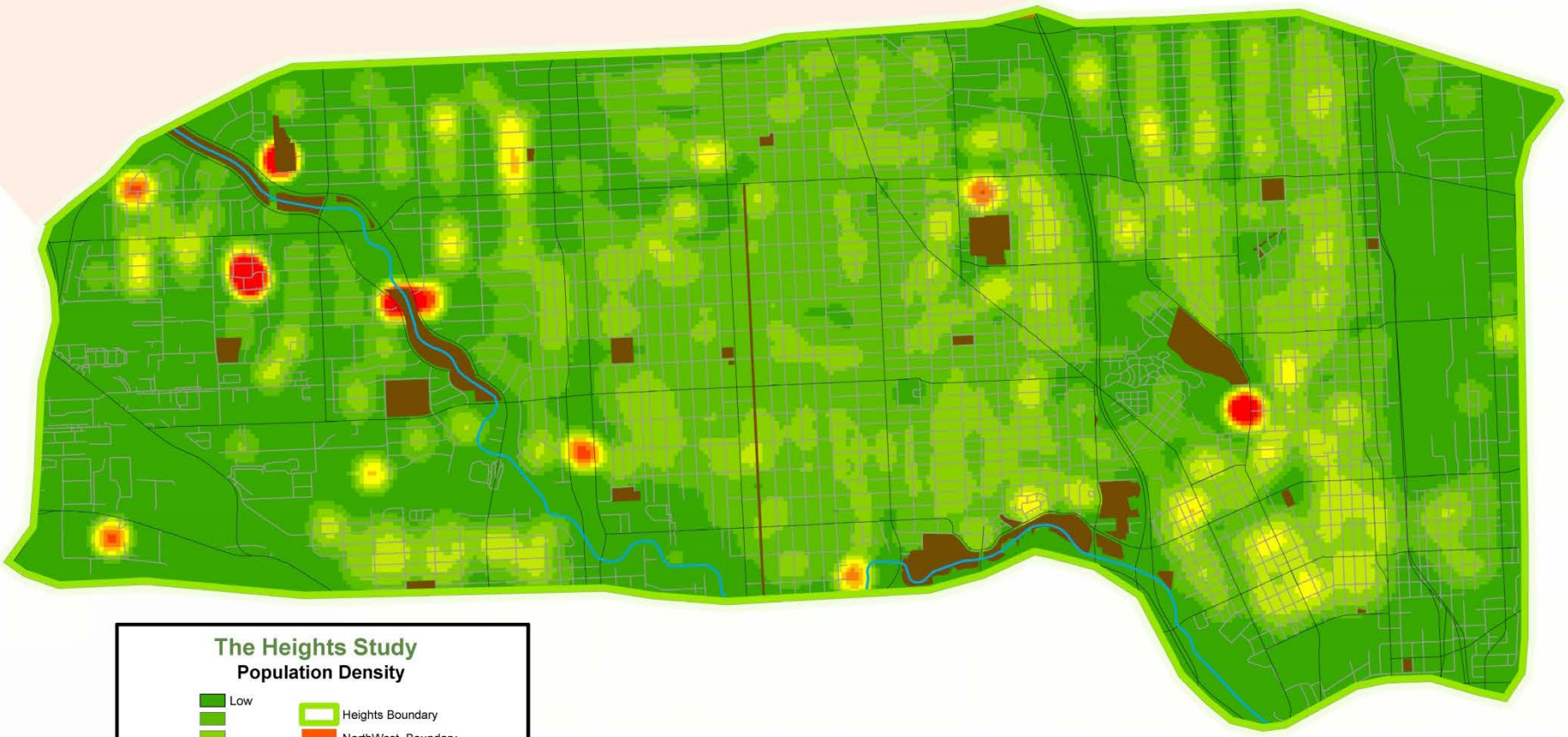

The Heights Study
Population Density

Low
High

Heights Boundary
NorthWest_Boundary
Water
Park
MTFP 2012
Local Street

2,000 1,000 0 2,000 Feet

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Heights-Northside: Land Value

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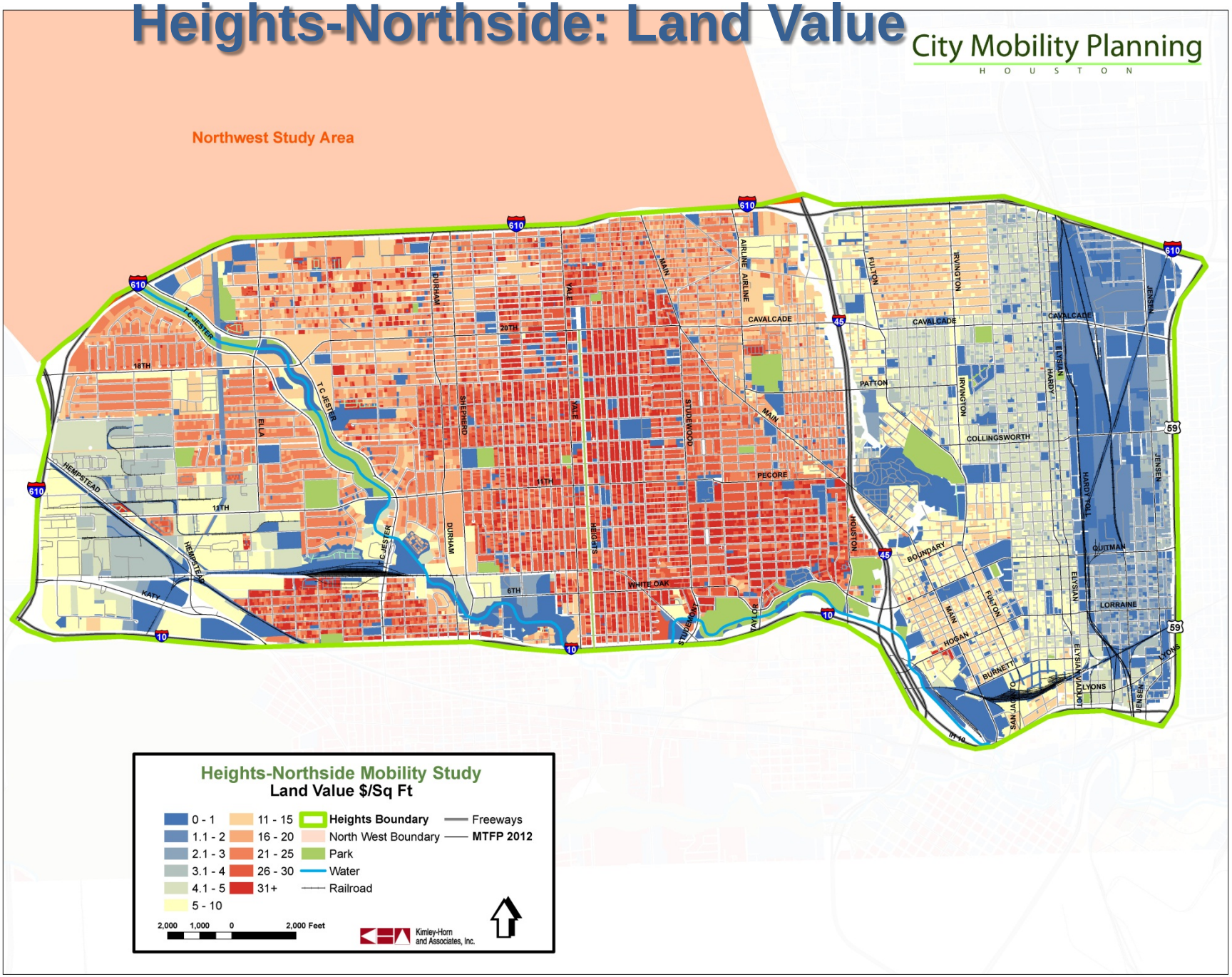

Heights-Northside Mobility Study
Land Value $/Sq Ft

0 - 1	11 - 15	Heights Boundary	Freeways
1.1 - 2	16 - 20	North West Boundary	MTFP 2012
2.1 - 3	21 - 25	Park	
3.1 - 4	26 - 30	Water	
4.1 - 5	31+	Railroad	
5 - 10			

2,000 1,000 0 2,000 Feet

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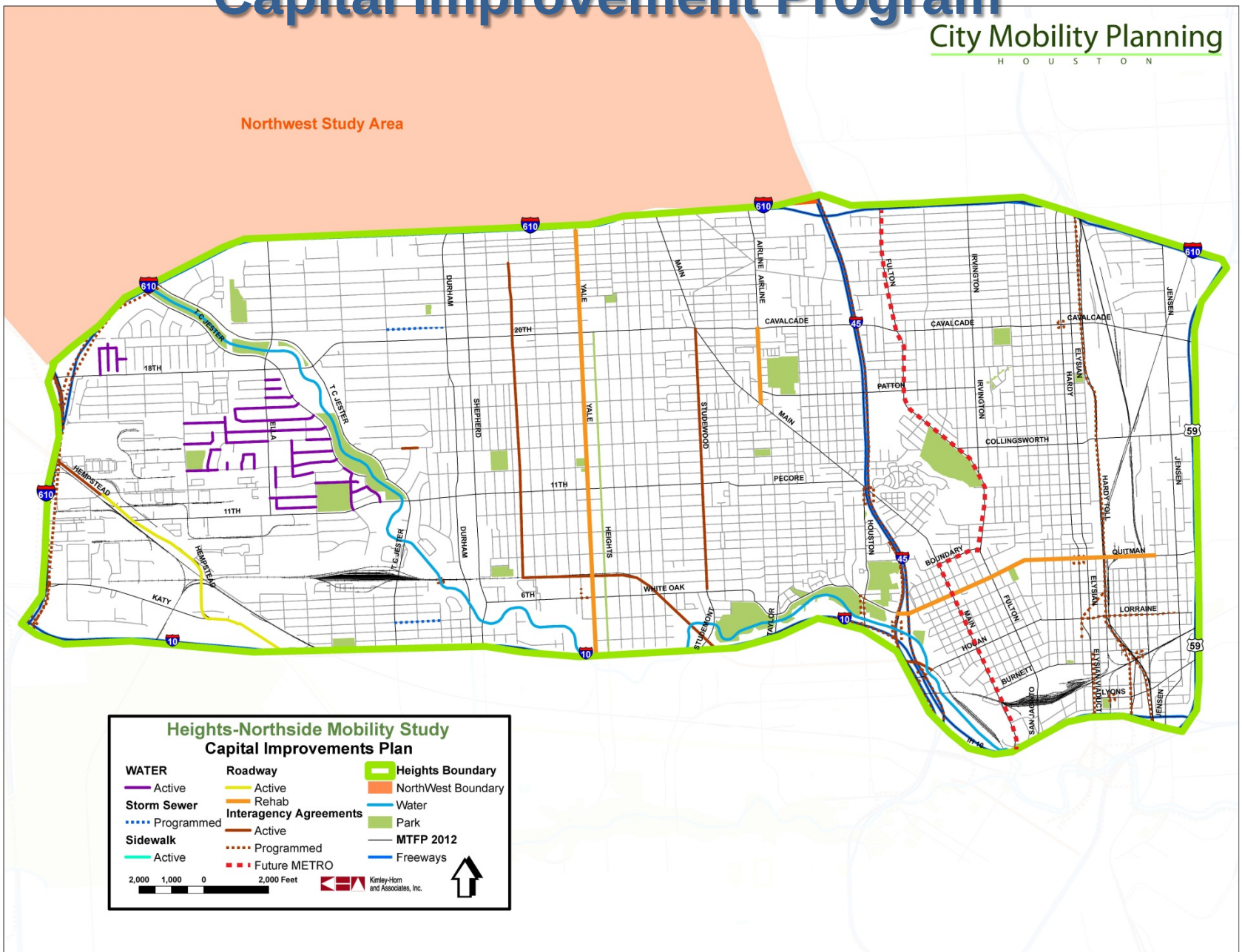
What are we using as a basis from previous plans?

- Desires to protect and enhance local streets
- Increased availability of walking and biking options
- Better connectivity to existing and proposed transit
- Maximization of exiting Right-of-Way footprint
- Identified need for improved facilities

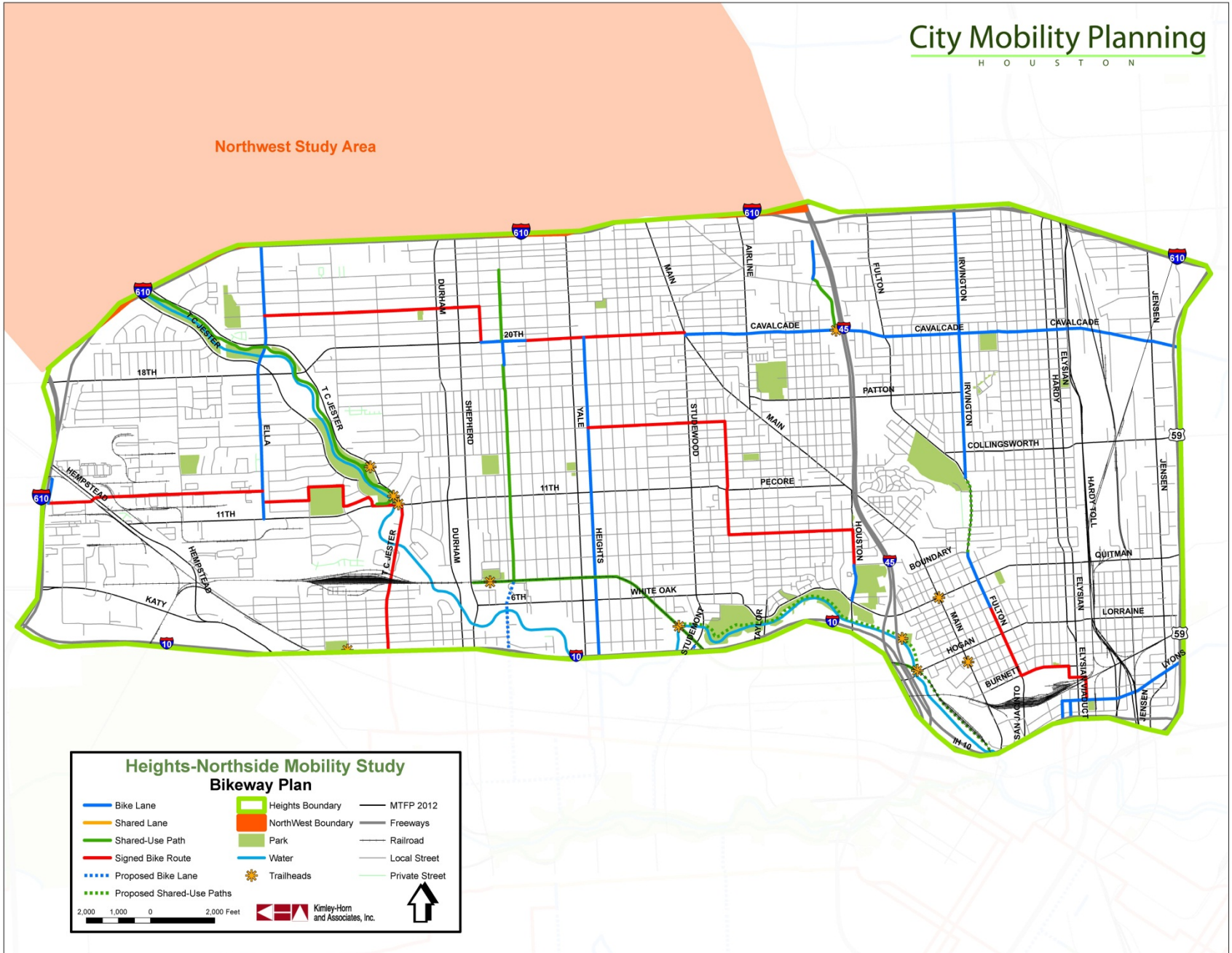
Heights-Northside: Capital Improvement Program



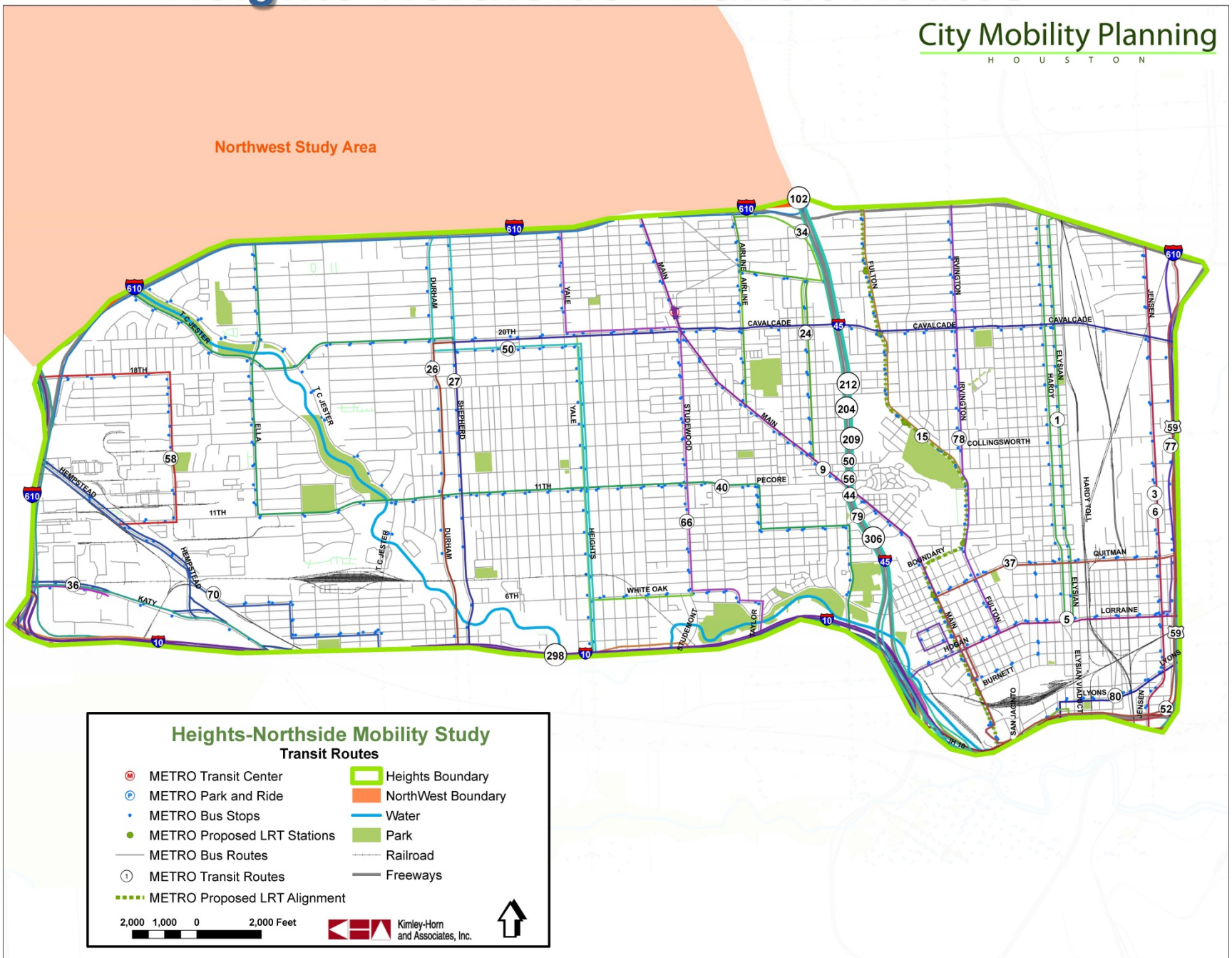
How does this relate to other studies?

- Informs future strategies for transit
- Develops potential project lists for implementation
- Examines transportation connections identified by district studies
- Prioritizing potential corridors based on needs assessment
- Enhanced bicycle pedestrian amenities to connect to bayous

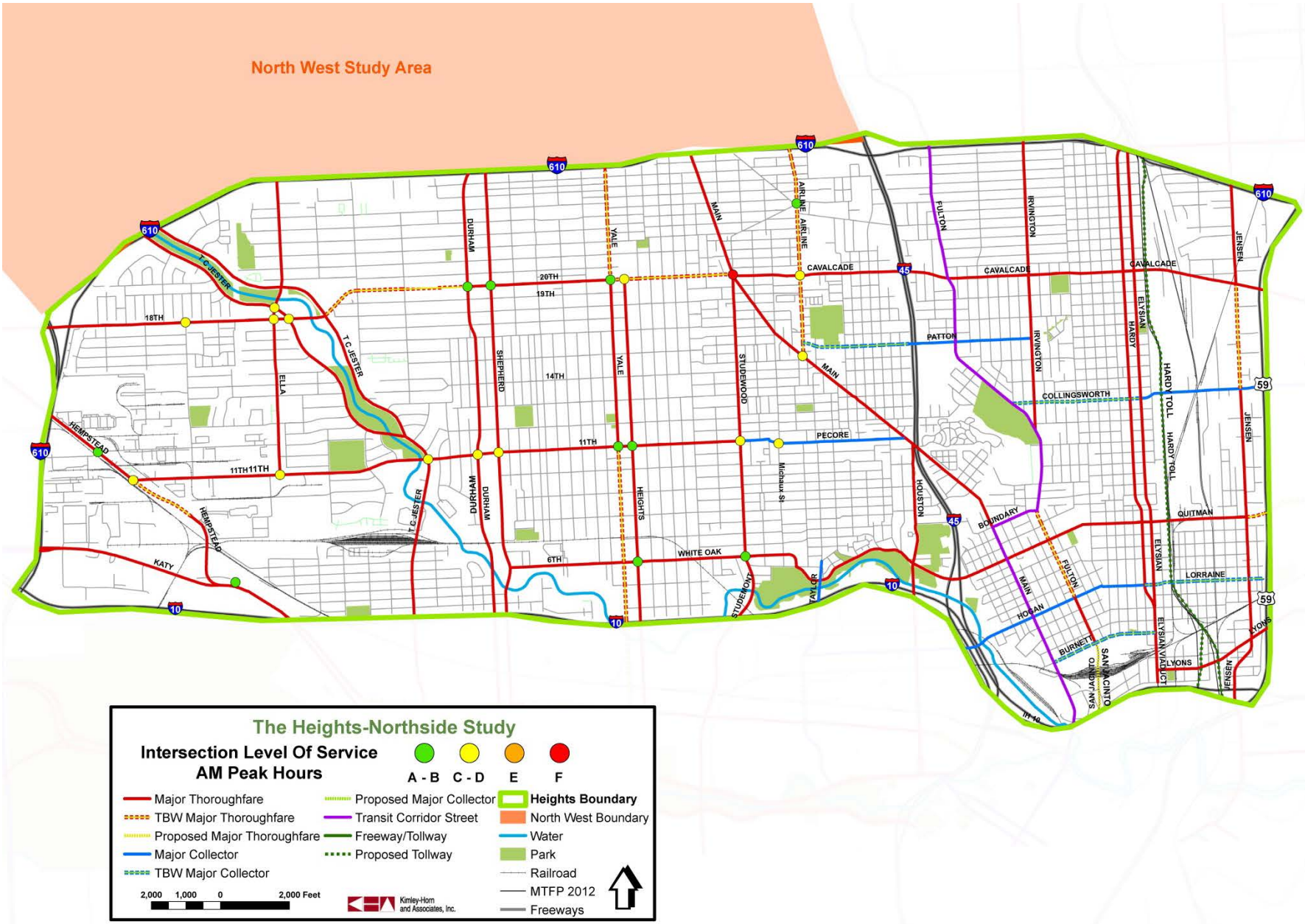
Heights-Northside: Bikeway Plan



Heights-Northside: Transit Routes



Heights-Northside: Intersection Analysis



The Heights-Northside Study

Intersection Level Of Service
AM Peak Hours

A - B | C - D | E | F

- Major Thoroughfare
- TBW Major Thoroughfare
- Proposed Major Thoroughfare
- Major Collector
- TBW Major Collector
- Proposed Major Collector
- Transit Corridor Street
- Freeway/Tollway
- Proposed Tollway
- **Heights Boundary**
- North West Boundary
- Water
- Park
- Railroad
- MTFP 2012
- Freeways

2,000 1,000 0 2,000 Feet

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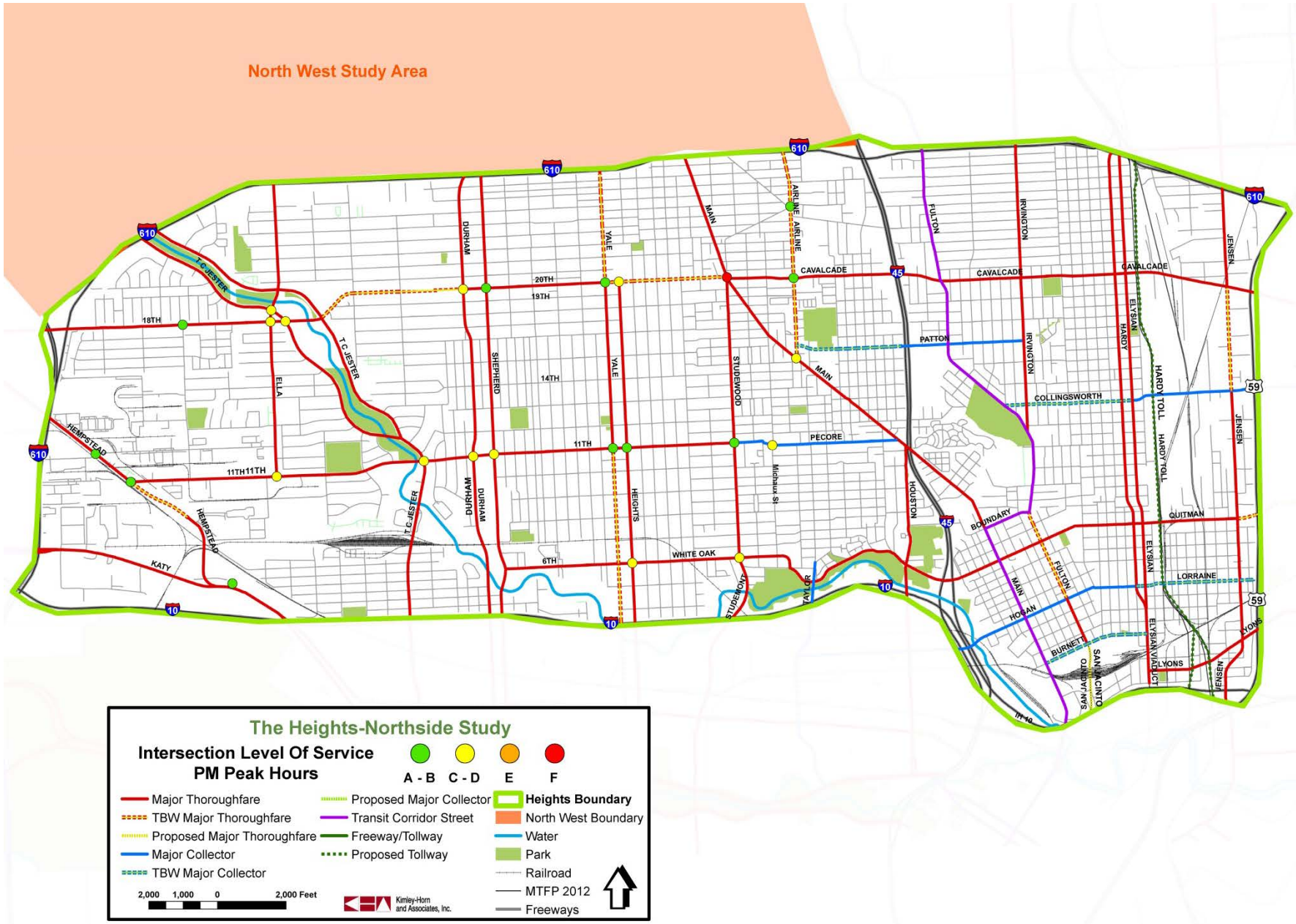
Heights-Northside: Intersection Analysis



The Heights-Northside Study

Intersection Level Of Service
PM Peak Hours

A - B C - D E F

- Major Thoroughfare
- TBW Major Thoroughfare
- Proposed Major Thoroughfare
- Major Collector
- TBW Major Collector
- Proposed Major Collector
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2,000 1,000 0 2,000 Feet

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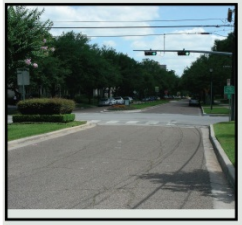
TOOLBOX

Motorized Tools

Traffic calming slows or reduces automobile traffic, improving safety for pedestrians and cyclists. Techniques include speed humps, textured paving, curb extensions, pedestrian crossing islands, traffic circles, and reduced turning radii.



Intersection design controls traffic movement where two or more streets cross. Improvements include left-turn bays, right-turn slip lanes, flared lanes to increase intersection capacity, reduced turning radii to increase intersection awareness, and protected bicycle turn spaces.

Signal timing is coordinating the sequence and timing of traffic signal phases. Signal timing can increase the efficiency of the street of by allowing for the greatest number of vehicles to cross the intersection in the shortest time.

Access management techniques help increase the mobility and safety of a particular corridor by consolidating driveways and controlling access to adjacent land uses by influencing access location, design, spacing and operation.

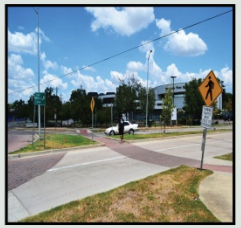
Medians are traffic islands installed to prevent or ensure certain turning movements at intersections. They also provide a seperation between opposing traffic lanes of traffic. Medians eliminate cut-through traffic, change driving patterns, beuatify streets with greenery and increase pedestrian saftey for crossing streets.

Non-Motorized Tools

Sidewalks are important to the pedestrian traveler. Wider sidewalks in commercial areas facilitate a mix of uses, and the addition of streetscaping can promote pedestrian use.

Bike Lanes are located on the edge of a street or between the travel lanes and parking lanes. Typically, they are 5-6 feet wide and allow cyclist to have a protected space on the street.

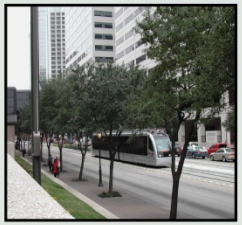
Streetscaping refers to the use of planted areas and other beautifying techniques along transit corridors that can attract pedestrians and make pedestrian and bicycle use more pleasant.



Pedestrian Crossings connect neighborhoods and can be at intersections or mid-block. Signal timing and pedestrian "islands" can improve safety for walkers.

Sharrows are special lane markings for roads too narrow to accomodate a separate bike lane. These markings alert drivers to the likelihood of encountering bicyclists.

Alternative Transport Tools



Rapid Transit comes in two forms: Light Rail Transit (LRT) and Bus Rapid Transit (BRT). Bus Rapid Transit has the unique ability to function in either an exclusive right-of-way (ROW) or in mixed traffic, however, the most common application assumes an exclusive ROW for operational efficiency and saftey.

Communter Rail service connects the large master planned communities around the region, the surrouding towns and even nearby cities with the urban core.

Road space rationing or reallocation reserves parking and other road uses for preferred modes such as carpools, vanpools, energy-efficient vehicles, and public transit vehicles.

Travel Demand managment refers to a set of strategies to reduce the use of of city roadways to decrease congestion and the infastructural burden of intense use, especially by single-occupancy vehicles.

Park and Ride lots encourage transit usage for people who are not within walking distance of a transit station. These lots typically adjoin suburban bus and rail stations to reduce the number of cars in the urban core.

What is the result?

- Report summarizing the results of this study
- Program of potential projects with phased implementation
  - Near and long-term strategies
  - Grouped into categories
- Policy recommendations

What we need from you

- Feedback for specific issues
  - What works well?
  - What needs improvement?
  - What is lacking?
- Input into the connections that need to be made
- Questions and Comments in writing
- Discussion about how this fits into the other plans that have been done

What we need from you

Any Questions?

heights-northside.org