Kimley-Horn and Associates, Inc.

City Mobility Planning
The Northwest Mobility Study
March 27th, 2013

Introductions

- Project Team
  - COH, H-GAC, METRO, HARRIS County & TxDOT
  - Kimley-Horn and Associates, Gunda Corporation
- City Council Districts A, B C & H
- Harris County Precinct 1 & 4

City Mobility Planning

Previous studies

- Near Northside Livable Center Study
- ULI Study
- Go-Neighborhoods
- 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
- 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?

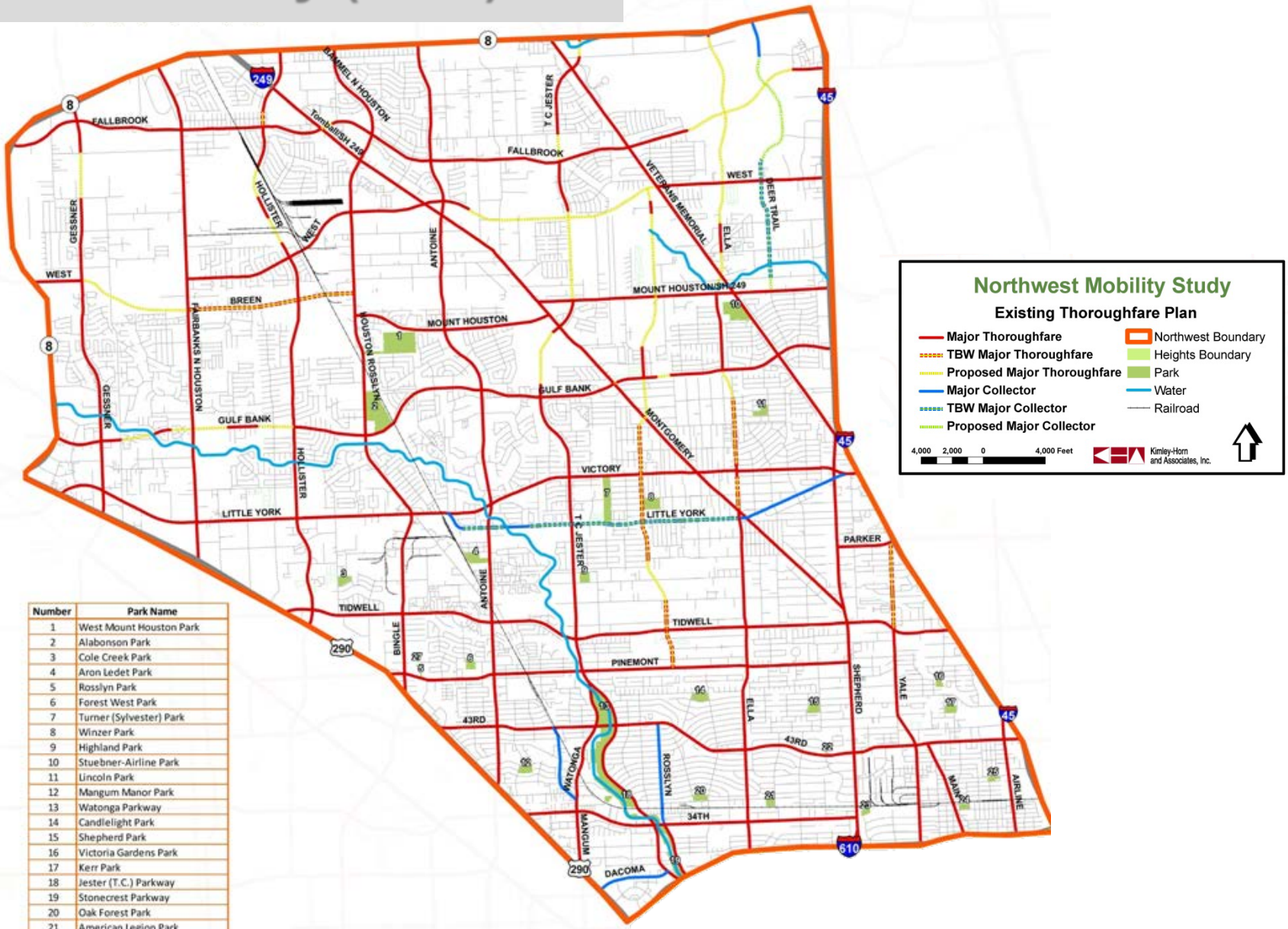
Schedule Overview

- Data Collection – February to March
- First Public Meeting – March 27th
- 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 – June - July
- Development of Draft and Final Report – July - August

Aerial (2012)

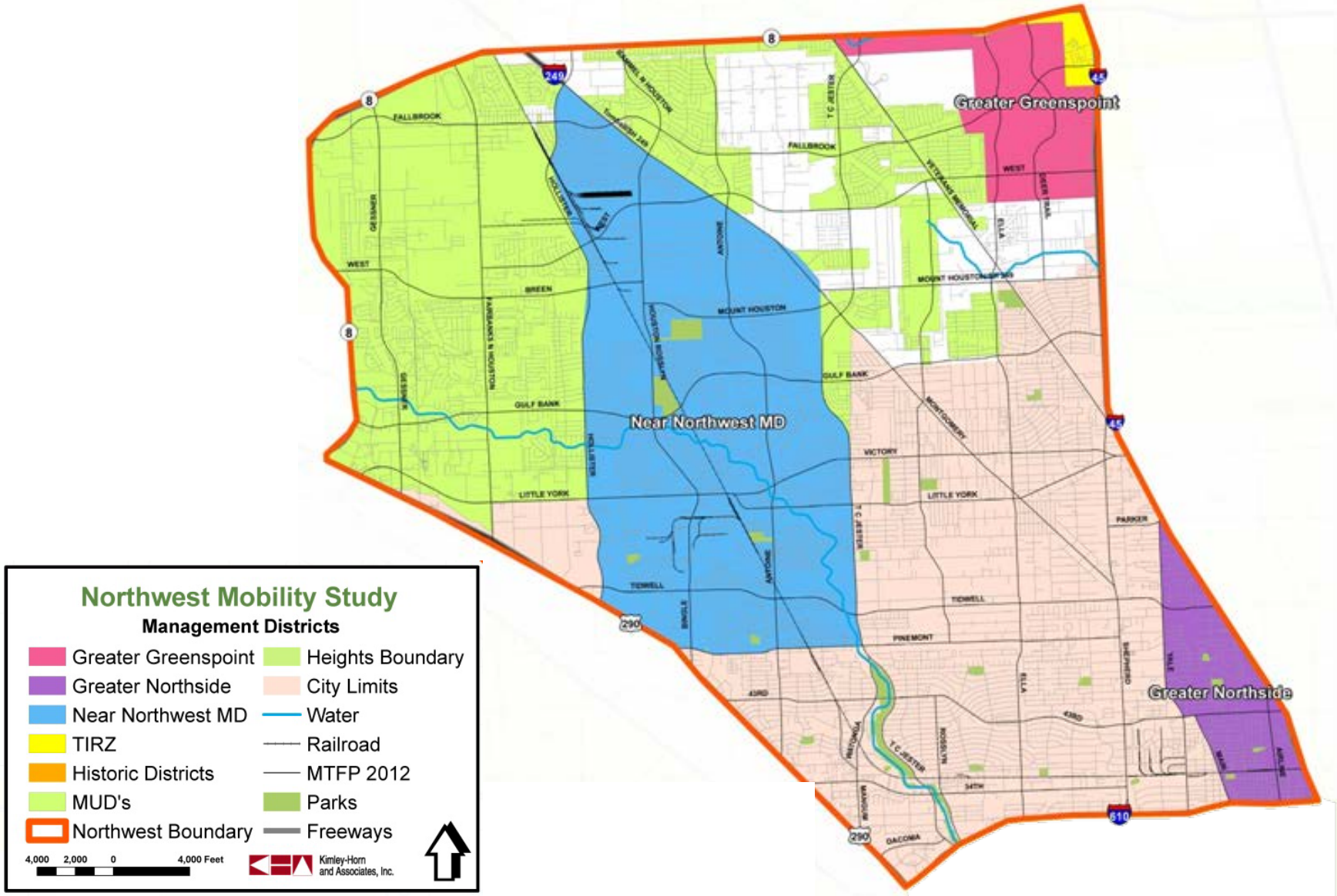
FM 1960
PERRY
JONES
BW 8
SH 249
HOLLISTER
ENOS
FAIRBANKS N HOUSTON
WEST
BREEN
FM 529
GESSNER
LITTLE YORK
TANNER
CLAY
HEMPSTEAD
CAMPBELL
BLALOCK
BINGLE
WIRT
US 290
HOUSTON ROSSLYN
TOMBALL
FALLBROOK
T.C. JESTER
MOUNT HOUSTON
CRESTVALE
ELLA
DEER TRAIL
WEST
IH 45
AIRLINE
ALDINE BENDER
W. HARDY
HARDY TOLL
GULF BANK
VETERANS MEMORIAL
MONTGOMERY
CARVER
VICTORY
WHEATLEY
PARKER
FULTON
CEBRA
TIDWELL
PINEMONT
BERRY
43RD
WATONKA
ROSSLYN
SHEPHERD
CROSSTIMBERS
34TH
IH 610
YALE
MAIN
IRVINGTON
MANGUM
DACOMA
DURHAM
20TH
LONG POINT
Study Area
Miles
0
1
2

Street Hierarchy (2011)



Number	Park Name
1	West Mount Houston Park
2	Alabonson Park
3	Cole Creek Park
4	Aron Ledet Park
5	Rosslyn Park
6	Forest West Park
7	Turner (Sylvester) Park
8	Winzer Park
9	Highland Park
10	Stuebner-Airline Park
11	Lincoln Park
12	Mangum Manor Park
13	Watonga Parkway
14	Candlelight Park
15	Shepherd Park
16	Victoria Gardens Park
17	Kerr Park
18	Jester (T.C.) Parkway
19	Stonecrest Parkway
20	Oak Forest Park
21	American Legion Park
22	Sue Barnett - 43rd Triangle
23	Graham Park
24	Independence Heights Park
25	McCullough Park
27	Poppy Avenue Future Park Site

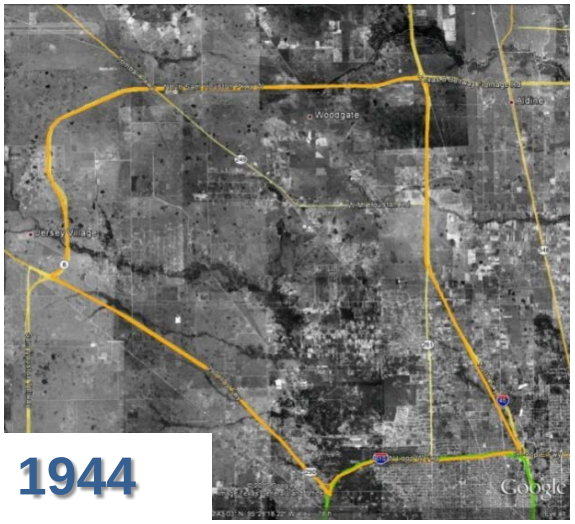
Management District

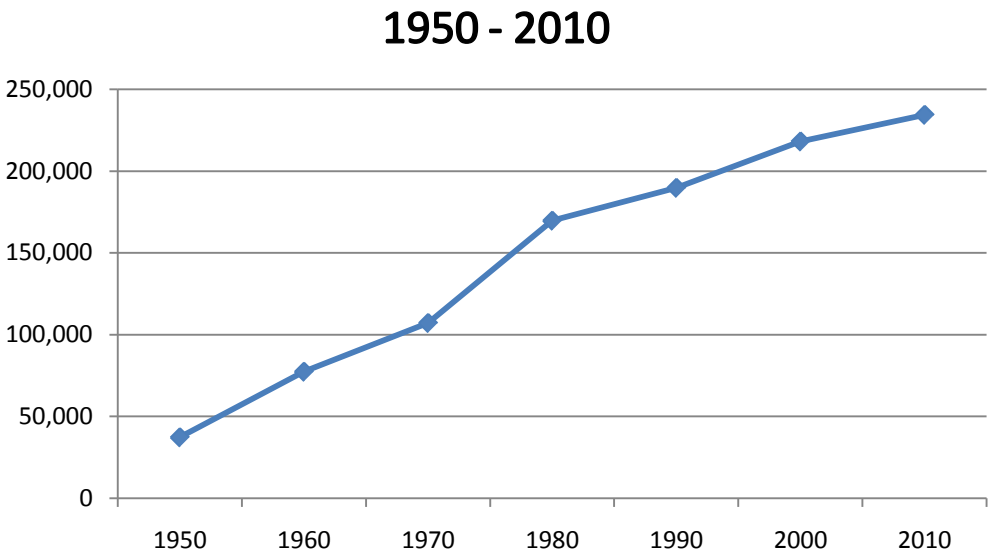


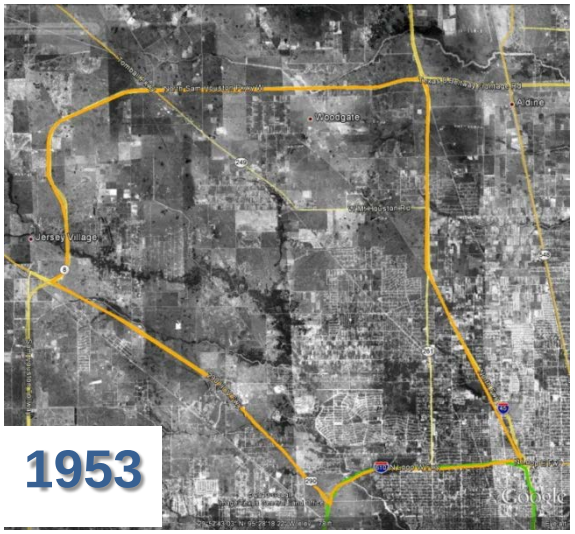
What are we studying?

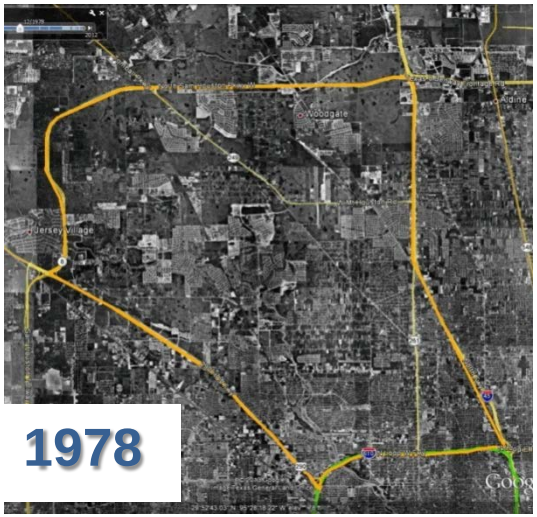
- Roadway and intersection improvements
  - Improve the efficiency of the system we have
- Pedestrian connectivity
- Bicycle connectivity
- Transit connectivity and access
- Multi-Modal street classification

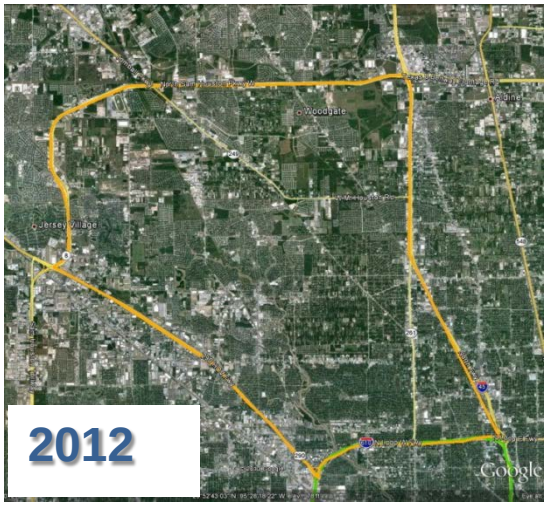
Population Change



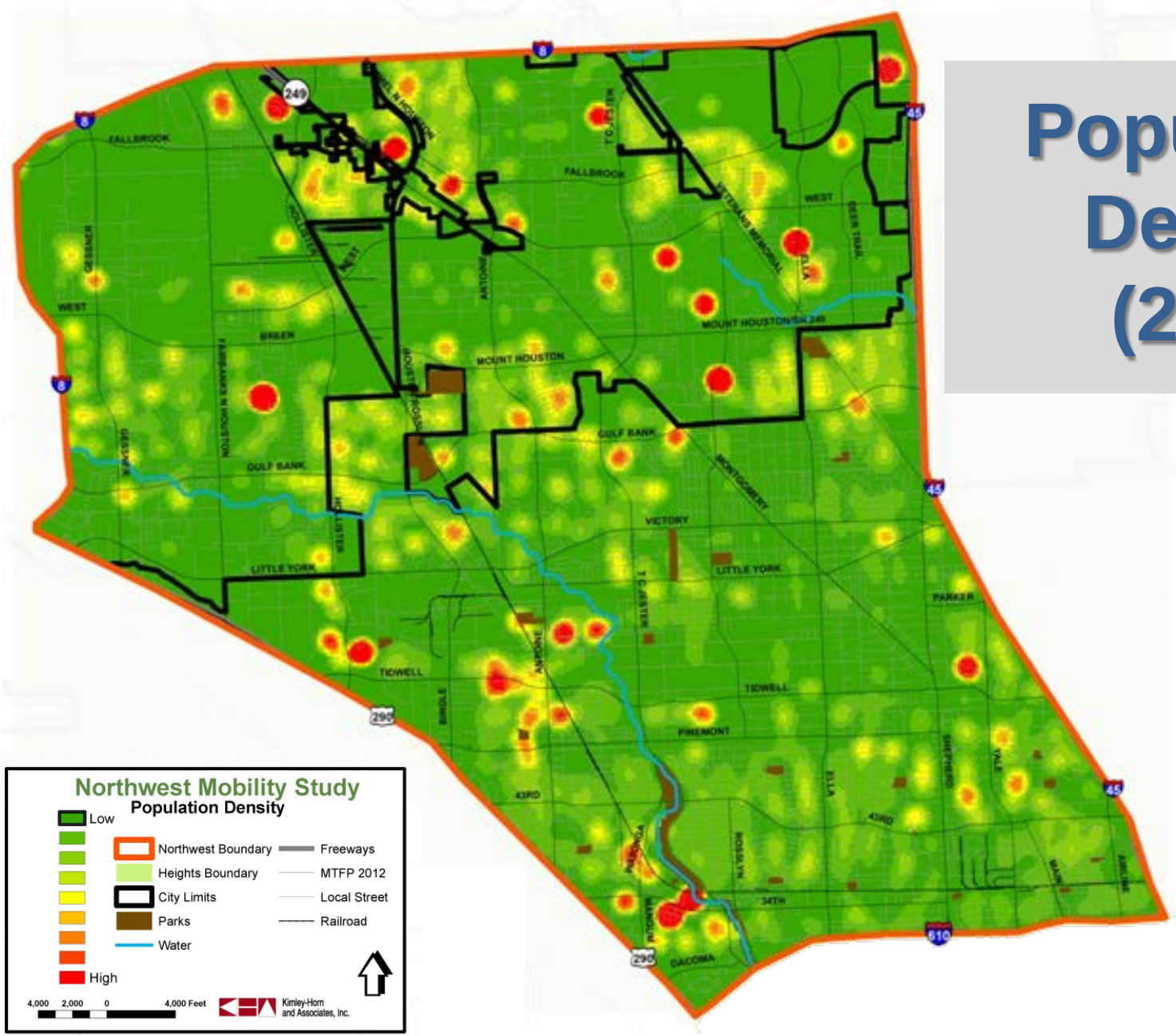








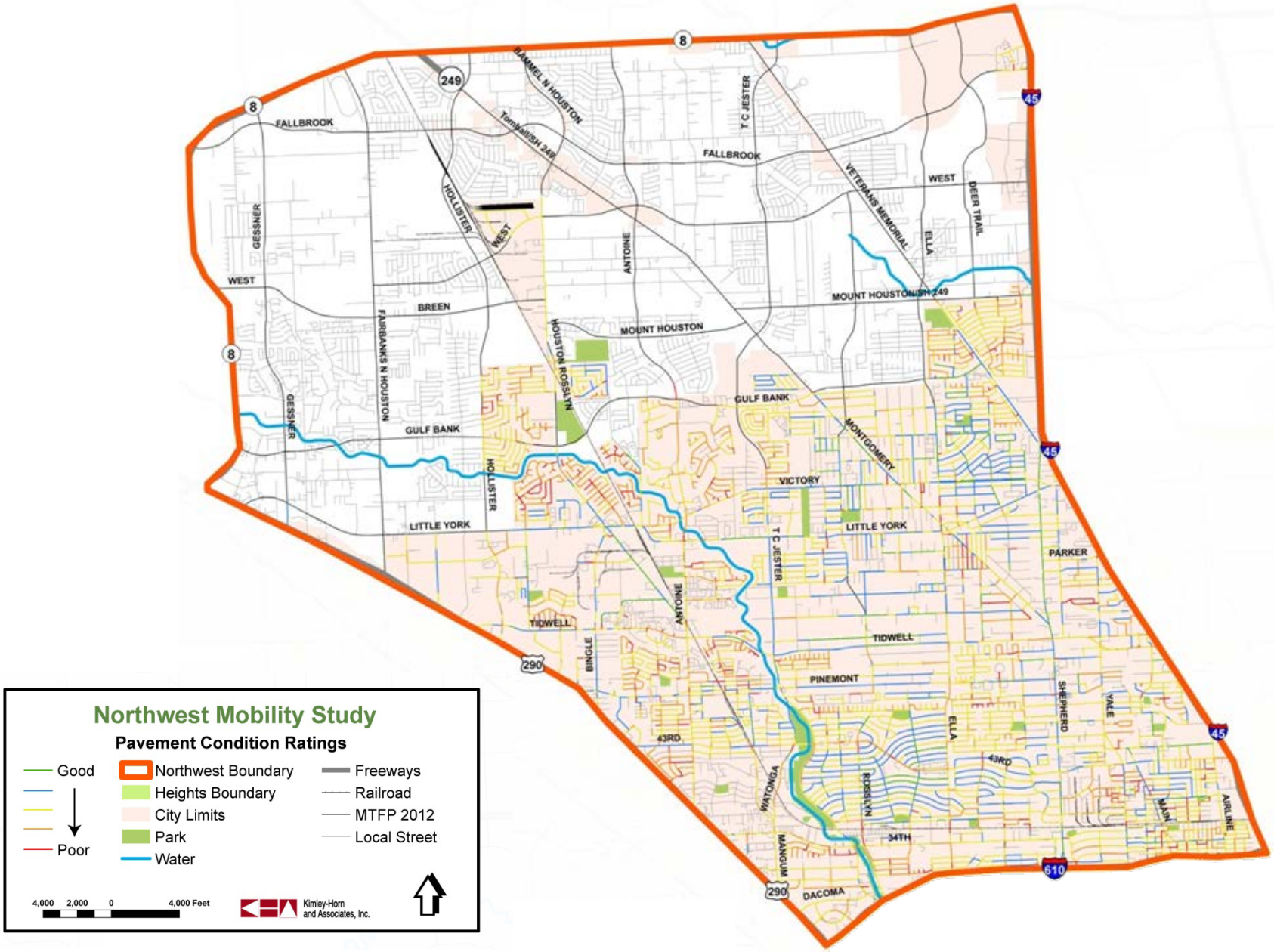
Population Density (2010)



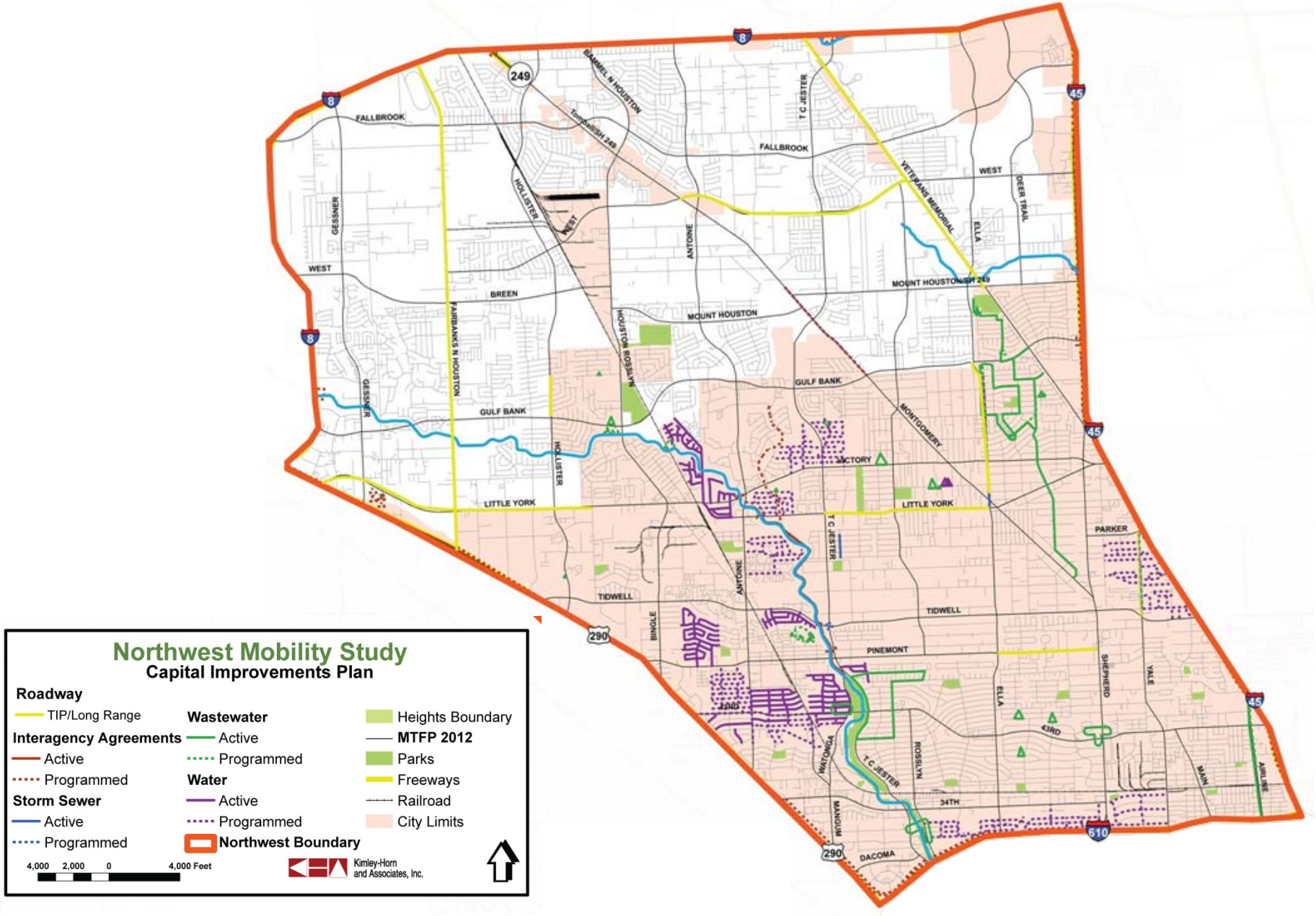
What are we using as a basis from previous plans?

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

Pavement Condition Ratings (2011)



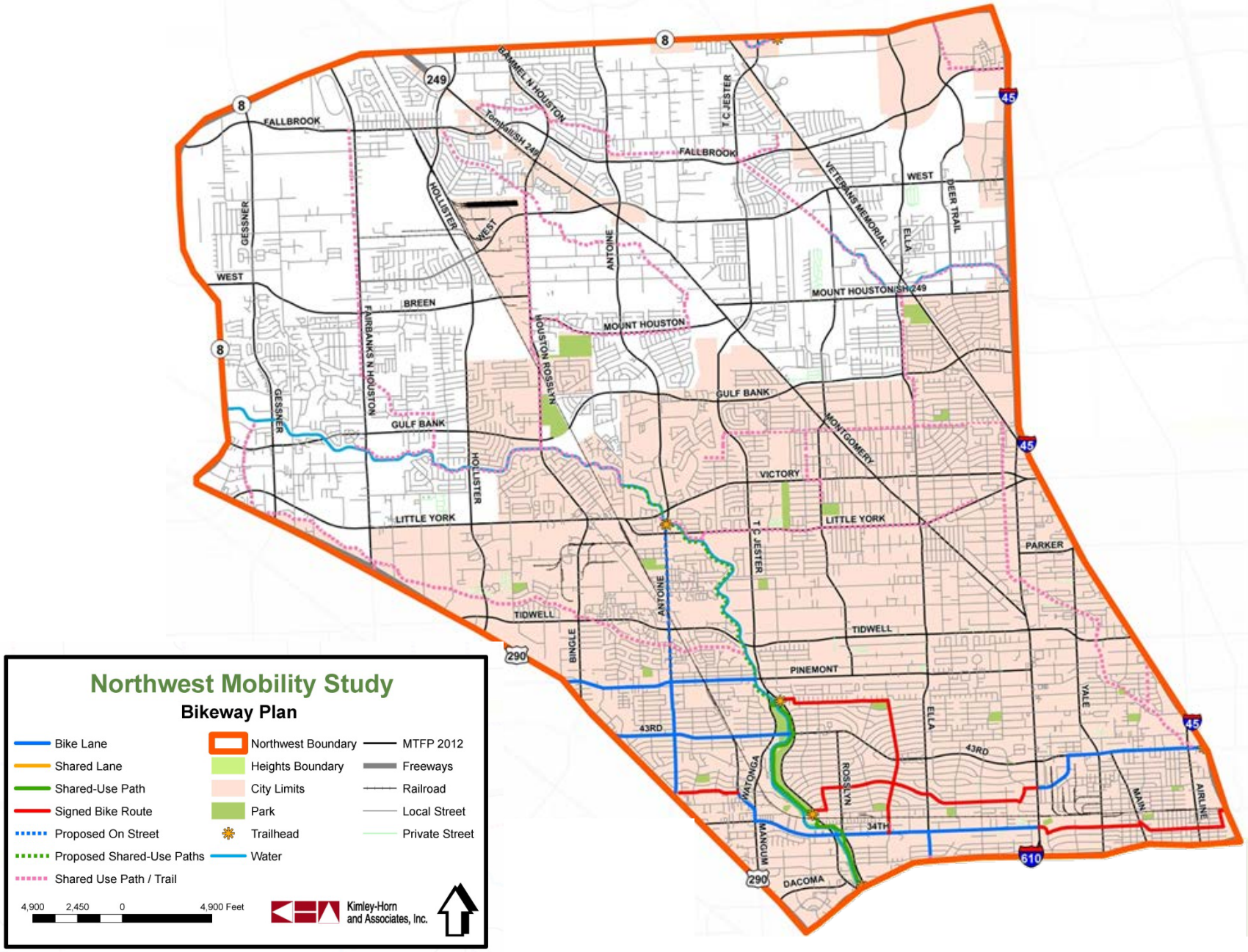
Capital Improvement Plan



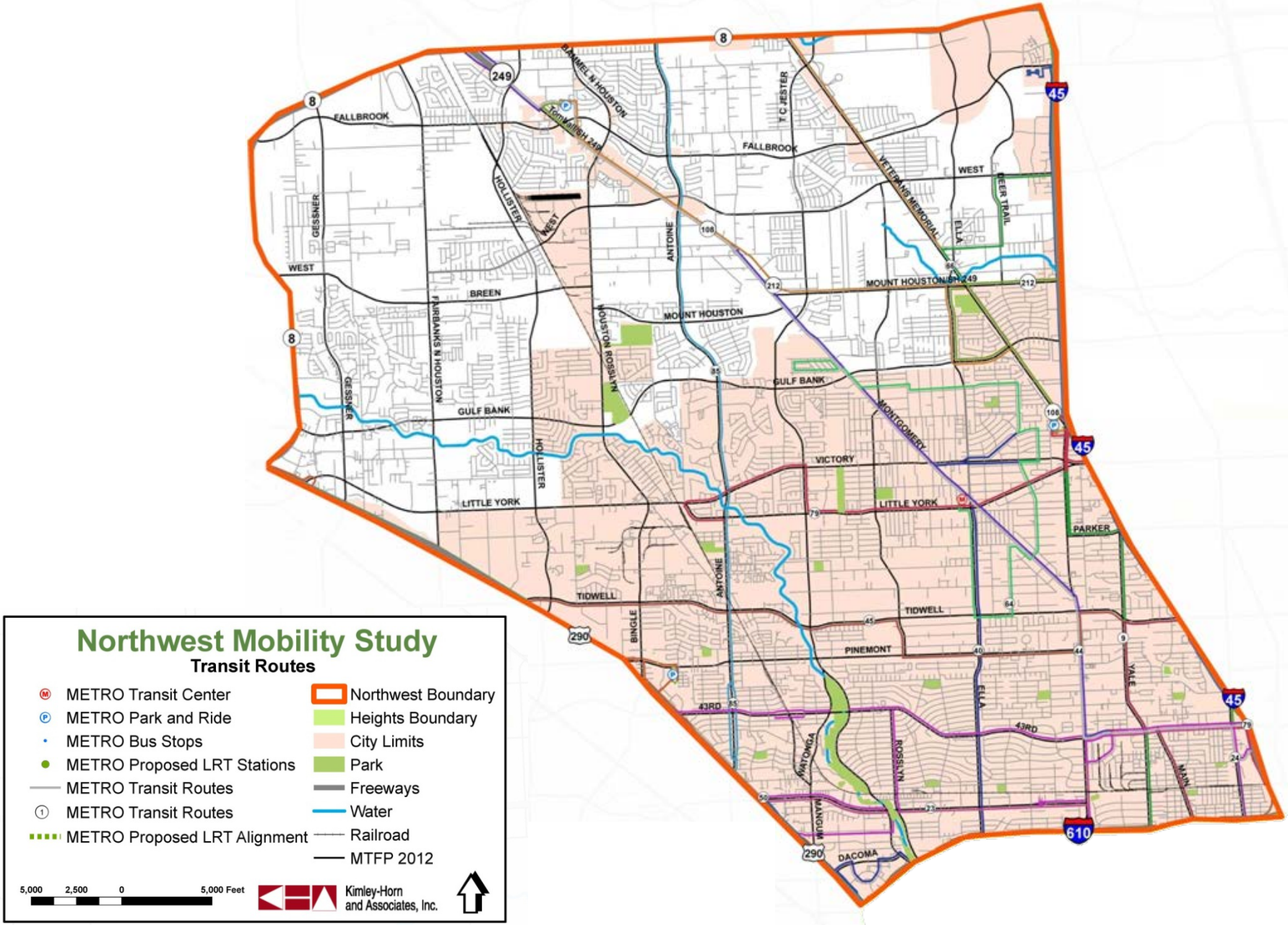
How does this relate to other studies?

- 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

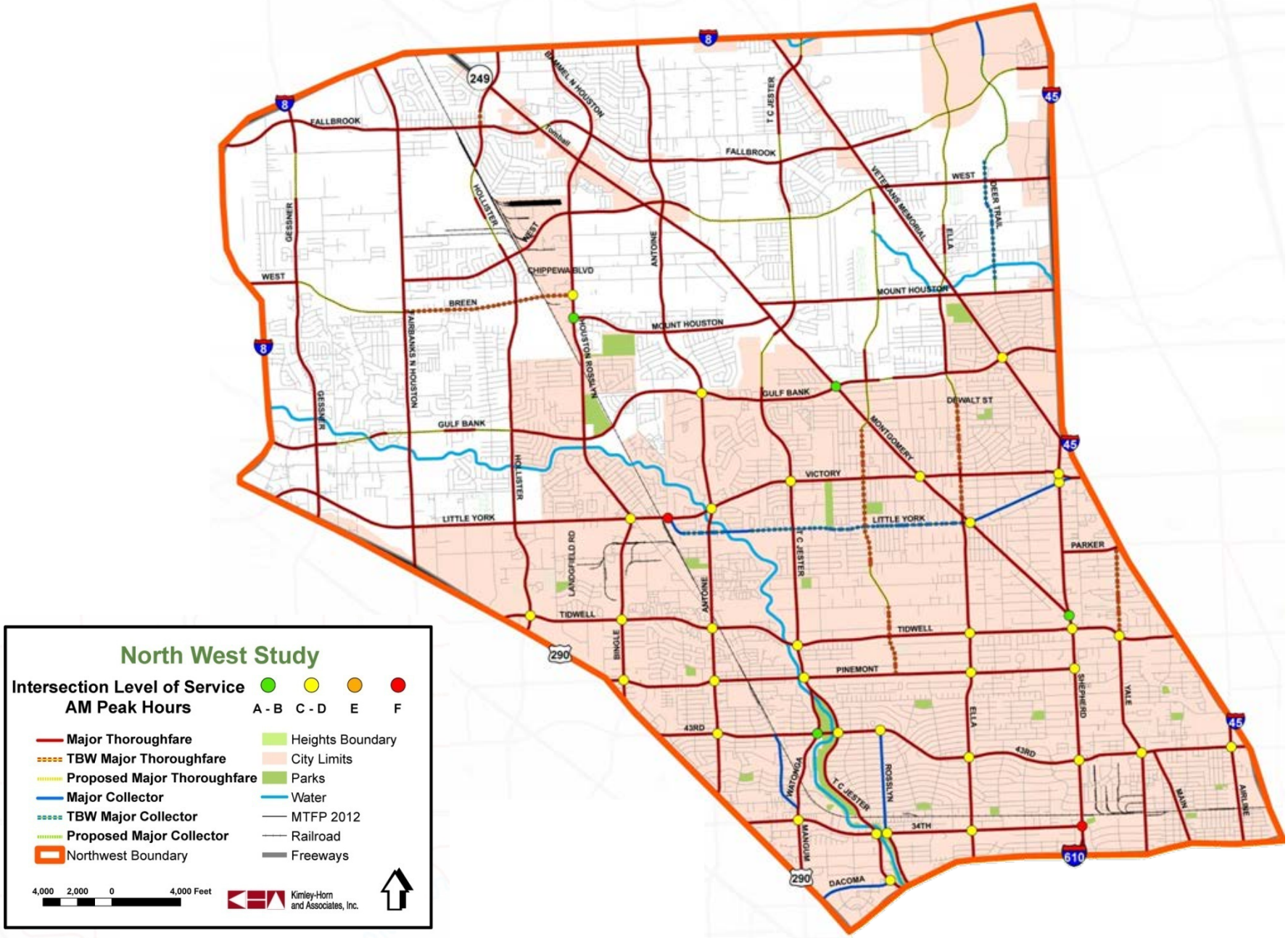
Bikeway Plan



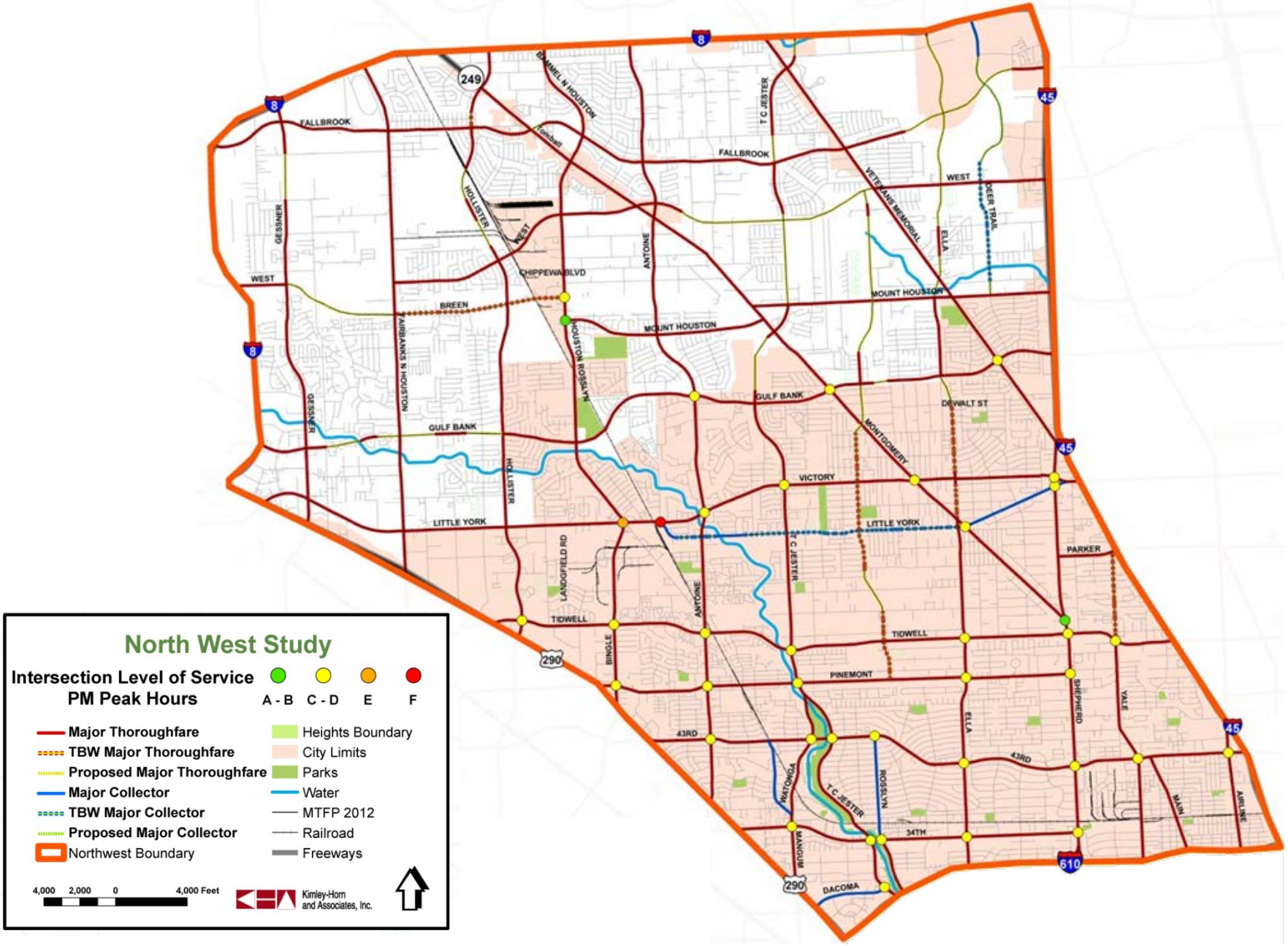
METRO Transit Routes



Intersection Analysis: AM



Intersection Analysis: PM



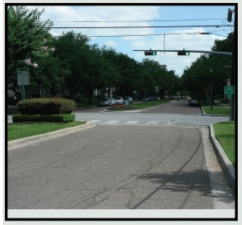
City Mobility Planning

HOUSTON

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.

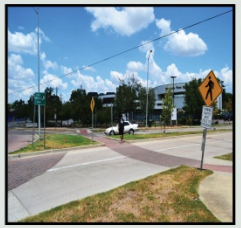
Medians are traffic islands installed to prevent or ensure certain turning movements at intersections. They also provide a seperation between opposing traffic lanes of traffic. Medians eliminate cut-through traffic, change driving patterns, beuatify streets with greenery and increase pedestrian saftey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

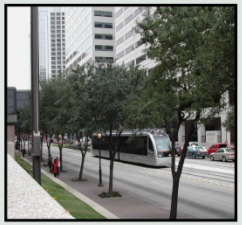
Streetscaping refers to the use of planted areas and other beautifying techniques along transit corridors that can attract pedestrians and make pedestrian and bicycle use more pleasant.



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.

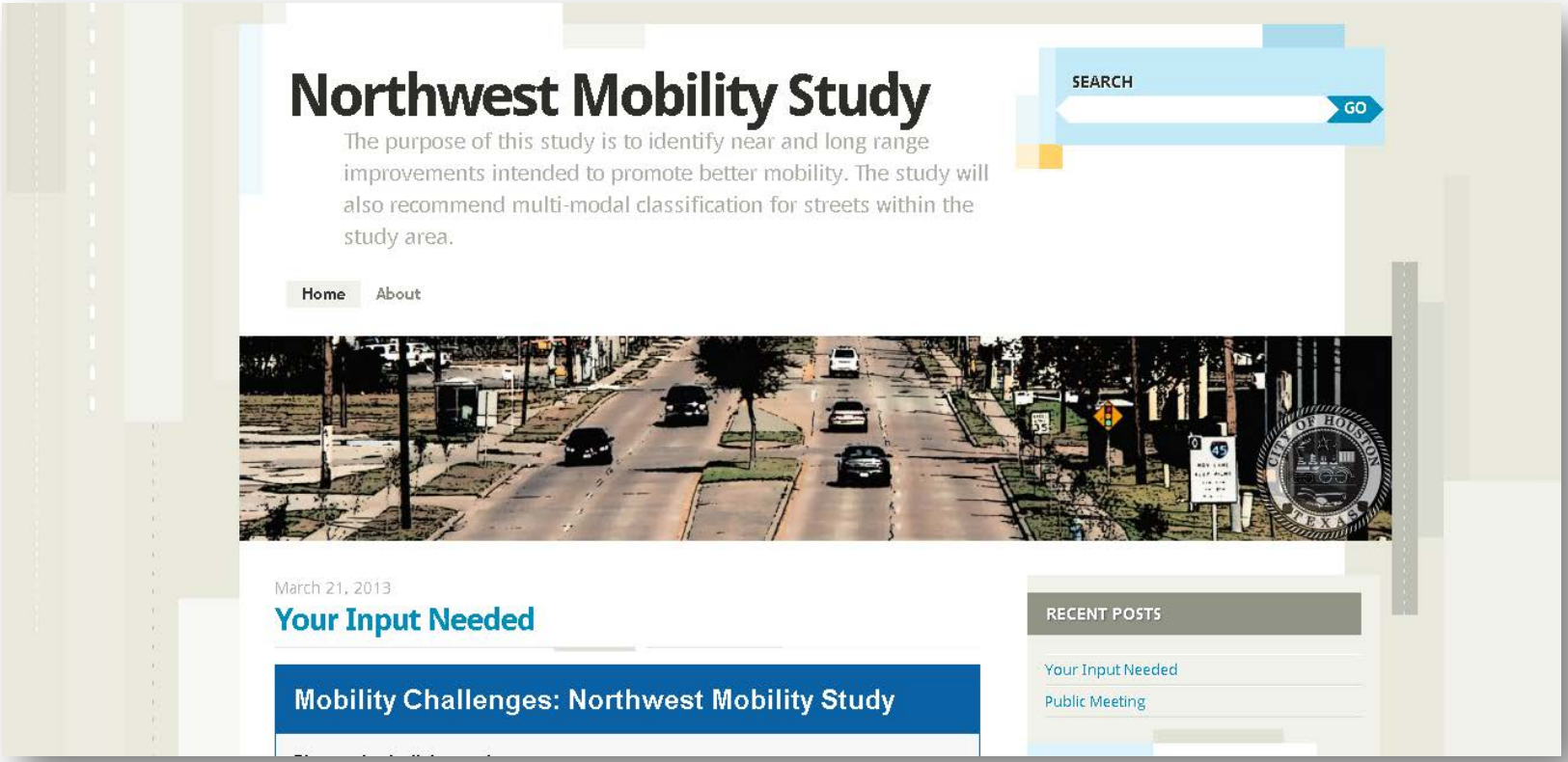
Park and Ride lots encourage transit usage for people who are not within walking distance of a transit station. These lots typically adjoin suburban bus and rail stations to reduce the number of cars in the urban core.

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

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