

II. Existing Conditions

The Mobility Plan for the Heights-Northside Study Area is intended to develop mobility solutions for those living, working, and traveling through the area. The first step in this process is to identify the existing conditions of the Heights and Near-Northside regions. Quantitative data gathered includes, but was not limited to: demographics, turning movement counts, traffic counts, transit ridership, right-of-way, and other corridor-specific plans. We also analyze qualitative data acquired through public and stakeholder feedback. This information is paired with the existing conditions data to help design mobility alternatives and solutions to fit the needs of the community.

The existing conditions found in this chapter analyze the current state of the Study Area, while also consulting any existing future plans for development in the region (i.e. the Major Thoroughfare and Freeway Plan, a long-range planning document). Examination of the street, bicycle, pedestrian, and transit networks and other travel conditions are in this section.



PHOTO PROVIDED COURTESY CITY OF HOUSTON

2.1 2013 Major Thoroughfare and Freeway Plan

The City of Houston's Major Thoroughfare and Freeway Plan (MTFP) identifies all major corridors within the City of Houston and its surrounding extraterritorial jurisdiction (ETJ). Freeways and Major Thoroughfares represent those roadways which adhere to the movement of large volumes of traffic (regardless of mode) over long distances. Collectors and Local Streets form the network that provides access to residential properties, private developments, and other neighborhood amenities such as parks, schools, or grocery stores. Based on these definitions, Freeways and Major Thoroughfares are designed to optimize mobility, while Collectors and Local Streets provide the greatest potential for increased access. The MTFP maintains the provided hierarchical classification for Major Thoroughfares and associated Collector Streets.

The Heights-Northside area is well-represented by all hierarchal street types which are mostly arranged in an elongated street grid commonly associated with historic suburb development patterns. Several corridors, however, are aligned diagonally through the corridor including:

- Hempstead
- Katy Road
- TC Jester Boulevard
- North Main Street
- Fulton

North-south movement is funneled to those Major Thoroughfares which provide for traffic movement through the Study Area, as well as access over or under surrounding interstates.

Two north-south couplets are in operation today: 1) Shepherd/Durham pairing in the Heights area and 2) Hardy/Elysian in the Northside. Corridors connecting the IH 610 loop to US 59 typically change name and cross section design at least once throughout the Heights and Northside areas. These two communities are ultimately separated by Interstate 45 (IH 45), which bisects the Study Area and limits continuous east-west flow of traffic to the following key corridors:

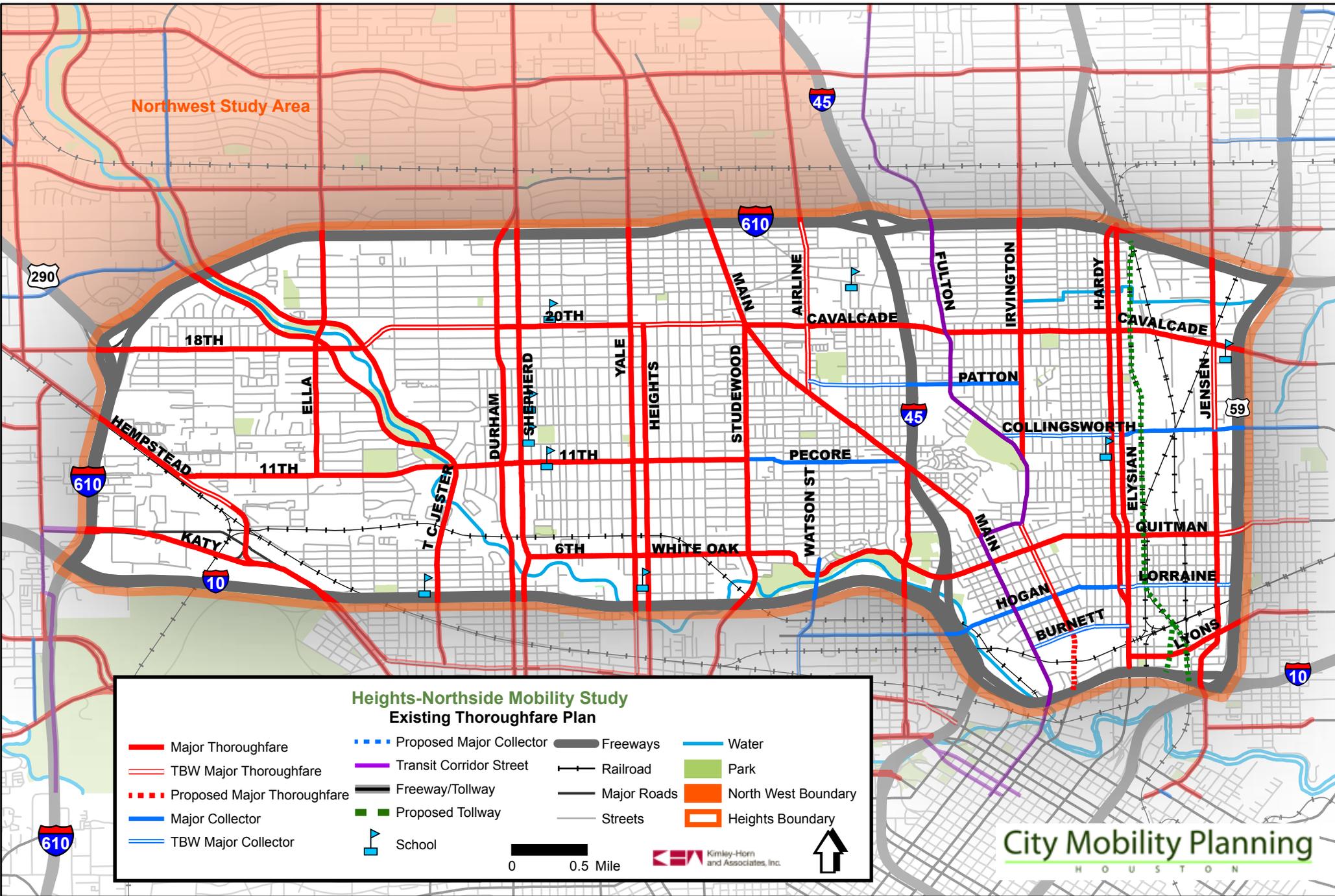
- Cavalcade/20th
- Patton
- Main
- White Oak/Quitman

The White Oak Bayou transverses the Study Area diagonally, largely in alignment with TC Jester within the Heights area. It creates a physical barrier between Downtown and the Northside communities.

Finally, although the Hardy Toll Road does not physically occupy this Study Area, its primary access from Downtown is the Elysian/Hardy couplet which transcends the Northside section of this greater Study Area. The potential impact of the Tollway expansion within this Study Area will be taken into account upon evaluation of future conditions as it relates to the greater and local communities.

The identified gaps in the system show a need for increased connectivity between the Heights and Northside communities, as well as enhanced connection via bayous.

The City of Houston's current MTFP identifies (as shown in Figure 2.1) the Major Thoroughfares and Major Collectors within the Study Area that have sufficient width (solid lines), need to be widened (double dashed line), or need to be acquired (dashed line).



**Heights-Northside Mobility Study
Existing Thoroughfare Plan**

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

0 0.5 Mile

Kimley-Horn and Associates, Inc.

City Mobility Planning
HOUSTON

FIGURE 2.1

2.2 Existing Transit Routes

The Metropolitan Transit Authority of Harris County (METRO) is the transit service provider for the City of Houston. Within the Heights and Northside Study Areas there are 26 transit routes with bus stops, as shown in Figure 2.2. The majority of the corridors have at least one bus route assigned to them. Bus routes move riders locally within the Heights and Northside areas, as well as regionally to destinations such as Downtown. Most routes focus on facilitating the north/south movement of passengers.

The Study Area is also home to the recently constructed METRO light-rail line, which travels along Main, Boundary, and Fulton. METRORail provides connections into the downtown area and further south to other activity centers, such as the Texas Medical

Center. As the light-rail continues to expand through the year 2025, expansion of the line within this Study Area and placement of transit stations must be taken into consideration during planning and development decision-making processes.

Analysis of these existing conditions indicates special consideration should be given specifically to Metro Bus and METRORail users to increase ridership. Providing for regional connections to local light-rail (by means of bus, bicycle, and pedestrian facilities) can assist in supporting this rail line. Creating accessible and efficient routes to move persons within and outside the Study Areas is essential for a vibrant transit network.



PHOTO PROVIDED COURTESY CITY OF HOUSTON



PHOTO PROVIDED COURTESY CITY OF HOUSTON

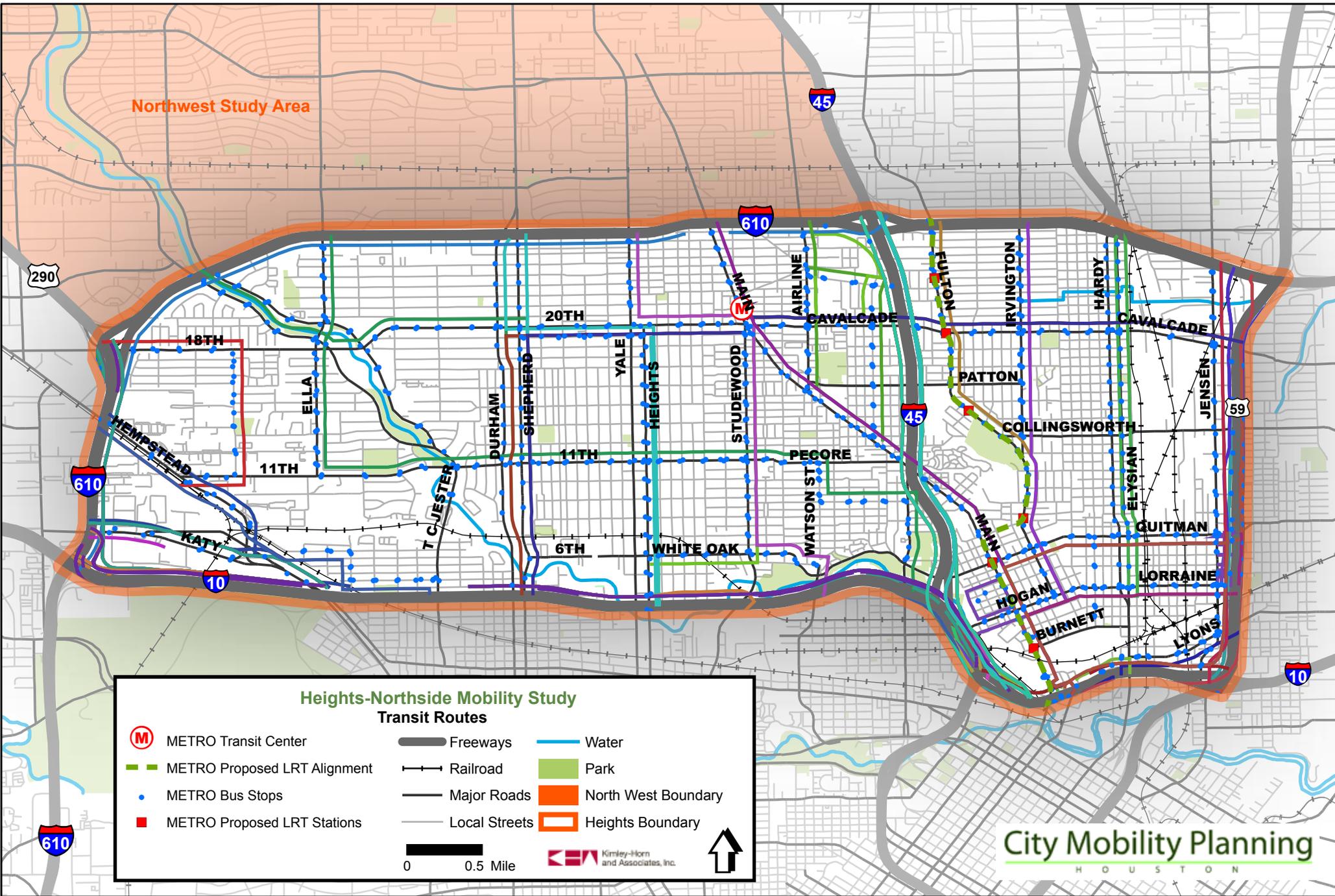


FIGURE 2.2

2.3 Existing Bicycle Facilities

Bicycle facilities for the City of Houston are divided into four types: bike lane, shared lane (also known as a Sharrow), shared-use path/trail, and signed bike route. The existing facilities are identified in Figure 2.3. Shared lanes, are not present in this Study Area. As corridors transition through different road designs, bicycle facility types also change. This transition mostly occurs between designated on-street bike lanes and signed bike routes. For a more detailed description of bike facilities as defined by the City of Houston, see Chapter 5.4: Bicycle and Facility User.

Current facilities that provide a complete north/south or east/west connection are limited due to issues with underpasses at the interstates. Cavalcade and the White Oak Bayou Trail are currently the only facilities to cross under IH 45.

The White Oak Bayou Trail (shared-use path), follows the bayou as it moves from the north-west towards the downtown area. This trail provides an off-street facility for bicyclists and limits their interaction with automobiles. Connections to this trail via on-street bicycle facilities are limited. Direct connections to the White Oak Bayou exist at Ella, 11th, and TC Jester.

Initial analysis of this network indicates a strong need to increase the number of connections to the White Oak Bayou Trail. Also lacking are east/west connections for bicycles between the Heights and Northside areas. Expansion of the network for on- and off-street facilities has the potential to create a well-traversed bicycle system.



PHOTO PROVIDED COURTESY CITY OF HOUSTON

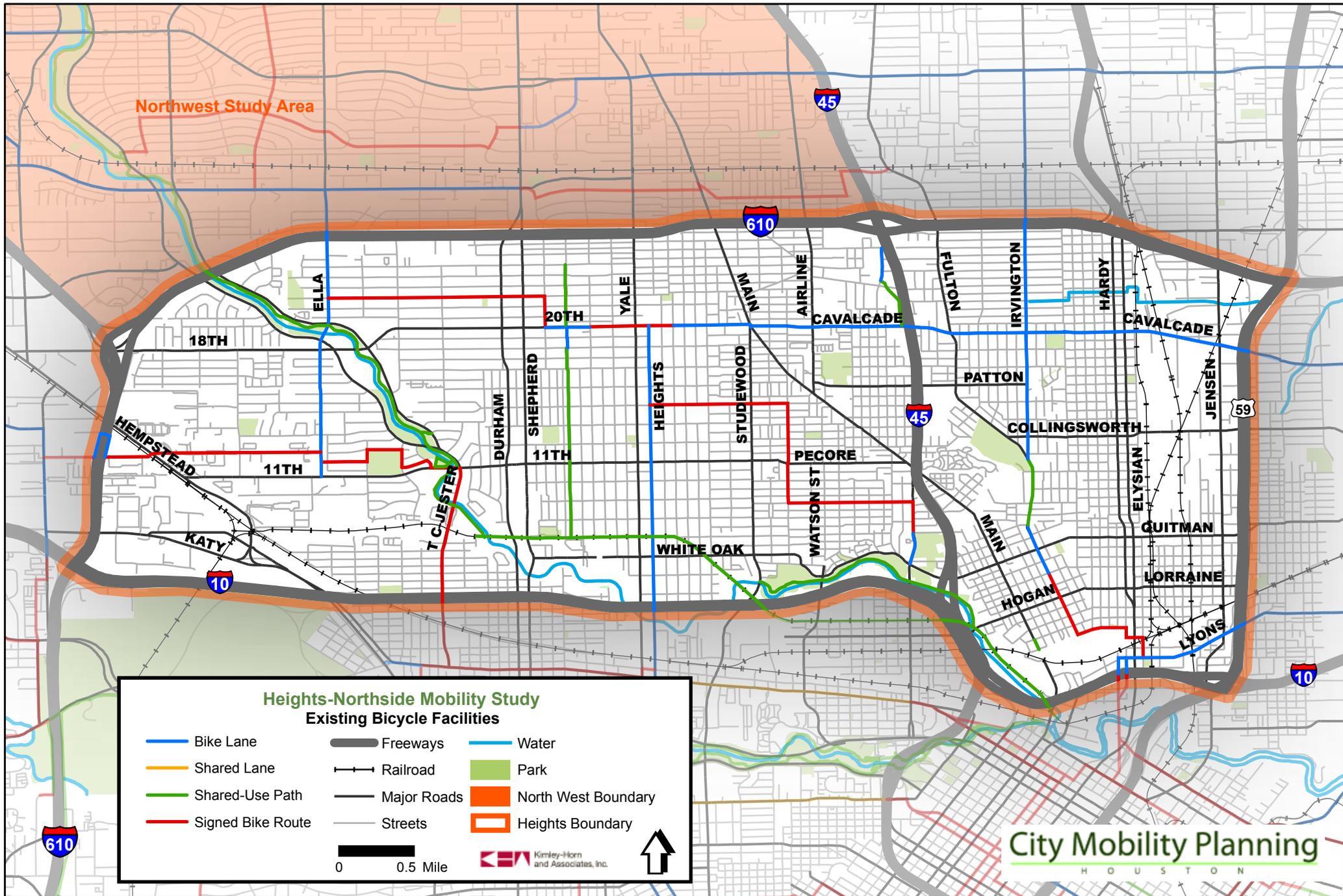


FIGURE 2.3

2.4 Existing Sidewalk Facilities

A characteristic of the Heights-Northside area is an elongated street grid. Small, inter-connected grids are imbedded among the Major Thoroughfares, making the environment conducive to walking. 2.4 shows the segments along the prominent roadways that are missing sidewalks, as provided by the Greater Heights Super Neighborhood. Given the scope of this study, the data provided is for prominent roadways only and does not reflect sidewalk gaps along the local street network. However, where appropriate, key connections to the greater transportation network (i.e. transit stops and bayou trails) are considered.

The system map shows that the Heights area generally has a well-connected sidewalk system. Missing sidewalk links are found along Major Thoroughfares which is problematic

when considering the movement of pedestrian to and from key transit stops as well as within the neighborhood itself which is home to many popular eateries, bars and shops. The Northside area has substantially more gaps, with many on main roadways where pedestrian use would appear to be high.

While analyzing this data, system gaps indicate a need for sidewalks along corridors that are in the vicinities of schools. Gaps are also found near destination points, such as parks. Data for the condition of existing sidewalks is not represented on this map, but has a strong impact on the pedestrian network. The information provided by this map can assist in the prioritization process of constructing sidewalks in the near and long term.



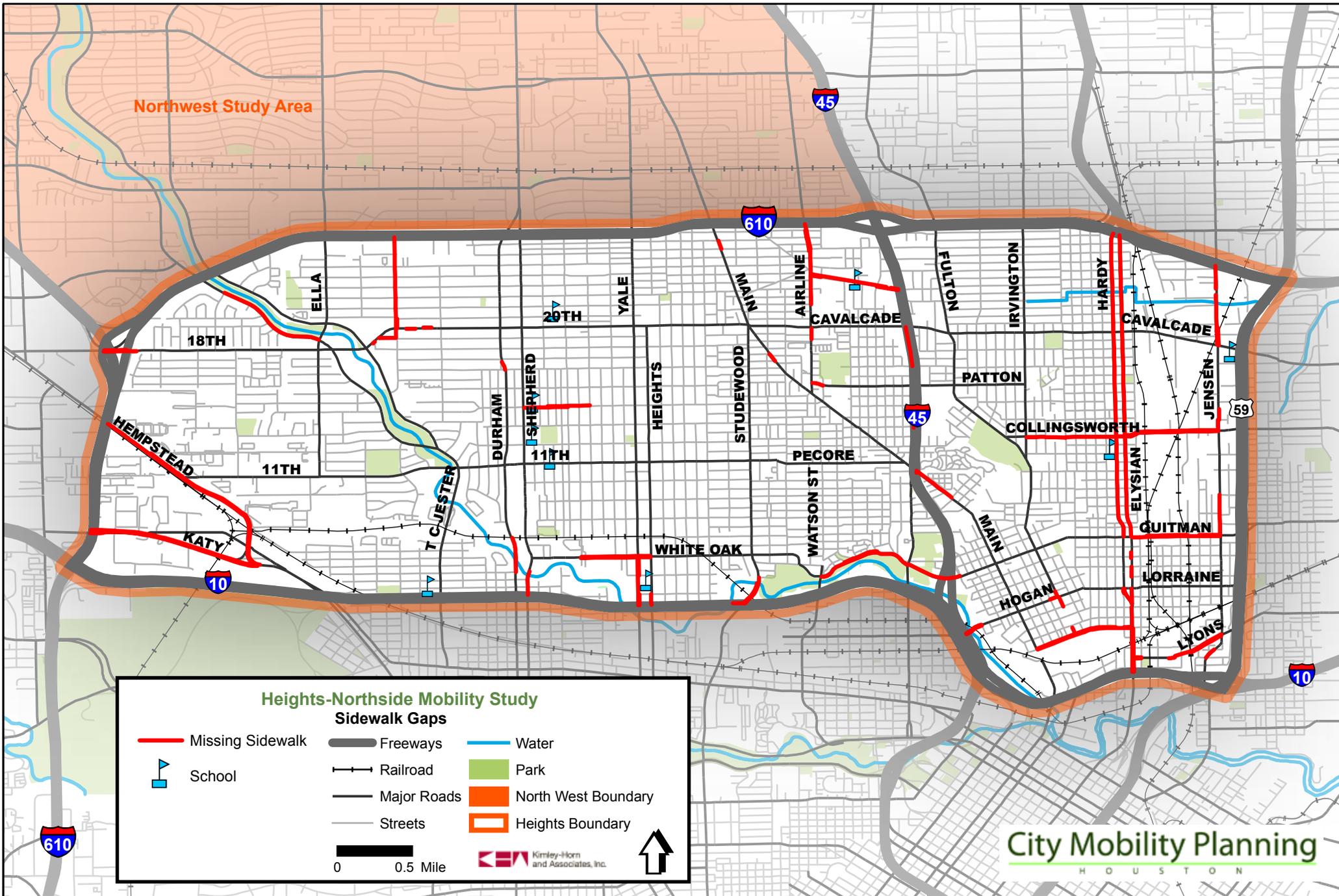


FIGURE 2.4

2.5 Existing Travel Conditions by Period of Day

Intersection Congestion

Counts and signal data are limited for this Study Area. Twenty-six intersections within the Heights Study Area were analyzed, but data was not collected for the Northside area due to the ongoing construction of the light-rail during the time period of this Study. The available information was divided into two periods for study: AM peak period and PM peak period, which represent when corridors are most heavily utilized by commuting traffic. Figures 2.5 and 2.6 on the following pages show the level of service (LOS) at each intersection as analyzed with available data. LOS is a measurement scale that gauges congestion on a grading scale similar to scholastic grading: A is a good rating with little or no congestion, and F is a poor rating with high levels of congestion.

Where provided intersections are TxDOT property, future coordination with TxDOT is essential to fully understand the best treatment options available to the city of Houston (as approved by TxDOT). Similarly, where intersections are within a certain proximity of roadway, highway, or light-rail construction, intersection congestion was not evaluated because current traffic patterns do not reflect (what will be) normal traffic patterns once construction is complete. Traffic patterns are expected to normalize one year after construction is complete.

Intersections within the Heights currently rate between A and D. These ratings are at or above the acceptable level set by the City of Houston and show that the Heights area is not categorized as “congested.” Acceptable levels are provided as intersections such as

The intersection congestion for the study area is considered minimal where the only LOS E intersection is located at the intersection of Studewood/North Main and 20th Street. An intersection failure of LOS F does not exist at present day volumes.

Intersections with a rating of E or F, and thus representing intersections with maximum failure include:

Main at Studewood: AM = LOS E; PM = LOS E

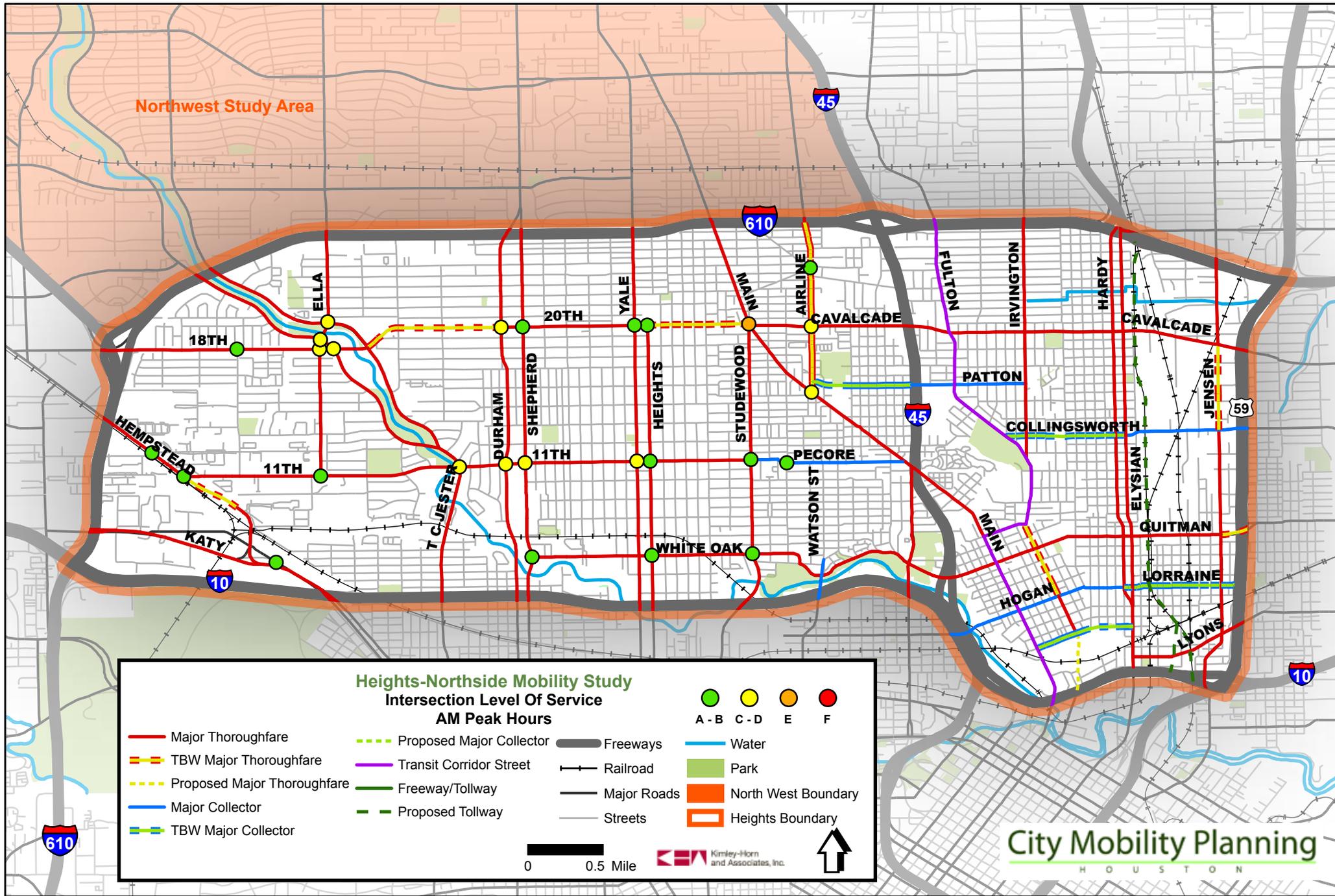


FIGURE 2.5

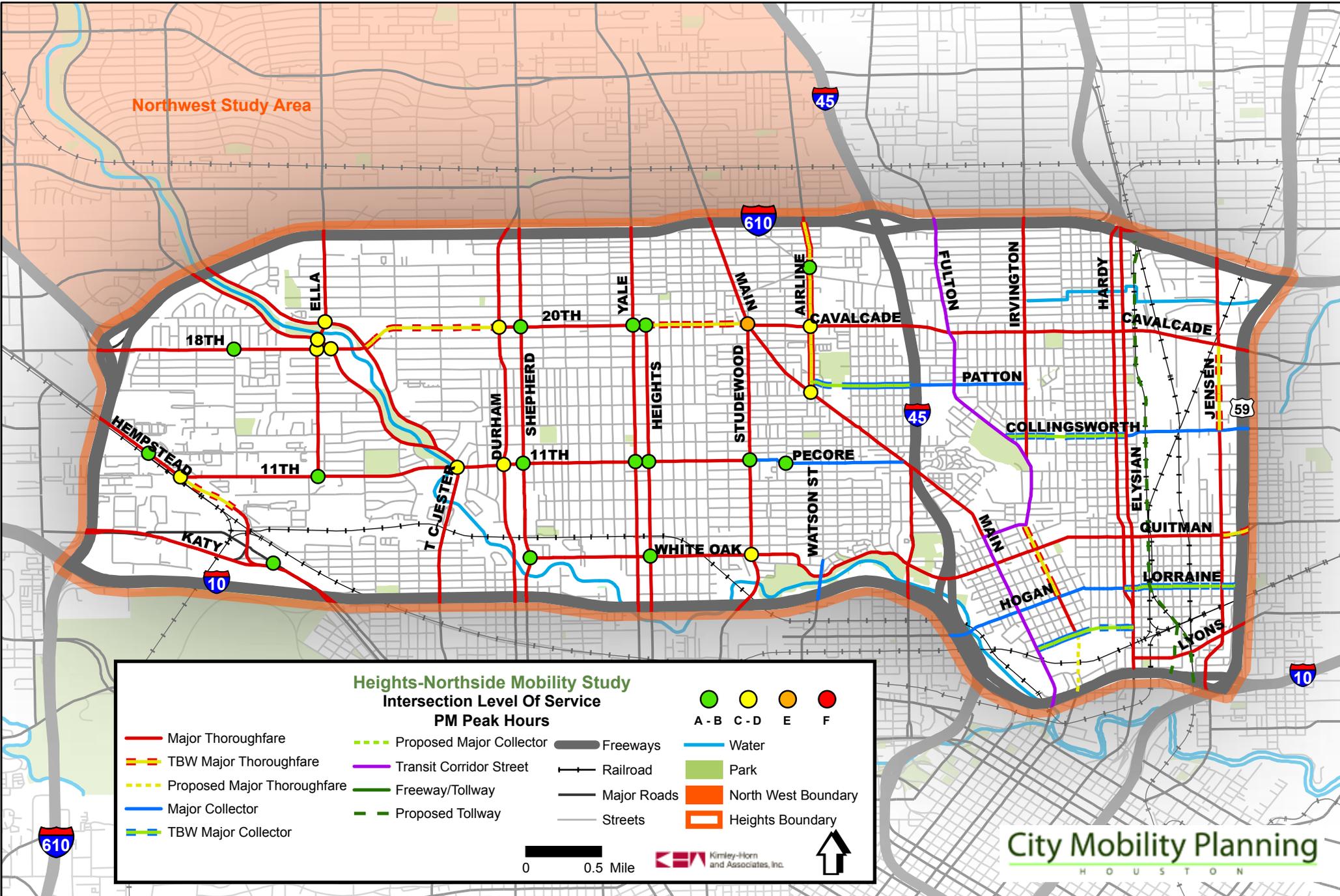


FIGURE 2.6

This Page Intentionally Left Blank

This Page Intentionally Left Blank