

II. Northwest Existing Conditions

The Mobility Plan for the Northwest 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 Northwest Study Area. Quantitative data gathered includes, but is 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 Northwest Study Area consists of mostly Major Thoroughfares with a few Major Collectors designated on the MTFP. The prevalent issue in this region is a lack of street continuation and connectivity of existing roadways where:

- Many of the Major Thoroughfares are not yet built and hence provide for a noted gap within the existing system of roadways. Future congestion of the network depends greatly on when and where these gaps are completed.

- The White Oak Bayou presents a challenge to street connectivity especially where it intersects with major and local roadways. Due to cost associated with bridge construction, variances for roadway continuation across certain portions of these bayous are often granted.
- Given presence of industrial and manufacturing facilities within the Study Area, freight traffic movement is prevalent within this context, but more evident along corridors such as Fairbanks North Houston, Fall Brook Drive, Breen and Bingle/ North Houston Rosslyn Road.

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). Most of the thoroughfares are of sufficient width, but portions of the following corridors need more right-of-way.



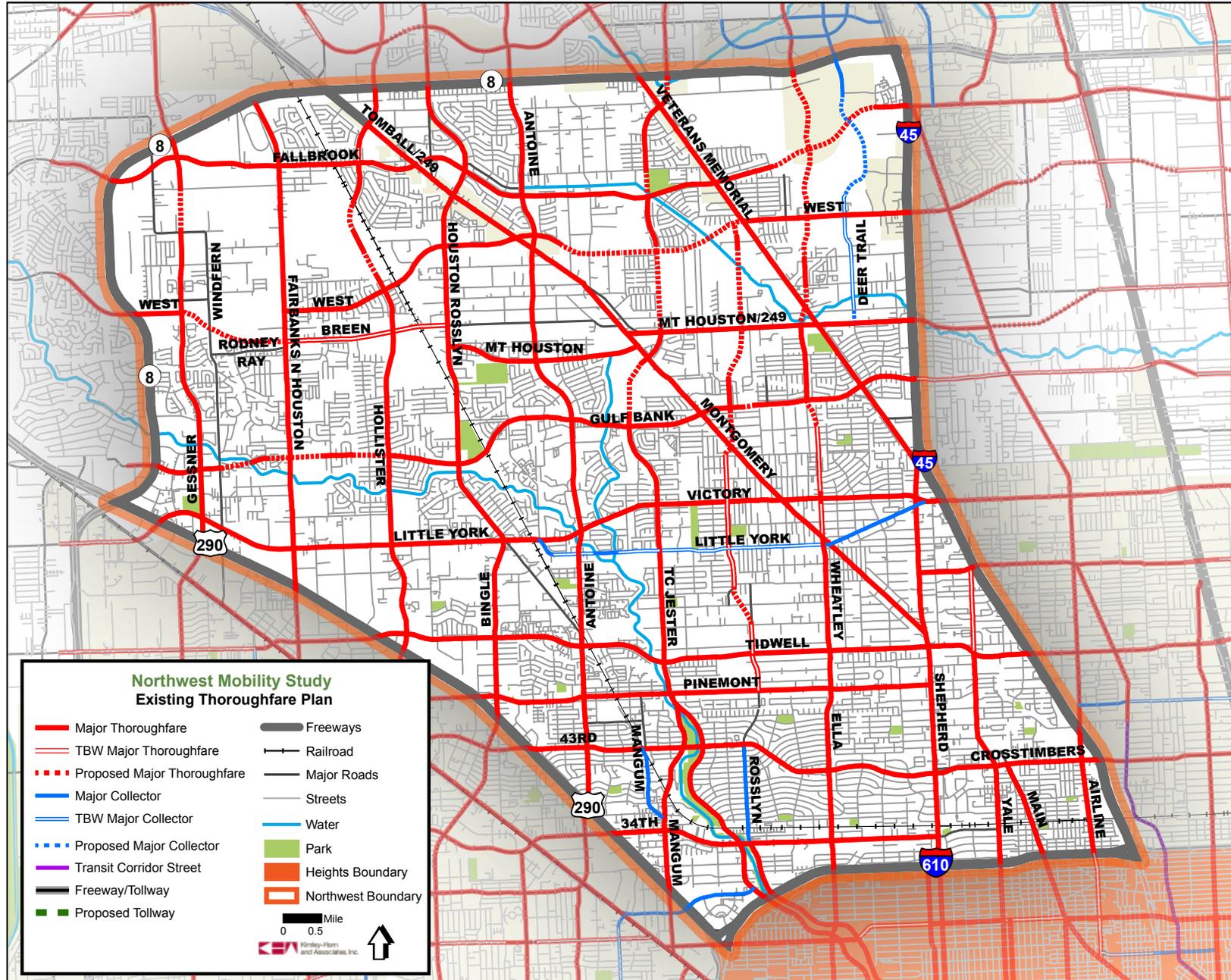


FIGURE 2.1

2.2 Existing Transit Routes

The Metropolitan Transit Authority of Harris County (METRO) is the transit service provider for the City of Houston. Currently, 14 transit routes with bus stops exist within the Northwest Study Area, as shown by Figure 2.2. Routes within the Northwest Area facilitate the movement of passengers mostly within the city limits of Houston, or along the freeways.

Many neighborhoods within the Study Area are not served by a transit route, and the location of Park and Ride facilities are spaced far apart in this expansive area. The METRO Park and Ride facilities are located in two areas: Veterans Memorial Dr. at Shepherd Drive and Tomball Parkway at Seton Lake Drive. A third Park and Ride location - Pinemont Drive at Federal Plaza Drive - closed in January of 2014 due to the expansion of the U.S. 290

corridor. Rider traffic is anticipated to be diverted to the Northwest Transit Center near the 610 Loop at Little York Drive and West Montgomery Drive or the West Little York Park and Ride which lies just west of the study area south of U.S. 290.

METRO is also undergoing a transit system reimagining project that takes a fresh look at the METRO bus network. Although the study is pending completion, the overarching goal is to improve and expand upon existing transit service by consolidating routes and increasing frequency. As such, all recommendations emerging from this Study Area analysis is fully vetted by participating METRO Stakeholder committee members.



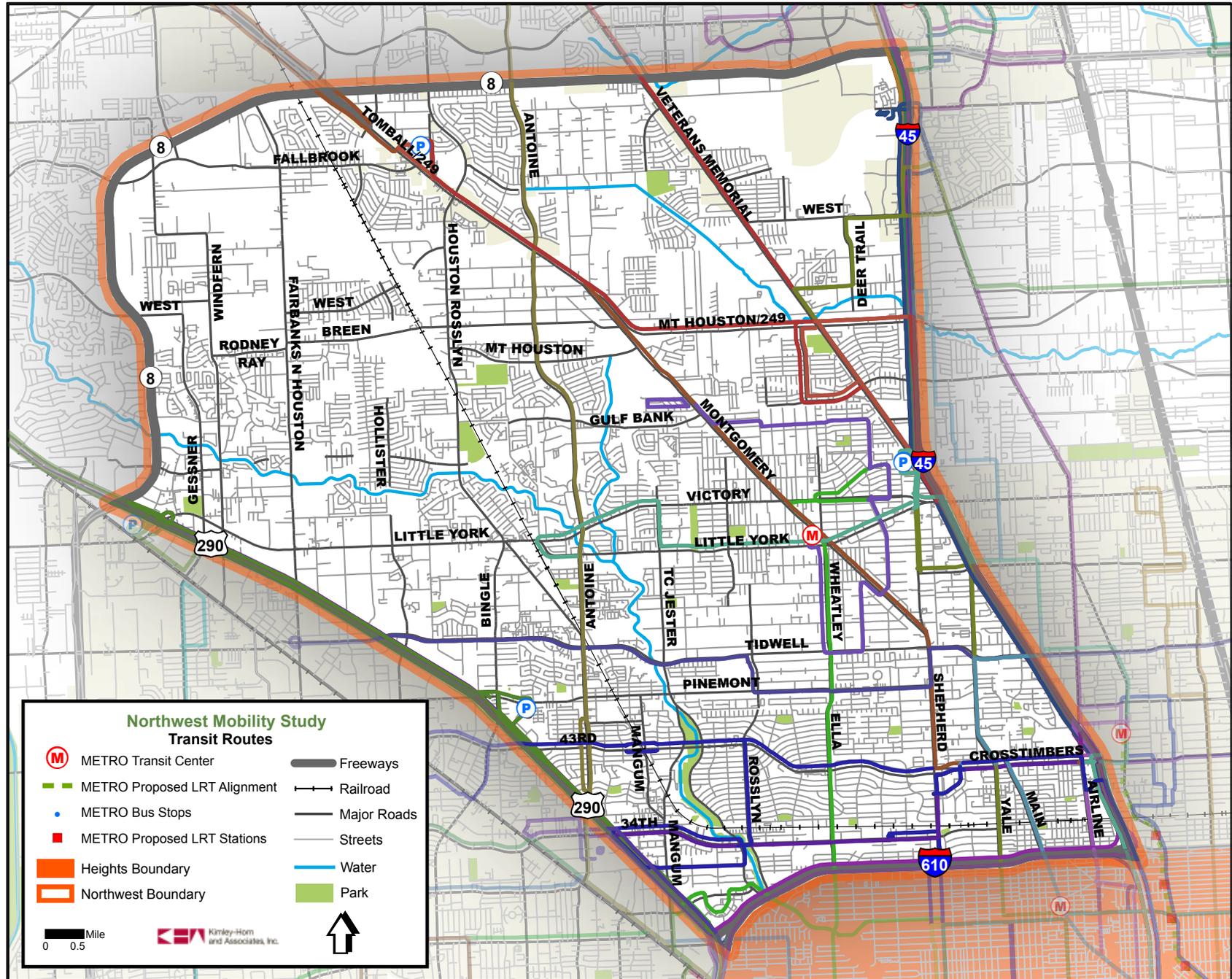


FIGURE 2.2

2.3 Existing Bicycle Facilities

There are a limited number of existing bicycle facilities in the Northwest Study Area, and are mainly located within the City Limits. Bicycle facilities for the City of Houston are divided into four types: bike lane, shared lane (also known as a sharrow), shared-use path, and signed bike route. The existing facilities are identified in Figure 2.3. Three of these four types are found in the Study Area - the Northwest does not have any designated shared lanes. A shared-use path exists on Antoine Drive from the White Oak Bayou shared-use trail to Pinemont Drive.

Most facilities within this area have developed as a way to bring cyclists to the White Oak Bayou Trail. Bike lanes and bike routes transition across the major east/west corridors where the corridor's street designs change. The on-street network is lacking north of Pinemont Drive. The expansion of the White Oak Bayou Trail will call for additional bicycle facilities to enable the movement of bikers from the neighborhoods to the trail.

Initial analysis of the network indicates a need to develop and expand the existing bicycle network. Specific attention should be given to:

- Movement of cyclists to the northern portion of the study area where on-street bike facilities are less likely do to corridor constraints and related speeds associated with regional roadways.
- Interstate crossings under surrounding Freeways between the Heights, Northside and the Greater Heights or Northwest neighborhoods.
- Key connection points - or trail heads - from on-street to off-street bike facility networks.

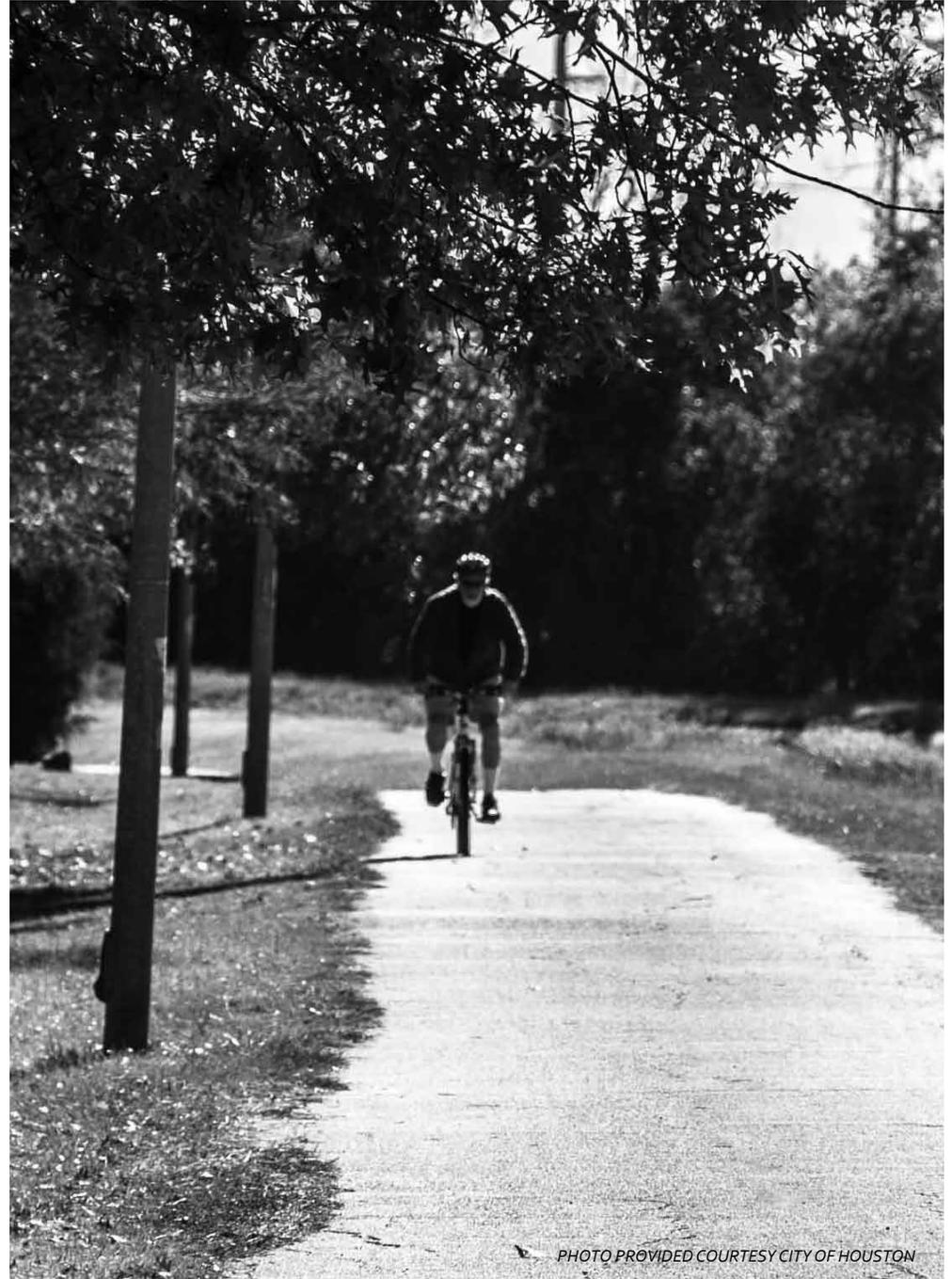


PHOTO PROVIDED COURTESY CITY OF HOUSTON

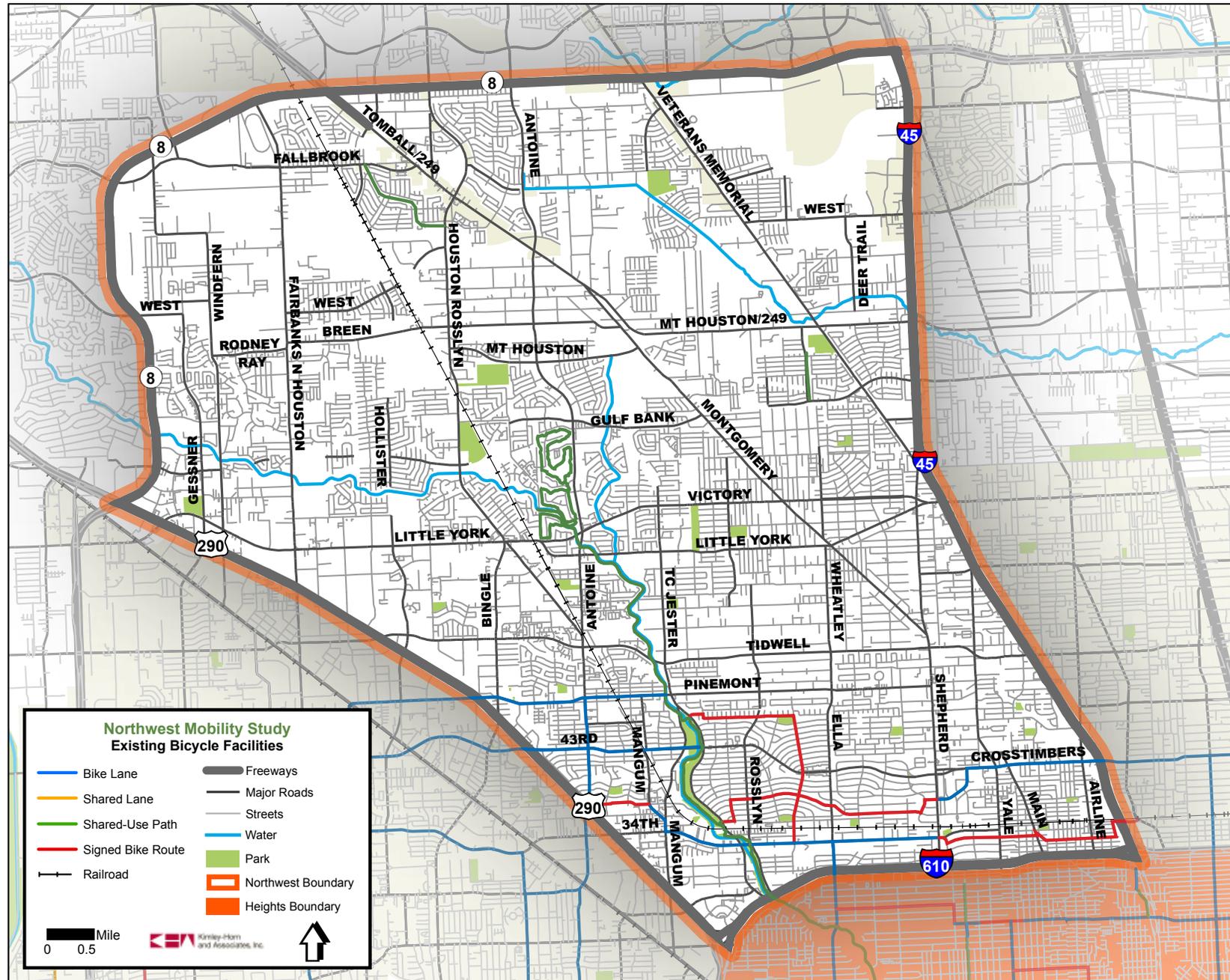


FIGURE 2.3

2.4 Existing Travel Conditions by Period of Day

Intersection Congestion

Data for this study area was collected for major intersections within the Houston city limits. Traffic counts for 41 intersections were analyzed using SYNCHRO traffic analysis software. The 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 2.4 and 2.5 show the level of service (LOS) at each intersection analyzed with available AM peak period and PM peak period data. LOS is a measurement scale that gauges congestion on a grading 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 with a rating of E or F, and thus representing intersections with maximum failure include:

- Victory at Little York: AM = LOS F; PM = LOS F
- Victory at Shepherd: AM = LOS F; PM = No Failure
- Little York at Houston Rosslyn: AM = LOS E; LOS E
- Tidwell at Shepherd: AM = LOS F; PM = LOS F
- 34th and Mangum: AM = No Failure; PM = LOS E
- 34th at Shepherd: AM = LOS F; PM = No Failure

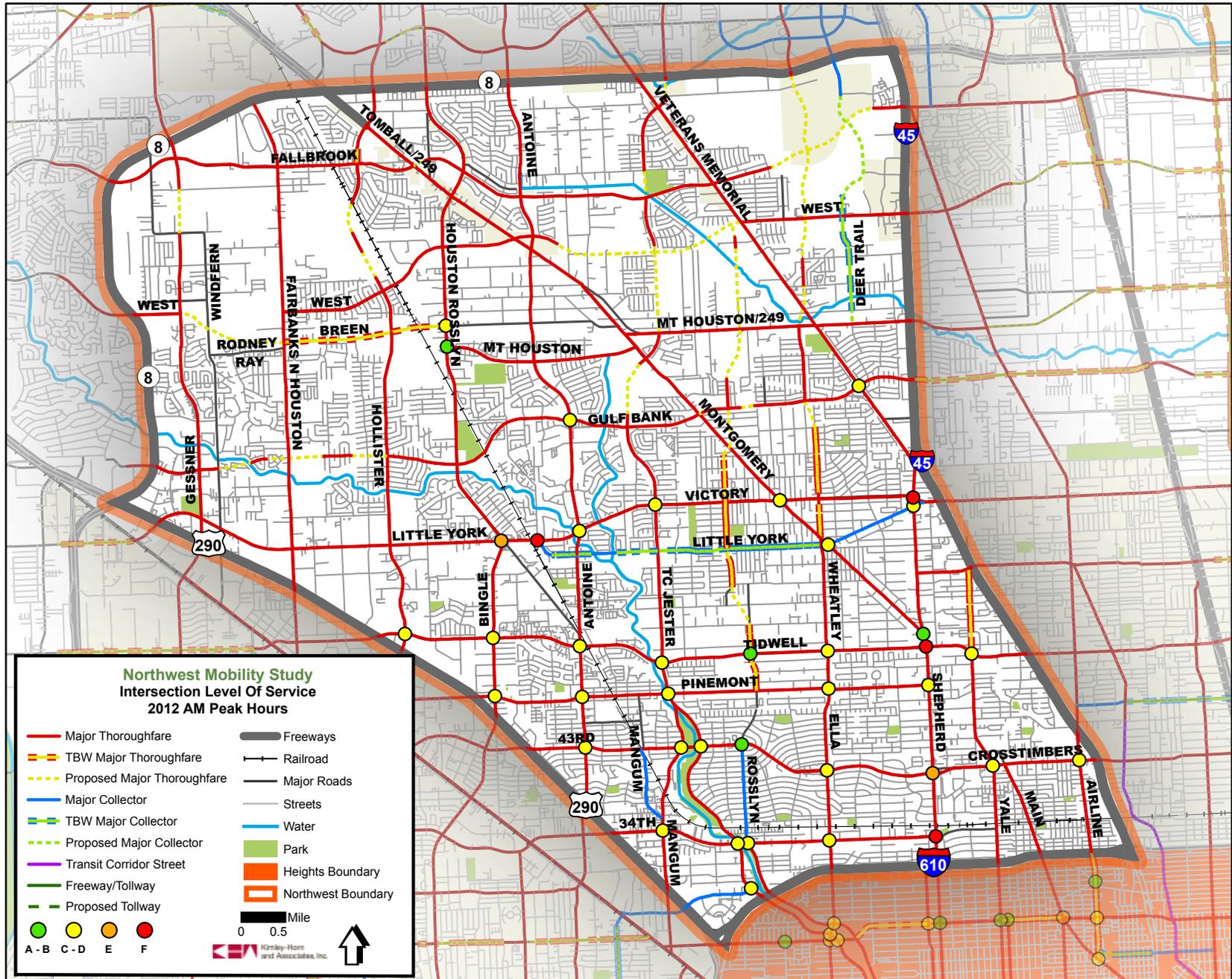


FIGURE 2.4

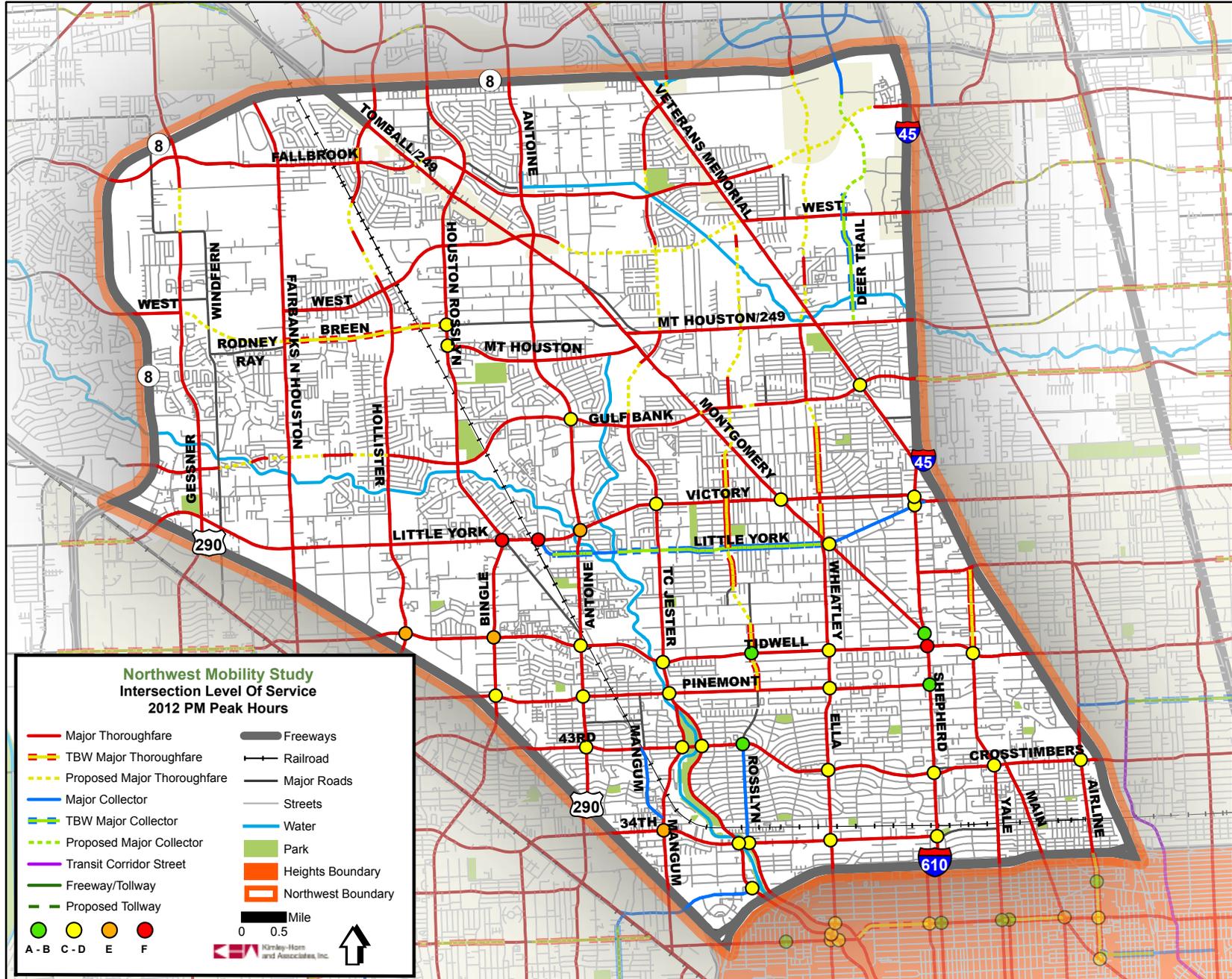


FIGURE 2.5

This Page Intentionally Left Blank

This Page Intentionally Left Blank