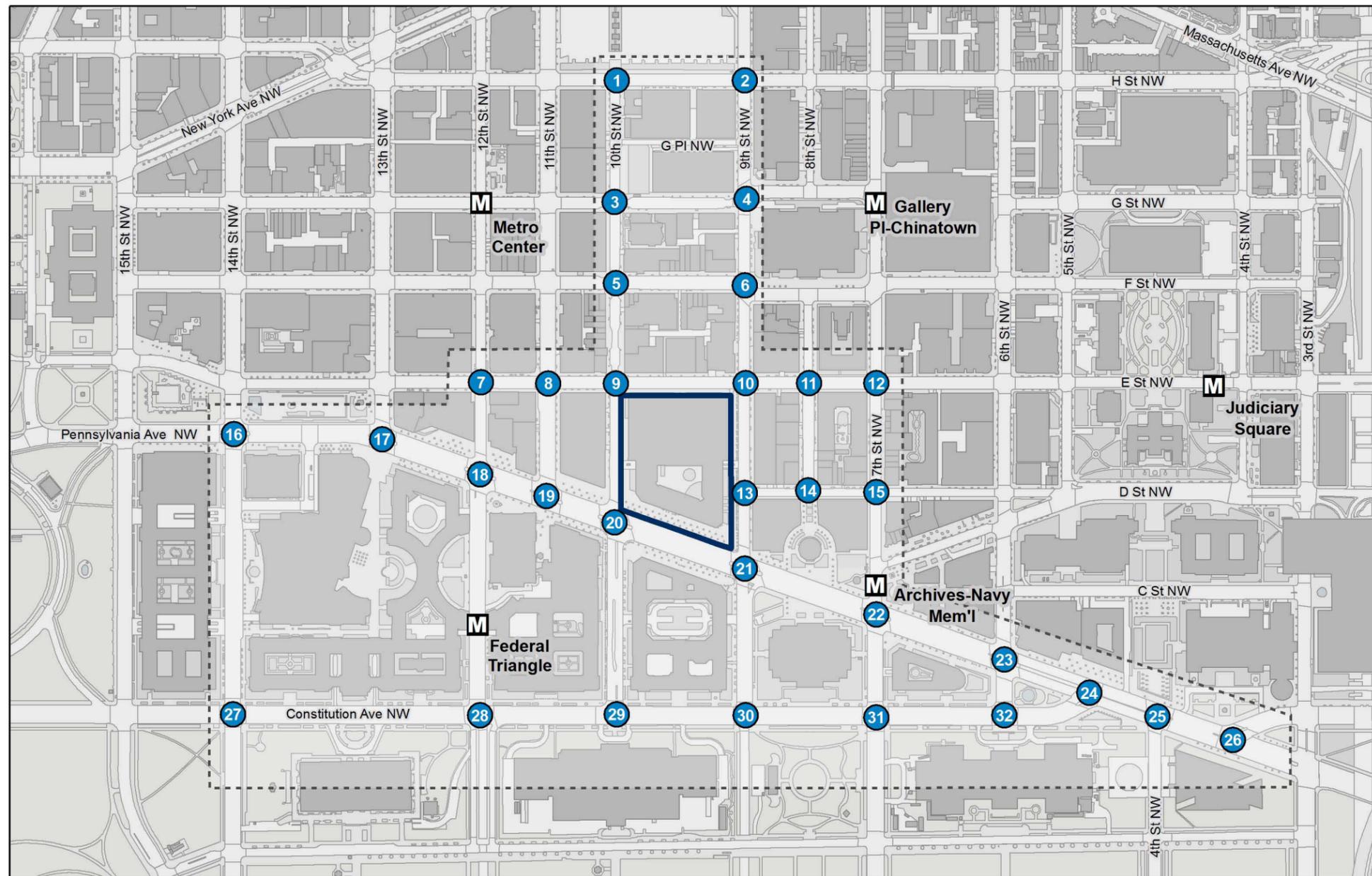
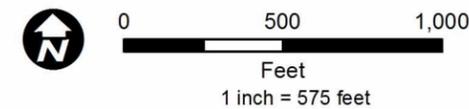


Figure 4-16: JEH Parcel Study Area

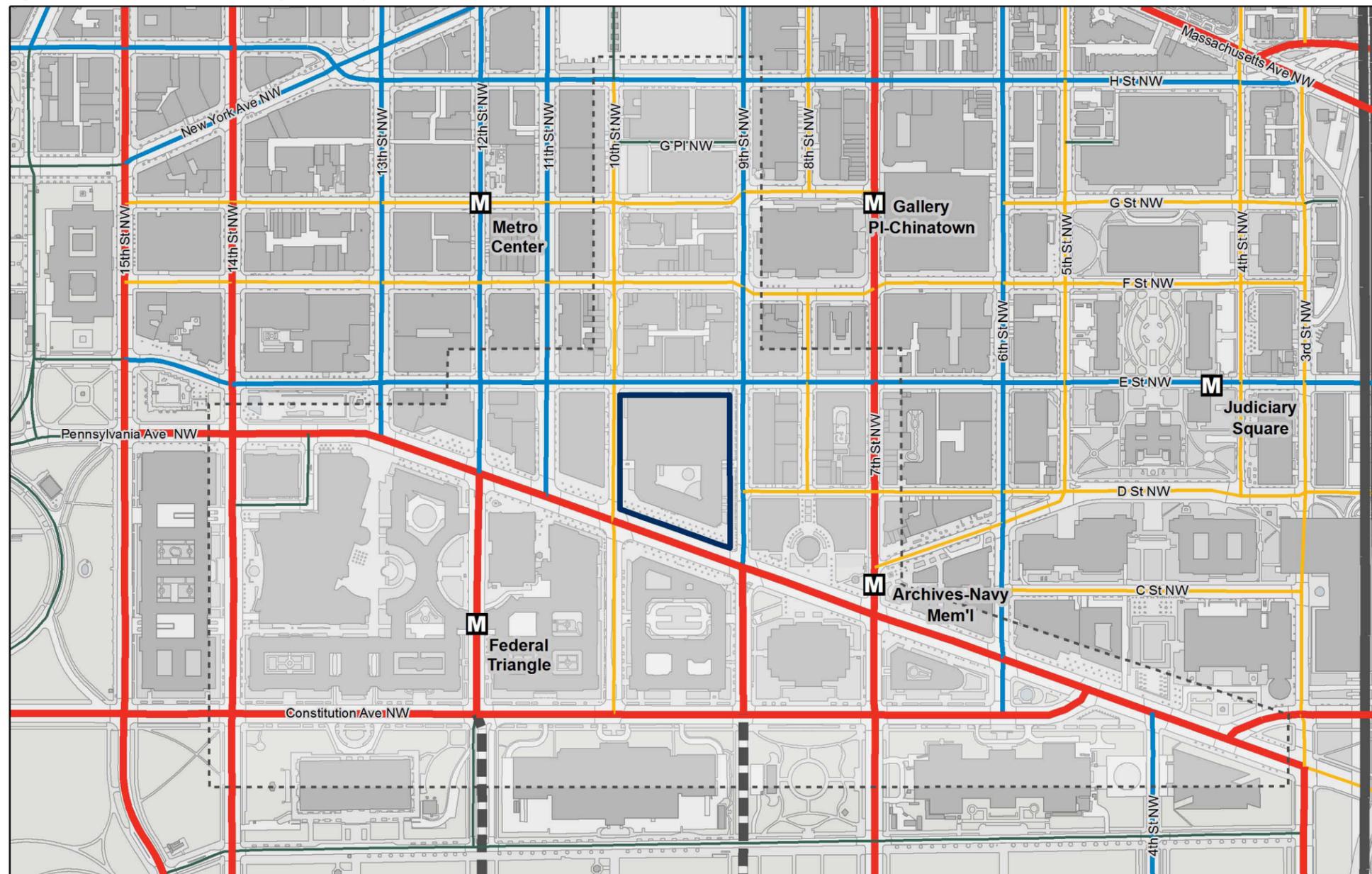


-  Site Boundary
-  Study Area
-  Study Intersection

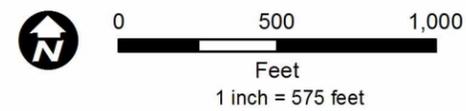


Sources:
ESRI (2013), GSA (2013), DC GIS (2013)

Figure 4-17: JEH Parcel Roadway Hierarchy and Classification



- | | | |
|---------------|--------------------------|----------------|
| Site Boundary | Roadway Hierarchy | Minor Arterial |
| Study Area | Underground Freeway | Collector |
| | Interstate or Freeway | Local |
| | Principal Arterial | |



Sources:
ESRI (2013), GSA (2013), DC GIS (2013)

12th Street NW is classified by DDOT as a minor arterial from the north until Pennsylvania Avenue NW, at which point it becomes a principal arterial. Between Constitution Avenue NW and Pennsylvania Avenue NW, it is a north-south oriented, two-way roadway that operates with three lanes of northbound traffic and two lanes of southbound traffic. This stretch of 12th Street connects to the 12th Street Expressway to the south, south of Constitution Avenue near the National Mall, eventually merging with Maine Avenue SW.

Between Pennsylvania Avenue NW and E Street NW, 12th Street NW is a one-way roadway with four lanes of northbound traffic. In 2012, the AADT north of Pennsylvania Avenue NW was 15,200; south of Pennsylvania Avenue NW, it was 18,400 (DDOT 2013a).

11th Street NW is a two-way roadway that is classified by DDOT as a minor arterial. The north-south roadway carries two lanes of southbound traffic and two lanes of northbound traffic. There is ample bike infrastructure present on this street, including advance stop boxes at intersections and direction-specific bike lanes for both northbound and southbound traffic. 11th Street NW only extends for a short stretch within the study area, from E Street NW to Pennsylvania Avenue NW. In 2012, the AADT for 11th Street NW was 10,000 (DDOT 2013a).

10th Street NW is a north-south roadway that is classified by DDOT as a collector. Between Pennsylvania Avenue NW and H Street NW, 10th Street NW is a one-way, two-lane, southbound only roadway with a sporadic bike lane. However, between Pennsylvania Avenue NW and Constitution Avenue NW, 10th Street NW is a two-way roadway that varies between two and three lanes in the southbound direction and one and two lanes in the northbound direction. In 2012, 10th street NW had an AADT of 2,000 (DDOT 2013a).

9th Street NW is a one-way roadway that is classified by DDOT as a minor arterial. The roadway is oriented north-south, carries three lanes of southbound traffic, and sporadically has a bike lane or bike and bus-only lane. Between Pennsylvania Avenue NW and Constitution Avenue NW, DDOT classifies 9th Street NW as a principal arterial where it becomes a two-way roadway with four lanes of southbound traffic and one lane of northbound traffic. This roadway then leads into the below grade 9th Street Expressway and eventually connects to the Southwest Freeway/I-395. In 2012, the AADT north of the Pennsylvania Avenue NW was 16,700; it was 19,600 south of Pennsylvania Avenue NW (DDOT 2013a).

8th Street NW is a two-way roadway that is classified by DDOT as a collector. The north-south roadway has one lane in each direction and is only present in the study area for a short stretch. During the summer months, this short stretch of roadway is closed to traffic every Thursday from 1:00 PM until dark for a Farmer's Market.

7th Street NW is a two-way roadway that is classified by DDOT as a principal arterial. The roadway is north-south oriented. Between E Street NW and Pennsylvania Avenue NW, the roadway has one to two lanes of southbound traffic and two lanes of northbound traffic, with one of the northbound lanes reserved only for bikes and buses north of Indiana Avenue. However, between Pennsylvania Avenue NW and Constitution Avenue NW, the roadway width increases to three lanes of traffic in both directions. In 2012, 7th Street NW had an AADT of 15,500 (DDOT 2013a).

6th Street NW is a two-way roadway that is classified by DDOT as a minor arterial. The north-south roadway is present in the study areas for a very short stretch and has three lanes of traffic in both directions. (The AADT values for 6th Street NW are not included, because the roadway section in the study area is so small and the AADT values do not match up well with this location.)

Constitution Avenue NW is a two-way roadway that is classified by DDOT as a principal arterial. The roadway is east-west oriented and skirts the northern edge of the National Mall. Constitution Avenue NW carries four lanes of traffic in each direction. This roadway progresses into Route 50 to the west, which serves as a major regional and commuter route to Virginia. In 2012, the AADT east of the JEH parcel was 31,900; west of the JEH parcel, it was 21,800 (DDOT 2013a).

Pennsylvania Avenue NW is a two-way roadway that is classified by DDOT as a principal arterial. The roadway runs along a diagonal in a northwest to southeast orientation. Pennsylvania Avenue NW ranges from three to four lanes of traffic in both directions, although it is as narrow as two to three lanes between 13th and 15th Streets NW. In 2012, west of the JEH parcel on Pennsylvania Avenue NW, the AADT was 18,600 and east of the parcel, it was 28,900 (DDOT 2013a).

Pennsylvania Avenue NW has bike infrastructure with a two-way cycle track that runs through the central median of the roadway between 15th Street NW and 3rd Street NW. This cycle track has one lane of traffic in each direction, established turning lanes, and is clearly separated from automobile traffic through the means of Armadillo lane dividers or Park-lts (recycled rubber parking stops usually used in parking lots).

D Street NW is a two-way roadway that is classified by DDOT as a collector. The roadway is oriented east-west and extends from 9th Street NW to 7th Street NW. D Street NW has one lane of traffic in both westbound and eastbound directions, and in 2012, it had an AADT of 4,300 (DDOT 2013a).

E Street NW is a two-way roadway that is classified by DDOT as a minor arterial. The roadway is oriented east-west and has one lane of traffic in each direction with a central turning lane. This roadway has one-way bike lanes present on both westbound and eastbound lanes, and in 2012, the AADT was 10,000 (DDOT 2013a).

F Street NW is a two-way roadway that is classified by DDOT as a collector. The roadway is oriented east-west and has two lanes of traffic in each direction. Only the stretch of roadway between 10th Street NW and 9th Street NW is within the study area. In 2012, this portion of F Street NW had an AADT of 7,800 (DDOT 2013a).

G Street NW is oriented east-west and is a two-way roadway with one lane of traffic in each direction. This roadway is classified by DDOT as a collector. Only the stretch of roadway between 10th Street NW and 9th Street NW is within the study area. Portions of G Street NW have one-way bike lanes present on both eastbound and westbound lanes between 9th and 10th Streets NW. In 2012, this portion of G street NW had an AADT of 6,700 (DDOT 2013a).

H Street NW is a two-way roadway that is classified by DDOT as a minor arterial. The roadway is oriented east-west and has three lanes of traffic in each direction. Only the stretch of roadway between 10th Street NW and 9th Street NW is within the study area. In 2012, this portion of H Street had an AADT of 15,600 (DDOT 2013a).

Figure 4-18: JEH Parcel Existing Lane Geometry and Traffic Control Type

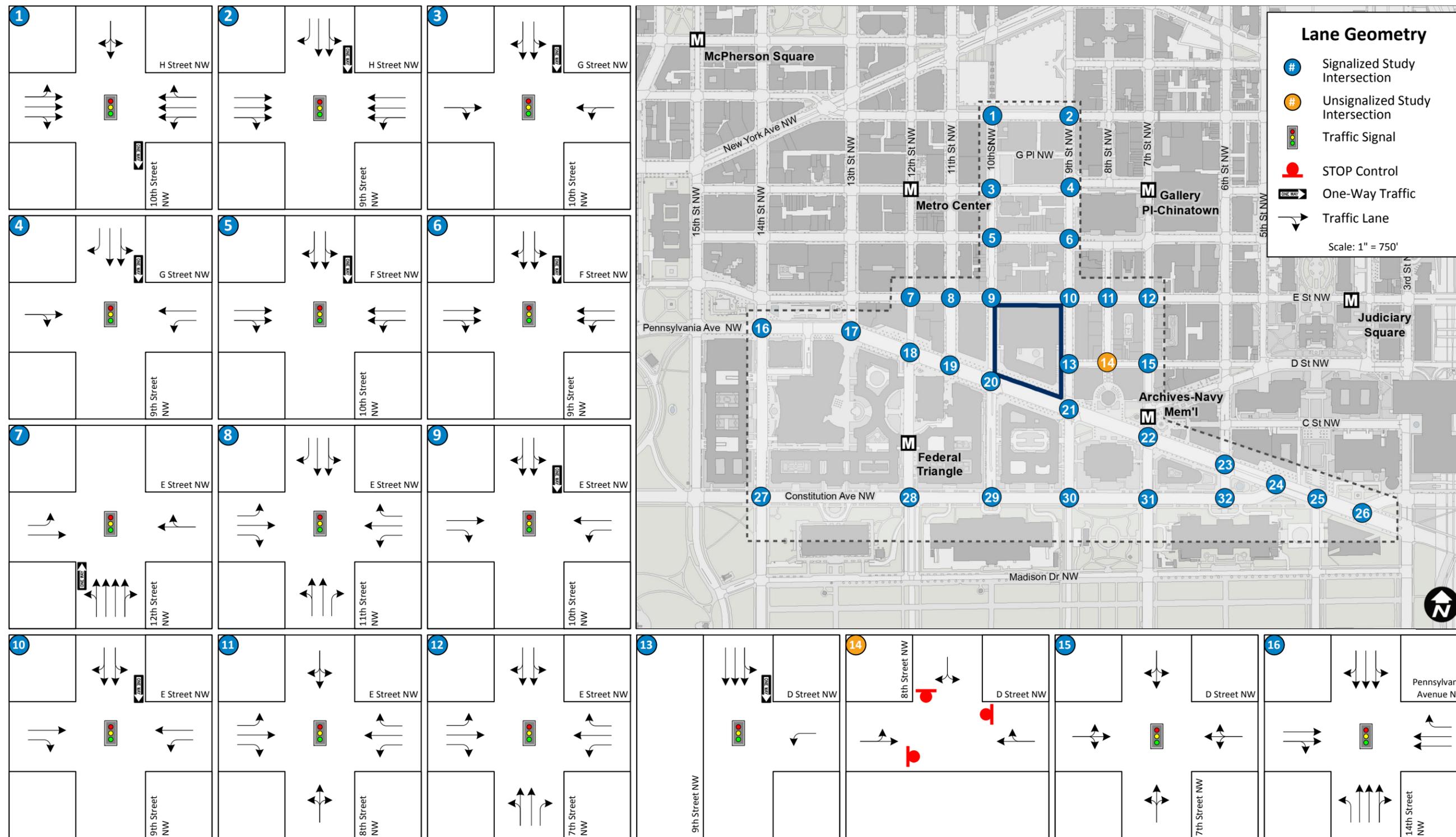


Figure 4-18: JEH Parcel Existing Lane Geometry and Traffic Control Type (continued)

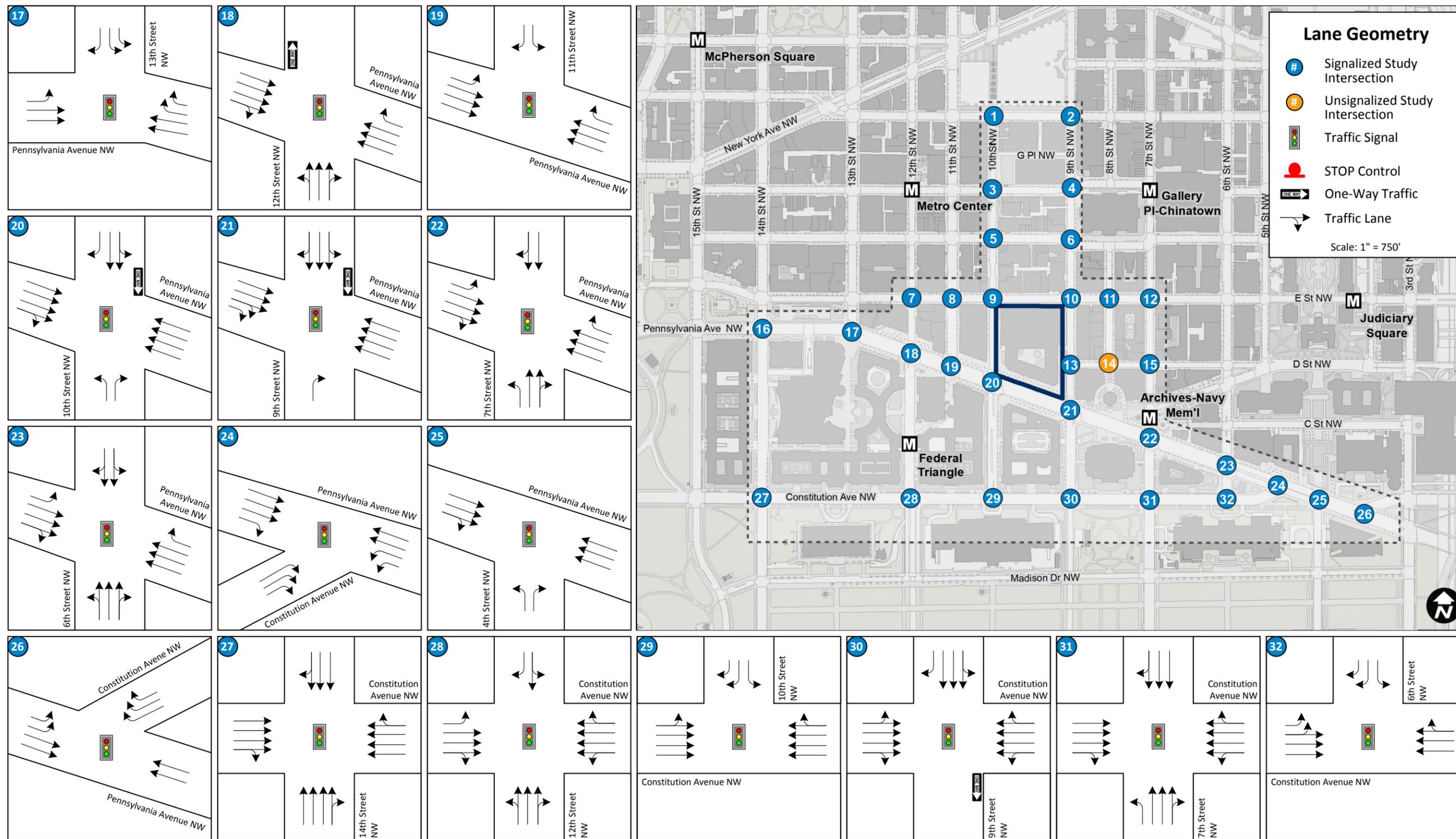


Figure 4-19: JEH Parcel Existing AM and PM Peak Hour Turning Movement Volumes

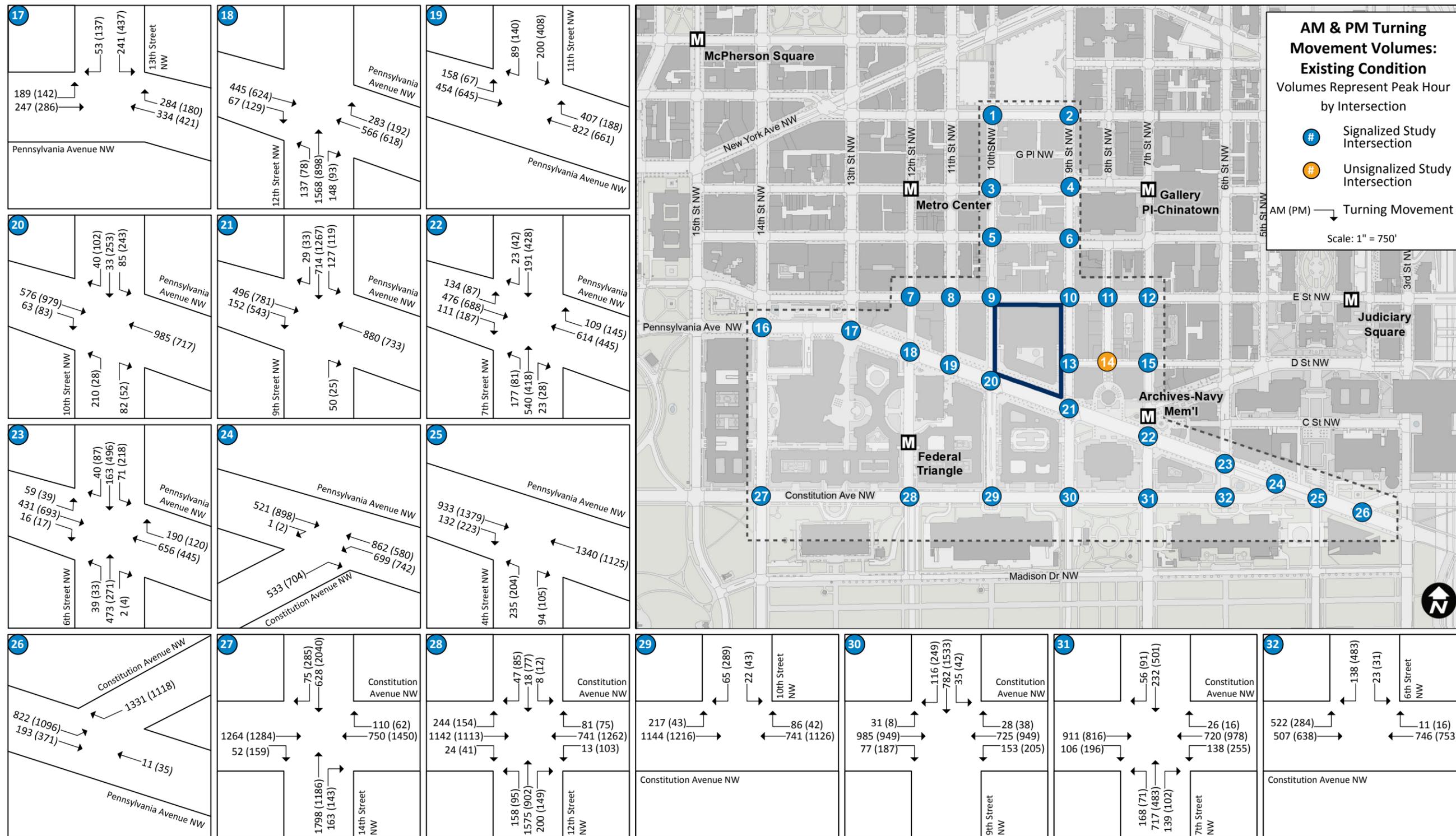
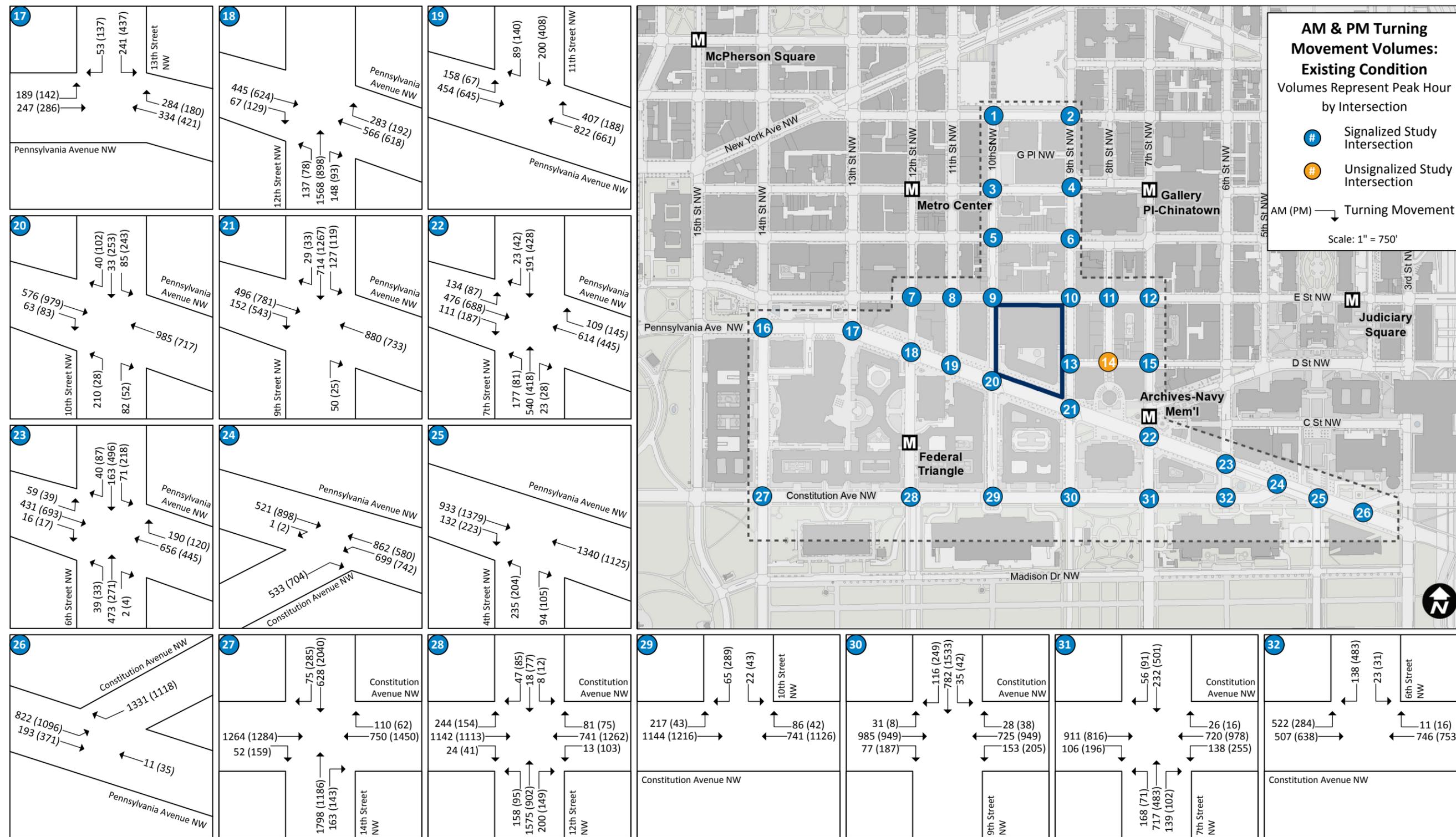


Figure 4-19: JEH Parcel Existing AM and PM Peak Hour Turning Movement Volumes (continued)



JEH PEDESTRIAN NETWORK

- Sidewalks are provided along both sides of all roads throughout the entire study area, except for areas undergoing temporary construction, and vary from the required minimum width of 2 feet to upwards of 30 feet as a result of design requirements of the PAP. Most of the site complies with ADA requirements which designate that sidewalks require a minimum width of 5.0 if setback from the curb or 6.0 feet if at the curb face.
- The study area is generally a zone of low pedestrian injury counts, however, there are a few problem intersections that have high pedestrian injury counts. Barriers and areas of concern that adversely affect pedestrian travel include narrow sidewalks along several streets, construction, and road quality.
- Pedestrian volumes in the study area are generally high in the morning during rush hour, during the lunch hour, and during the evening as commercial pedestrians mix with the dinner crowd transiting the area. The lowest pedestrian activity was during the period between the AM peak commuting hours and the lunch hour. Otherwise the area experiences regular high pedestrian activity.

4.1.9.4 Data Collection

As part of the data collection process, a detailed inventory of the lane geometry was conducted through field reconnaissance and a study of aerial imagery. Based on this information, the existing lane geometry and traffic control type (signalized or unsignalized) of intersections in the study area was assigned, as shown in figure 4-18. Section 3.10.4.1 contains a description of the data collection process and dates of collection.

To supplement existing data collected for the Old Post Office Building Redevelopment Final Environmental Assessment (GSA in cooperation with NCPD 2013a) and the Union Station to Georgetown Alternatives Analysis for Premium Transit Service (DDOT 2013b), vehicular counts from 25 intersections in the study area were collected. The data from the 25 intersections combined with the available 7 intersection vehicular counts provided the necessary data to cover all 32 study area intersections. Vehicular counts include vehicular, truck, bicycle, and pedestrian volumes. These counts were used in combination with data from the Old Post Office study (collected in April 2012) and the DC Streetcar Alternatives Analysis (collected in early 2013) to perform the Existing Condition traffic operations analyses.

As advised by DDOT and similar to other transportation studies performed for DDOT, the worst-case AM and PM weekday peak hour volumes by intersection were identified, so that a worst-case condition for traffic operations could be evaluated. Based on the various count collection periods for the study area intersections, the overall weekday AM peak hour occurs between 8:15 AM and 9:15 AM, and the weekday PM peak hour occurs between 5:00 PM and 6:00 PM. Figure 4-19 shows the existing AM and PM weekday peak hour turning movement volumes for the study area.

4.1.9.5 Pedestrian Network

Pedestrian facilities within the study area are highly used and generally adequate. A few sections of sidewalk are deficient because of width and/or accessibility per the requirements of the Americans with Disabilities Act (ADA). Facilities were considered adequate if sidewalk conditions were in decent condition (with only small amounts of overgrowth, cracks, or uneven pavement) and were at least 4 feet wide.

Sidewalk Description and Pedestrian Activity

Sidewalks are provided along both sides of all roads through the entire study area, except for areas undergoing temporary construction. Intersections within the study area generally have reasonable accommodations for pedestrians, including traffic lights and crosswalks; although, in some instances, these crosswalks are not ADA compliant (see ADA Compliance).

As mentioned in section 3.10.4.3, the minimum sidewalk width requirement, as determined by the Federal Highway Administration (FHWA), exists throughout most of the study area. Due to zoning requirements, certain stretches of sidewalk far exceed this minimum width. For example, Pennsylvania Avenue has 30-foot sidewalk sections as a result of the design requirements of the PAP and other local land use and historic preservation regulations as described in section 4.1.4. Due to the constant sidewalk width variations in downtown areas as a result of street furniture, planting strips, and vendors or restaurant seating areas, sidewalk width distances are not mapped for the JEH study area.

According to DDOT's 2009 Pedestrian Master Plan, the Downtown Business District, which contains the JEH study area, has mostly mid- to high-pedestrian activity potential. Constitution Avenue NW, 14th Street NW, 7th Street NW, and segments of Pennsylvania Avenue NW and 12th Street NW have the highest levels of pedestrian activity and subsequently are likely candidates for high pedestrian deficiency (DDOT 2009a). Therefore, this area is prioritized for further study and possible action.

This same Master Plan does not identify any streets in the study area that have "sidewalk gaps," which are defined as a missing sidewalk that is more than 10 percent of the length of the block. However, it is worth noting that there are intermittent locations within the study area that negatively impact the quality and attractiveness of pedestrian travel, including narrow sections of sidewalks north of Pennsylvania Avenue (mostly due to restaurants' outdoor seating on the sidewalks), sections of sidewalk without street trees, construction, and commercial loading areas. These deficiencies are common to urban environments.

The origins and destinations of pedestrian trips in the study area are a mix of office, retail, restaurants, and tourist attractions. During the lunch period on July 17, 2014, a high level of foot traffic to and from cafes and restaurants in the area was observed. The same level of traffic was seen during the PM peak period as commercial pedestrians mixed with the dinner crowd transiting the area. According to the Old Post Office Environmental Assessment, pedestrian volumes are also very high in the morning rush hour when commuters arrive to work (GSA in cooperation with NCPD 2013b). As observed, the area at the intersection of F Street NW and 7th Street NW also experienced an increase in foot traffic during the lunch break due to the number of food trucks that congregate in this area. Occasionally food trucks also line up along E Street NW, between 9th and 10th Streets NW, as well as along 12th Street NW near Metro Center Metro Station. The lowest pedestrian activity in the area was during the period between the AM peak commuting hours and the lunch hour. Otherwise the area experiences regular high pedestrian activity.