

COMPREHENSIVE TRANSPORTATION REVIEW

1109 CONGRESS STREET NE PUD

WASHINGTON, DC

October 20, 2016



ZONING COMMISSION
District of Columbia
CASE NO.16-13
EXHIBIT NO.22

Prepared by:



1140 Connecticut Avenue NW
Suite 600
Washington, DC 20036
Tel: 202.296.8625
Fax: 202.785.1276

3914 Centreville Road
Suite 330
Chantilly, VA 20151
Tel: 703.787.9595
Fax: 703.787.9905

15125 Washington Street
Suite 136
Haymarket, VA 20169
Tel: 703.787.9595
Fax: 703.787.9905

www.goroveslade.com

This document, together with the concepts and designs presented herein, as an instrument of services, is intended for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization by Gorove/Slade Associates, Inc., shall be without liability to Gorove/Slade Associates, Inc.

Contents

| | |
|---------------------------------------------|----|
| Executive Summary..... | 1 |
| Introduction | 2 |
| Purpose of Study | 2 |
| Contents of Study | 2 |
| Study Area Overview | 5 |
| Major Transportation Features..... | 5 |
| Project Design | 10 |
| Access and Loading | 10 |
| Parking | 10 |
| Bicycle and Pedestrian Facilities | 11 |
| Transportation Demand Management (TDM)..... | 11 |
| Trip Generation..... | 13 |
| Transit | 14 |
| Existing Transit Service | 14 |
| Proposed Transit Service | 14 |
| Site-Generated Transit Impacts | 15 |
| Pedestrian Facilities | 18 |
| Pedestrian Study Area..... | 18 |
| Pedestrian Infrastructure..... | 18 |
| Site Impacts..... | 18 |
| Bicycle Facilities | 22 |
| Existing Bicycle Facilities | 22 |
| Proposed Bicycle Facilities | 22 |
| Site Impacts..... | 23 |
| Summary and Conclusions..... | 25 |

Figures

| | |
|----------------------------------------------------------|----|
| Figure 1: Site Location..... | 3 |
| Figure 2: Site Aerial | 4 |
| Figure 3: Summary of Walkscore and Bikescore..... | 7 |
| Figure 4: Major Regional Transportation Facilities | 8 |
| Figure 5: Major Local Transportation Facilities..... | 9 |
| Figure 6: Site Plan | 12 |
| Figure 7: Existing Transit Service..... | 17 |
| Figure 8: Pedestrian Pathways..... | 20 |
| Figure 9: Existing Pedestrian Infrastructure..... | 21 |
| Figure 10: Existing Bicycle Facilities | 24 |

Tables

| | |
|--------------------------------------------------------|----|
| Table 1: Car-share within 0.25 miles of the Site | 7 |
| Table 2: Multi-Modal Trip Generation Summary..... | 13 |
| Table 3: Summary of Mode Split Assumptions | 13 |
| Table 4: Metrobus Route Information | 16 |
| Table 5: Sidewalk Requirements..... | 18 |



EXECUTIVE SUMMARY

The following report is a Comprehensive Transportation Review (CTR) for the 1109 Congress Street NE Planned Unit Development (PUD). This report reviews the transportation aspects of the project's Consolidated PUD application. The Zoning Commission Case Number is 16-13.

The purpose of this study is to review the design of the project and evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This evaluation is based on the existing multi-modal functions of the site. This report concludes that **the project will not have a detrimental impact** to the surrounding transportation network assuming that all planned site design elements are implemented.

Proposed Project

The 1109 Congress Street NE site is currently occupied by two commercial buildings, located approximately two blocks from the NoMa Gallaudet U Metrorail Station. The site is generally bound by the Uline Arena development to the north, Congress Street to the west, L Street to the south, and an alley and adjacent buildings to the east.

The application plans to develop the site into a mixed-use development including residential and retail uses. The project will be an eight story building with a penthouse containing approximately 64 dwelling units and approximately 3,825 square feet of retail.

The development will be served by seven surface parking spaces along the alley accessible via an easement from Congress Street. Loading will be on-street from L Street at the south end of the site as well as on-street from Congress Street.

Pedestrian facilities along Congress Street and L Street will be improved to include sidewalk and buffer widths that meet or exceed DDOT requirements, where available.

Multi-Modal Impacts and Recommendations

Transit

The site is served by regional and local transit services such as Metrorail, Circulator, and Metrobus. The site is 0.2 miles from the NoMa Gallaudet U Metrorail Station portal on M Street NE, and many Metrobus stops are located within a block of the site along K Street NE.

Although the development will be generating new transit trips, existing facilities have enough capacity to handle the new trips.

Pedestrian

The site is surrounded by a well-connected pedestrian network. Most roadways within a quarter-mile radius provide sidewalks and acceptable crosswalks and curb ramps, particularly along the primary walking routes. There are some pedestrian barriers surrounding the site such as limited connectivity due to the railroad west of the site.

Bicycle

Capital Bikeshare stations can be found within a few blocks of the site, for example there is a station 0.2 miles from the site on M Street, on the immediate opposite side of the railroad underpass. The site is also nearby routes and bike lanes on Delaware Avenue to the west as well as 4th Street and 6th Street to the east and I Street to the south.

On site, the development will meet short-term bicycle parking and on-site secure long-term bicycle parking for residents and retail employees.

Vehicular

The site is well-connected to regional roadways such as I-395 and I-695, primary and minor arterials such as Florida Avenue and K Street, and an existing network of collector and local roadways.

Since the vehicular trips do not meet the Comprehensive Transportation Review thresholds for additional study, the planned development is not expected to have adverse vehicular impacts on the surrounding transportation network.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact to the surrounding transportation network assuming that all planned site design elements are implemented.



INTRODUCTION

PURPOSE OF STUDY

This report reviews the transportation elements of the project, supplementing material provided in the Site Plan Package that accompanied the Zoning Commission Application for the 1109 Congress Street NE development.

The 1109 Congress Street NE mixed-use development will contain a residential building with retail. The site, shown in Figure 1 and Figure 2, is located in the H Street-NoMa neighborhood in northeast DC.

The purpose of this report is to:

1. Review the transportation elements of the development site plan and demonstrate that the site conforms to DDOT's general policies of promoting non-automobile modes of travel and sustainability.
2. Provide information to the District Department of Transportation (DDOT) and other agencies on how the development of the site will influence the local transportation network. This report accomplishes this by identifying the potential trips generated by the site on all major modes of travel and where these trips will be distributed on the network.

CONTENTS OF STUDY

This report contains nine sections as follows:

- Study Area Overview
This section reviews the area near and adjacent to the proposed project and includes an overview of the site location.
- Project Design
This section reviews the transportation components of the project, including the site plan and access. This chapter also contains the proposed Transportation Demand Management (TDM) plan for the site.
- Trip Generation
This section outlines the travel demand of the proposed project. It summarizes the proposed trip generation of the project.

- Transit
This section summarizes the existing and future transit service adjacent to the site, reviews how the project's transit demand will be accommodated, outlines impacts, and presents recommendations as needed.
- Pedestrian Facilities
This section summarizes existing and future pedestrian access to the site, reviews walking routes to and from the project site, outlines impacts, and presents recommendations as needed.
- Bicycle Facilities
This section summarizes existing and future bicycle access to the site, reviews the quality of cycling routes to and from the project site, outlines impacts, and presents recommendations as needed.
- Summary and Conclusions
This section presents a summary of the recommended mitigation measures by mode and presents overall report findings and conclusions.



Figure 1: Site Location

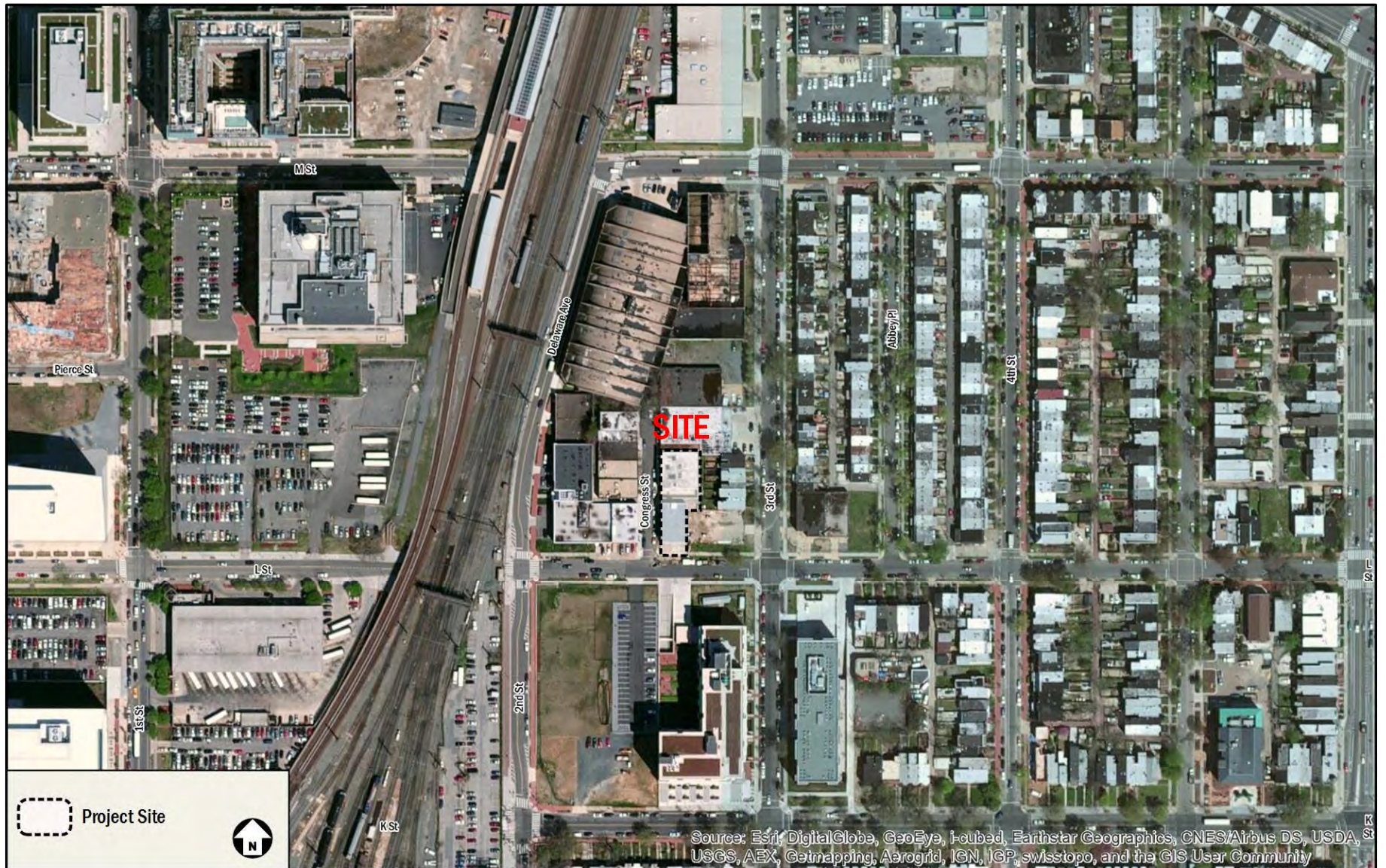


Figure 2: Site Aerial



STUDY AREA OVERVIEW

This section reviews the study area and includes an overview of the site location, including a summary of the major transportation characteristics of the area and of future regional projects.

The following conclusions are reached within this chapter:

- The site is surrounded by an extensive regional and local transportation system that will connect the residents, employees, and patrons to the proposed development.
- The site is well-served by public transportation with access to Metrorail, and several local and regional Metro bus lines.
- There is existing bicycle infrastructure including several bike lanes and shared lanes in the vicinity of the site.
- Pedestrian conditions are generally good, particularly along anticipated major walking routes.

MAJOR TRANSPORTATION FEATURES

Overview of Regional Access

The 1109 Congress Street site has ample access to regional vehicular- and transit-based transportation options, as shown in Figure 4, that connect the site to destinations within the District, Virginia, and Maryland.

The site is accessible from several US highways such as US-50 (New York Avenue) and US-1, as well as Interstate 395. The highways and interstates create connectivity to the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs. All of these roadways bring vehicular traffic within half-mile of the site, at which point arterials and local roads can be used to access the site directly.

Near this site there are several local and regional bus stops that connect the city limits with the innermost roads of Washington, DC. The multiple bus route options allow for more frequent bus pickups, and specified travel destination options, as shown in Figure 5.

The site is located extremely close to the NoMa-Gallaudet U Metrorail station. The proposed development has access to the Red line which provides connections to areas in the District and Maryland. The Red Line connects Prince George's County and Montgomery County, Maryland while providing access to the

District core. In addition, the Red Line provides connections to all additional Metrorail lines allowing for access to much of the DC Metropolitan area.

Overall, the site has access to several regional roadways and transit options, making it convenient to travel between the site and destinations in the District, Virginia, and Maryland.

Overview of Local Access

There are several local transportation options near the site that serve vehicular, transit, walking, and cycling trips, as shown on Figure 5.

The site is served by a local vehicular network that includes several primary and minor arterials such as Florida Avenue and 6th Street. In addition, there is an existing network of connector and local roadways that provide access to the site.

The Metrobus system provides local transit service in the vicinity of the site, including a connection to Union Station which acts as a primary hub for Amtrak, VRE, and Marc services. As shown in Figure 5, there are three bus routes that service the site. In the vicinity of the site the majority of bus routes travel along Florida Avenue and K Street. These bus routes connect the site to many areas of the District.

There are existing bicycle facilities that connect the site to areas within the District, most notably Metropolitan Branch Trail and the 4th Street bike lanes, as shown in Figure 10. East of the site, the 6th Street bike lanes provide further connection to the rest of the District.

In the vicinity of the site, most roadways provide sidewalks with crosswalks present at most intersections. Anticipated pedestrian routes, such as those to public transportation stops, retail zones, and community amenities provide acceptable pedestrian facilities; however there are some pedestrian barriers in the area that limit the overall connectivity to and from the site. A detailed review of existing and proposed pedestrian access and infrastructure is provided in a later section of this report.

Overall, the 1109 Congress Street site is surrounded by an expansive local transportation network that allows for efficient transportation options via transit, bicycle, walking, or vehicular modes.



Car-sharing

Three car-sharing companies provide service in the District: Zipcar, Enterprise Carshare, and Car2Go. All three services are private companies that provide registered users access to a variety of automobiles. Of these, Zipcar has designated spaces for their vehicles close to the site. There are five Zipcar car-share locations within a quarter-mile of the site. Table 1 breaks down the different locations that are made available to the public.

Car-sharing is also provided by Car2Go, which provides point-to-point car sharing. Car2Go can be used for one-way rentals and currently has a fleet of vehicles located throughout the District and Arlington. Car2Go vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit (RPP) location in any zone throughout the defined “Home Area”. Members do not have to pay the meters or pay stations. Car2Go does not have permanent designated spaces for their vehicles; however availability is tracked through their website and mobile phone application, which provides an additional option for car-sharing patrons.

Walkscore

Walkscore.com is a website that provides scores and rankings for the walking, biking, and transit conditions within neighborhoods of the District. Based on this website the planned development is located in the H Street-NoMa neighborhood. The project location itself has a walk score of 94 (or “Walker’s Paradise”), a transit score of 79 (or “Excellent Transit”), and a bike score of 91 (or “Biker’s Paradise”). Figure 3 shows the neighborhood borders in relation to the site location and displays a heat map for walkability and bikeability.

The site is situated in an area with good bike scores due to its proximity to bike facilities and flat topography. The high transit score was based on the proximity to the NoMa-Gallaudet U Metrorail station, car share, and multiple bus lines.

Overall, the H Street-NoMa neighborhood has a high walk, high transit, and high bike scores. Additionally, other planned developments and roadway improvements will help increase the walk and bike scores in the H Street-NoMa neighborhood



Table 1: Car-share within 0.25 miles of the Site

| Carshare Location | Number of Vehicles |
|--------------------------------------------|--------------------|
| Zipcar | |
| 3rd & M Street NE (Tag B Lot) | 3 vehicles |
| The Loree Grand @ 250 K Street NE | 2 vehicles |
| 3rd /I Street NE - On Street | 2 vehicles |
| First & M Apartments | 3 vehicles |
| Constitution Square (Harris Teeter Garage) | 1 vehicle |
| Total | 11 vehicles |

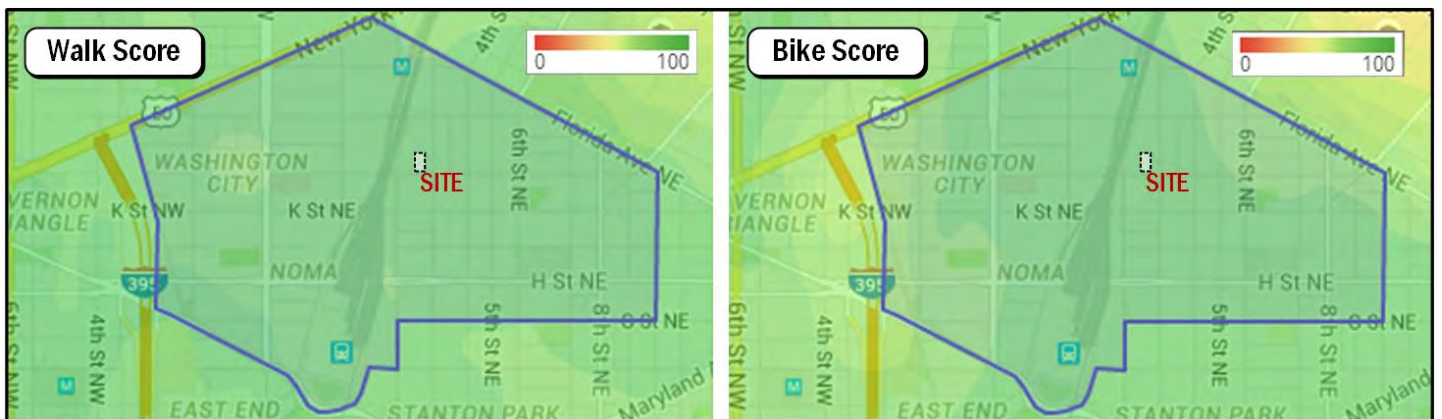


Figure 3: Summary of Walkscore and Bikescore

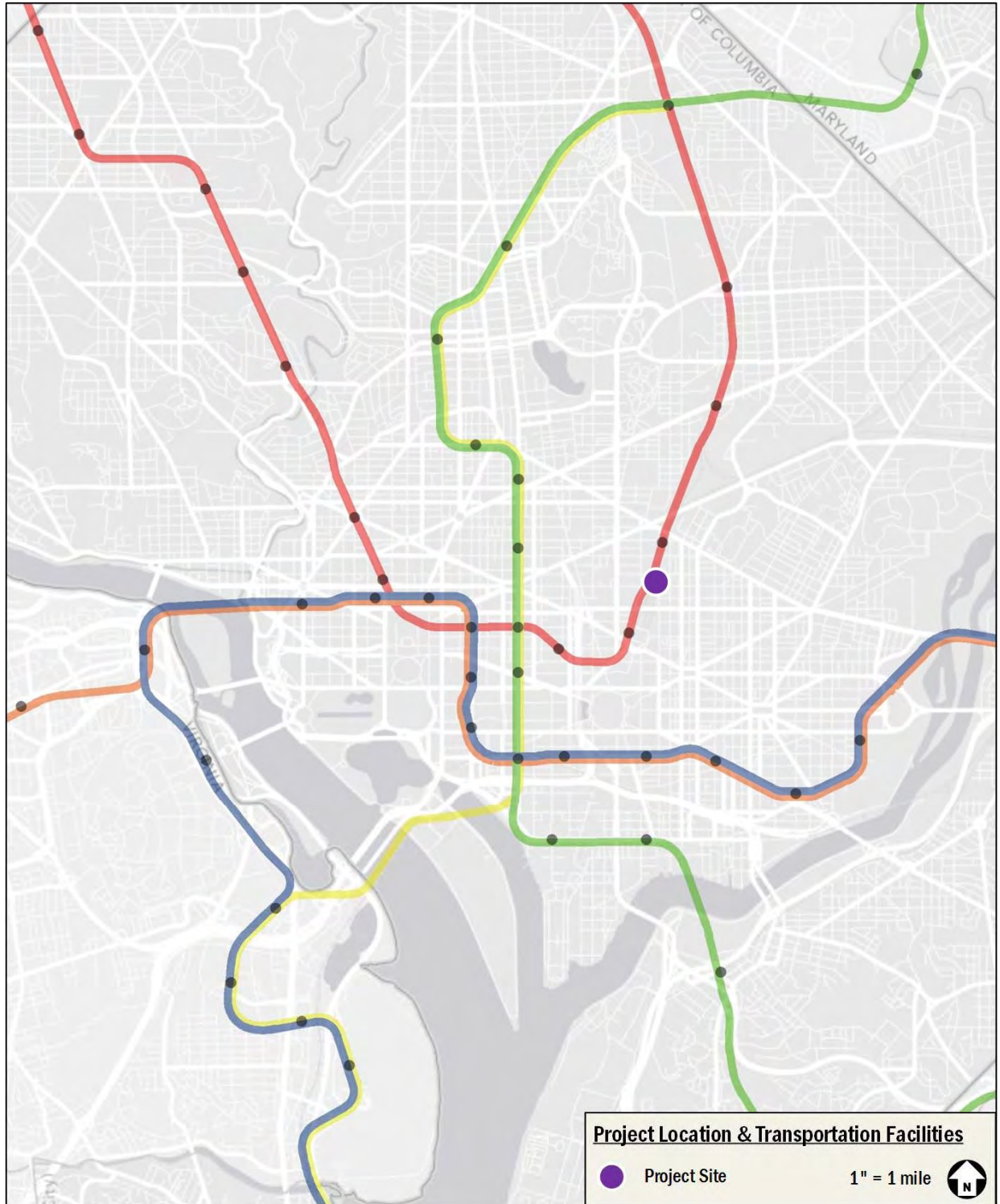


Figure 4: Major Regional Transportation Facilities

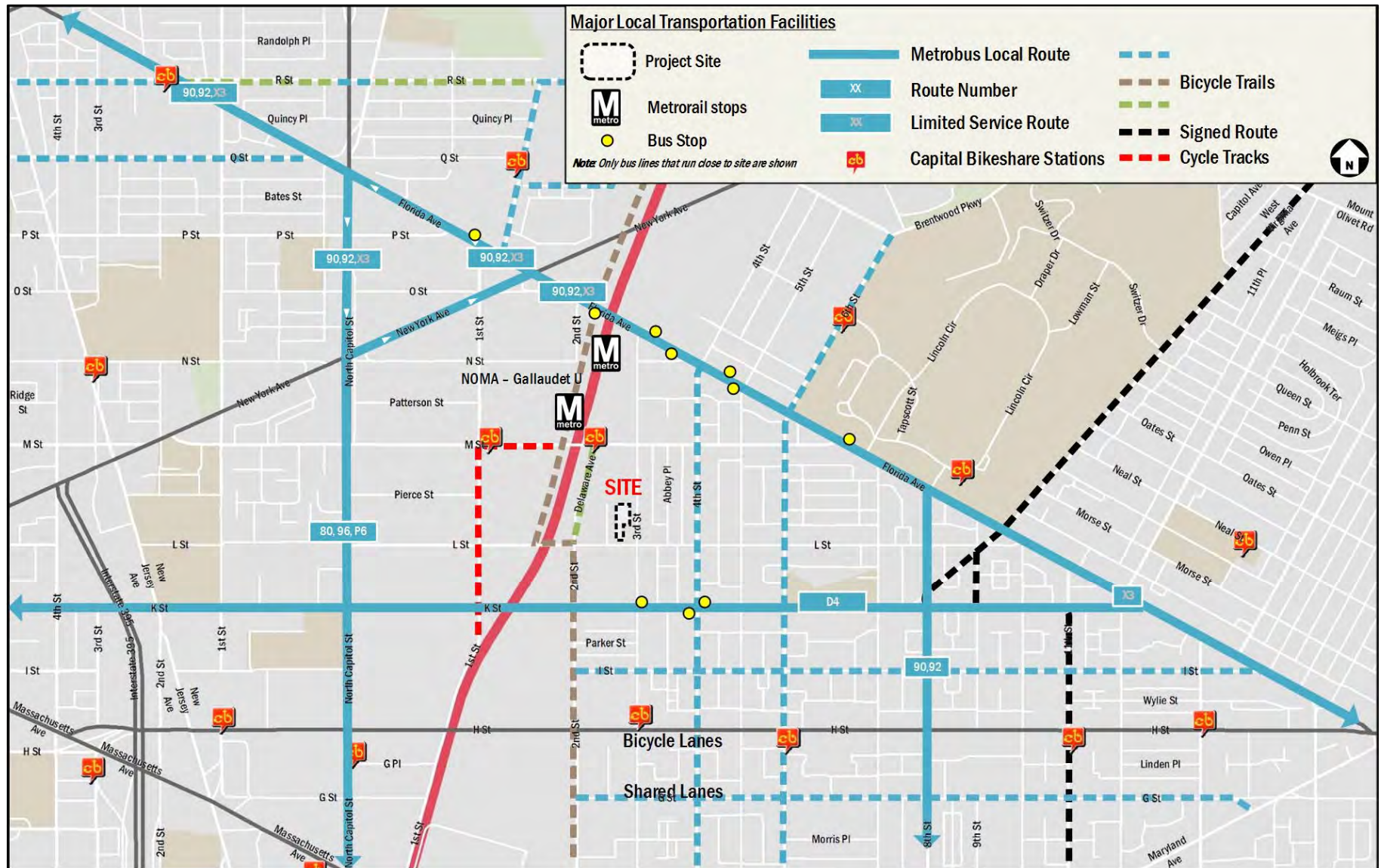


Figure 5: Major Local Transportation Facilities

PROJECT DESIGN

This section reviews the transportation components of 1109 Congress Street NE, including the proposed site plan and access points. It includes descriptions of the site's vehicular access, loading, parking, and Transportation Demand Management (TDM) plan.

The planned development will replace two commercial buildings with a mixed-use building. There is currently one curb cut that accesses the existing site along L Street that will be closed with the PUD. The curb cut serving the east-west alley between the two existing building will be relocated to the north as an easement to serve the existing alley on the east of the site that will be improved. The site is primarily surrounded by the Uline Arena development to the north, Congress Street to the west, L Street to the south, and residential properties to the east.

The 1109 Congress Street NE project will include 3,825 square feet of retail, 64 residential dwelling units, and seven surface parking spaces. Figure 6 shows an overview of the development program and site plan elements.

ACCESS AND LOADING

Pedestrian Access

Pedestrian access to both the residential and retail component of the development will occur via entrances on Congress Street and L Street. Pedestrian access points are outlined on the site plan in Figure 6.

Vehicular Access

Vehicular access to the site will be from the north via an easement off of Congress Street, which is a local roadway. The development is proposing to provide seven parking spaces located off the alley on the east side of the development.

Bicycle Access

Bicycle access to the site will be off the alley easement and will provide direct access into the lobby of the development. DC zoning requires the development to provide 21 bicycle spaces. The development will provide 22 indoor secure bicycle spaces, exceeding the requirements. In addition, outdoor bicycle racks will be placed on the perimeter of the site.

Loading Facilities

According to DC zoning requirements, the site use is required to provide one 55-foot berth, one 200 square foot platform, and one 20-foot service and delivery space. Due to the compact nature of the site, on-street loading has been proposed on L Street and Congress Street. The Applicant is seeking relief for the requirements set forth by District zoning laws for loading and service space.

Given the narrow nature of the alley and alley easement, trash will be picked-up curbside from the adjacent on-street loading zone along L Street and/or curbside from Congress Street. Trash bins will be rolled curbside for pickup and will not be left unattended along the sidewalk.

The proposed development is expected to generate up to 8 truck trips per day. This includes daily trash removal services, mail and parcel delivery, retail pickup and delivery, and residential move-in and move-out trips. One (1) trash removal truck per day, two (2) mail and parcel delivery trucks per day, up to four (4) retail pickup and delivery trucks per day, and occasional residential move-in or out trucks will service the development. The on-street loading space will be sufficient to accommodate this demand.

PARKING

On-Site Parking

Based on the current zoning of the property, the following outlines the parking requirements for all land uses of the development:

- Residential
1 space per 3 dwelling units, amounting to a requirement of 21 parking spaces
- Retail
1 space per 750 square feet of retail space in excess of 3,000 square feet, amounting to a requirement of 1 parking space

While seven surface parking spaces will be supplied along the site, these spaces do not meet zoning requirements. Therefore, the PUD is asking for relief for all parking requirements. Given the site location is near ample transit, the parking provided on-site will be sufficient to service needs.

BICYCLE AND PEDESTRIAN FACILITIES

The project will include secure long-term bicycle parking. The plans identify 22 spaces in the proposed development. According to the DC zoning requirements, all residential developments must provide at least one secure bicycle parking space for each three residential units. Based on these regulations the development should provide a total of 21 long-term bicycle parking spaces. The 22 bicycle parking spaces planned for the development exceeds these requirements.

The direct access provided to the alley easement from the bicycle storage room, as well as the quantity and quality of the on-site bicycle amenities, makes cycling an extremely attractive mode of travel to and from the site.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

TDM is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM typically focuses on reducing the demand of single-occupancy, private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods.

The Transportation Demand Management (TDM) plan for the 1109 Congress Street NE development is based on the DDOT expectations for TDM programs. The Applicant proposes the following TDM measures:

- The Applicant will provide a bicycle repair station.
 - The Applicant will offer the first buyer of each residential unit a one-time annual car sharing membership or a one-time annual Capitol Bikeshare membership to help alleviate the reliance on personal vehicles. These incentives will be included in a move-in transportation package that includes brochures for transit facilities as well as bicycle and car sharing services for the initial buyer of each residential unit.
 - The Applicant will offer a one-time \$50 SmartTrip card to each initial residential tenant and employee in the building to encourage non-auto mode usage.
 - The Applicant will contribute \$80,000 to fund a Capitol Bikeshare station to be located near the intersection of 3rd Street and L Street NE in response to community input.
-
- The Applicant will identify a Resident Transportation Coordinator (for planning, construction, and operations). The Resident Transportation Coordinator will work with residents and employees in the building to distribute and market various transportation alternatives and options.
 - The Applicant will provide TDM materials to new residents in the New Buyer Welcome Package materials.
 - The Applicant will install a digital multimodal display in the lobby of the residential building that provides schedule information of Metrobus and Metrorail, and locations of bikeshare stations and carshare vehicles, among other transportation related information.
 - The Applicant will provide bicycle parking/storage facilities at the proposed development. This includes secure parking located on-site, short-term bicycle parking around the perimeter of the site.

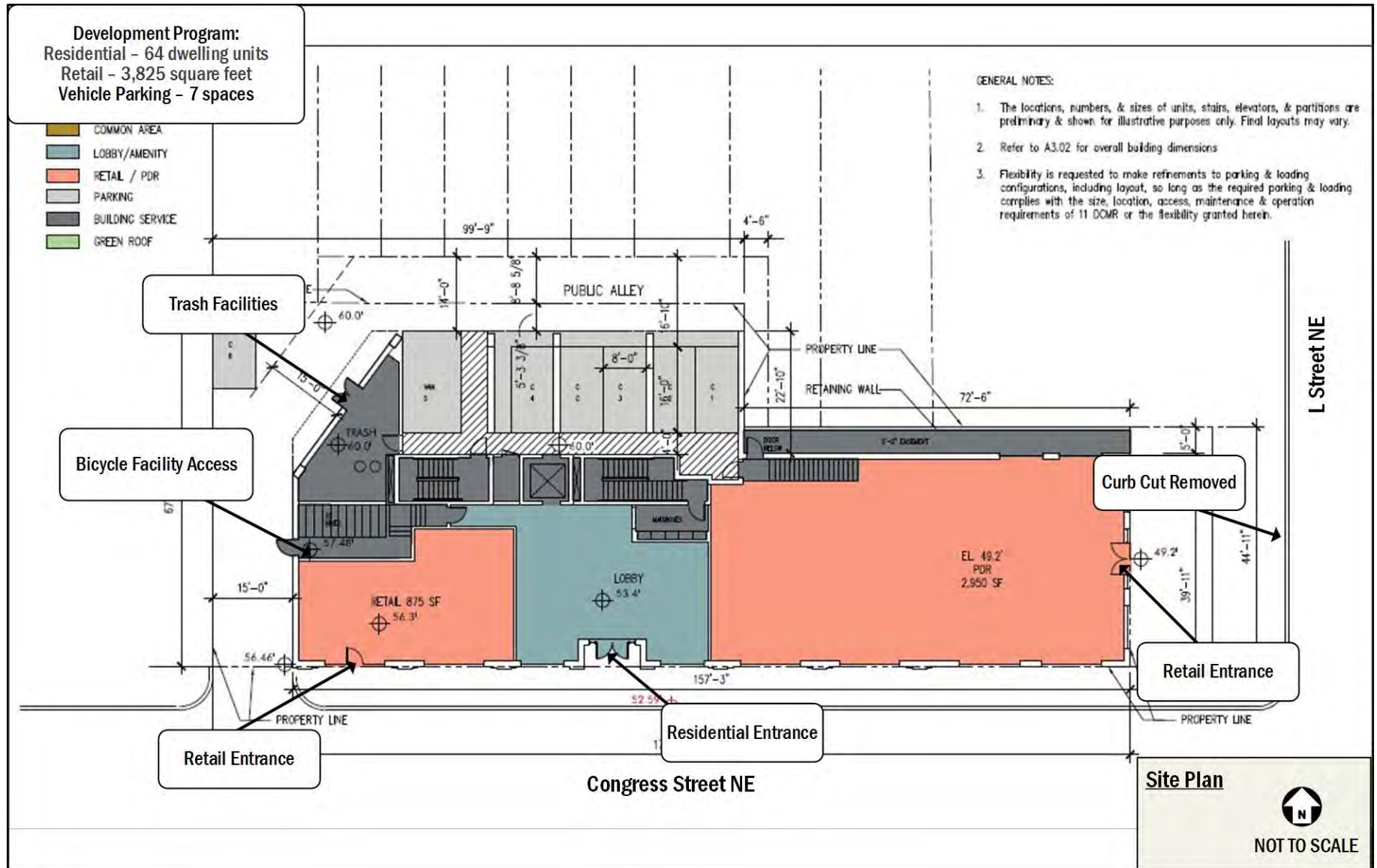


Figure 6: Site Plan

TRIP GENERATION

This section outlines the transportation demand of the proposed 1109 Congress Street NE project. It summarizes the projected trip generation of the site by mode, which forms the basis for the chapters that follow.

Traditionally, weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition. This methodology was supplemented to account for the urban nature of the site (the *Trip Generation Manual* provides data for non-urban, low transit use sites) and to generate trips for multiple modes.

Residential trip generation was calculated based on ITE land use 220, Apartment, splitting trips into different modes using assumptions derived from census data for the residents that currently live near the site. The vehicular mode split was then adjusted to reflect the parking supply and other developments with similar proximity to Metrorail.

Retail trip generation was calculated based on ITE land use 820, Shopping Center. Mode splits for the retail portion of the site were based on information contained in WMATA's 2005 *Development-Related Ridership Survey* and mode splits used for retail uses of nearby developments that have recently been studied.

A summary of the multimodal trip generation for the development is provided in Table 2 for the morning and afternoon peak hours. The mode split assumptions for all land uses within the development is summarized in Table 3. Detailed calculations are included in the Technical Appendix.

Of note, a capacity analysis was not performed due to the Comprehensive Transportation Review thresholds not being met, as scoped with and agreed to by DDOT.

Table 2: Multi-Modal Trip Generation Summary

| Mode | Land Use | AM Peak Hour | | | PM Peak Hour | | |
|---------|--------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| | | In | Out | Total | In | Out | Total |
| Auto | Apartments | 2 veh/hr | 9 veh/hr | 11 veh/hr | 10 veh/hr | 6 veh/hr | 16 veh/hr |
| | Retail | 1 veh/hr | 0 veh/hr | 1 veh/hr | 2 veh/hr | 1 veh/hr | 3 veh/hr |
| | Total | 3 veh/hr | 9 veh/hr | 12 veh/hr | 12 veh/hr | 7 veh/hr | 19 veh/hr |
| Transit | Apartments | 3 ppl/hr | 13 ppl/hr | 16 ppl/hr | 15 ppl/hr | 9 ppl/hr | 24 ppl/hr |
| | Retail | 1 ppl/hr | 1 ppl/hr | 2 ppl/hr | 4 ppl/hr | 5 ppl/hr | 9 ppl/hr |
| | Total | 4 ppl/hr | 14 ppl/hr | 18 ppl/hr | 19 ppl/hr | 14 ppl/hr | 33 ppl/hr |
| Bike | Apartments | 1 ppl/hr | 3 ppl/hr | 4 ppl/hr | 4 ppl/hr | 2 ppl/hr | 6 ppl/hr |
| | Retail | 0 ppl/hr | 0 ppl/hr | 0 ppl/hr | 1 ppl/hr | 0 ppl/hr | 1 ppl/hr |
| | Total | 1 ppl/hr | 3 ppl/hr | 4 ppl/hr | 5 ppl/hr | 2 ppl/hr | 7 ppl/hr |
| Walk | Apartments | 2 ppl/hr | 6 ppl/hr | 8 ppl/hr | 8 ppl/hr | 4 ppl/hr | 12 ppl/hr |
| | Retail | 1 ppl/hr | 1 ppl/hr | 2 ppl/hr | 4 ppl/hr | 5 ppl/hr | 9 ppl/hr |
| | Total | 3 ppl/hr | 7 ppl/hr | 10 ppl/hr | 12 ppl/hr | 9 ppl/hr | 21 ppl/hr |

Table 3: Summary of Mode Split Assumptions

| Land Use | Mode | | | |
|-------------|------|---------|------|------|
| | Auto | Transit | Bike | Walk |
| Residential | 30% | 40% | 10% | 20% |
| Retail | 25% | 35% | 5% | 35% |

TRANSIT

This section discusses the existing and proposed transit facilities in the vicinity of the site, accessibility to transit, and evaluates the overall transit impacts due to the 1109 Congress Street NE project.

The following conclusions are reached within this chapter:

- The development has excellent access to transit
- The development site is surrounded by several Metrobus routes that travel along multiple primary corridors
- The site is expected to generate a manageable amount of transit trips, and the existing service is capable of handling these new trips

EXISTING TRANSIT SERVICE

The study area is well served by Metrobus and Metrorail. Combined, these transit services provide local, city wide, and regional transit connections and link the site with major cultural, residential, employment, and commercial destinations throughout the region. Figure 7 identifies the major transit routes, stations, and stops in the study area.

The NoMa-Gallaudet U Metrorail station is located 0.2 miles from the development site and is served by the Red Line, which provides direct connections to areas in the District and Maryland and provides a connection to all additional Metrorail lines. The Red Line connects Shady Grove with Glenmont while providing access to the District core in a “U” shape. Red Line trains run approximately every three to six minutes during the morning and afternoon peak hours. The Red Line runs about every 12 minutes during weekday non-peak hours, every 15-18 minutes on weekday evenings after 9:30 pm and 12 to 15 minutes on the weekends.

The site is also serviced by Metrobus with stops located along Florida Avenue in the vicinity of the site. These bus lines connect the site to many areas of the District, including several Metrorail stations which provide further connections to Virginia and Maryland. Table 4 shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop.

A detailed inventory of Metrobus stops within a quarter-mile walkshed of the site, detailing individual bus stop amenities

and conditions is included in the Technical Appendix. A summary of this inventory is shown on Figure 7.

PROPOSED TRANSIT SERVICE

Due to growth of population, jobs, and retail in several neighborhoods in the District and the potential for growth in other neighborhoods, the District’s infrastructure is challenged with the need for transportation investments to support the recent growth and to further strengthen neighborhoods. In order to meet these challenges and capitalize on future opportunities, DDOT has developed a plan to identify transit challenges and opportunities and to recommend investments. This is outlined in DC’s *Transit Future System Plan* report published by DDOT in April 2010, which includes the reestablishment of streetcar service in the District.

In addition to the existing streetcar line that runs along H Street, one planned streetcar route is expected to travel near the site. The Woodley Park/Adams Morgan to Congress Heights line would run along Florida Avenue and connect the site to several commercial districts including Woodley Park, Adams Morgan, U Street NW, NoMa, H Street NE, Barracks Row, Anacostia Waterfront, and Historic Anacostia. The line also will have direct connections to all five Metrorail lines and serve Gallaudet University and the National Zoo. Additionally, Florida Avenue was identified as a corridor in need of a Metro Express by the *Transit Future System Plan* report.

Additionally, WMATA and local transportation agencies in the District, Maryland, and Virginia have begun reviewing Metrobus lines and system wide facilities for service improvements since 2007. In direct relation to this development, routes 90, 92, 93, and X3 were studied.

WMATA and DDOT published the *90-92-93 Metrobus U Street-Garfield Line Study* in March 2011. At the time of the report (2011), the 90s line had one of highest ridership of any Metrobus line at almost 14,700 daily riders. The report cites the need for improved customer experience, updating services and operating plans, improved reliability and travel times, and reducing passenger crowding. As possible solutions the report proposes a new Metro Express limited-stop service, increased supervision and bus operator training, traffic operation enhancements, improved bus facilities, consolidation and relocation of bus stops, and improved safety and security. In March 2016, the 93 line was discontinued due to low ridership,

and additional trips were reallocated to the 90 and 92 lines. As of the date of this report the recommendations outlined in the WMATA report for the potential Metro Express 99 Line have not been enacted.

WMATA and DDOT published the *X1-X2-X3 Metrobus Benning Road/H Street Line Study* in January 2010. At the time of the report (2010) the “X” line had one of the highest ridership of any Metrobus line at almost 14,000 daily riders. Overcrowding, delays, and other reliability issues prompted WMATA and DDOT to explore potential improvements. The report lists service recommendations such as increased frequency, the addition of articulated buses, and the creation of the X9 Metro Express route. Additionally, improved scheduling, increased supervision, improved bus stop facilities, better customer information, improved safety measures, and prioritized signals are proposed as potential recommendations. Specifically related to the proposed development, the X3 was recommended to be eliminated by the WMATA report to help cover the cost of operating the proposed X9 Metro Express route. As of this report, the X3 has not been eliminated.

In addition to Metrobus, Circulator is planning a route that serves the NoMa neighborhood. Circulator is still in the planning phases, but several routes are being reviewed with the help of community input. Two of the five potential routes travel along Florida Avenue north of the site with the other three routes terminating at the intersection of M Street and 1st Street NE. These routes have the potential to connect the NoMa neighborhood to a variety of activity centers such as Columbia Heights, Washington Hospital Center, U Street, Logan Circle, and H Street.

SITE-GENERATED TRANSIT IMPACTS

This section summarizes the impacts of the development on the overall transit operations in the vicinity of the site.

Transit Trip Generation

The proposed development is projected to generate 18 transit trips (4 inbound, 14 outbound) during the morning peak hour and 33 transit trips (19 inbound, 14 outbound) during the afternoon peak hour.

US Census data was used to determine the distribution of those taking Metrorail and those taking Metrobus. The site lies in TAZ 20282 which shows that approximately 71 percent of transit riders used Metrorail and the remainder use Metrobus. That

said, approximately 13 people will use Metrorail and 6 will use Metrobus during the morning peak hour; approximately 24 people will use Metrorail and 10 will use Metrobus during the afternoon peak hour.

WMATA studied capacity of Metrorail stations in its *Station Access & Capacity Study (2008)*. The study analyzed the capacity of Metrorail stations for their vertical transportation, for example the capacity of the station at elevators, stairs, and escalators to shuttle patrons between the street, mezzanine, and platforms. The study also analyzed stations capacity to process riders at fare card gates. For both analyses, vertical transportation and fare card gates, volume-to-capacity ratios were calculated for existing data (from 2005) and projections for the year 2030. According to the study, the NoMa-Gallaudet U station can currently accommodate future growth at all access points, being one.

Additionally, the *New York Avenue – Florida Avenue – Gallaudet University Station Access Improvement Study* report was published in June 2010. The purpose of the Study was to (1) identify access needs and deficiencies; (2) define ways to enhance accessibility for pedestrians and bicyclists; (3) improve the pedestrian environment; and (4) improve the connectivity and flow of Metrobuses, shuttle buses, and private automobiles at the station. The report recommended improvements to pedestrian infrastructure and bicycle facilities, increased safety through the use of staff, lighting and cameras, improved wayfinding, and repairs to the rail overpass on Florida Avenue. The majority of recommendations were deferred to the *NoMa Neighborhood Access Study and Transportation Management Plan*.

WMATA studied capacity along Metrobus routes. DC’s *Transit Future System Plan (2010)* lists the bus routes with the highest load factor (a ratio of passenger volume to bus capacity). A load factor is considered unacceptable if it is over 1.2 during peak periods or over 1.0 during off-peak or weekend periods. According to this study Metrobus routes that travel near the site operate at a load factor that greatly exceeds its capacity during peak periods of the day. As it is expected that the majority of new trips will be made via the Metrorail, and the improvements to Metrobus service discussed above, site-generated transit trips will not cause detrimental impacts to Metrobus or Metrorail service.

Nearby Site Transit Improvements

The proposed development will be near the planned pedestrian tunnel to the NoMa-Gallaudet U Metrorail Station. As mentioned earlier as part of the *NoMa Pedestrian Tunnel Feasibility Study*, the three preferred alternatives will have eastern portals at or near the project site. A plaza adjacent to 3rd Street will allow residents, employees, and customers to walk underneath the rail tracks without conflicting with vehicles at neighborhood streets while conveniently accessing the Metrorail station.

Table 4: Metrobus Route Information

| Route Number | Route Name | Service Hours | Headway | Walking Distance to Nearest Bus Stop |
|--------------|----------------------------------|--------------------------------------------------------------|-----------|--------------------------------------|
| 90,92 | U Street-Garfield Line | Weekdays: 4:05AM – 2:04 AM Weekends: 4:05AM – 2:18 AM | 7-15 min | <0.1 miles, 1 minute |
| X3 | Benning Road Line | Weekdays: Westbound 6:00AM-8:39AM Eastbound 3:31PM-5:37PM | 20-30 min | <0.1 miles, 1 minute |
| D4 | Ivy City-Franklin Square Line | Weekdays: 4:23AM – 12:50 AM Weekends: 4:56AM – 8:46 AM | 15-30 min | 0.1 miles, 3 minute |
| 80 | North Capitol Street Line | Weekdays: 4:39AM – 1:56 AM Weekends: 4:49AM – 2:05 AM | 15-30 min | 0.4 miles, 8 minute |
| 96 | East Capitol Street-Cardozo Line | Weekdays: 4:58AM – 3:20 AM Weekends: 5:57AM – 3:29 AM | 15-30 min | 0.4 miles, 8 minute |
| P6 | Anacostia-Eckington Line | Weekdays: 5:08AM – 1:55 AM Weekends: 5:30AM – 1:56 AM | 15-30 min | 0.4 miles, 8 minute |



Figure 7: Existing Transit Service



PEDESTRIAN FACILITIES

This section summarizes the existing and future pedestrian access to the site and reviews walking routes to and from the site.

The following conclusions are reached within this chapter:

- The existing pedestrian infrastructure surrounding the site provides a good walking environment. There are some gaps in the system, but there are sidewalks along all primary routes to pedestrian destinations.
- The site is not expected to generate a significant amount of pedestrian trips; however, the pedestrian trips generated by walking to and from transit will be more substantial, particularly along L Street and Delaware Avenue toward the Metrorail station.

PEDESTRIAN STUDY AREA

Facilities within a quarter-mile of the site were evaluated as well as routes to nearby transit facilities and prominent retail and neighborhood destinations. The site is easily accessible to transit options such as bus stops along Florida Avenue and the NoMa-Gallaudet U Metro Station. There are some barriers and areas of concern within the study area that negatively impact the quality of and attractiveness of the walking environment. This includes roadway conditions that reduce the quality of walking conditions, narrow or nonexistent sidewalks, incomplete or insufficient crossings at busy intersections, and the rail tracks that limits connectivity to the west. Figure 8 shows suggested pedestrian pathways, walking time and distances, and barriers and areas of concern.

PEDESTRIAN INFRASTRUCTURE

This section outlines the existing and proposed pedestrian infrastructure within the pedestrian study area.

Existing Conditions

A review of pedestrian facilities surrounding the proposed development shows that most facilities meet DDOT standards and provide a quality walking environment. Figure 9 shows a

detailed inventory of the existing pedestrian infrastructure surrounding the site. Sidewalks, crosswalks, and curb ramps are evaluated based on the guidelines set forth by DDOT’s *Public Realm Design Manual* in addition to ADA standards. Sidewalk widths and requirements for the District are shown below in Table 5.

Within the area shown, roadways in the southern portion of the study area are considered residential with a low to moderate density, while the northern portion of the study area covering the Florida Avenue Market is considered commercial (non-Downtown) and thus require wider sidewalks. Most of the sidewalks surrounding the site to the south comply with DDOT standards; however to the north there are areas which have inadequate sidewalks or no sidewalks at all, with insufficient or no buffer. All primary pedestrian destinations are accessible via routes with sidewalks, most of which met DDOT standards.

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks is not desired. As shown in the figure, under existing conditions there are some issues with crosswalks and curb ramps near the site.

Pedestrian Infrastructure Improvements

As a result of planned developments near the site, pedestrian facilities near the site will be improved. The development will improve sidewalks adjacent to the site such that they meet or exceed DDOT requirements and provide an improved pedestrian environment, where available.

As a result of additionally planned developments and roadway improvements in the area, it is expected that pedestrian infrastructure bordering developments, particularly those within the Union Market area, will be improved to meet DDOT and ADA standards.

SITE IMPACTS

This section summarizes the impacts of the development on the overall pedestrian operations in the vicinity of the site.

| Street Type | Minimum Sidewalk Width | Minimum Buffer Width |
|---------------------------------------|------------------------|--------------------------------------|
| Residential (Low to Moderate Density) | 6 ft | 4 ft (6 ft preferred for tree space) |
| Residential (High Density) | 8 ft | 4 ft (6 ft preferred for tree space) |
| Commercial (Non-downtown) | 10 ft | 4 ft |
| Downtown | 16 ft | 6 ft |



Pedestrian Trip Generation

The 1109 Congress Street NE development is expected to generate 10 walking trips (3 inbound, 7 outbound) during the morning peak hour and 21 walking trips (12 inbound, 9 outbound) during the afternoon peak hour. The origins and destinations of these trips are likely to be:

- Employment opportunities where residents can walk to work;
- Local areas where employees and patrons of the development reside;
- Retail locations outside of the site; and
- Neighborhood destinations such as schools, libraries, and parks in the vicinity of the site.

In addition to these trips, the transit trips generated by the site will also generate pedestrian demand between the site and nearby transit stops.

Currently the existing pedestrian network has the capacity to absorb the newly generated trips from the site. The planned sidewalk and pedestrian landscape improvements on Florida Avenue, N Street, 3rd Street, and 4th Street will further improve and expand the pedestrian network in the vicinity of the site.

Nearby Pedestrian Improvements

The proposed development will see the removal of the existing curb cut along L Street. This eliminates vehicles from turning into the site, allowing pedestrians to safely walk along the sidewalk without conflict. The aforementioned pedestrian tunnel to the NoMa-Gallaudet U Metrorail Station will provide additional access to and from the Metrorail Station and reduce pedestrian-vehicular conflicts at neighborhood intersections.

Not only will these improvements improve the quality of pedestrian facilities for PUD residents and employees, but they will also improve the overall pedestrian environment for the entire surrounding neighborhood.

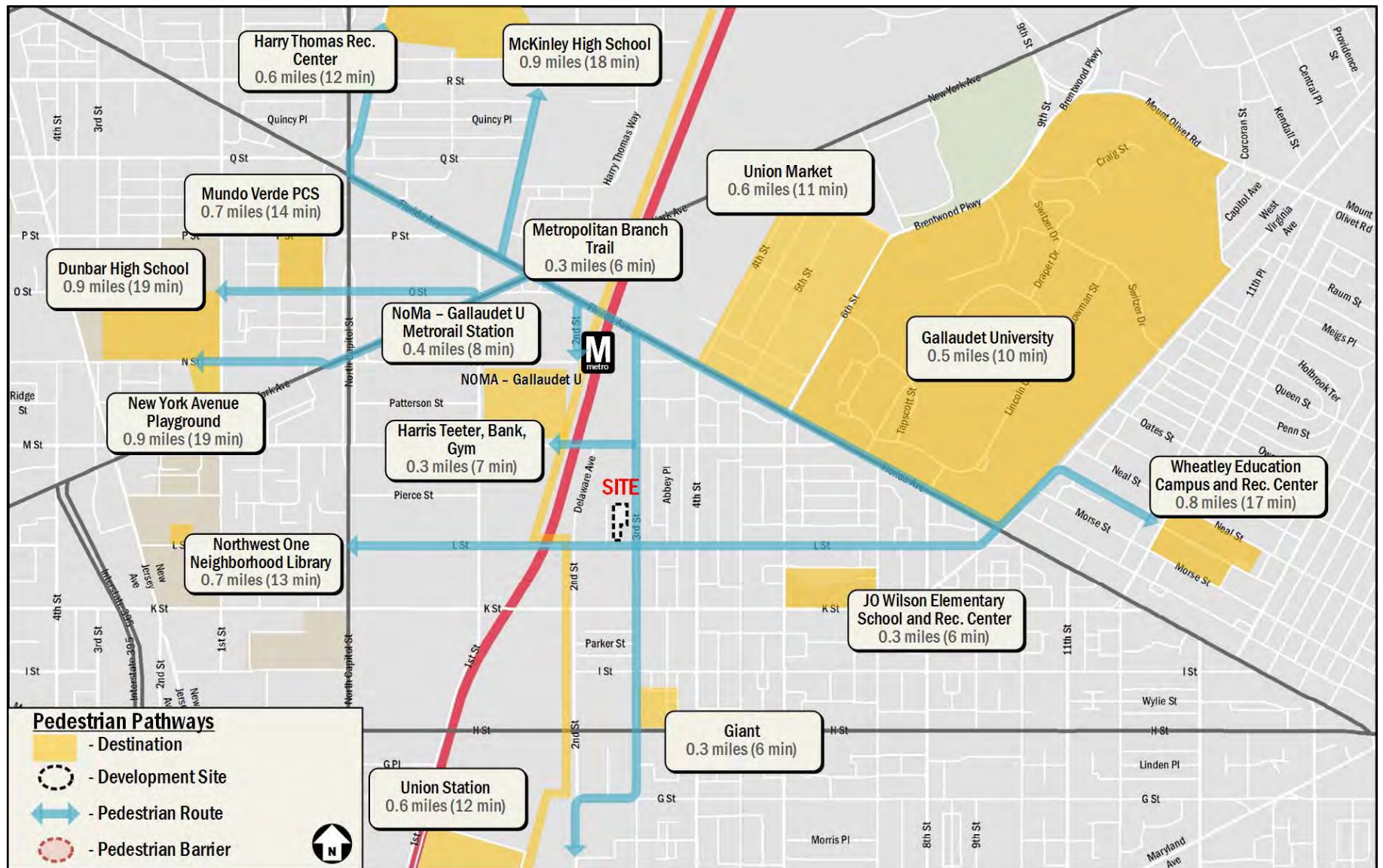


Figure 8: Pedestrian Pathways

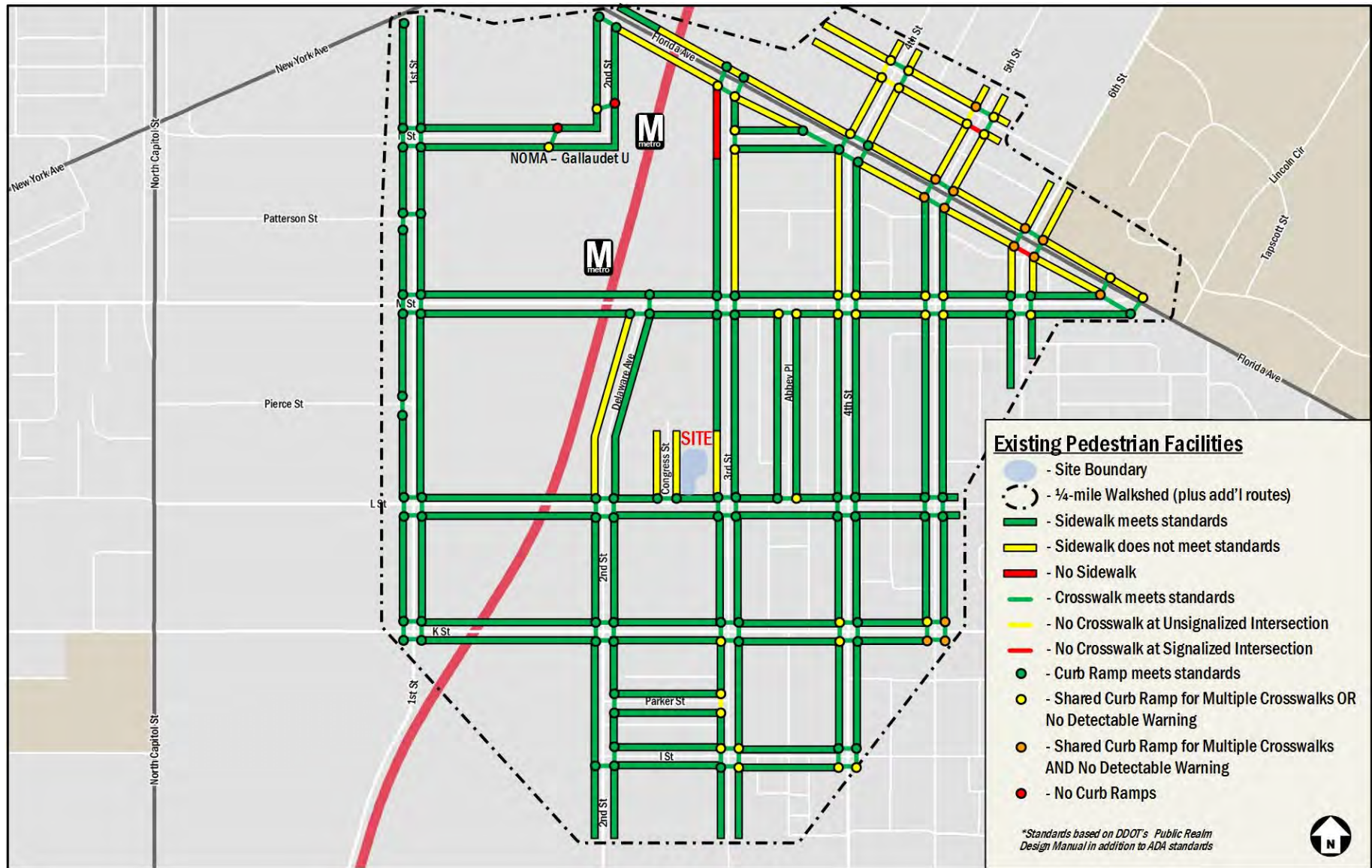


Figure 9: Existing Pedestrian Infrastructure



BICYCLE FACILITIES

This section summarizes existing and future bicycle access, reviews the quality of cycling routes to and from the site, and presents recommendations.

The following conclusions are reached within this chapter:

- The site has access to one bike trail located to the southeast of the site, as well as bike lane to the east and west.
- The site is not expected to generate a significant amount of bicycle trips, therefore all site-generated bike trips can be accommodated on existing infrastructure.
- The development will include secure bicycle parking on site, and short-term bicycle racks along the perimeter of the site.

EXISTING BICYCLE FACILITIES

The site is well connected to existing on- and off-street bicycle facilities. East-west connectivity is provided via bike lanes along G Street, I Street, K Street and M Street. North-south connectivity will be primarily provided via the Metropolitan Branch Trail, which is located across M Street north of the site, and 4th and 6th Streets. Figure 10 illustrates the existing bicycle facilities in the area. Under existing conditions there is no short-term bicycle parking located around the perimeter of the site.

In addition to personal bicycles, the Capital Bikeshare program provides additional cycling options for residents, employees, and patrons of the planned development. The Bikeshare program has placed over 350 Bikeshare stations across Washington DC, Arlington, and Alexandria, VA, and most recently Montgomery County, MD, with over 3000 bicycles provided. Within a quarter-mile of the site, there are two Bikeshare stations that house a total of 36 bikes. Figure 10 illustrates the existing Capital Bikeshare facilities in the area.

PROPOSED BICYCLE FACILITIES

The MoveDC plan outlines several bicycle improvements in the vicinity of the site. These improvements are broken up into four tiers that rank the priority for implementation. The four tiers are broken down as follows:

- Tier 1
Investments should be considered as part of DDOT’s 6-year TIP and annual work program development, if they are not already included. Some projects may be able to move directly into construction, while others become high priorities for advancement through the Project Development Process.

There is a bicycle lane planned north of the development on M Street, which will improve bicycle connectivity and attract cyclists to the site.

- Tier 2
Investments within this tier are not high priorities in the early years of MoveDC implementation. They could begin moving through the Project Development Process if there are compelling reasons for their advancement.

There are bicycle lanes planned east of the development on 5th Street and 6th Street, which will improve bicycle connectivity and attract cyclists to the site.

- Tier 3
Investments within this tier are not priorities for DDOT-led advancement in the early years of MoveDC’s implementation. They could move forward earlier under circumstances such as real estate development initiatives and non-DDOT partnerships providing the opportunity for non-District-led completion of specific funding.

There is a bicycle lane planned south of the development on L Street, which will improve bicycle connectivity and attract cyclists to the site.

- Tier 4
Generally, investments within this tier are not priorities for DDOT-led advancement and are lower priority for project development in the early years of implementation.

There are no tier 4 improvements planned in the vicinity of the site.

Due to the timeline of the proposed development, this report will focus on the Tier 1 and Tier 2 recommendations within the vicinity of the site.

Although these projects are discussed in the MoveDC plan, they are not currently funded or included in DDOT’s Transportation Implementation Plan thus they will not be assumed as complete for this analysis.



As previously discussed earlier in the report, there are planned bicycle infrastructure improvements along M Street, 4th Street, and 6th Street near the site. Along M Street, the existing two-way cycle track will be extended to 4th Street NE from Delaware Avenue NE, with Shared Lane Markings from 4th Street NE to Florida Avenue NE. Along 4th Street, a two-way cycle track will replace the one-way southbound bike lane that currently exists in between Florida Avenue NE and M Street NE. Along 6th Street, a two-way cycle track will replace the existing one-way northbound and southbound bike lanes between K Street NE and Florida Avenue NE. This will be in conjunction with the planned improvements laid forth in the *Florida Avenue Multimodal Transportation Study*. Detailed plans for each of these planned bicycle infrastructure improvements are included in the Technical Appendix. All of these planned improvement are planned to be completed before the proposed development opens.

SITE IMPACTS

This section summarizes the impacts of the development on the overall bicycle operations surrounding the site and develops recommendations for connectivity improvements.

Bicycle Trip Generation

The 1109 Congress Street NE development is expected to generate 4 bicycle trips (1 inbound, 3 outbound) during the morning peak hour and 7 bicycle trips (5 inbound, 2 outbound) during the afternoon peak hour. Although bicycling is an important mode for getting to and from the site, with significant facilities located on site, and existing and planned routes to and from the site, the project is well positioned to take full advantage of any future expansion of bicycle infrastructure in the area. In the meantime, the surrounding low volume neighborhood streets provide suitable interim connectivity for bicycles.

On-Site Bicycle Elements

The project will provide amenities that cater to cyclists including 22 secure long-term bicycle parking off the alley easement, which will increase the attractiveness of cycling to the site.

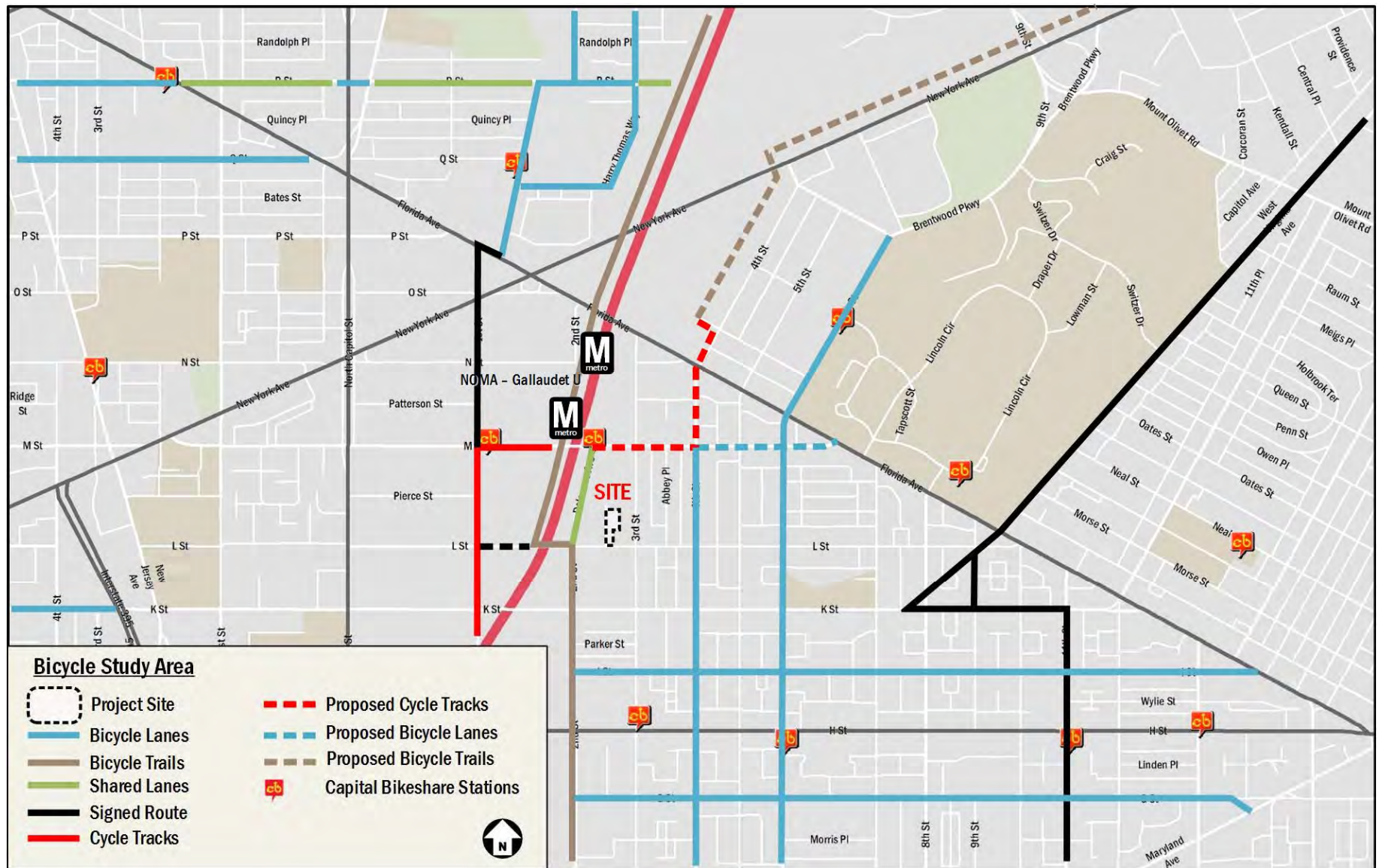


Figure 10: Existing Bicycle Facilities



SUMMARY AND CONCLUSIONS

This report presents the findings of a Comprehensive Transportation Review (CTR) for the 1109 Congress Street NE development. The purpose of this study is to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This evaluation is based on the existing multi-modal functions of the site. This report concludes that **the project will not have a detrimental impact** to the surrounding transportation network assuming that all planned site design elements are implemented.

Proposed Project

The 1109 Congress Street NE site is currently occupied by two commercial buildings, located approximately two blocks from the NoMa Gallaudet U Metrorail Station. The site is generally bound by the Uline Arena development to the north, Congress Street to the west, L Street to the south, and an alley and adjacent buildings to the east.

The application plans to develop the site into a mixed-use development including residential and retail uses. The project will be an eight story building with a penthouse containing approximately 64 dwelling units and approximately 3,825 square feet of retail.

The development will be served by seven surface parking spaces along the alley accessible via an easement from Congress Street. Loading will be on-street from L Street at the south end of the site as well as on-street from Congress Street.

Pedestrian facilities along Congress Street and L Street will be improved to include sidewalk and buffer widths that meet or exceed DDOT requirements, where available.

Multi-Modal Impacts and Recommendations

Transit

The site is served by regional and local transit services such as Metrorail, Circulator, and Metrobus. The site is 0.2 miles from the NoMa Gallaudet U Metrorail Station portal on M Street NE, and many Metrobus stops are located within a block of the site along K Street NE.

Although the development will be generating new transit trips, existing facilities have enough capacity to handle the new trips.

Pedestrian

The site is surrounded by a well-connected pedestrian network. Most roadways within a quarter-mile radius provide sidewalks and acceptable crosswalks and curb ramps, particularly along the primary walking routes. There are some pedestrian barriers surrounding the site such as limited connectivity due to the railroad west of the site.

Bicycle

Capital Bikeshare stations can be found within a few blocks of the site, for example there is a station 0.2 miles from the site on M Street, on the immediate opposite side of the railroad underpass. The site is also nearby routes and bike lanes on Delaware Avenue to the west as well as 4th Street and 6th Street to the east and I Street to the south.

On site, the development will meet short-term bicycle parking and on-site secure long-term bicycle parking for residents and retail employees.

Vehicular

The site is well-connected to regional roadways such as I-395 and I-695, primary and minor arterials such as Florida Avenue and K Street, and an existing network of collector and local roadways.

Since the vehicular trips do not meet the Comprehensive Transportation Review thresholds for additional study, the planned development is not expected to have adverse vehicular impacts on the surrounding transportation network.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact to the surrounding transportation network assuming that all planned site design elements are implemented.