

TECHNICAL MEMORANDUM

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Date: December 18, 2025
Subject: Wonder Plaza (2301 Georgia Avenue NW) - Transportation Statement (ZC Case No. 20-08D)

DDOT – PSD
Greystar - GS Development Services NE, LLC
Holland & Knight

Introduction

This memorandum serves as a Transportation Statement prepared in support of the Further Processing (FP) application for the proposed redevelopment of Wonder Plaza in the Howard University neighborhood of Washington, DC. Wonder Plaza is one of the buildings proposed in the 2020 Howard University (HU) Central Campus Master Plan (CMP), which was approved under Zoning Commission (ZC) Case No. 20-08. Figure 1 identifies the regional site location within the District, and Figure 2 identifies the location of the project site in relation to the local neighborhood.

The project site, located at 2301 Georgia Avenue NW, is bounded by an HU building and a HU staff-only parking lot to the north, Bryant Street NW to the south, three (3) HU buildings to the east, and Georgia Avenue NW to the west. Currently, the project site is occupied by a building that houses restaurants, retail shops, and offices, with a computer lab on the upper level.

The multi-modal impacts of the larger campus redevelopment, including Wonder Plaza, were analyzed as part of the approved CMP. During the CMP approval process, Wonder Plaza was assumed to include 60,000 square feet (sf) of retail space and 300 parking spaces while other uses were to be determined during the FP application. As part of this project, the proposed redevelopment plan has been updated to include:

- Approximately 281,696 square feet (sf) of student housing, comprised of 280 dwelling units (du) with up to 591 beds;
- Approximately 19,656 sf of health and wellness use;
- Approximately 8,408 sf of campus dining use;
- Approximately 7,520 sf of ground-floor retail and commercial use;
- 151 vehicular parking spaces in a subsurface garage and the removal of 50 parking spaces in the existing surface lot; and
- 109 long-term and 32 short-term bicycle parking spaces.

The Applicant is requesting relief from the requirement to provide 100 short-term bicycle parking spaces due to space constraints along the site frontage on Georgia Avenue NW and Bryant Street NW, which make it infeasible to accommodate the required number of short-term spaces. While the proposed building is treated as an Education, College/University use for zoning purposes, the primary generator of bicycle trips is student housing. To better align bicycle parking with building needs, the Applicant proposes 109 long-term bicycle parking spaces within a secure indoor facility, substantially exceeding the ZR16 requirement of 42 spaces. This significant increase in long-term bicycle parking helps offset the reduction in short-term spaces.

As the project's traffic impacts were analyzed during the CMP approvals, this statement focuses on details not included in the CMP application, primarily multimodal transportation network evaluation of the project site and specific transportation elements of the site plan. The purpose of this Transportation Statement is to:

- Provide an overview of existing multimodal transportation conditions surrounding the Wonder Plaza site;
- Develop a comparison of the approved CMP development plans for Wonder Plaza with the updated FP plans;
- Review the major transportation elements of the site plan, supplementing the material provided in the plans that accompany the FP application; and
- Provide a building-specific Transportation Demand Management (TDM) plan, incorporating measures from the campus-wide TDM plan established in the 2020 CMP, to be implemented for the life of the Project.

The findings of this study conclude that:

- The project site is surrounded by a very well-connected existing network of transit, bicycle, and pedestrian facilities that results in an environment for enjoyable and effective non-vehicular transportation;
- The redevelopment plan has been updated from the original CMP such that the trips generated by the proposed project are reduced; therefore, the capacity analysis conclusions from the CMP remain valid;
- The site provides adequate circulation with conveniently located access points for all modes of transportation;
- The loading plan proposed for the site is adequate to accommodate the practical loading demand, and truck can access the loading berths via the widened public alley with head-in/head-out maneuvers;
- The requested relief to provide fewer short-term bicycle parking spaces than required by ZR16 is not expected to have a detrimental impact as the reduction will be offset with a substantial increase in long-term bicycle parking spaces;
- The proposed project enhances the pedestrian network in the vicinity of the site by improving pedestrian facilities along the perimeter of the site that meet or exceed DDOT standards;
- The proposed project includes a robust TDM plan that incorporates building-specific and campus-wide measures that adequately promote non-vehicular modes of travel; and
- The proposed project is not expected to have a detrimental impact on the surrounding transportation network.

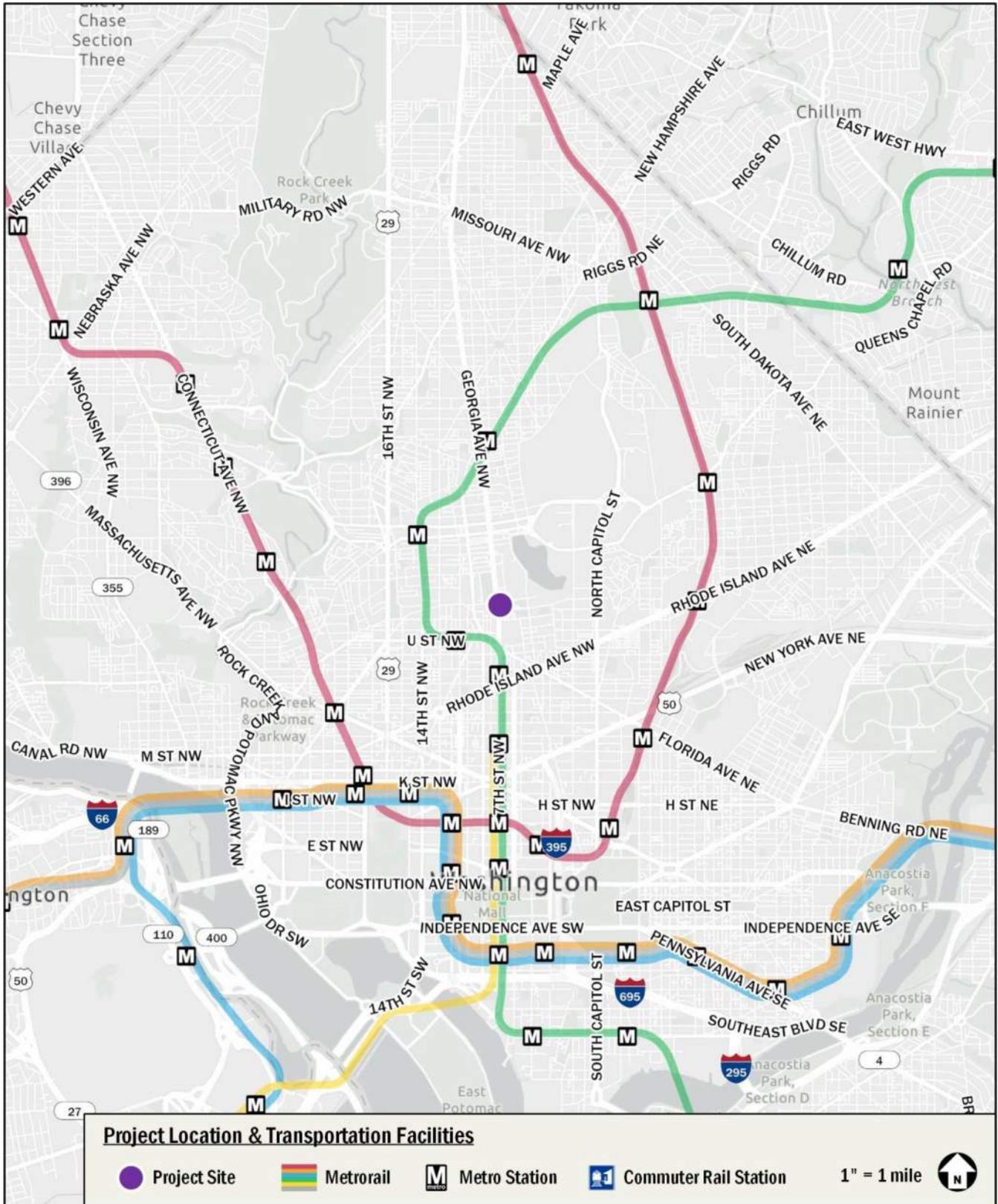


Figure 1: Project Location & Transportation Facilities

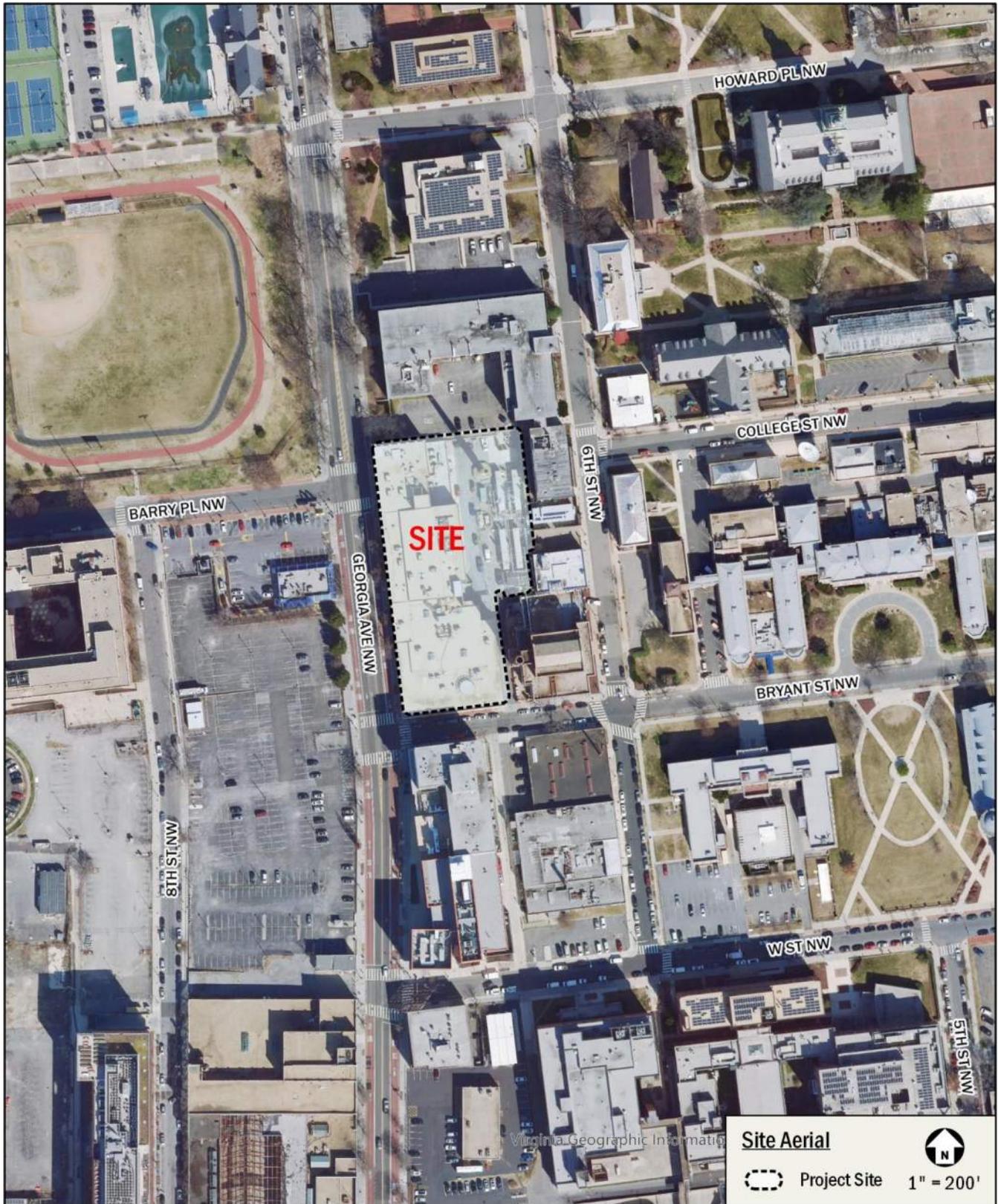


Figure 2: Site Aerial

Existing Transportation Conditions

This section reviews the existing vehicular, transit, bicycle, and pedestrian facilities as well as safety and curbside management in the vicinity of the site. The site is located in a transit-rich, bicycle- and pedestrian-friendly neighborhood which minimizes the need for personal vehicles. The site is well-served by eight (8) Metrobus routes and is within ½ mile of the Shaw-Howard University and U Street/African-American Civil War Memorial stations served by the Green Line. The project site is also surrounded by a robust pedestrian network that consists of well-connected sidewalks and crosswalks.

Vehicular Facilities

The project site is served by Georgia Avenue NW, a principal arterial that facilitates north-south travel throughout Washington, DC, and Bryant Street NW, a major collector that connects the site to northeast Washington, DC. This arterial connects to major routes such as Florida Avenue NW to the south and Sherman Avenue NW to the north, providing access to the District's core and surrounding areas. The existing network of local streets surrounding the site offers connections to other minor arterials, collectors, and local roads, enhancing vehicular mobility. Notably, the site is part of Howard University with Howard University buildings to the north, east, and south, and is north of the Howard University Hospital, integrating it into a vibrant urban context.

Vehicular and loading access to the building will be provided via the existing public alley along the eastern edge of the property, which will be widened from 15 feet to 20 feet and is accessible from Bryant Street NW. The project proposes approximately 151 vehicular parking spaces in a below-ground garage, and the 50 existing surface parking spaces will be removed. As part of the project, the existing curb cut on Bryant Street NW, just west of the existing public alley, will be closed.

Carsharing

Two (2) companies provide carsharing services in the District of Columbia: Free2Move and Zipcar. Both services are private companies that provide registered users with access to a variety of automobiles. Free2Move operates a point-to-point model that allows customers to pick up a vehicle at a location and drop it off at any non-restricted metered curbside parking space or Residential Parking Permit (RPP) location in the defined "Home Area". Zipcar operates a reserved-space model where customers are required to borrow from and return vehicles to the same reserved carsharing space. Currently, there is one (1) Zipcar location within a quarter mile of the project site:

- Two (2) vehicles are located within a five-minute walk at the Atlantic Plumbing Garage (2112 8th Street NW)

Transit Facilities

Existing Transit Service

The site is served by eight (8) WMATA bus routes – C51, C53, C57, C91, D32, D40, D44, and D4X. Within a half-mile radius of the project site, there are 43 bus stops, including one (1) along the site frontage on Georgia Avenue NW for northbound Route D40. These stops are approximately a 15-minute walk from the project site. Table 1 shows a summary of the bus route information for the routes that serve the site, including service hours, headways, and distance to the nearest bus stop. Table 4 shows WMATA's recommended amenities for each type of bus stop. Table 5 shows a detailed inventory of the amenities appearing at each existing bus stop within the transit study area. Figure 3 identifies the major transit routes, stations, and stops in the study area.

Three (3) Metrorail stations are located within a mile of the site, all on the Green Line: Shaw-Howard University Station (0.4 miles), U Street/African-American Civil War Memorial/Cardozo Station (0.5 miles), and Columbia Heights Station (0.8 miles). The Green Line travels north from Branch Avenue in Suitland, MD through Anacostia and the District core before continuing northwest towards College Park and Greenbelt, MD. The Green Line runs every 6-8 minutes on weekdays and every 8 minutes on weekends. Table 2 and Table 3 provide details of Metrorail information, including service hours and timetables.

The approximate 10-, 20-, and 30-minute transit travel sheds to and from the project site on a typical weekday morning are shown in Figure 4.

Planned Transit Service

moveDC Transit Priority Network

The draft Transit Priority Network in the approved *moveDC* 2021 update, the District’s multimodal long-range transportation plan, proposes transit priority infrastructure such as dedicated transit lanes, better transit stops, and/or special treatments for buses at intersections along designated corridors. Specific treatments along given streets or route paths are not proposed but rather prioritized as part of the long-range plan. Transit priority corridors proposed near the proposed project include:

- Georgia Avenue NW from Eastern Avenue NW to Florida Avenue NW;
- 7th Street NW/SW from Florida Avenue to the Maine Avenue SW;
- U Street NW from 9th Street NW to 16th Street NW; and
- Florida Avenue NW from 9th Street NW to N Capitol Street.

Identified as part of this network, WMATA bus routes D40, D4X, and D44 are partially covered by the Georgia Avenue NW and 7th Street NW/SW priority corridors, and bus routes C51, C53, and C57 are partially covered by the U Street NW and Florida Avenue NW priority corridors. Priority bus improvements have the potential to improve bus speeds and service to the site in the future.

The Georgia Avenue NW Bus Priority Project from Barry Place NW to Eastern Avenue NW is currently in the design phase until Fall 2026. As Georgia Avenue NW corridor is part of the high-injury network and serves Metrobus Routes D40 and D4X, which have some of the highest ridership of all routes in the region, DDOT is implementing strategies to improve safety, decrease transit delays, and increase transit reliability such as offsetting bus lanes, installing bus bulb-outs, rebalancing bus stops, and adding turn pockets. Bus-only lanes currently exist on Georgia Avenue NW along the site’s western frontage.

The U Street NW Bus Priority project is currently in the design phase and will begin the construction process mid-2027. The project aims to address bus delays, loading/delivery and pick-up/drop-off operations along the commercial corridor, and increase bus speed and reliability. Currently, the proposed bus priority tools include installing bulb-outs and curb extensions, bus stop rebalancing, offsetting bus lanes, curbside management, and closure of slip lanes.

Howard University Campus Master Plan

As part of the Howard University Campus Master Plan Transportation Demand Management (TDM) Plan, “The University will maintain existing bus routes and stops during any and all University construction events in order to avoid transit service disruptions for the University and surrounding communities. Further Processing for parcels abutting WMATA bus routes or stops (Parcels A, E, F, and J) will include plans for maintaining bus service”.

Table 1: Bus Route Information

Route Number	Line Name	Service Hours at Nearest Bus Stop			Headway (min)	Walking Distance to Nearest Bus Stop
		Weekday	Saturday	Sunday		
WMATA Routes						
C51	U St - Anacostia	24/7 Service	24/7 Service	24/7 Service	20-30	0.3 miles (6 min)
C53	U St – Congress Heights	24/7 Service	24/7 Service	24/7 Service	8-20	0.3 miles (6 min)
C57	U St – Capitol Heights	7:00- 9:00am, 3:00-7:00pm	N/A	N/A	30	0.3 miles (6 min)
C91	Georgetown – LeDroit Park	5:30am- 12:00am	6:00am- 11:00pm	6:00am- 11:00pm	20-40	0.3 miles (7 min)
D32	Rhode Island Av – Ft Lincoln	5:30am- 12:00am	6:30am- 12:00am	6:30am- 12:00am	10-30	0.6 miles (13 min)
D40	7 th St – Georgia Ave	24/7 Service	24/7 Service	24/7 Service	12-20	<0.01 miles (1 min)
D44	11 th St	5:30am- 12:00am	6:30am- 12:00am	6:30am- 12:00am	10-30	0.3 miles (7 min)
D4X	7 th St – Georgia Ave Express	6:00am- 10:00pm	6:00am- 9:00pm	6:00am- 9:00pm	10-12	0.2 miles (5 min)

¹ Service hours are based on the most recent effective schedules available on WMATA website.

² Only bus stops within the transit review area shown in Figure 3 are included.

Table 2: Metrorail Service Hours

Day	Time
Monday – Thursday	5 AM – midnight
Friday	5 AM – 2 AM
Saturday	6 AM – 2 AM
Sunday	6 AM – midnight

Table 3: Metrorail Service Intervals (in minutes)

Rail Line	Monday & Friday	Tuesday, Wednesday, Thursday	Saturday & Sunday
Green	5 AM – 9:30 PM: 6 min 9:30 PM – close: 8 min	5 AM – 9:30 PM: 6 min 9:30 PM – close: 8 min	6 AM – 9:30 PM: 8 min 9:30 – close: 8 min

Table 4: WMATA Bus Stop Amenity Guidance

Amenity	Basic Stop		Enhanced Stop	Transit Center Stop
	< 50 daily boardings	≥ 50 daily boardings		
Bus stop flag	●	●	●	●
Route map and schedule	●	●	●	●
5' x 8' landing pad	●	●	●	●
40'/60' x 8' landing pad			●	●
4' sidewalk	●	●	●	●
Bench		●	●	●
Shelter		●	●	●
Lighting (on shelter or within 30' if overhead)	Required for stops with early morning and evening service		●	●
Dynamic information signage	Contingent on the presence of shelter			
Trash and recycling receptacles	Recommended where surrounding uses may generate trash			

Table 5: Local Bus Stop Information

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & schedule	Landing pad	Sidewalk	Bench	Shelter	Dynamic Info Sign	Lighting	Trash Recp.
Rhode Island Av NW + New Jersey Av NW	1001597	D32	●	●	●	●	●	●	●	●	●
7 St NW + S St NW (SB)	1001602	D40	●	●	●	●	●	●	●	●	●
New Jersey Av NW + Florida Av NW	1001604	C51	●	●	●	●					●
7 St NW + S St NW (NB)	1001606	D40	●	●	●	●	●	●	●	●	●
Vermont Av NW + S St NW	1001608	D44	●	●	●	●	●	●			●
Florida Av NW + New Jersey Av NW	1001610	C53, C57	●	●		●					●
Florida Av NW + 6 St NW (WB)	1001625	C51, C53, C57	●	●		●				●	●
7 St NW + T St NW	1001640	D40, D4X	●		●	●				●	
Florida Av NW + Georgia Av NW	1001653	C51, C53, C57	●	●	●	●	●	●		●	●
Florida Av NW + 7 St NW	1001655	C51, C53	●	●	●	●	●	●	●	●	●
Vermont Av NW + U St NW (SB)	1001659	C57, D44	●	●	●	●					●
Vermont Av NW + U St NW (NB)	1001670	D44	●	●		●					●
U St NW + 9 St NW	1001674	C51, C53	●		●	●					
U St NW+13 St NW	1001679	C51, C53	●	●	●	●	●	●	●		
3 St NW+U St NW	1001682	C91	●		●	●					●
U St NW + Vermont Av NW (WB)	1001683	C51, C53	●	●		●				●	●
U St NW + Vermont Av NW (EB)	1001685	C51, C53	●	●	●	●	●	●	●	●	●
U St NW + 13 St NW (WB)	1001688	C51, C53	●		●	●				●	●
Georgia Av NW + V St NW	1001709	D40	●		●	●				●	●
4 St NW + V St NW	1001720	C91	●			●				●	
Florida Av NW + W St NW (NB)	1001733	D44	●		●	●				●	
4 St NW + W St NW	1001737	C91	●	●		●	●	●		●	●
Florida Av NW + W St NW (SB)	1001738	D44	●		●	●				●	

Location	Stop ID	Routes Served	Amenities									
			Bus stop flag	Route map & schedule	Land-ing pad	Side-walk	Bench	Shelter	Dyna mic Info Sign	Light-ing	Trash Recp.	
Georgia Av NW + W St NW	1001739	D40	●	●	●	●	●	●	●			
W St NW + 2 St NW	1001748	C91	●			●					●	
Georgia Av NW + Barry PI NW (NB)	1001774	D40	●	●		●					●	
Bryant ST NW + #301	1001776	C91	●		●	●						
Georgia Av NW + Barry PI NW (SB)	1001786	D40	●			●				●		
Georgia Av NW + Howard PI NW (NB)	1001803	D40, D4X	●			●					●	
11 St NW + Clifton St NW (NB)	1001818	D44	●			●					●	
Georgia Av NW + Howard PI NW (SB)	1001820	D40, D4X	●			●					●	
11 St NW + Euclid St NW	1001857	D44	●	●		●				●	●	
Georgia Av NW +Euclid St NW (NB)	1001860	D40	●			●				●	●	
Georgia Av NW +Euclid St NW (SB)	1001871	D40	●			●					●	
11 St NW + Girard St NW	1001929	D44	●			●				●	●	
Georgia Av NW + Gresham PI NW	1001939	D40	●			●				●	●	
11 St NW + Fairmont St NW	1003049	D44	●	●	●	●					●	
11 St NW + Clifton St NW (SB)	1003050	D44	●		●	●				●		
3 St NW+U St NW (NB)	1003074	C91	●			●					●	
Georgia Av NW + Florida Av NW	1003615	D40, D4X	●			●				●	●	
Florida Av NW+11 St NW (SB)	1003917	D44	●		●	●						
Florida Av NW+11 St NW (NB)	1003918	D44	●			●						
Georgia Av NW + Girard St NW	1003934	D40	●			●				●	●	

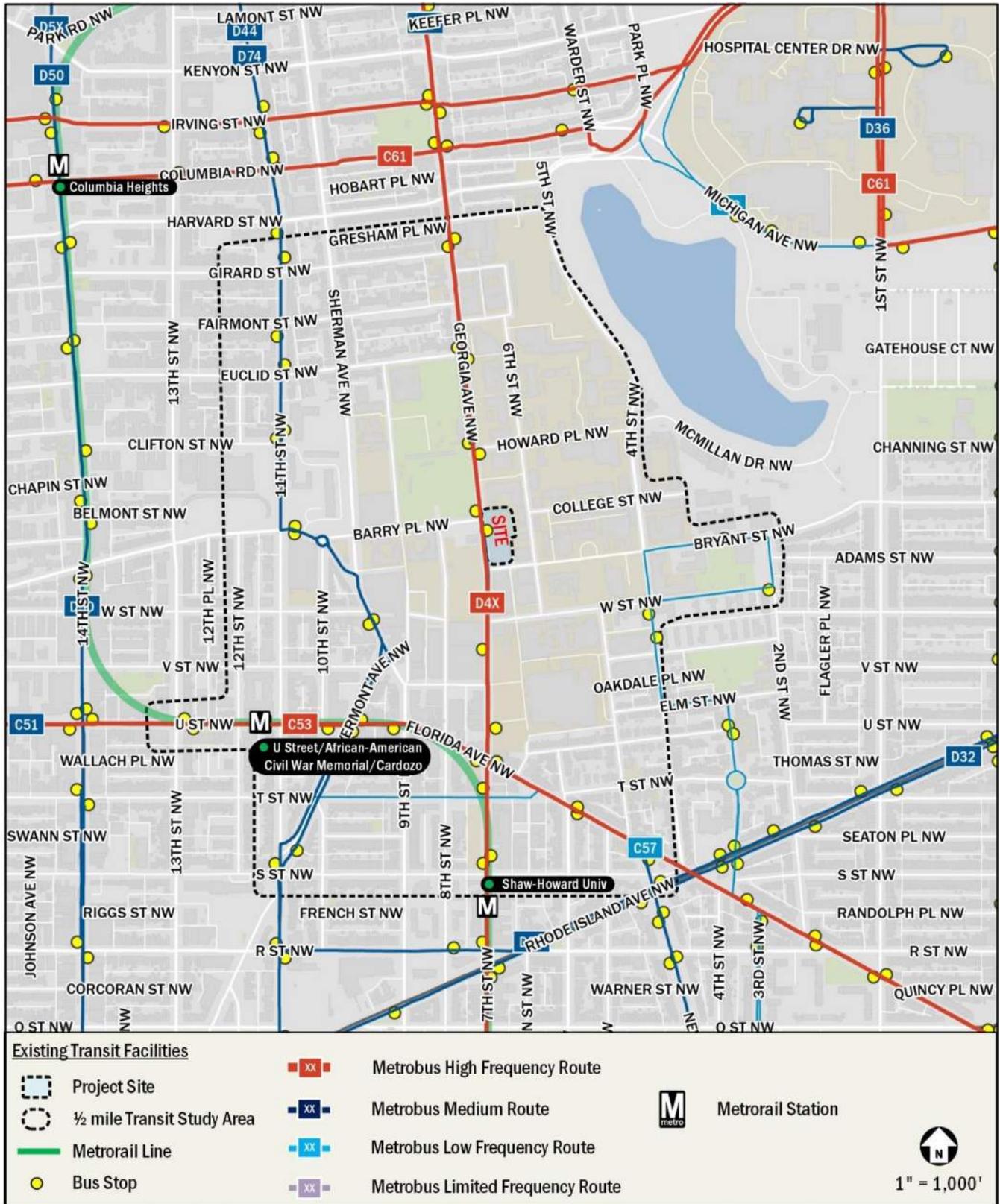


Figure 3: Existing Transit Facilities

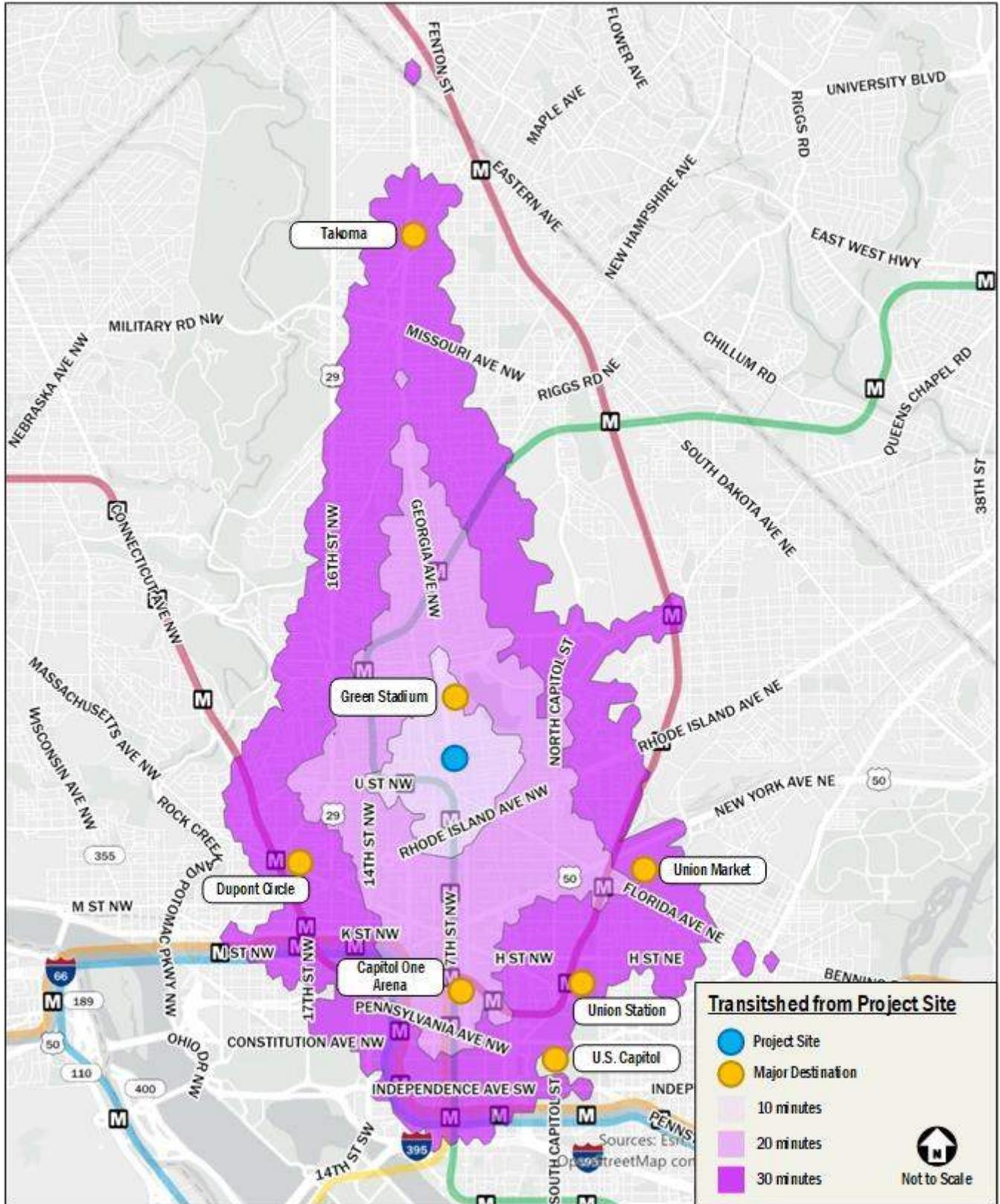


Figure 4: Transitshed from Project Site

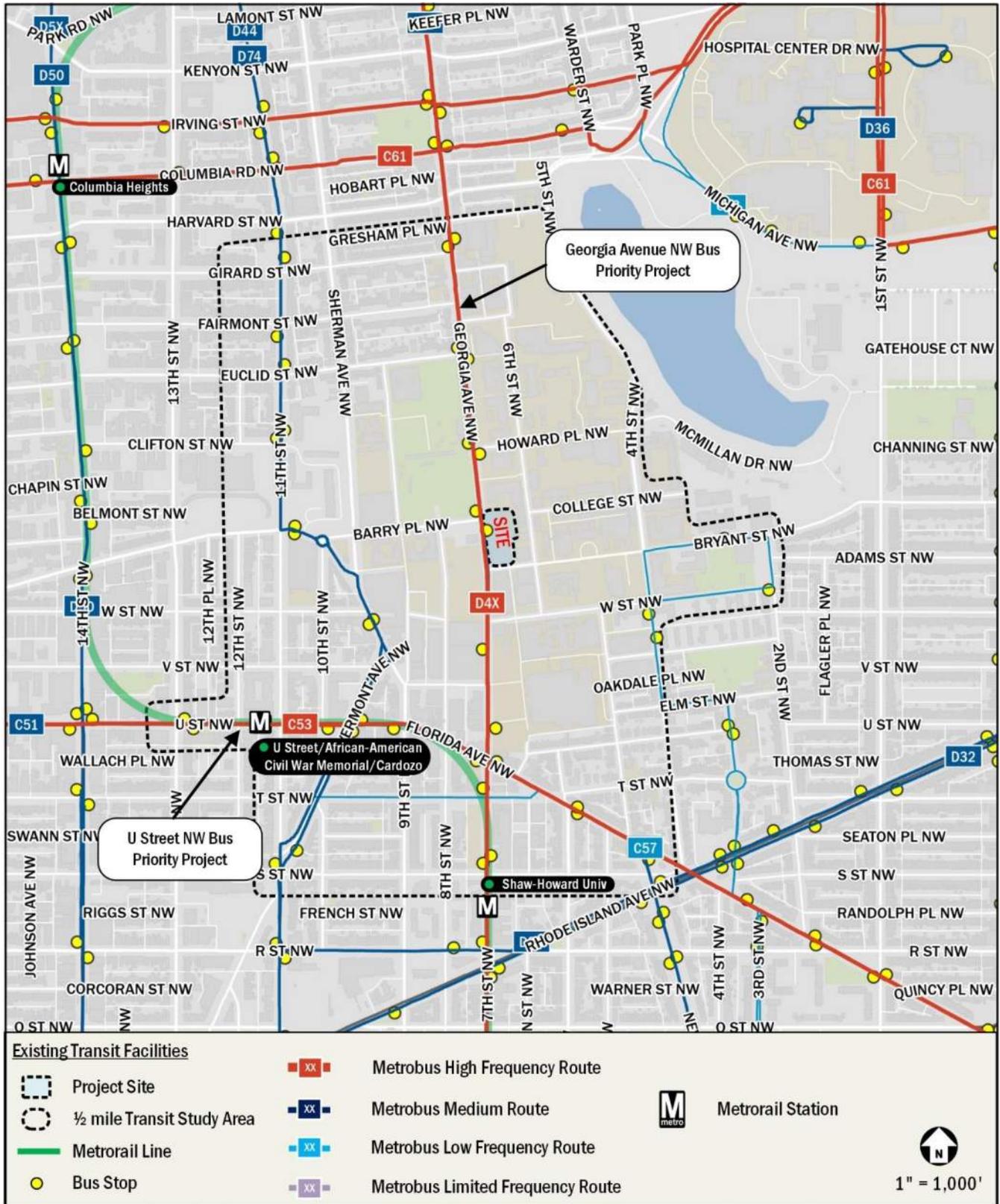


Figure 5: Future Transit Facilities

HU Shuttle Service

Howard University currently operates nine (9) regular campus shuttle routes, up from four (4) in the 2020 CMP: North Campus Route, South Campus Route, West Campus Route, Weekend Campus Route, Mazza GrandMarc, Connecticut Avenue Route, 801 N Capitol St NW Route, The Lanes Apartment Route, and Wish Route. All shuttle routes begin service on the first official day of classes. Additionally, the Summer Route operates from May to August and is the sole shuttle service during the summer semester.

On average, HU shuttle buses arrive every 20-30 minutes, except for the West Campus shuttle, which operates on a 45-minute interval. The closest shuttle bus stop is at W Street NW and Georgia Avenue NW, a 2-minute walk from the project site, serving four (4) shuttle bus routes. Additionally, another stop at Howard Place NW and Georgia Avenue, north of the project site, is served by all nine (9) regular campus shuttle routes. Given the extensive service coverage, the trips generated by the proposed project site are expected to be accommodated with existing shuttle network.

Bicycle Facilities

Existing Bicycle Facilities

The site has access to existing on- and off-street bicycle facilities. A shared bus/bike lane runs along Georgia Avenue NW between Barry Place NW and T Street NW, directly adjacent to the site on Georgia Avenue NW. Nearby, bicycle lanes on 4th and 5th Streets NW provide connections to protected bicycle lanes on Warder Street NW and Park Place NW. Additionally, the protected bicycle lanes along 9th Street NW offer a direct link to the extensive bicycle network in downtown DC.

Figure 6 shows the existing bicycle facilities near the project site. The approximate 10-, 20-, and 30-minute bicycle travel sheds to and from the project site are shown in Figure 7.

Capital Bikeshare

In addition to personal bicycles, the Capital Bikeshare program provides additional bicycle options for residents. The program has placed over 700 bikeshare stations across the Washington metropolitan area with over 6,000 bicycles in the fleet. There are 13 Capital Bikeshare stations located within a half-mile radius of the site, with their locations, number of available docks, and walking distance from project site summarized in Table 6.

Table 6: Capital Bikeshare Station near Project Site

Location	Available Docks	Walking Distance from Project Site
8 th St NW & V St NW	19	0.2 miles (5 mins)
10 th St NW & Florida Ave NW	19	0.3 miles (6 mins)
4 th St NW & College St NW	15	0.3 miles (6 mins)
7 th St NW & Florida Ave NW	15	0.3 miles (7 mins)
Georgia Ave NW & Fairmont St NW	15	0.3 miles (8 mins)
11 th St NW & Clifton St NW	19	0.4 miles (9 min)
7 th St NW & S St NW	19	0.5 miles (10 min)
3 rd St NW & Elm St NW	24	0.5 miles (11 mins)
11 th St NW & V St NW	18	0.5 miles (11 mins)
10 th St NW & U St NW	19	0.5 miles (11 mins)
12 th St NW & U St NW	36	0.5 miles (14 mins)
11 th St NW & Girard St NW	19	0.5 miles (15 mins)
13 th St NW & U St NW	19	0.7 miles (15 min)

DDOT's Capital Bikeshare Development Plan was originally released in 2016 to guide the continued growth of Capital Bikeshare in the District. The most recent update of the Development Plan was released in 2020 and shows no planned Capital Bikeshare station near the proposed project.

Planned Bicycle Facilities

moveDC Bicycle Priority Network

As part of the 2021 update to *moveDC*, DDOT has outlined both funded and future planned improvements to the District's Bicycle Priority Network. Funded improvements have secured construction funding within the next six (6) years; however, none are currently planned near the project site. Meanwhile, future planned improvements have been designated but lack committed funding. Within the study area, planned upgrades along Florida Avenue NW will introduce fully protected bike facilities, aligning with the roadway's classification as an arterial. On Euclid Street NW, improvements may include a protected or standard bike lane, or another facility type such as an advisory lane, buffered lane, contra-flow lane, or neighborhood bikeway, depending on roadway conditions. These improvements remain unfunded at this time.

Shared Mobility

As of February 2025, micromobility service in the District is provided by four (4) private dockless companies operating electric-assist bicycles (e-bikes) and electric scooters (e-scooters), including Lime, Spin, Lyft, and Veo. These dockless vehicles are provided by private companies that give registered users access to a variety of e-bike and e-scooter options. These devices are used through each company-specific mobile phone application. Many dockless vehicles do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare; rather, they are parked in public space, most commonly in the "furniture zone" or the portion of sidewalk between where people walk and the curb, often where other street signs, street furniture, trees, and parking meters are found. In addition to DDOT's program, dockless pilots and demonstration programs are underway in Arlington County, Fairfax County, the City of Fairfax, the City of Alexandria, and Montgomery County.

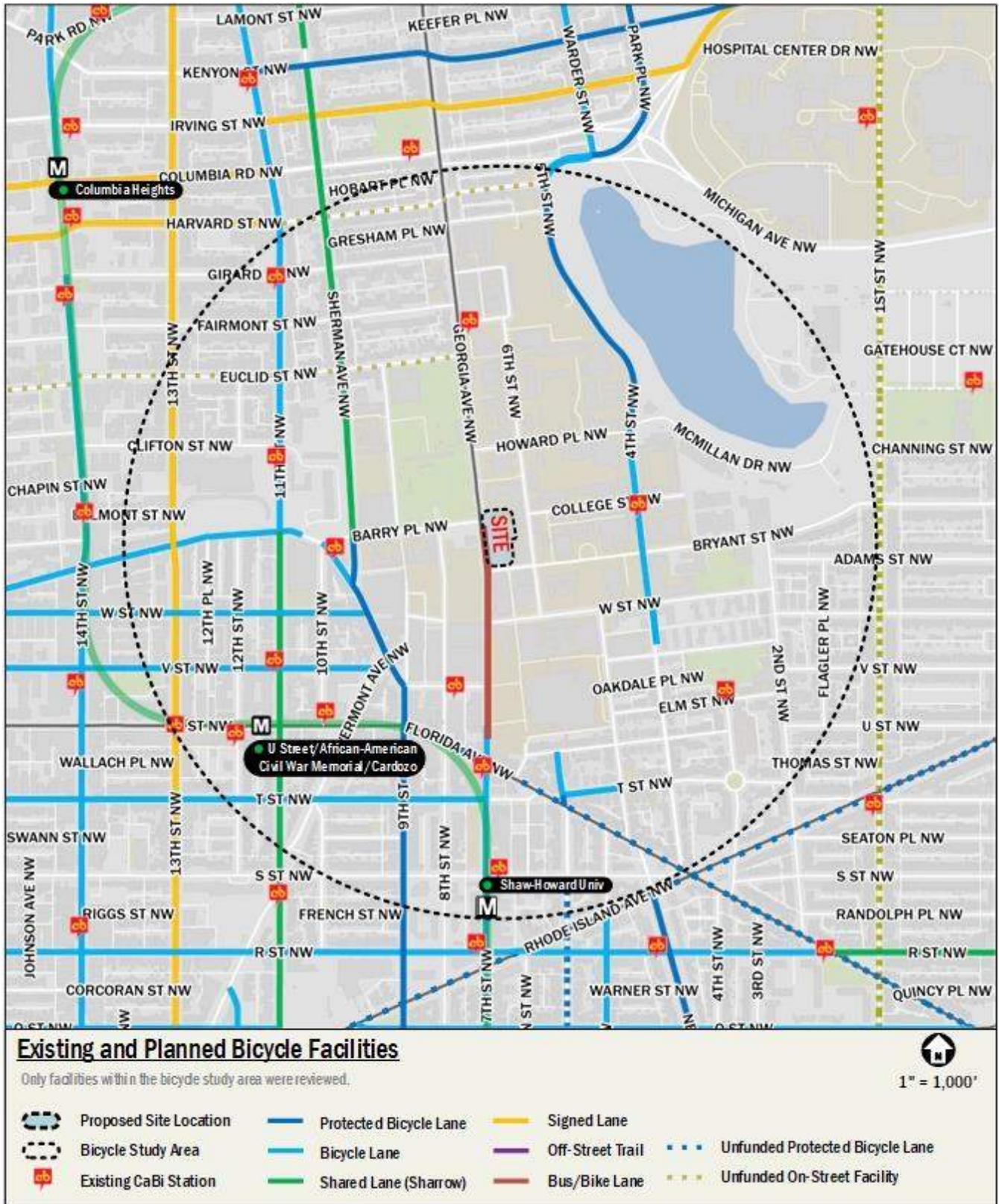


Figure 6: Existing and Planned Bicycle Facilities

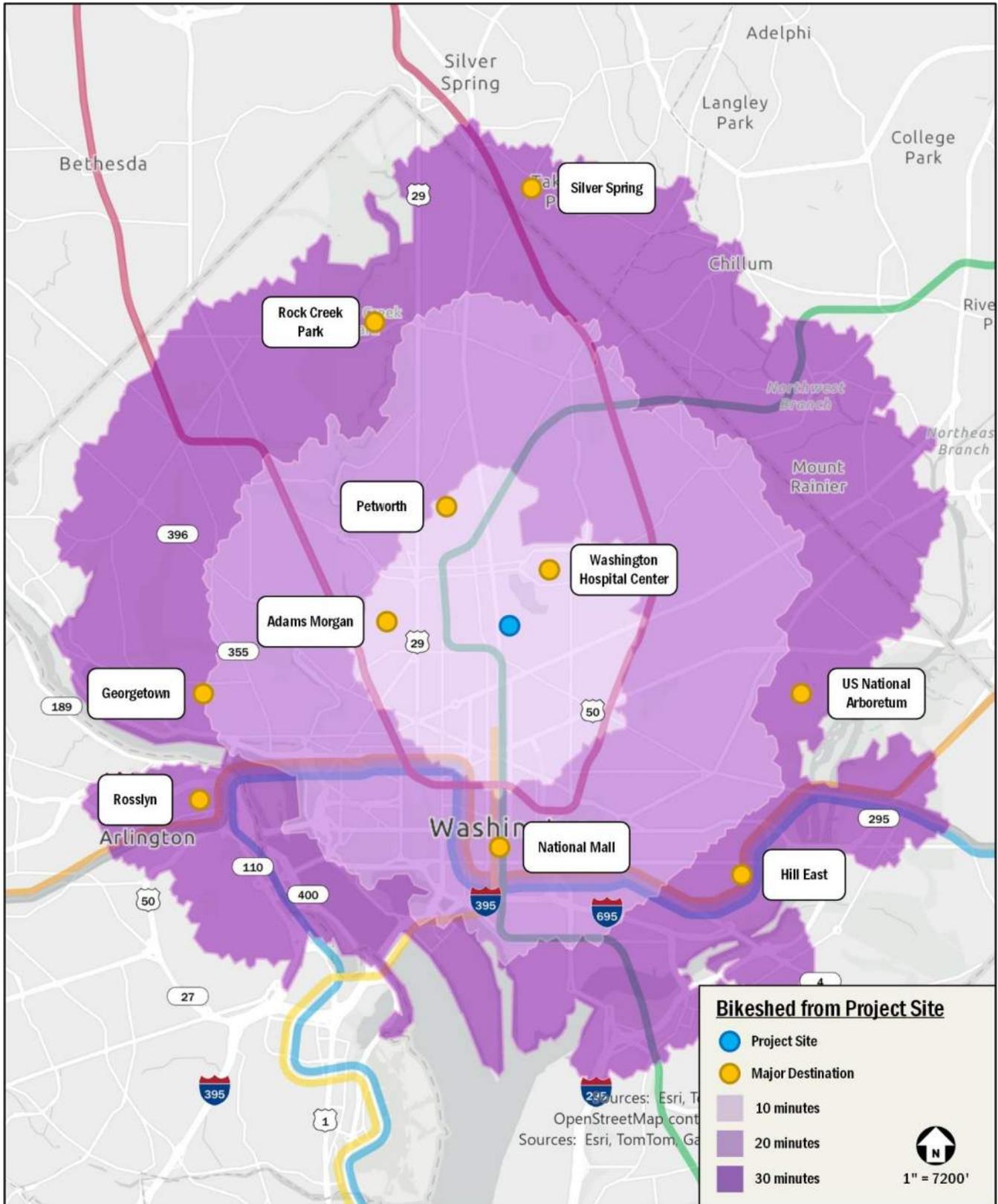


Figure 7: Bikeshed from Project Site

Pedestrian Facilities

Overall, pedestrian facilities within the study area provide sufficient connectivity to major local destinations. An overview of pedestrian facilities within approximately a quarter-mile radius is provided in Figure 8, with a summary of sidewalk width requirements shown in Table 7. The approximate 10-, 20-, and 30-minute walking travel sheds to and from the project site are shown in Figure 9.

As shown in Figure 8, the streets within the pedestrian study area fall into the “Low to Moderate Density Residential” or “High Density Residential or Light Commercial” category of sidewalk width requirements. Sidewalks in this area require a minimum buffer of four (4) to eight (8) feet and a minimum sidewalk unobstructed width of eight (8) feet for a total minimum sidewalk width of 10 to 13 feet, as shown in Table 7. The sidewalks in the study area that do not meet DDOT standards typically do not maintain the total minimum sidewalk width or provide sufficient buffer width but do provide an unobstructed clear width of at least six (6) to eight (8) feet.

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 are not desired but where they are present, a 48” clear space is required outside active vehicle traffic lanes and within marked crossings. As shown in Figure 8, under existing conditions, there are a few missing curb ramps along W Street NW and a number of curb ramps that either lack a 48” clear space or detectable warning within the study area.

Table 7: Sidewalk Requirements

Street Type	Minimum Buffer Width	Minimum Sidewalk Unobstructed Width	Total Minimum Sidewalk Width
Residential (Low to Moderate Density)	4-6 feet	6 feet	10 feet
Residential (High Density)	4-8 feet	8 feet	13 feet
Central DC and Commercial Areas	4-10 feet	10 feet	16 feet

Pedestrian Infrastructure Improvements

Pedestrian facilities on-site and along its perimeter will be improved to meet DDOT and ADA standards. Sidewalks along the project site frontage will be reconstructed to meet or exceed the width requirements. Additionally, background developments within the study area, including the new future parcels proposed in the HU CMP, will also provide improvements to the surrounding pedestrian facilities. The future conditions of pedestrian facilities are shown in Figure 10.

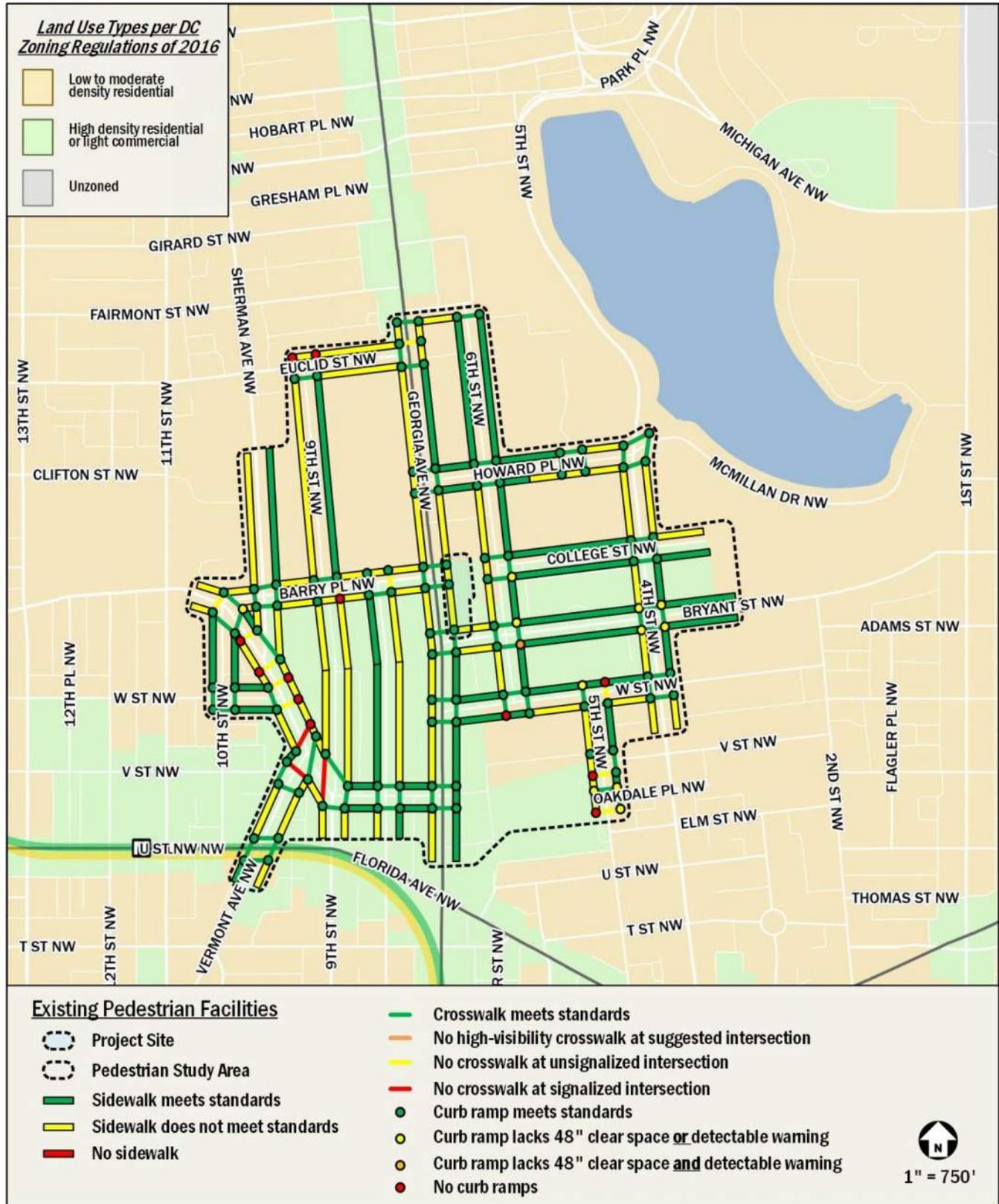


Figure 8: Existing Pedestrian Facilities

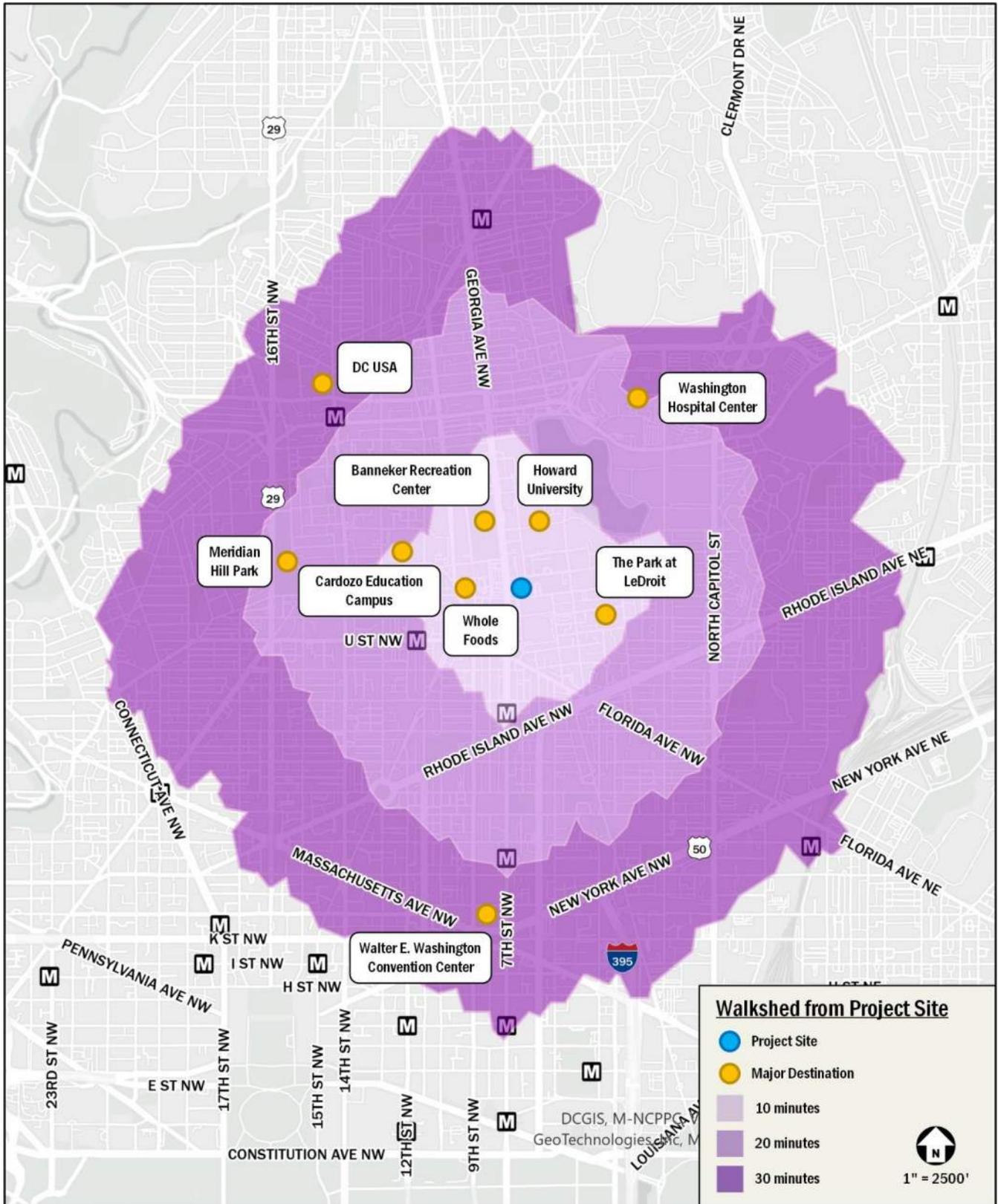


Figure 9: Walkshed from Project Site

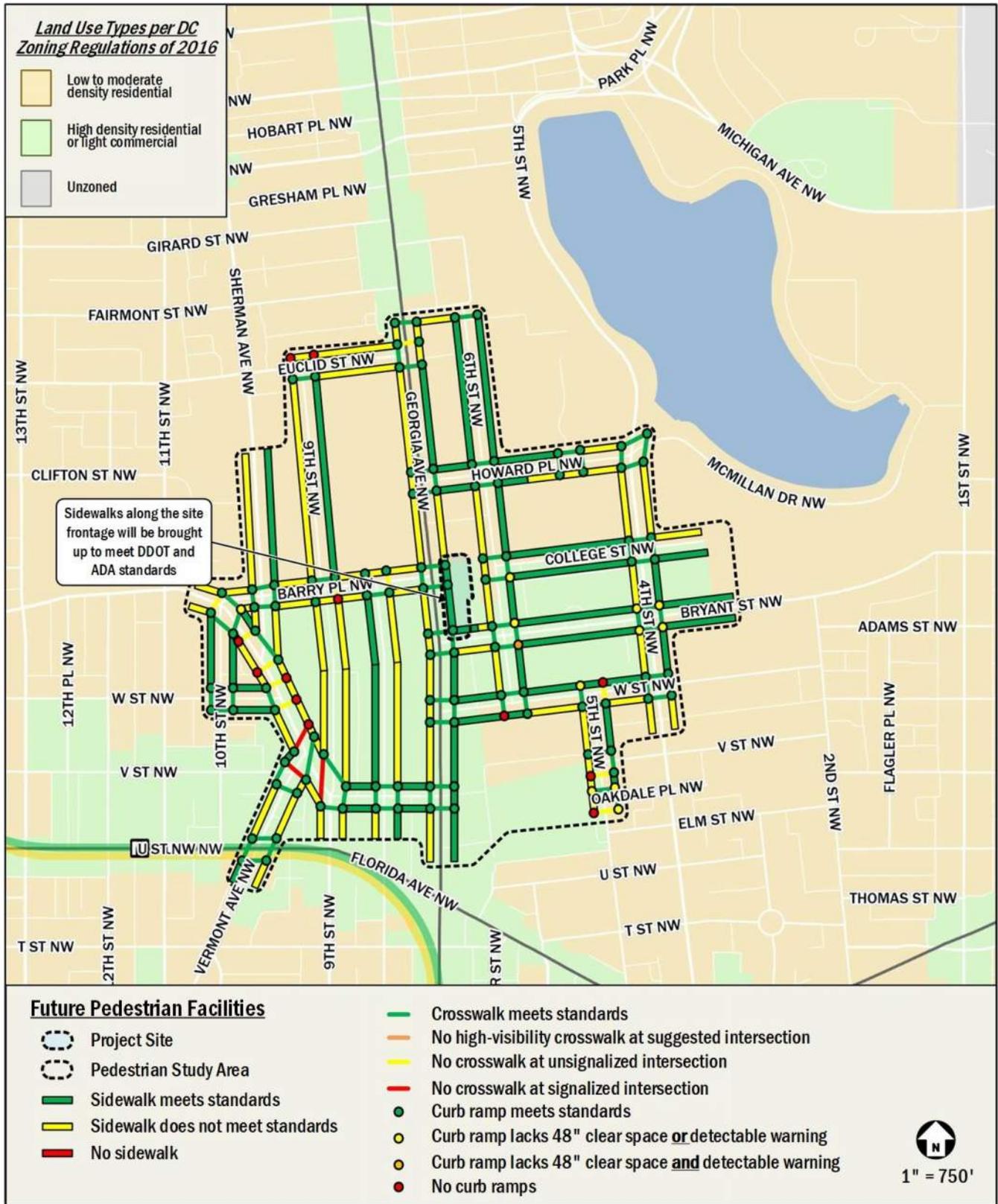


Figure 10: Future Pedestrian Facilities

Safety Analysis

A qualitative review was conducted to assess any vehicle, pedestrian, and bicycle conflicts at intersections and street segments within the study area. This review included identifying any intersections designated by the District Department of Transportation (DDOT) as high-crash locations. The analysis focuses on existing conditions and is not a direct result of the proposed project; its findings are provided for DDOT's review and informational purposes.

The safety assessment examined whether any nearby intersections pose significant conflicts for vehicles, pedestrians, or cyclists. This evaluation was based on data from DDOT's most recent *Traffic Safety Statistics Report (2018-2020)*, the *Vision Zero Action Plan*, and the Open Data DC *Vision Zero Safety* database.

According to the available data, no intersections within the study area have been identified by DDOT as one of the top 20 high-crash locations. However, it's important to note that Georgia Avenue NW has been designated as a Tier 1 High Injury Corridor under DDOT's Vision Zero initiative. Specifically, the segment of Georgia Avenue NW adjacent to the project site is classified as a Tier 1 high injury segment. This designation indicates a higher concentration of severe crashes involving vehicles, pedestrians, and cyclists along this corridor.

The Tier 1 High Injury Corridor classification under Vision Zero prioritizes Georgia Avenue NW for targeted safety improvements. DDOT is committed to implementing measures aimed at reducing traffic-related fatalities and serious injuries. Potential safety enhancements may include infrastructure upgrades, traffic calming measures, or enhanced signage and signals.

Curbside Management

A review of curbside uses within approximately two (2) blocks of the project site, as shown in Figure 11, indicates that the area primarily offers time-restricted on-street parking. Specifically, along the site frontage on Bryant Street NW, time-restricted parking is currently in place. The project proposes to maintain these existing curbside designations within the study area. As such, future curbside usage will remain consistent with existing conditions.

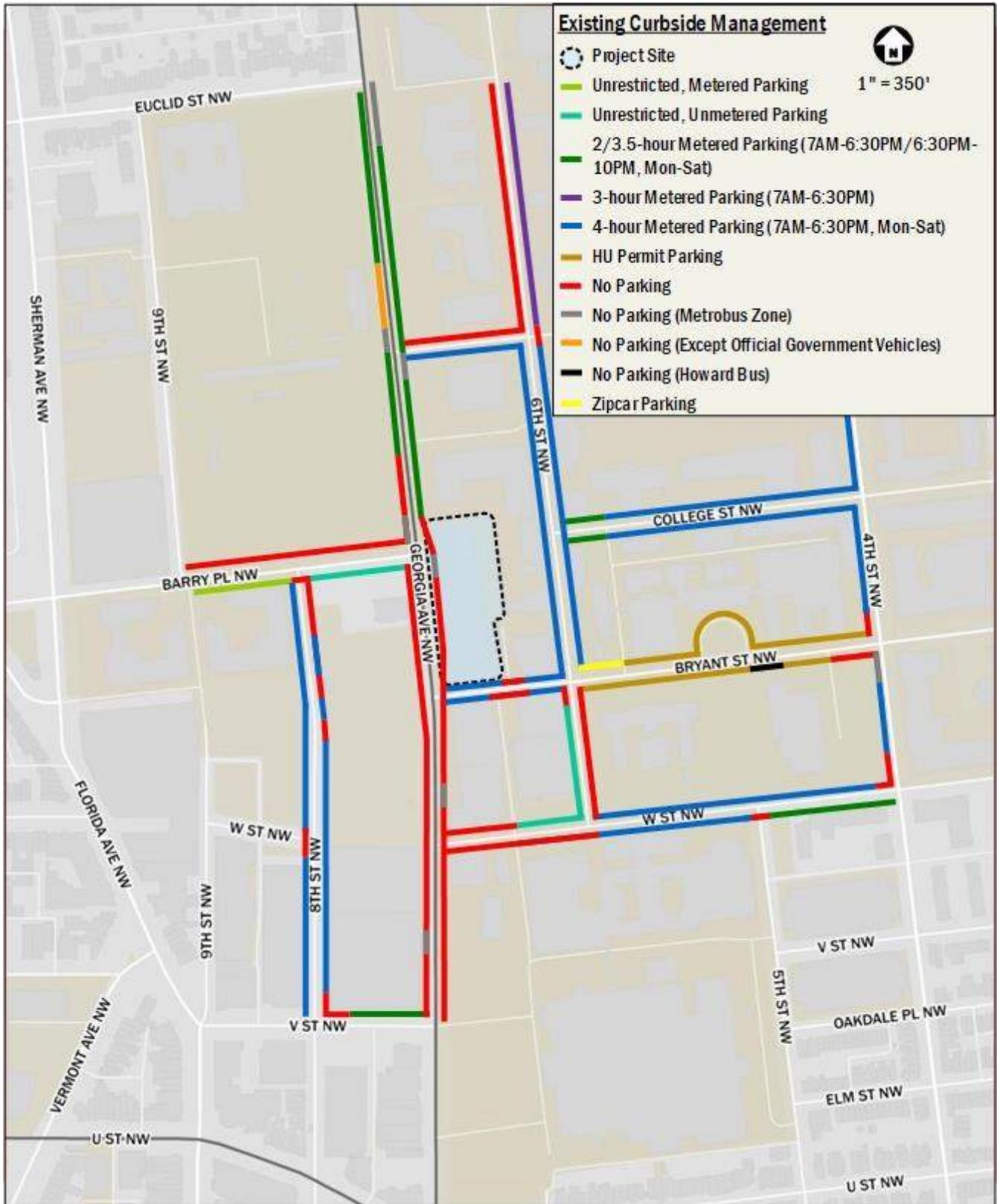


Figure 11: Existing Curbside Management

Strategic Planning Documents and Initiatives

There are several District-wide and local planning documents and initiatives located in the vicinity of the project site. These documents and projects are summarized below, along with their implications for or relation to the proposed project.

2020 Howard University (HU) Campus Master Plan (CMP)

The 2020 HU CMP serves as a guiding document for the University's long-term development strategy, including different aspects such as academic mission, quality of life, urban design, public realm, and physical access and connectivity. The transportation strategy established in the CMP is comprised of five (5) elements:

- Ensuring there is no net increase in parking supply;
- Improving pedestrian conditions and connectivity;
- Increasing multimodal access;
- Provide safe, efficient access to the new Howard University Hospital; and
- Being a good transportation neighbor.

The CMP directly informs and dictates the Further Processing (FP) application for the proposed project by establishing the transportation framework that new developments must follow. The CMP includes recommendations for roadway reconfigurations, parking management, and TDM strategies, which shape the transportation design and commitments of the proposed project. As the proposed project is part of the broader CMP, it adheres to the CMP's transportation strategies, ensuring that multimodal transportation improvements align with the University's long-term vision while mitigating transportation-related impacts and enhancing accessibility and connectivity for students and the surrounding neighborhoods.

Sustainable DC 2.0 Plan

The *Sustainable DC 2.0 Plan* of 2018 is an update on the original *Sustainable DC Plan* of 2013. It is a high-level guiding document that contains sustainability goals, targets, and actions for the District ranging across Governance, Equity, Built Environment, Climate, Economy, Education, Energy, Food, Health, Nature, Transportation, Waste, and Water. The subject area of area of Transportation contains the following targets which are supported by the proposed project:

- “*TR1.5 Identify and remove the obstacles to families taking transit.* Many families with small children (or who require strollers) find using transit, particularly buses, difficult. By better understanding the specific obstacles making transit difficult for families, the District will be able to change policies or make physical changes to make riding transit convenient and safe for families. Changsha, China launched a Child Friendly City initiative, which included children in the design process to make transit more family friendly. Other jurisdictions charge a lower fare for children, which the District should also consider doing, building on the success of the Kids Ride Free for school age children.”
 - The proposed project supports this target by upgrading sidewalks along the property frontage to meet DDOT standards, enhancing walking experience around the site and the surrounding area.
- “*TR2.1: Develop and maintain a safe and convenient citywide bicycle lane and trail network.* Washington, DC currently has 85 miles of bicycle lanes, including 10 miles of protected bicycle lanes and 60 miles of multi-use trails. However, many residents do not have convenient access to this network or do not feel safe biking with traffic on the street. The District Government will expand the current system to a 130-mile connected and convenient bicycle lane network, including 44 miles of protected bicycle lanes. Additionally, the District will expand the trail network to 114 miles. Bike lanes and trails will be prioritized in neighborhoods east of the Anacostia River where bicycle infrastructure is currently insufficient, and will do so in consultation with the community to ensure residents' concerns and desires are taken into account in planning.”
 - The proposed project supports this target by providing a total of at least 109 long-term and 32 short-term bicycle parking spaces, with the long-term spaces significantly exceeding the District's requirements.

- “*TR 3.2 Encourage private business to offer incentives to employees for transit, biking, and walking.* Eighteen percent of the District’s greenhouse gas emissions come from private passenger vehicles, which are also responsible for a significant amount of traffic congestion in the city. The District Government will build on the goDCgo program to work with businesses to develop a suite of incentives that private businesses can offer to their employees to encourage clean commuting, such as including facilities for showering after biking and walking and subsidizing Metro SmartTrip cards. To make sure existing required benefits are available to those entitled, the District Government will also ensure all employers comply with the existing transit benefits law.”
 - The proposed project supports this target by implementing a building-specific Transportation Demand Management (TDM) plan to help reduce the demand of single-occupancy, private vehicles during peak period travel times or shift single-occupancy vehicular demand to off-peak periods.
- “*TR 4.3 Encourage network of electric vehicle charging stations throughout the city.* Electric vehicles (EVs) have a battery instead of a gasoline tank, and an electric motor instead of an internal combustion engine, which means they do not emit pollution from their tailpipes. There is still limited infrastructure to charge EVs. The District Government will partner with the private sector, Pepco, and other relevant players to facilitate the development of convenient, publicly accessible EV charging stations (for example in designated spaces on appropriate streets or in parking structures). Electrification opportunities will be evaluated based on their ability to reduce GHGs, maximize public benefits and investment from the private sector, and equity.”
 - The proposed project supports this target by providing a minimum of three (3) EV parking stations within the below-grade parking garage.

moveDC

As the District of Columbia grows, so must the transportation system, and specifically it must grow in a way that expands transportation choices while improving the reliability of all transportation modes. In order to meet this challenge and capitalize on future opportunities, DDOT maintains and regularly updates its long-range transportation plan, *moveDC*, to identify transit challenges and opportunities and to recommend investments.

The *moveDC* 2014 update outlined recommendations by mode with the goal of having them complete by 2040, including improvements to the District’s transportation system such as:

- 70 miles of high-capacity transit (streetcar or bus);
- 200 miles of on-street bicycle facilities or trails;
- Sidewalks on at least one side of every street;
- New street connections;
- Road management/pricing in key corridors and the Central Employment Area;
- A new downtown Metrorail loop;
- Expanded commuter rail; and
- Water taxis.

As part of the *moveDC* 2021 update, Mobility Priority Networks were created to show where investments in safety and mobility improvements will take place for specific modes of transportation. The Transit Priority Network highlights streets where infrastructure improvements such as dedicated transit lanes, better transit stops, and/or special intersection treatments for buses will be prioritized to improve transit travel times and reliability. The Bicycle Priority Network includes bicycle priority routes from the *moveDC* 2014 update and additions from recent planning and public engagement efforts. From the final *moveDC* 2021 update published in December 2021, the Transit and Bicycle Priority Networks near the project site include:

- Four (4) transit priority corridors:
 - Georgia Avenue NW from Eastern Avenue NW to Florida Avenue NW;
 - 7th Street NW/SW from Florida Avenue to the Maine Avenue SW;
 - U Street NW from 9th Street NW to 16th Street NW; and
 - Florida Avenue NW from 9th Street NW to N Capitol Street.
- Future planned protected bicycle lanes on Florida Avenue NW; and
- Future planned on-street bicycle facilities on Euclid Street NW.

Vision Zero Action Plan

DDOT's *Vision Zero Action Plan* is the implementation strategy of DC's Vision Zero Initiative, which commits to reaching zero fatalities and serious injuries to travelers of DC's transportation system by the year 2024. The *Action Plan* is based on DC interagency workgroups, public input, local transportation data and crash statistics, and national and international best practices. Workgroups identified the guiding themes for the *Vision Zero Action Plan* and the goals of the DC government. The *Action Plan* focuses on the following themes:

- Create Safe Streets
- Protect Vulnerable Users
- Prevent Dangerous Driving
- Be Transparent and Responsive

Strategies within each theme assign lead and supporting agencies responsible for the planning and implementation of each program. The Action Plan also calls for partners external to the District government to ensure accountability and aid in implementation.

It's noted that Georgia Avenue NW has been designated as a Tier 1 High Injury Corridor under DDOT's Vision Zero initiative. Specifically, the segment of Georgia Avenue NW adjacent to the project site is classified as a Tier 1 high injury segment. This designation indicates a higher concentration of severe crashes involving vehicles, pedestrians, and cyclists along this corridor.

The Tier 1 High Injury Corridor classification under Vision Zero prioritizes Georgia Avenue NW for targeted safety improvements. DDOT is committed to implementing measures aimed at reducing traffic-related fatalities and serious injuries. Potential safety enhancements may include infrastructure upgrades, traffic calming measures, or enhanced signage and signals. By focusing on these improvements, the Vision Zero initiative aims to transform Georgia Avenue NW into a safer corridor, thereby enhancing the overall safety and quality of life for residents and visitors in the area surrounding the project site.

Capital Bikeshare Development Plan

DDOT's Capital Bikeshare Development Plan was originally released in 2016 to guide the continued growth of Capital Bikeshare in the District of Columbia. The most recent update of the Development Plan was released in 2020 and shows no planned Capital Bikeshare station near the proposed project .

DC Comprehensive Plan

The DC Comprehensive Plan is a high-level guiding document that sets a positive, long-term vision for the District through the lens of its physical growth and change. The existing Comprehensive Plan was enacted in 2006, updated in 2011, and as of November 2020 is currently being updated. The April 2020 proposed amendments to the Comprehensive Plan's Mid-City Area

Element, which includes the Howard University Central Campus and its surroundings, contains the following policies and actions which are supported by the HU Central Campus Plan:

- “*Policy MC-1.1.2: Directing Growth.* Stimulate high-quality, transit-oriented development around the Columbia Heights, Shaw/Howard University, and U St./African American Civil War Memorial/Cardozo Metro station areas, as well as along the Georgia Avenue NW corridor and the North Capitol Street NW/Florida Avenue NW business district. Opportunities for new mixed-income housing developments that provide a greater mix of affordability as a result of a rezoning effort, neighborhood retail, local-serving offices, and community services should be supported in these areas, as shown on the Comprehensive Plan Policy Map and Future Land Use Map.”
 - The proposed project supports this policy by improving pedestrian conditions and connectivity along the site frontage on Georgia Avenue NW and Bryant Street NW. Improving the connectivity, safety, and attractiveness of the pedestrian environment will help facilitate a more transit-oriented environment.
- “*Policy MC-1.1.8: Multimodal Connections.* Improve traffic circulation along major Mid-City arterial streets, with a priority on 14th Street NW, Georgia Avenue NW, U Street NW, 16th Street NW, Rhode Island Avenue NW, 18th Street NW, Columbia Road NW, North Capitol Street NW, Connecticut Avenue NW, North Capitol Street, New York Avenue NW, and Florida Avenue NW. Implement programs in these areas to improve bus service, improve pedestrian and bicyclist safety and ease of travel, and mitigate the effects of increased traffic on residential streets. Consistent with the Transportation Element of the Comprehensive Plan, provide alternatives to automobile use—including improved transit and innovative personal transportation options—for existing and new residents to reduce the need for auto ownership, particularly where parking and traffic problems exist.”
 - The proposed project supports this policy by: A) decreasing parking supply from the approved CMP; B) using Transportation Demand Management (TDM) measures to reduce parking demand; C) improving pedestrian conditions and connectivity along the site frontage; and D) increasing multimodal access and facilities for the proposed building, thereby reducing the need for auto trips to and from the campus.
- “*Policy MC-2.1.1: Revitalization of Lower Georgia Avenue NW.* Encourage continued revitalization of the Lower Georgia Avenue NW corridor. Lower Georgia Avenue NW should be an attractive, pedestrian-oriented ‘Main Street’ with retail uses, local-serving offices, mixed-income housing, civic and cultural facilities, and well-maintained public space.”
 - The proposed project supports this policy by improving pedestrian conditions and connectivity along the site frontage on Georgia Avenue NW and Bryant Street NW, as well as by providing a first-floor, neighborhood-serving retail use as part of the development program.
- “*Policy MC-2.1.2: Georgia Avenue NW Design Improvements.* Upgrade the visual quality of the Georgia Avenue NW corridor through urban design and public space improvements, including tree planting, new parks and plazas, upgraded triangle parks, and facade improvements that establish a stronger identity and improved image.”
 - The proposed supports this policy by improving pedestrian conditions and connectivity along the site frontage on Georgia Avenue NW, including removing surface parking.
- “*Policy MC-2.1.3: Howard University.* Encourage and strongly support continued relationship-building between Howard University and adjacent residential neighborhoods. Work with Howard University in the abatement of any outstanding community issues, such as the redevelopment of vacant property, facade/building enhancements, and buffering issues associated with campus expansion. Stimulate joint development opportunities with the university that benefit students and surrounding residents.”
 - The proposed project supports this policy by: A) providing a building-specific Transportation Demand Management (TDM) plan to reduce vehicle trips to and from the campus and mitigate the impact of vehicle trips on the surrounding

community; B) removing surface parking along Georgia Avenue NW, allowing for a more engaging and pedestrian-friendly streetscape on Georgia Avenue NW; and C) avoiding new vehicle access points on Georgia Avenue NW, reducing potential traffic conflicts.

7th Street and Georgia Avenue Streets Initiative

This initiative by the DC Office of Planning aims to transform the 7th Street and Georgia Avenue corridor into a thriving and inviting neighborhood center. It is part of a larger DC Great Streets program that strategically uses public investments to improve local quality of life and to attract private investment to communities. The 7th Street and Georgia Avenue Great Street Initiative specifically aims to:

- Improve the quality of life in neighborhoods along the corridors, including public safety, physical appearance, and personal opportunity;
- Support local demand for goods and services through economic development;
- Expand mobility choices and improve safety and efficiency of all modes of travel; and
- Attract private investment through the demonstration of a public commitment to Great Streets communities.

Right-of-way options are defined in the initiative's Framework Plan to improve bus service along the corridor and prepare for eventual streetcar service. Additionally, pedestrian facilities, including bulb-outs, high visibility crosswalks, and sidewalk extensions are included in the Plan, as well as signed bicycle routes and bike lanes. In order to improve vehicular travel, signal coordination and transit signal prioritization are suggested, as well as left-turn pockets at intersections where pedestrian bulbouts are not planned.

This project supports the 7th Street and Georgia Avenue Great Streets Initiative by improving pedestrian conditions and connectivity along Georgia Avenue, including removing surface parking and bringing sidewalks along the site frontage to DDOT and ADA standards. Improving the connectivity, safety, and attractiveness of the pedestrian environment along Georgia Avenue will help facilitate the mobility and investment goals outlined in the 7th Street and Georgia Avenue Great Streets Initiative.

Site Trip Generation

Traditionally, weekday peak hour trip generation was calculated based on the methodology outlined in ITE Trip Generation, 11th Edition. However, in order to compare the difference in trips generated by the development program assumed in the CMP’s CTR and by the currently proposed program, the methodology used for generating trips in this study maintains all the assumptions that were determined in the December 2020 CTR, as vetted and approved by DDOT as part of the Comprehensive Transportation Review (CTR) scoping process. The finalized DDOT CTR scoping form can be found in the Technical Attachments.

Based on the CMP, only retail uses apply the traditional ITE trip generation methodology and mode split assumptions. Academic-based trips, including those from student housing, health and wellness, and campus dining space, were generated based on the location and availability of vehicle parking. This approach was used because overall trip generation at HU is determined at the campus level rather than by individual buildings.

As such, this study estimated peak hour vehicular volumes using the following methodology:

- **Academic facilities**, including the proposed uses of student housing, health and wellness, and campus dining, were analyzed based on the proposed parking supply.
- **Retail facilities** were analyzed using traditional methodology outlined in ITE *Trip Generation*, which is based on the square footage of retail space.
 - Trip generation for retail use of the proposed project was calculated in a General Urban/Suburban setting based on ITE land use 822 (Strip Retail Plaza).

In addition, per DDOT’s request, the Total Weekday and Saturday peak hour trips were calculated for the proposed program. The 2020 CMP CTR did not include trip generation estimates for weekday daily or Saturday peak hour trips; as such, no trip generation estimates for these periods is reported from that study. To provide an estimate for these time periods for the current program while staying consistent with the proposed methodology, the following approach was utilized:

- Saturday peak hour trips were developed using a conversion factor based on the ratio of weekday peak hour trips to Saturday peak hour trips in ITE’s Trip Generation for mid-rise multifamily housing (ITE does not report any weekend trip generation rates for University/College uses).
- Weekday daily trips were developed using a conversion factor based on the ratio of weekday peak hour trips to daily trips from ITE’s Trip Generation time-of-day trip distributions for a university/college use (LU Code 550).

Detailed methodology established in the CMP can be found in the Technical Attachment.

Table 8 shows the mode split assumptions used in the CMP’s CTR. Table 9 compares the weekday AM and PM auto trip generation between the December 2020 analysis and the proposed project. Table 10 shows the Saturday peak hour and Weekday Total auto trips generated but the proposed development program. As shown, the proposed project is expected to generate 47 fewer vehicular trips in the AM peak hour and 97 fewer vehicular trips in the PM peak hour compared to the assumptions outlined in the CMP. As the projected trip generation is lower than what was analyzed in the CMP, the original findings remain valid, and an update to the vehicular capacity analysis is not necessary.

Table 8: Mode Split Assumptions

Land Use	Mode				
	Drive	Transit	Bike	Walk	Telecommute/Other
Retail	35%	15%	5%	45%	-

Table 9: Comparison of Auto Trips

Program	AM Peak Hour	PM Peak Hour
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	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Currently Proposed Program						
Campus Auto Trips	30 veh/hr	5 veh/hr	35 veh/hr	5 veh/hr	35 veh/hr	40 veh/hr
Retail Auto Trips	5 veh/hr	3 veh/hr	8 veh/hr	11 veh/hr	12 veh/hr	23 veh/hr
Total	35 veh/hr	8 veh/hr	43 veh/hr	16 veh/hr	47 veh/hr	63 veh/hr
Wonder Plaza - CMP CTR (12.11.2020)						
Campus Auto Trips	60 veh/hr	10 veh/hr	70 veh/hr	10 veh/hr	70 veh/hr	80 veh/hr
Retail Auto Trips	12 veh/hr	8 veh/hr	20 veh/hr	38 veh/hr	42 veh/hr	80 veh/hr
Total	72 veh/hr	18 veh/hr	90 veh/hr	48 veh/hr	112 veh/hr	160 veh/hr
Net New Auto Trips (Currently Proposed - 2020 CMP Study)						
Total Auto Trips	-37 veh/hr	-10 veh/hr	-47 veh/hr	-32 veh/hr	-65 veh/hr	-97 veh/hr

Table 10: Proposed Saturday Peak Hour and Weekday Total Trips

Program	Saturday Peak Hour			Weekday Daily
	<i>In</i>	<i>Out</i>	<i>Total</i>	
Currently Proposed Program				
Campus Auto Trips	19 veh/hr	18 veh/hr	37 veh/hr	388 veh
Retail Auto Trips	3 veh/hr	14 veh/hr	17 veh/hr	97 veh
Total	22 veh/hr	32 veh/hr	54 veh/hr	485 veh

Project Design

This section provides an overview of the on-site transportation features of the proposed project, including an overview of project site access by pedestrians, bicycles, private vehicles, and loading vehicles. Site plans of the ground level are presented in Figure 12.

Development Program Update

The overall development plan has been refined since the CMP approval, with details determined as part of this project. A summary of the development program update is provided in Table 11. As discussed in the previous chapter, the overall transportation demand of the proposed project is expected to decrease as a result. As such, the conclusions from the CMP traffic capacity analyses remain valid.

Table 11: Development Program Update

Plan Component	Wonder Plaza per 2020 CMP	Wonder Plaza per FP Plans
Student Housing	NA	281,696 sf
Health and Wellness	NA	19,656 sf
Dining	NA	8,408 sf
Retail	60,000 sf	7,520 sf
Vehicular Parking	300 spaces	151 spaces
Bicycle Parking	Meet ZR16 minimum requirements	109 long-term spaces, 32 short-term spaces, as well as a minimum of six (6) showers and 29 lockers
Loading Facilities	NA	Two (2) 12'x30' loading berths with 200 SF platforms and one (1) 10'x20' service/delivery space
Vehicular/Loading Access	No vehicular/loading access along Georgia Avenue NW	Vehicular/loading access proposed via public alley accessible from Bryant Street NW

Site Access and Circulation

A proposed circulation plan including expected pedestrian, bicycle, vehicle and loading routes to the project site is shown in Figure 12. Pedestrian access to the residential lobby, dining, fitness center, and dining space will be provided via entrances along Georgia Avenue NW, while ground-floor retail spaces will have entrances on both Georgia Avenue NW and Bryant Street NW. Bicycle access is planned through the southern building frontage, leading to a secure, long-term bicycle parking room situated in the building's southern section. Vehicular and loading access will be provided via a 20-foot public alley along the eastern edge of the site, accessible from Bryant Street NW. The entrance to the below-grade parking garage and loading berths will be located along the public alley. As part of the project, the existing 15-foot public alley is proposed to be widened to 20 feet, and the current curb cut on Bryant Street NW, west of the existing public alley, will be removed.

Vehicular Parking

According to Subtitle C §701.5 of ZR16, parking requirements for colleges and universities are determined by the approved campus plan rather than a standard zoning minimum. Since the proposed project falls under an approved campus plan (ZC Case No. 20-08), there is no ZR16 minimum parking requirement applicable to this project.

While the 2020 CMP study anticipated a maximum of approximately 300 parking spaces for this project, the current proposal includes 151 parking spaces in a below-grade garage as part of the project. Additionally, the existing surface lot, which contains approximately 50 spaces, will be removed.

To ensure compliance with the campus-wide parking cap established in the Zoning Commission Order, an updated campus-wide parking inventory was included, as shown in Table 12. This update demonstrates that the proposed parking supply aligns with the maximum campus-wide limit of 3,580 spaces.

Table 12: Howard University Parking Inventory

Lot Code	Lot Name	Supply	
		University/Hospital Spaces	Non-University Spaces
Howard University Facilities			
A	Childers	75	-
AA	Florida Avenue	23	-
B	Founders	56	-
BB	HUSC	50	-
BB1	HUSC Garage	100	-
C	Business	36	-
D	Miner	22	-
E	Johnson	43	-
ELC	Early Learning Center	10	-
F	Mackey	57	-
G	Downing	33	-
H	Drew	58	-
I	Greene	46	-
J	Burr	12	-
K	Georgia	35	-
KK	Wonder Plaza	151	-
L	Just	22	-
LL	West	247	-
M	Chem	6	-

Lot Code	Lot Name	Supply	
		University/Hospital Spaces	Non-University Spaces
Howard University Facilities			
Met	Metropolitan	30	
MM	LSHSL	44	-
O	C.B.P.	40	-
S	Private Roadway	58	-
T	5th & W	24	-
ZS	Banneker South	178	-
Total Academic Supply		1,456	0
Howard University Hospital Facilities			
NN	HU Medical Arts Lot	24	-
H4	HUH Daily/Visitor Lot	124	-
H5	HUH Daily/Visitor Lot	57	-
H6	HUH Permit Only Lot	35	-
A1	HU A1-Rear Lot	22	-
H9	HUH Garage 1	609	-
H10	HUH Garage 2	580	-
Total Hospital Supply		1,451	0
Total Parking Supply		2,907	0

Project-Related Bicycle Facilities

As shown in Table 13, the project is required to provide a minimum of 42 long-term and 100 short-term bicycle parking spaces, as well as a minimum of six (6) showers and 25 lockers.

The Applicant proposes 109 long-term bicycle parking spaces within a secure indoor facility, significantly exceeding ZR16 requirements. However, due to limited space along the site frontages on Georgia Avenue NW and Bryant Street NW, accommodating the full number of required short-term bicycle parking spaces is not feasible. Although the building is classified as an Education, College/University use for zoning purposes, the primary generator of bicycle trips at this site is student housing, which creates a higher demand for long-term rather than short-term bicycle parking. To address this, the Applicant is seeking relief from the short-term bicycle parking requirement while incorporating 32 short-term spaces into the streetscape design. These short-term spaces will be strategically located along the site frontage on both Georgia Avenue NW and Bryant Street NW. The reduction in short-term spaces is expected to be offset by the substantial surplus of long-term spaces provided.

Additionally, the Applicant will include a minimum of six (6) showers and 25 lockers within the building’s Health and Wellness space, meeting the ZR16 requirements.

Table 13: Bicycle Parking Requirements

Use	Proposed Size	ZR-16 Required				Rate Source
		Long-term	Short-term	Showers	Lockers	
Student Housing – Dorm	281,696 sf					ZR16 § 802.1 – Education, college / university
Dining	8,408 sf	42	100	6	25	
Health and Wellness	19,656 sf					
Retail	7,520 sf					

Use	Proposed Size	ZR-16 Required				Rate Source
		Long-term	Short-term	Showers	Lockers	
Total	317,280 sf	42	100	6	25	

Loading

The proposed project’s loading facilities align with the guidelines established in the 2020 CMP, which specifies that detailed loading operations will be addressed in the FP application. While the DDOT Report and ZC Order did not establish specific zoning requirements for loading, they provided key recommendations, including locating loading areas within private space without back-up maneuvers through public space, consolidating facilities between uses to minimize conflicts, and avoiding vehicle or loading access along Georgia Avenue NW.

In compliance with these recommendations, the project will provide two (2) 12’x30’ loading berths and one (1) 10’x 20’ service/delivery space within private space, accessible from the public alley southeast of the building. All truck backing maneuvers will occur within the property, ensuring that no vehicles reverse through public space. Truck access will follow front-in/front-out maneuvers, and turning diagrams are provided in Figure 13 and Figure 14, as well as in the Technical Attachments.

Urban Forestry Street Tree Inventory

Concentration of street trees adjacent to the site are found along Georgia Avenue NW, as illustrated on Figure 15.

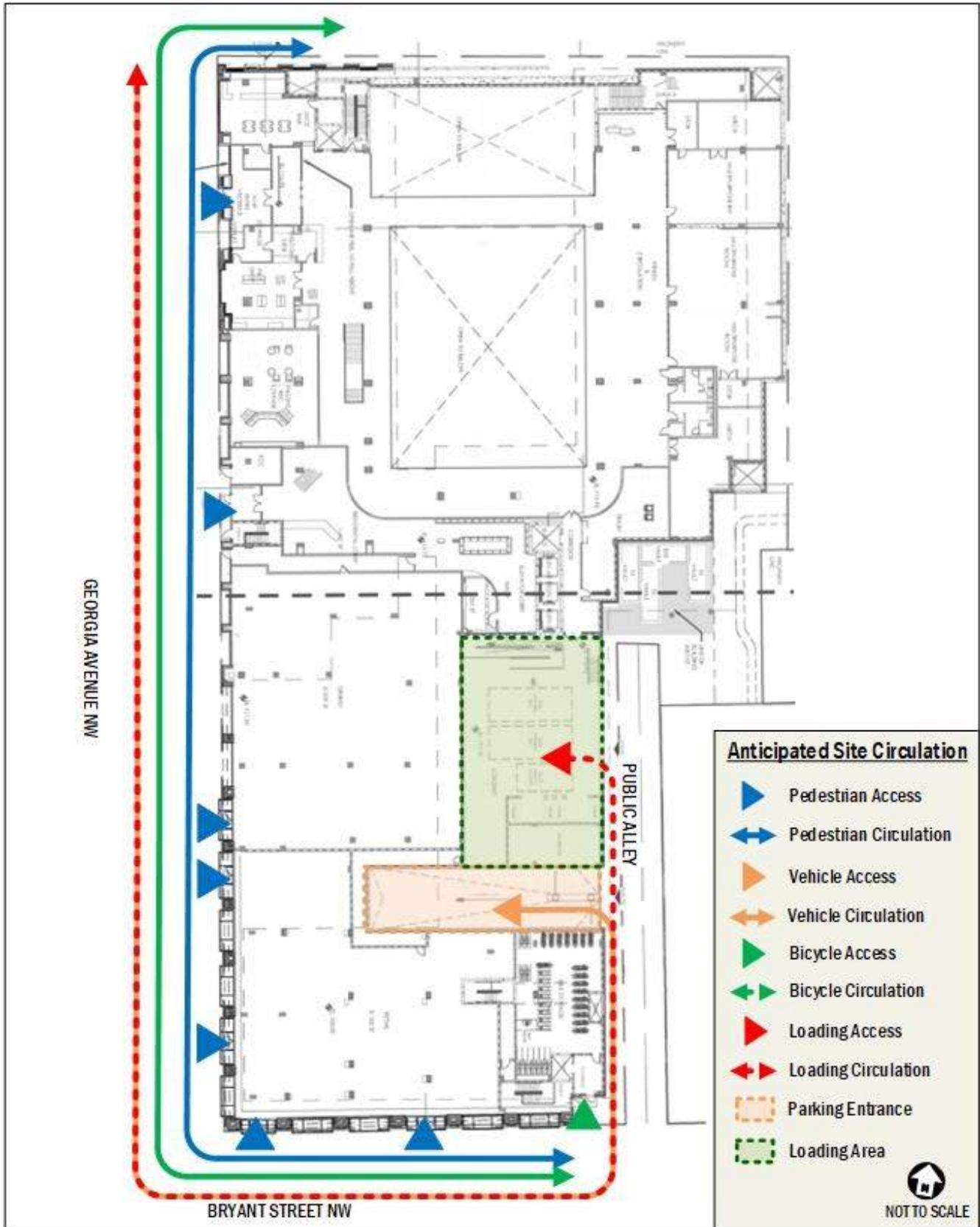


Figure 12: Proposed Site Plan and Circulation



Figure 13: SU-30 – Inbound and Outbound



Figure 14: Trash Truck – Inbound and Outbound

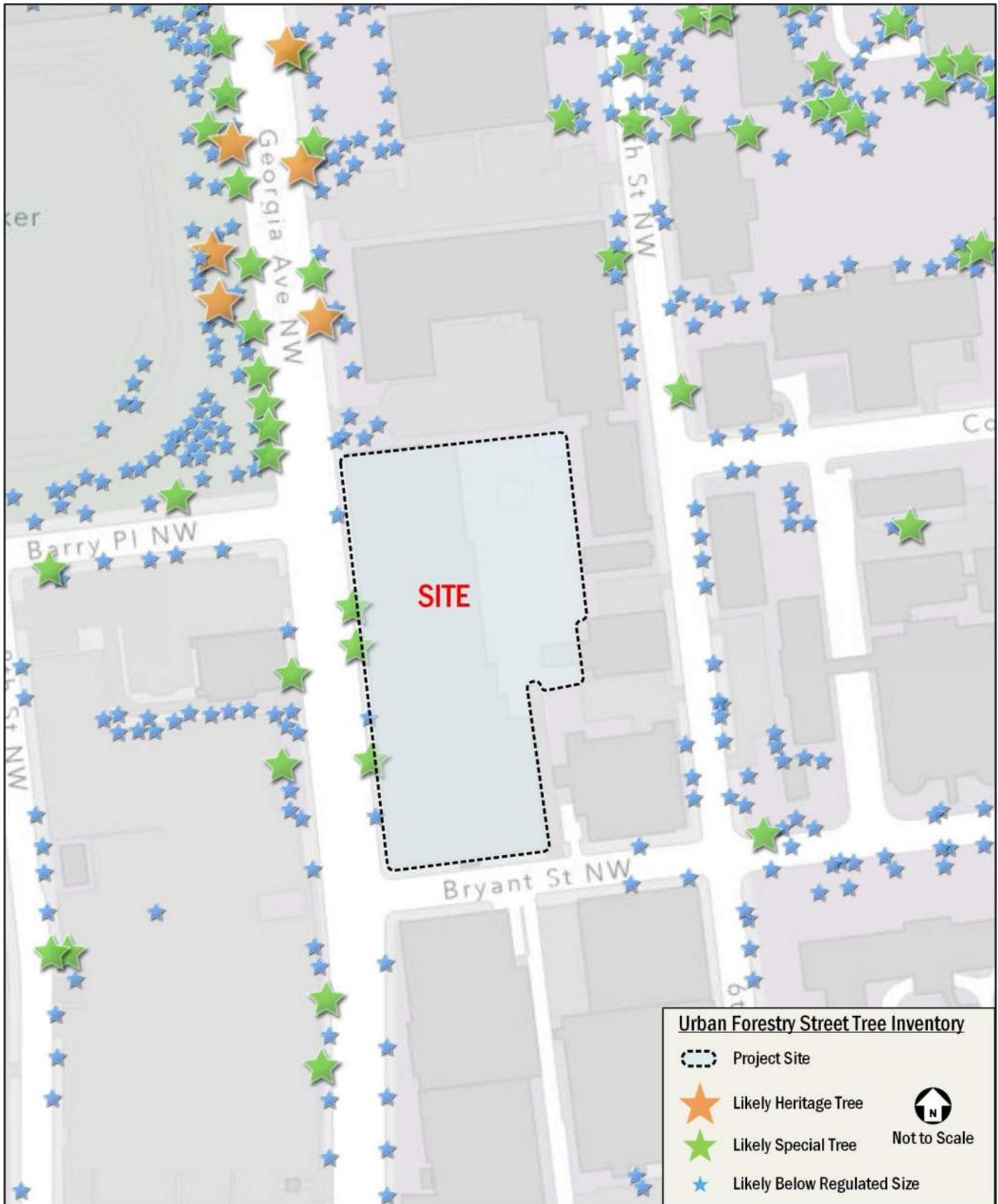


Figure 15: Urban Forestry Street Tree Inventory

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or redistribute demand to other times or spaces. TDM 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.

A campus-wide TDM plan was developed as part of the 2020 CMP and is provided in the Technical Attachments. For this project, a building-specific TDM plan has been developed, incorporating measures that align with the University's overall TDM commitments. This plan includes targeted strategies for students living on campus, as well as retail patrons and employees when appropriate. Notably, because the retail component of the building is less than 10,000 SF, a TDM plan is only required for the student housing component of the building.

The following is a list of TDM strategies the Applicant proposes for the project:

Student Housing TDM Plan

Coordination, Marketing, and Management

- Provide welcome packets to all new student residents upon or prior to moving in. The packet should, at a minimum, include the Metrorail pocket guide, brochures of local Metrobus lines, carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map. Brochures can be ordered from DDOT's goDCgo program by emailing info@godcgo.com.
- Post all transportation and TDM commitments on the University website and in other University media, publicize availability, and allow the public to see what has been promised.
- Following the issuance of a Certificate of Occupancy for the Project, the Transportation Coordinator will submit documentation summarizing compliance with the transportation and TDM conditions of the Order (including, if made available, any written confirmation from the Office of the Zoning Administrator) to the Office of Zoning for inclusion in the IZIS case record of the case.

Bicycle, Transit, and Micro-Mobility Facilities

- Provide at least six (6) showers and 25 lockers, which will be located within the building's Health and Wellness space.
- Provide 109 long-term bicycle parking spaces, significantly exceeding ZR16 requirements.
- Maintain existing bus routes and stops during construction events in order to avoid transit service disruptions for the University and surrounding communities.

Summary and Conclusions

The findings of this study conclude that:

- The project site is surrounded by a very well-connected existing network of transit, bicycle, and pedestrian facilities that results in an environment for enjoyable and effective non-vehicular transportation;
- The redevelopment plan has been updated from the original CMP such that the trips generated by the proposed project are reduced; therefore, the capacity analysis conclusions from the CMP remain valid;
- The site provides adequate circulation with conveniently located access points for all modes of transportation;
- The loading plan proposed for the site is adequate to accommodate the practical loading demand, and truck can access the loading berths via the widened public alley with head-in/head-out maneuvers;
- The requested relief to provide fewer short-term bicycle parking spaces than required by ZR16 is not expected to have a detrimental impact as the reduction will be offset with a substantial increase in long-term bicycle parking spaces;
- The proposed project enhances the pedestrian network in the vicinity of the site by improving pedestrian facilities along the perimeter of the site that meet or exceed DDOT standards;
- The proposed project includes a robust TDM plan that incorporates building-specific and campus-wide measures that adequately promote non-vehicular modes of travel; and
- The proposed project is not expected to have a detrimental impact on the surrounding transportation network.

Technical Attachments

**Wonder Plaza
(2301 Georgia Avenue NW)**

Washington, DC

December 18, 2025

GOROVE SLADE
Transportation Planners and Engineers

CONTENTS

(Note: Click on heading to navigate directly to each section of the Technical Attachments)

- A. Finalized Scoping Form
- B. Campus Master Plan (CMP) Trip Generation Methodology
- C. Campus Master Plan (CMP) Transportation Demand Management (TDM) Plan
- D. Truck Maneuvering Exhibits

A. Finalized Scoping Form

B. Campus Master Plan (CMP) Trip Generation Methodology

Mode Split Assumptions for Wonder Plaza Retail							
Retail Component							
Description of proposed retail component of the project:							
The development will contain approximately 7,520 sf of retail space.							
Pertinent Mode Split data from other sources:							
Information Source	Mode						
	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
CTPP (2012-2016 5-year) - TAZ Workers (TAZ 10169)	62%	10%	21%	0%	5%	1%	1%
CTPP (2012-2016 5-year) - TAZ Workers (TAZ 10170)	47%	8%	23%	0%	11%	11%	0%
State of the Commute 2019 (of DC Workers)	32%	6%	53%	7%		---	
2005 WMATA Ridership Survey Table 12 (U Street Main Street Retail)	19%		57%	25%		---	
2005 WMATA Ridership Survey Table 12 (Retail Sites)	36%		37%	27%		---	
Mode Split assumed in TIS:							
Land Use	Mode						
	Drive	Transit	Bike	Walk	Telecommute/Other		
Retail Mode Split	35%	15%	5%	45%	0%		

Trip Generation Methodology

The methodology used for generating trips in this proposed project is consistent with December 2020 Comprehensive Transportation Review (CTR) for the Howard University (HU) 2020 Central Master Plan (CMP). Rather than use the traditional methodology outlined in ITE’s Trip Generation using land use codes based on the makeup of the parcel’s building(s), educational/academic-based trips were generated based on the location and availability of vehicle parking. This is because overall trip generation to HU is not based on individual buildings, but the campus as a whole. As such, the 2020 CTR and this proposed project estimated peak hour vehicular volumes as follows:

- Retail trips – trips generated by retail facilities based on square footage of any retail uses; and
- Educational/academic trips – trips generated by academic buildings based on parking supply.

In order to compare the difference in trips generated by the proposed development program assumed in the CMP’s CTR and by the proposed project, the methodology used for generating trips in the scoping form maintains all the assumptions that were determined in the December 2020 CTR, including the auto mode splits and the proportion of staff and student parking demand that were distributed into Wonder Plaza.

Proposed Retail Trip Generation

Trip Generation - Wonder Plaza

Step 1: Base trip generation using ITEs' 11th Edition *Trip Generation*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
Retail	822	7,520 du	14 veh/hr	10 veh/hr	24 veh/hr	32 veh/hr	32 veh/hr	64 veh/hr	547 veh
Calculation Details:			60%	40%	$\ln(T)=0.66\ln(X/1000)+1.84$	50%	50%	$\ln(T)=0.71\ln(X/1000)+2.72$	$=42.2(X/1000)+229.68$
Setting/Location:		General Urban/Suburban							

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	25 ppl/hr	19 ppl/hr	44 ppl/hr	58 ppl/hr	58 ppl/hr	116 ppl/hr	996 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
Retail	Auto	35%	9 ppl/hr	6 ppl/hr	15 ppl/hr	20 ppl/hr	21 ppl/hr	41 ppl/hr	349 ppl
Retail	Transit	15%	4 ppl/hr	3 ppl/hr	7 ppl/hr	9 ppl/hr	8 ppl/hr	17 ppl/hr	149 ppl
Retail	Bike	5%	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	6 ppl/hr	50 ppl
Retail	Walk	45%	11 ppl/hr	9 ppl/hr	20 ppl/hr	26 ppl/hr	26 ppl/hr	52 ppl/hr	448 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	5 veh/hr	3 veh/hr	8 veh/hr	11 veh/hr	12 veh/hr	23 veh/hr	192 veh

Trip Gen Summary

Mode	AM Peak Hour			PM Peak Hour			Total
	In	Out	Total	In	Out	Total	
Auto	5 veh/hr	3 veh/hr	8 veh/hr	11 veh/hr	12 veh/hr	23 veh/hr	192 veh
Transit	4 ppl/hr	3 ppl/hr	7 ppl/hr	9 ppl/hr	8 ppl/hr	17 ppl/hr	149 ppl
Bike	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	6 ppl/hr	50 ppl
Walk	11 ppl/hr	9 ppl/hr	20 ppl/hr	26 ppl/hr	26 ppl/hr	52 ppl/hr	448 ppl

CMP CTR Retail Trip Generation

Trip Generation

Step 1: Base trip generation using ITEs' *Trip Generation 10th Edition*

Land Use	Land Use Code	Quantity (x)	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Weekday
			In	Out	Total	In	Out	Total	In	Out	Total	Total
Retail	820	60,000 sf	35 veh/hr	21 veh/hr	56 veh/hr	110 veh/hr	119 veh/hr	229 veh/hr	215 veh/hr	198 veh/hr	413 veh/hr	2,265 veh
Calculation Details:			62%	38%	=0.94(X/1000)	48%	52%	=3.81(X/1000)	52%	48%	=0.79X	=37.75(X/1000)

Note: Setting used for trip generation above is General Urban/Suburban

Step 2: Convert to people per hour, before applying mode splits

Land Use	People/Car (from 2017 NHTS, Table 16)	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Weekday
		In	Out	Total	In	Out	Total	In	Out	Total	Total
Retail	1.82 ppl/veh	64 ppl/hr	38 ppl/hr	102 ppl/hr	200 ppl/hr	217 ppl/hr	417 ppl/hr	118 ppl/hr	634 ppl/hr	752 ppl/hr	4,122 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Weekday
			In	Out	Total	In	Out	Total	In	Out	Total	Total
Retail	Auto	35%	22 ppl/hr	14 ppl/hr	36 ppl/hr	70 ppl/hr	76 ppl/hr	146 ppl/hr	41 ppl/hr	222 ppl/hr	263 ppl/hr	1,443 ppl
Retail	Transit	15%	10 ppl/hr	5 ppl/hr	15 ppl/hr	30 ppl/hr	33 ppl/hr	63 ppl/hr	18 ppl/hr	95 ppl/hr	113 ppl/hr	618 ppl
Retail	Bike	5%	3 ppl/hr	2 ppl/hr	5 ppl/hr	10 ppl/hr	11 ppl/hr	21 ppl/hr	6 ppl/hr	32 ppl/hr	38 ppl/hr	206 ppl
Retail	Walk	45%	29 ppl/hr	17 ppl/hr	46 ppl/hr	90 ppl/hr	97 ppl/hr	187 ppl/hr	53 ppl/hr	285 ppl/hr	338 ppl/hr	1,855 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Weekday
			In	Out	Total	In	Out	Total	In	Out	Total	Total
Retail	Auto	35%	12 veh/hr	8 veh/hr	20 veh/hr	38 veh/hr	42 veh/hr	80 veh/hr	23 veh/hr	122 veh/hr	145 veh/hr	793 veh

Trip Gen Summary for Proposed Land Uses

Mode	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Weekday
	In	Out	Total	In	Out	Total	In	Out	Total	Total
Auto	12 veh/hr	8 veh/hr	20 veh/hr	38 veh/hr	42 veh/hr	80 veh/hr	23 veh/hr	122 veh/hr	145 veh/hr	793 veh
Transit	10 ppl/hr	5 ppl/hr	15 ppl/hr	30 ppl/hr	33 ppl/hr	63 ppl/hr	18 ppl/hr	95 ppl/hr	113 ppl/hr	618 ppl
Bike	3 ppl/hr	2 ppl/hr	5 ppl/hr	10 ppl/hr	11 ppl/hr	21 ppl/hr	6 ppl/hr	32 ppl/hr	38 ppl/hr	206 ppl
Walk	29 ppl/hr	17 ppl/hr	46 ppl/hr	90 ppl/hr	97 ppl/hr	187 ppl/hr	53 ppl/hr	285 ppl/hr	338 ppl/hr	1,855 ppl

Proposed Educational/Academic Trip Generation

The proposed peak hour trip generation methodology for educational/academic facilities is based on two (2) factors:

- Changes to campus population levels that would impact how many people are traveling to and from the campus; and
- Changes to the location of parking supplies on campus.

This methodology, which is the same methodology used in the 2011 and 2020 Campus Plan’s Transportation Report, is undertaken using the following steps:

1. Estimate future staff and student peak parking demand by extrapolating existing parking demand per individual to the projected staff and student populations, assuming they grow to the caps proposed in the Campus Plan.
2. Distribute existing and added staff and student parking demand into individual academic parking locations based on proposed lot removals and additions.
3. Convert this parking demand into peak hour trips for each academic parking location using the following rates of trips generated per occupied parking space:
 - AM peak hour: 0.35 (0.30 inbound and 0.05 outbound)
 - PM peak hour: 0.40 (0.05 inbound and 0.35 outbound)

The resulting peak hour trip generation thus reflects both the increase in population and the change in parking supply locations. Regarding population growth, this trip generation takes a conservative approach in assuming that all new students included in the University’s projected enrollment growth attend classes in person on the Central Campus, not virtually.

The 2020 CMP CTR did not include trip generation estimates for weekday daily or Saturday peak hour trips. To provide an estimate for these time periods while staying consistent with the proposed methodology, the following approach was utilized:

- Saturday peak hour trips were developed by developing a conversion factor based on the ratio of weekday peak hour trips to Saturday peak hour trips in ITE’s *Trip Generation* for mid-rise multifamily housing (ITE does not report any weekend trip generation rates for University/College uses).
- Weekday daily trips were developed by developing a conversion factor based on the ratio of weekday peak hour trips to daily trips from ITE’s *Trip Generation* time-of-day trip distributions for a university/college use (LU Code 550)

Parking Ratio

Use	AM Peak Hour			PM Peak Hour		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Academic ratio	0.30	0.05	-	0.05	0.35	-
Hospital ratio	0.55	0.55	-	0.45	0.60	-

Trip Generation

Garage	Supply	Existing + New Demand Redistributed				AM Peak Hour			PM Peak Hour		
		Staff	Student	Hospital	Total	In	Out	Total	In	Out	Total
B & C	200-450	250			250	75	13	88	13	88	101
D, E, G, & H (academic)	950-1200	490	435		925	278	46	324	46	324	370
D, E, G, & H (hospital)	950-1200			297	297	163	163	326	134	178	312
D, E, G, & H (total)						441	209	650	180	502	682
F	50-150		50		50	15	3	18	3	18	21
J (Wonder Plaza)	151		101		101	30	5	35	5	35	40
Total		740	589	297	1626	562	230	792	201	644	845

Saturday Peak Hour/ Weekday Trip Generation

ITE LUC Based Trip Generation											
Land Use Code	Land Use	Quantity	AM Peak	PM Peak	AM+PM	Saturday Peak Hour			Daily Total	Saturday to	Daily to (AM+PM)
			Hour	Hour	Peak	%In	%Out	Total			
221	Multifamily Housing (Mid-Rise)	280 du	112	110	222	51	49	109	--	0.49	--
550	University/College	591 students	89	89	178	--	--	--	920	--	5.17
Parking Based Trip Generation											
Land Use Code	Land Use	Quantity	AM Peak	PM Peak	AM+PM	Saturday Peak Hour			Daily Total	Saturday to	Daily to (AM+PM)
			Hour	Hour	Peak	%In	%Out	Total			
--	Howard University Campus	101 Spaces	35	40	75	19	18	37	388	0.49	5.17

C. Campus Master Plan (CMP) Transportation Demand Management (TDM) Plan

TECHNICAL MEMORANDUM

To: Anna Chamberlin, AICP
Kelsey Bridges

From: Drew Ackermann
Robert B. Schiesel, P.E.

Date: April 28, 2021

Subject: Howard University 2020 Central Campus Plan
Transportation Demand Management Plan, Performance Monitoring Plan, and Infrastructure Upgrades

Introduction and Purpose

This memorandum is intended to provide guidance for Howard University's implementation of the transportation commitments of the 2020 Central Campus Plan. Enclosed are the following sets of commitments:

- **Transportation Demand Management (TDM) Plan**

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or redistribute demand to other times or spaces. TDM 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. DC zoning approvals of large-scale developments like Howard's 2020 Central Campus Plan are often conditioned upon a set of TDM strategies and an accompanying plan to monitor progress towards TDM goals. The enclosed TDM plan was offered as a condition of zoning approval for the 2020 Central Campus Plan. The TDM plan is categorized by Committed Actions (measures the University agrees to as part of its zoning approvals) and Discretionary Actions (measures the University intends to implement as part of its own internal efforts, or if TDM goals are not being met based on performance monitoring). This tiered approach allows the University flexibility to customize its TDM actions depending on whether TDM goals are being met.

- **Performance Monitoring Plan (PMP)**

The Performance Monitoring Plan (PMP) is the University's plan to track progress towards its TDM goals. The PMP is comprised of annual transportation surveys of Howard University students and staff, which are then compiled into annual monitoring reports submitted to DDOT. The purpose of the monitoring reports is to make data-driven decisions about which TDM measures, if any, need to be adjusted to meet TDM goals. The primary TDM goal of the 2020 Central Campus Plan is ensuring that academic (non-hospital) parking demand per student does not rise above its current level.

- **Infrastructure Improvements**

The new academic, athletic, and hospital buildings proposed in the 2020 Central Campus Plan will each undergo a more detailed development review known as Further Processing before they are approved and constructed. As part of Further Processing for each site, the University has committed to considering infrastructure improvements which mostly include sidewalk upgrades and traffic signal timing adjustments. Since DDOT does not typically update traffic signal timings in conjunction with development of individual buildings, the University will work with DDOT during Further Processing to identify and implement alternative mitigation. These might include installing off-site missing curb ramps, flipping parking and bicycle lanes to create protected bicycle lanes, or upgrading bus shelters, among others.

The contents of these commitments, as well as guidance for their implementation, are outlined below.

Transportation Demand Management (TDM) Plan

Following the structure of the 2012 TDM plan, the proposed TDM plan is categorized by Committed Actions (measures the University agrees to as part of its zoning approvals) and Discretionary Actions (measures the University intends to implement as part of its own internal efforts, or if TDM goals are not being met based on performance monitoring). The University will implement the proposed TDM plan for the life of the Campus Plan unless otherwise stated.

Committed Actions

The University agrees to the following Committed Actions:

- The University has already increased staff and student parking permit rates substantially since the 2011 Campus Plan. The University will continue to increase permit rates to help deter single-occupant driver parking and raise revenue for TDM programs.
- The University will unbundle tenant parking by raising the monthly visitor parking permit rate to \$180. The University already charges non-University tenants for access to University parking facilities. However, to qualify as "unbundled" according to DDOT's CTR guidelines, tenant parking rates need to increase until they at least equal the lowest monthly rate offered by a commercial parking facility within one quarter-mile of the campus. Based on a recent survey of nearby parking rates, the lowest monthly rate is \$180, compared to HU's current monthly rate of \$160 for a visitor permit.
- The University will continue to prohibit freshman residents from parking vehicles on campus, with exceptions for those students who need a car for medical purposes or are in the Reserve Officers' Training Corps.
- The University will establish a maximum parking supply of 3,580 spaces (inclusive of the hospital).
- The University will establish a maximum non-hospital staff population of 4,506 staff members.
- The University will establish a maximum student enrollment of 15,000 students.
- The University will continue to invest in improving its shuttle services based on staff and student feedback, as well as in anticipation of new development projects that may alter traffic patterns and sources of demand for shuttle service. Further Processing for each building proposed in the Campus Plan will include a review of existing shuttle ridership patterns, whether the proposed building is expected to alter ridership patterns, and recommendations for improving shuttle service if applicable.
- The University will maintain existing bus routes and stops during any and all University construction events in order to avoid transit service disruptions for the University and surrounding communities. Further Processing for parcels abutting WMATA bus routes or stops (Parcels A, E, F, and J) will include plans for maintaining bus service.
- The University will coordinate with DDOT and WMATA to improve, pay for, and install bus shelter improvements across campus during Further Processing for any new building or if the TDM is found to be insufficient.
- The University will continue promoting transit commuting benefits for faculty and staff via WMATA's SmartBenefits program. Currently the maximum pre-tax allowed amount is \$270/month for transit only, \$104/month for parking only, and \$374/month for transit and parking.
- The University will provide space for and fund an additional two (2) 19-dock Capital Bikeshare stations on the central campus. One station is proposed be located somewhere on the southern part of campus near the new Howard University Hospital as a potential location. If this location is chosen, the University will fund the station as part of Further Processing for whichever of the hospital-related parcels (Parcels D, E, G, or H) is developed first. The second location

is proposed to be located on Parcel C, with a specific location to be finalized during Parcel C's Further Processing. If either station is located on private property, the University will enter into a Memorandum of Agreement with DDOT to ensure public access to the station and bicycles.

- The University will post a downloadable copy of the final TDM Plan on its website and in other University media.
- The University will continue designating a TDM Coordinator, who will implement, monitor, and market the TDM programs, provide personalized commuter counseling to help members of the HU population understand their options, and act as a point of contact with DDOT, goDCgo, and Zoning Enforcement.
- The University's Transportation Coordinator will develop, distribute, and market various transportation alternatives and options to employees and students, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on relevant websites and in any relevant internal newsletters, communications, or displays. These materials will contain sections oriented to different users, including faculty/staff, students, and visitors. Any students living on-campus will be provided with a packet of information upon or prior to moving-in. New faculty/staff hires will be provided with a similar packet of information. Further Processing for each building proposed in the Campus Plan will include a discussion of building-specific TDM marketing materials, if applicable.
- The University will prominently display links to commuter support websites on appropriate University webpages, including links to CommuterConnections.com, DDOT's Washington, DC Bicycle Map, Washington Walks, nearby bicycle vendors and service providers, goDCgo.com, and WMATA.
- The University will perform annual monitoring to understand student, faculty and staff mode choice in relation to TDM practices, parking pricing, and University transportation policies, and release annual monitoring reports containing this information. The purpose of this monitoring is to make data-driven decisions about which TDM measures, if any, need to be adjusted to meet the primary TDM goal of ensuring that academic parking demand per student does not rise above its current level. The monitoring reports will include the recommended survey question modifications outlined in the above TDM Assessments section of this report. The monitoring will be used to inform future TDM- and parking-related decisions to further incentivize non-auto modes and minimize impacts by the University on the surrounding community. The University will update the TDM plan as necessary if performance targets are not met. The monitoring reports will include the following:
 - Mode split surveys of the campus population, broken down by students and employees;
 - Current parking inventory and occupancy on a typical weekday;
 - Number of permits sold per year;
 - Parking availability on surrounding neighborhood streets;
 - Number of registered carpools;
 - Number of people enrolled in WMATA SmartBenefits; and
 - Inventory and occupancy of bicycle racks.
- The University will prepare an annual TDM and Parking report to be submitted to DDOT. These reports will focus first and foremost on documenting progress toward the TDM Plan performance targets that the University has agreed to. Further Processing for each building proposed in the Campus Plan will reference these reports, identifying trends and progress towards TDM goals and allowing these to inform parking and other transportation-related elements of the proposed buildings. The performance targets that the University has agreed to are as follows:

- By the end of the 2020 Campus Plan (2030), the University sets a goal of ensuring that academic parking demand per student does not rise above its current level of 0.126 peak hour-occupied parking spaces per student. This will be the primary measure of success for the Campus Plan's five (5) transportation strategies, as this metric is the result of a direct measurement, not of surveys which may be susceptible to error. Achieving this goal will also help the University implement the Campus Plan, as reduced demand can lead to less parking supply being added to proposed buildings, reducing costs to the University. If parking demand per student increases, it will be seen as an indicator that more discretionary TDM measures are needed. A decrease in parking demand per student is an aspirational goal of the Campus Plan.
- The University sets the following mode split goals for trips to campus by the end of the 2020 Campus Plan (2030), which are informed by A) *MoveDC*'s non-auto mode share goal for commute trips of 75%, B) the latest mode splits for both residents and employees in the campus's census Transportation Analysis Zone (TAZ), and C) the 2019 cumulative student/faculty/staff mode splits of 53% auto, 30% transit, 1% bike, and 16% walk for trips to campus. While the mode splits below are identified as aspirational goals, the primary measure of success for the TDM Plan is peak parking demand per student, as noted above. The drive alone mode split goals are percentages the University aspires to reduce down to, and all other mode split goals are percentages the University aspires to increase to or exceed. The mode split goals are as follows:
 - For students:
 - Drive alone: ≤ 40%
 - Carpool: ≥ 2%
 - Transit: ≥ 50%
 - Bike: ≥ 15%
 - Walk: ≥ 30%
 - For faculty/staff:
 - Drive alone: ≤ 20%
 - Carpool: ≥ 2%
 - Transit: ≥ 40%
 - Bike: ≥ 5%
 - Walk: ≥ 20%
- The University will develop formal "Alternative Work Schedule" guidelines, which will define opportunities for telecommuting as well as maintaining non-traditional weekly work schedules. The University's Transportation Coordinator will ensure that the TDM benefits of various policy options – reducing peak-hour travel and parking demand – are considered when developing and implementing these guidelines.
- The University will significantly expand the quantity and quality of bicycle parking facilities on campus, both at existing building sites and at the new University development sites identified in the Campus Plan. A more detailed discussion of proposed bicycle parking quantities and locations will be included in Further Processing for proposed buildings.

- The University will install an additional 20 bicycle parking spaces every year over the course of the Campus Plan and include a bicycle parking inventory with every annual TDM report. These spaces are intended to serve existing buildings that do not have sufficient bicycle parking and does not include parking spaces added as part of new buildings.
- As part of Further Processing for Parcel B or C, whichever enters Further Processing first, the University will coordinate with DDOT to explore removing on-street parking spaces along 6th Street between Fairmont Street and Bryant Street to make room for multimodal improvements such as bike lanes, curb extensions, or bike/scooter parking corrals.
- The University will consider and implement the following additional measures as deemed necessary based on data about progress towards TDM goals:
 - Offer new carpool incentives and rideshare matching services to campus commuters through Commuter Connections, and/or other service providers;
 - Increase Campus Shuttle frequency during peak periods to every 10 minutes, if demand is present;
 - Expand Campus Shuttle to provide rides seven days a week and operate at least 30 minutes before/after Metro opens/closes, if demand is present;
 - Offer discounted Capital Bikeshare memberships to students;
 - Increase employee participation in pre-tax transit benefits;
 - Fund and install Transit Screens in additional student common areas;
 - Provide additional carshare spaces in easily accessible locations on campus;
 - Increase parking permit fees over the increases required pursuant to paragraph (b) of this condition, which requires raising the monthly visitor parking permit rate to \$180;
 - Impose limitations on the number of parking permits issued;
 - Target access restrictions to commuter parking; and
 - Introduce new or increase existing financial incentives for alternative mode options.

Discretionary Actions

The University agrees to the following Discretionary Actions:

- The University will ensure that there is no net increase in parking supply resulting from the capital projects proposed in the Campus Plan. That is, any increased supply from new parking facilities will be offset by closures and removals of existing parking facilities. Further Processing for each proposed building in the Campus Plan will include an updated inventory of existing campus-wide parking supply and proposed parking facilities for the building.
- The University will explore installing on-street bike paths and bike/scooter parking facilities as made possible by reduced vehicular activity and removed parking supply in the campus core. The University will coordinate with DDOT on any such public space changes.
- The University will develop a bike parking map to direct bicyclists to existing and future bike parking facilities. Further Processing for each proposed building in the Campus Plan will include a commitment to display an up-to-date bike parking map in a prominent location within or outside the building.

- The University will create a dedicated webpage to identify and promote its transportation benefits and resources. For the purposes of this plan, this will be referred to as the future Transportation Services webpage when describing related TDM actions. This page will be the home for all information on:
 - Parking;
 - Transit;
 - Carpool and Vanpool;
 - TDM and Commuter Benefits;
 - TDM Survey results and reporting;
 - Transportation and parking maps;
 - Links to supportive programs;
 - Links to alternative mode services and vendors; and
 - Marketing materials.
- The University will explore the potential to utilize existing “Live Where You Work” programs to boost the proportion of faculty/staff and students living near campus. These programs provide low-interest mortgage loans or a cash payment to be applied at closing to those purchasing a home within a designated distance of where they work.
- As the Campus Plan is implemented, and most parking is provided within structured, access-controlled facilities, the University will explore gradually phasing out annual parking permits in favor of monthly permits and daily parking (including pay-per-use permits).
- The University will explore enrolling students in the WMATA U-Pass program.
- The University will explore strategies for reserving preferentially-located parking spaces for registered rideshare vehicles. This will require developing distinct parking permits for carpool and vanpool parking, including defining qualification criteria, and designating spaces at specific parking facilities.
- The University will explore implementing a bike repair and maintenance education program.
- As capital projects identified in the Campus Plan are developed, the University will seek to include changing and showering facilities where feasible and where concentrations of faculty and staff are expected.
- The University will implement physical improvements to the central campus’s pedestrian network to improve the appeal, safety, and effectiveness of pedestrian circulation.
- The University will explore ways to promote and enhance micro-mobility services on campus, such as providing on-street bike and scooter parking corrals.
- During Further Processing for each of the proposed buildings in the Campus Plan, the University will consider building-specific TDM measures not mentioned in this report, e.g. specific TDM strategies for patients/visitors at the new hospital.

Performance Monitoring Plan (PMP)

The Performance Monitoring Plan (PMP) is comprised of transportation surveys and other data to understand student, faculty and staff mode choice in relation to TDM practices, parking pricing, and University transportation policies. The University releases annual monitoring reports to DDOT containing this information. The purpose of this monitoring is to make data-driven

decisions about which TDM measures, if any, need to be adjusted to meet the primary TDM goal of ensuring that academic parking demand per student does not rise above its current level. If it is found that TDM goals are not being met, it is recommended the University consider items in the Discretionary Actions section of the TDM plan above, or propose new actions for review by DDOT.

The annual monitoring reports should include details regarding the following:

- Mode split of the campus population for trips to campus, broken down by students and employees;
- Current parking inventory and occupancy on a typical weekday;
- Number of parking permits sold per year;
- Parking availability on surrounding neighborhood streets;
- Number of registered carpools;
- Number of people enrolled in WMATA SmartBenefits; and
- Inventory and occupancy of bicycle racks.

This information will be collected using surveys of students and employees, internal University data, and manual counts of vehicle and bicycle parking inventory and occupancy. Guidance regarding these data sources is provided below.

Surveys

Surveys of University students and employees should be collected on a typical weekday when large, representative population samples can be found. The number of respondents in previous years ranged from 340 to 640 students, and 270 to 630 employees.

Survey question topics in previous years have included student ZIP codes, travel costs, shuttle usage patterns, reasons for using or not using certain travel modes, and other topics. While these may be included at the University's discretion for its own purposes, the only topic required for the PMP is student and employee mode splits.

In order to have concrete, trackable year-to-year mode split data, it is recommended the phrasing of the mode split survey question include whether the respondent is a student or employee, and only ask for the travel mode the respondent used that day (not what they typically use according to memory). For ease of future analysis, it is recommended the University keep the raw survey data, separated by students and employees, on file. It is recommended that the mode split survey questions be phrased as follows:

1. Are you a:
 - a. Student
 - b. Full-time employee
 - c. Part-time employee
 - d. Contractor
 - e. Visitor
 - f. Hospital employee
2. What transportation mode did you use for **most** of your trip to campus **today**?
 - a. Driving a car alone

- b. Driving a car with passengers
 - c. As a passenger in a car
 - d. Carshare (Zipcar, Free2Move)
 - e. Motorcycle
 - f. Metrobus
 - g. Metrorail
 - h. Taxi
 - i. Rideshare (Uber, Lyft)
 - j. Bicycle (personal)
 - k. Scooter (personal)
 - l. Capital Bikeshare
 - m. Shared dockless e-scooter/bicycle (Lime, Bird, Jump, etc.)
 - n. Walk/jog/run
 - o. Other: please specify
3. What transportation mode did you use for the **last part of** your trip to campus **today**?
- a. Driving a car alone
 - b. Driving a car with passengers
 - c. As a passenger in a car
 - d. Carshare (Zipcar, Free2Move)
 - e. Motorcycle
 - f. Metrobus
 - g. Metrorail
 - h. Taxi
 - i. Rideshare (Uber, Lyft)
 - j. Bicycle (personal)
 - k. Scooter (personal)
 - l. Capital Bikeshare
 - m. Shared dockless e-scooter/bicycle (Lime, Bird, Jump, etc.)
 - n. Walk/jog/run
 - o. Other: please specify

Internal University Data

Internal University data should be used to determine:

- Number of parking permits sold per year;
- Number of registered carpools; and
- Number of people enrolled in WMATA SmartBenefits.

Manual Counts

Manual counts should be conducted every year to determine:

- Inventory and occupancy of all off-street HU parking facilities;
- Inventory and occupancy of on-street parking on surrounding neighborhood streets; and
- Inventory and occupancy of bicycle racks.

It is recommended this data be collected at 7:00am, 11:00am, 3:00pm, and 7:00pm on a typical weekday to reflect patterns throughout the day. Figure 1 shows the parking study area that was analyzed for the 2020 Central Campus Plan's accompanying Transportation Report, including off- and on-street parking facilities. It is recommended this study area be used for future annual monitoring reports, and revised based on future parking facility removals and additions.

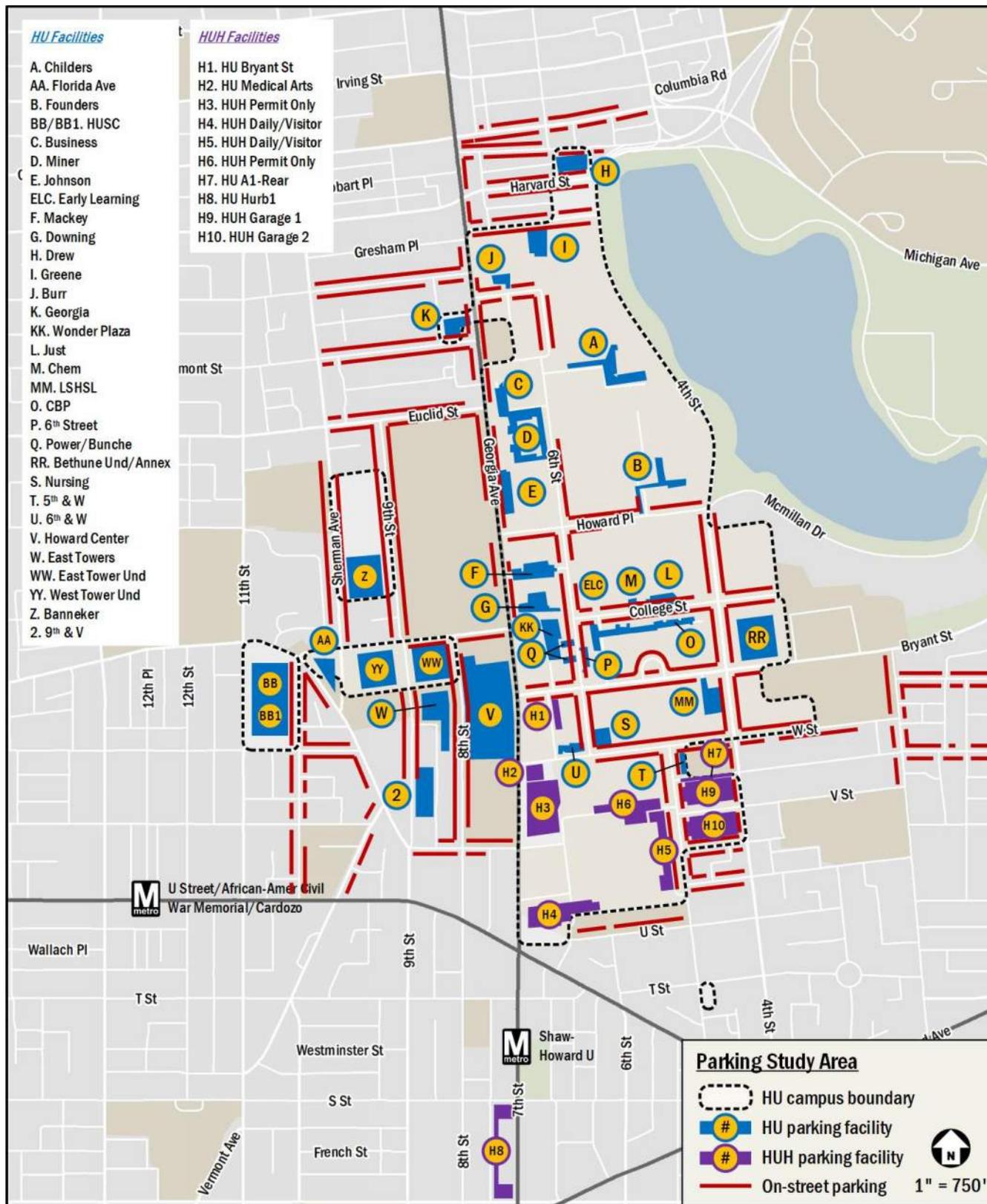


Figure 1: Parking Study Area

Infrastructure Improvements

As part of Further Processing for each of the proposed buildings in the Campus Plan, the University agrees to consider the following infrastructure improvements:

Parcel A: Burr Intercollegiate Athletic Center

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- Have the project explore upgrading the sidewalks adjoining the site along Georgia Avenue and Girard Street, which currently do not meet DDOT width requirements. The project should also explore improving the existing WMATA bus stop at Georgia Avenue and Gresham Place, just north of the parcel, which currently does not have all recommended bus stop amenities.

Parcel B: Center for Arts & Communications

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - Georgia Avenue and Harvard Street NW (minor signal timing adjustments)
 - Harvard Street and 5th Street NW (minor signal timing adjustments)

Parcel C: Howard Student Union

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - Georgia Avenue and Harvard Street NW (minor signal timing adjustments)
 - Harvard Street and 5th Street NW (minor signal timing adjustments)

Parcel D: Health Sciences Complex

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - 4th Street and College Street NW (minor signal timing adjustments)
 - 4th Street and Bryant Street NW (converting Bryant Street from one-way to two-way, converting on-street parking into a 75-foot eastbound right-turn lane, minor signal adjustments)
 - Georgia Avenue and W Street NW (converting W Street from one-way to two-way, minor signal timing adjustments)
 - 4th Street and W Street NW (converting W Street from one-way to two-way)
 - Georgia Avenue and V Street/HU Hospital NW (minor signal timing adjustments)
 - Georgia Avenue/7th Street and Florida Avenue NW (minor signal timing adjustments)

- Have the project explore upgrading the sidewalks adjoining the site along 6th Street and College Street, which currently do not meet DDOT width requirements. The project should also explore upgrading the curb ramps adjoining the parcel at 6th Street and College Street, and 6th Street and Bryant Street, which do not comply with ADA standards.

Parcel E: STEM Facility

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - 4th Street and College Street NW (minor signal timing adjustments)
 - 4th Street and Bryant Street NW (converting Bryant Street from one-way to two-way, converting on-street parking into a 75-foot eastbound right-turn lane, minor signal adjustments)
 - Georgia Avenue and W Street NW (converting W Street from one-way to two-way, minor signal timing adjustments)
 - 4th Street and W Street NW (converting W Street from one-way to two-way)
 - Georgia Avenue and V Street/HU Hospital NW (minor signal timing adjustments)
 - Georgia Avenue/7th Street and Florida Avenue NW (minor signal timing adjustments)
- Have the project explore upgrading the sidewalks adjoining the site along 4th Street and College Street, which currently do not meet DDOT width requirements.

Parcel F: Apartment-style Residences

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- Have the project explore upgrading the sidewalks adjoining the site along 9th Street, which currently do not meet DDOT width requirements. The project should also consider installing a pedestrian path between the buildings that connects Sherman Avenue and 9th Street.

Parcel G: Medical Office

- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - 4th Street and College Street NW (minor signal timing adjustments)
 - 4th Street and Bryant Street NW (converting Bryant Street from one-way to two-way, converting on-street parking into a 75-foot eastbound right-turn lane, minor signal adjustments)
 - Georgia Avenue and W Street NW (converting W Street from one-way to two-way, minor signal timing adjustments)
 - 4th Street and W Street NW (converting W Street from one-way to two-way)
 - Georgia Avenue and V Street/HU Hospital NW (minor signal timing adjustments)
 - Georgia Avenue/7th Street and Florida Avenue NW (minor signal timing adjustments)
- Have the project explore upgrading the sidewalks adjoining the site along 6th Street and Bryant Street, which currently do not meet DDOT width requirements.

Parcel H: Howard University Hospital

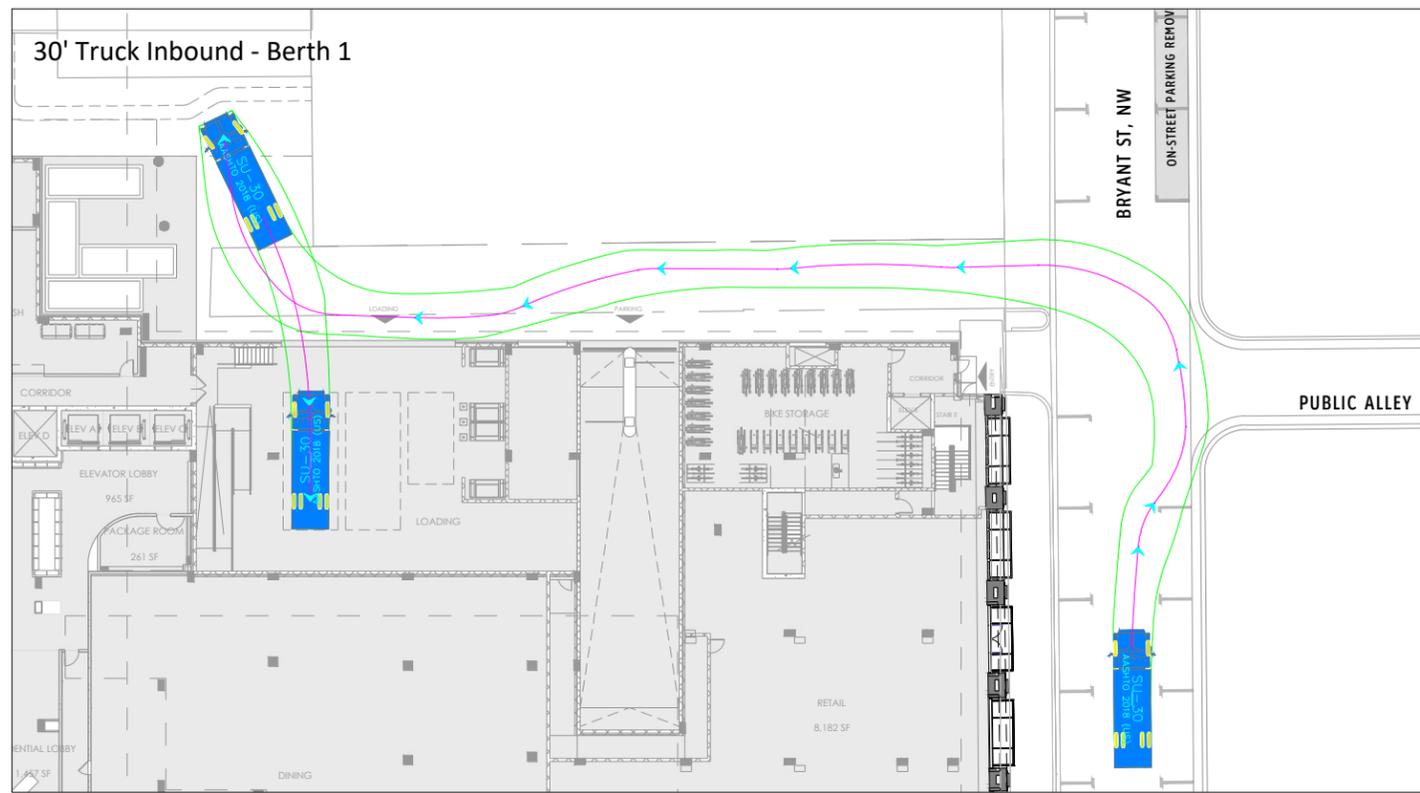
- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - 4th Street and College Street NW (minor signal timing adjustments)
 - 4th Street and Bryant Street NW (converting Bryant Street from one-way to two-way, converting on-street parking into a 75-foot eastbound right-turn lane, minor signal adjustments)
 - Georgia Avenue and W Street NW (converting W Street from one-way to two-way, minor signal timing adjustments)
 - 4th Street and W Street NW (converting W Street from one-way to two-way)
 - Georgia Avenue and V Street/HU Hospital NW (minor signal timing adjustments)
 - Georgia Avenue/7th Street and Florida Avenue NW (minor signal timing adjustments)
- Have the project explore upgrading the sidewalks adjoining the site along 6th Street, Bryant Street, and W Street, which currently do not meet DDOT width requirements. The site plan should also explore upgrading the curb ramp adjoining the parcel at 6th Street and College Street, which does not comply with ADA standards.

Parcel J: Wonder Plaza Mixed-Use

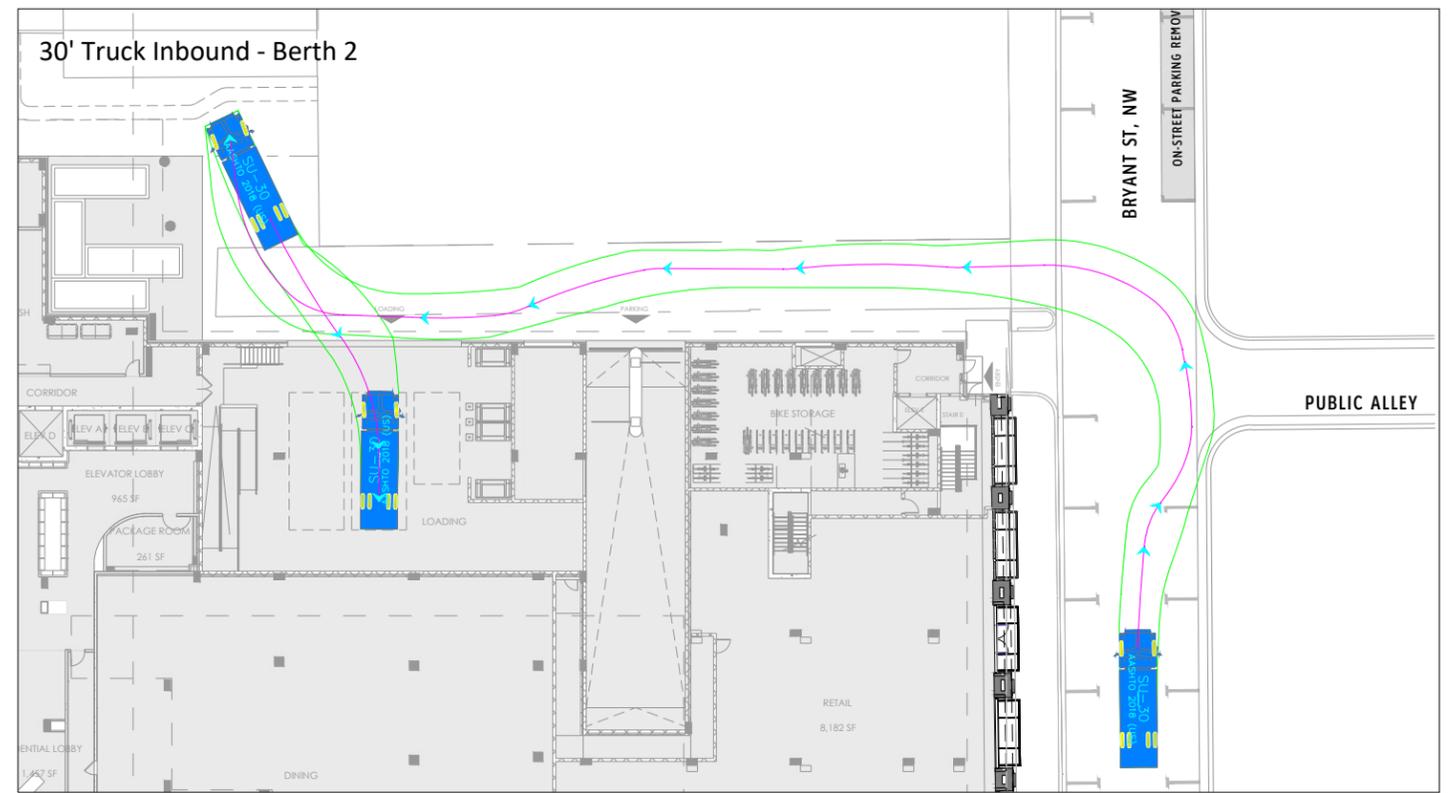
- Prepare a Comprehensive Transportation Review or Transportation Statement as required by DDOT.
- An examination of potential mitigations at the following intersections with movements or approaches that operate at unacceptable conditions, which are partially attributable to the addition of parking facilities at this parcel:
 - Georgia Avenue and Barry Place NW (converting on-street parking into a 100-foot eastbound right-turn lane, minor signal timing adjustments)
 - Georgia Avenue and Bryant Street NW (converting Bryant Street from one-way to two-way, minor signal adjustments)
 - Georgia Avenue/7th Street and Florida Avenue NW (minor signal timing adjustments)
- Have the project explore upgrading the sidewalks adjoining the site along Georgia Avenue and Bryant Street, which currently do not meet DDOT width requirements. The project should also explore improving the existing WMATA bus stop at Georgia Avenue and Barry Place adjoining the parcel, which currently does not have all recommended bus stop amenities.

D. Truck Maneuvering Exhibits

30' Truck Inbound - Berth 1



30' Truck Inbound - Berth 2



30' Truck Outbound - Berth 1



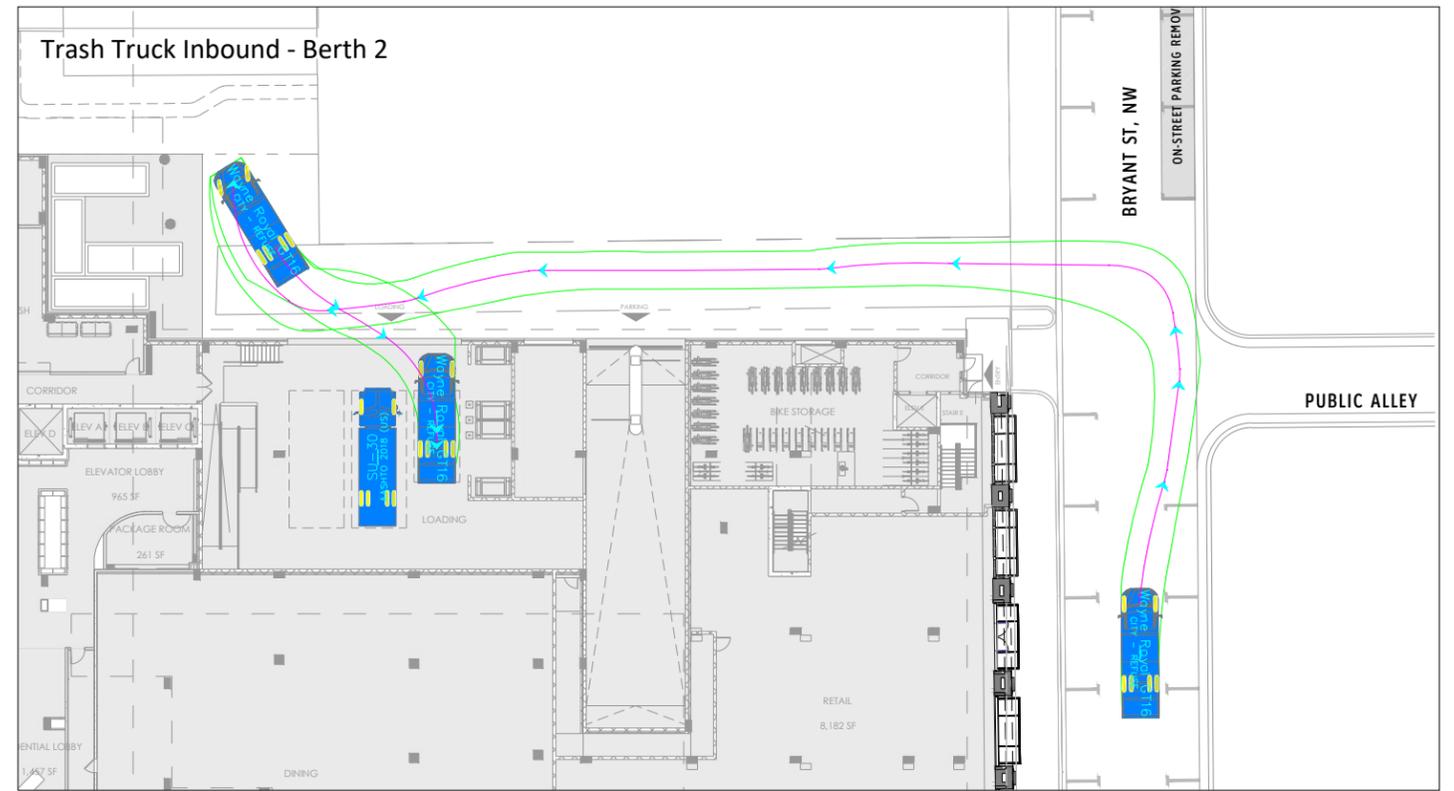
30' Truck Outbound - Berth 2



Trash Truck Inbound - Berth 1



Trash Truck Inbound - Berth 2

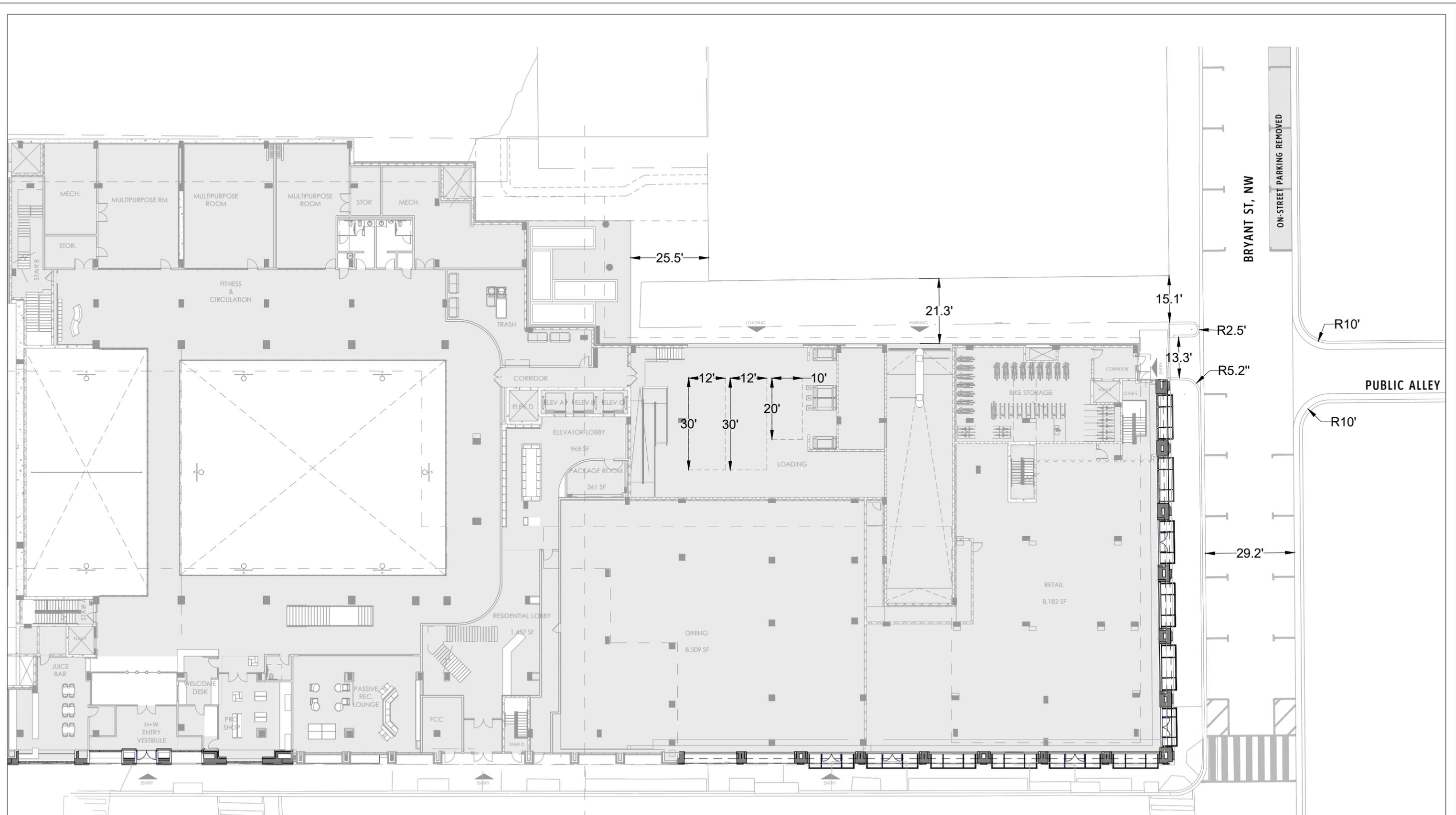


Trash Truck Outbound - Berth 1



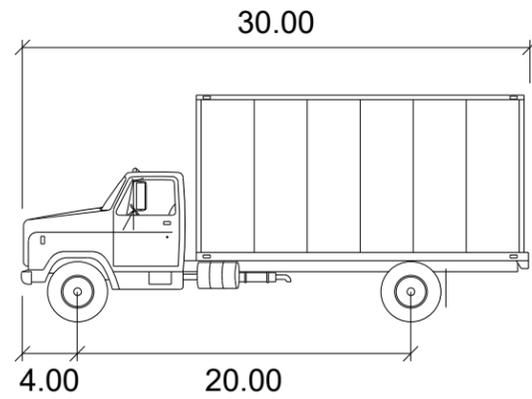
Trash Truck Outbound - Berth 2





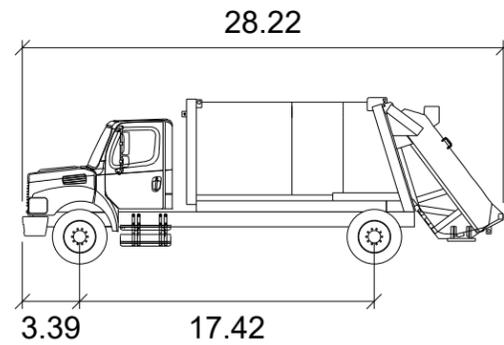
Vehicle Turning Movements: Overview





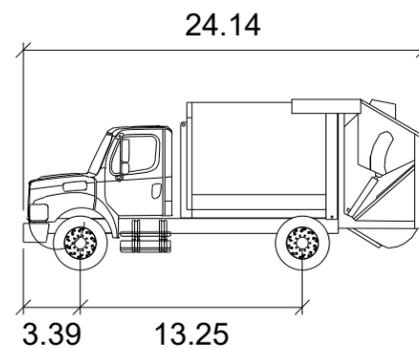
SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



Wayne Royal GT16

	feet
Width	: 8.00
Track	: 8.04
Lock to Lock Time	: 6.0
Steering Angle	: 48.0



Wayne PowerLynx PL12

	feet
Width	: 8.00
Track	: 7.97
Lock to Lock Time	: 6.0
Steering Angle	: 46.0

AutoTurn Notes:

- AutoTurn is a kinematic model and does not account for inertia
- AutoTurn does not account for weather and/or pavement conditions
- AutoTurn cannot compensate for driver error or experience
- Other drivable paths may achieve the same result(s) shown
- AutoTurn is a conservative model but is not a guarantee of exact real time results
- Successful simulation in AutoTurn does not guarantee that a specific driver can achieve the same pathway
- Vehicle dimensions are for standard sized vehicles, actual vehicle dimensions may vary
- Future changes to the design may impact and/or invalidate the results depicted in this exhibit
- Unless noted, AutoTurn does not account for vertical clearance or grade change.