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MEMORANDUM

TO:	Tasin Malik	District of Columbia Department of Transportation
	Erkin Ozberk	District of Columbia Department of Transportation
CC:	Hussain Shehab	Soles Montessori
	Maribel Robello	Soles Montessori
FROM:	Nicole White, P.E., PTOE	Symmetra Design
	Cece Wu	Symmetra Design
DATE:	April 16, 2025 (Original March 31, 2025)	
RE:	4401 16th Street Daycare – Transportation Statement	

Introduction

The following *revised* Transportation Statement outlines transportation conditions associated with the 4401 16th Street NW project located in Washington, DC. **Figure 1** illustrates the site location. The Project is planned to be a Child Development Center – Soles Montessori. The Transportation Statement has been prepared in accordance with guidelines outlined in the District Department of Transportation (DDOT) Guidance for Comprehensive Transportation Review (CTR) Study (January 2022). This Transportation Statement has been updated from the original March 31, 2025 version to incorporate the following key revisions based on input from DDOT:

- Additional mode split data with supporting information
- Detailed pick-up/drop-off plan, including one-way alley operations
- Bicycle access
- Loading and trash removal

The property is currently improved with a large church. The property is located in the R-1B zone with three stories totaling 17,917 square feet, and a Board of Zoning Adjustment (BZA) application was submitted for special exception relief requested pursuant to Subtitle X-901.2 and U-203.1(h) for a Daytime Care use in the R-1B Zone District.

The daycare intends to serve 118 children with up to 25 adult staff members. The daycare would operate Monday through Friday from 7:00am to 7:00pm and serve children ages 6 weeks to 13 years. The daycare parking lot has approximately 25 spaces (stacked). Drop-off and pick-up would be staggered depending on parental needs - not all students need to arrive by a specific time like a traditional school.

The Project is projected to generate 149 peak hour total person trips and 16 peak hour vehicle trips in the peak direction. This is above the District's threshold of 100-person trips but below 25 vehicle trips in the peak direction. Therefore, this Transportation Statement was scoped to include the

additional sections providing the analysis on the pedestrian, bike, and transit networks as well as the qualitative assessment of safety. The project's vehicle trip generation in the peak hour did not trigger the Traffic Impact Analysis (TIA) component of the CTR/Transportation Statement.

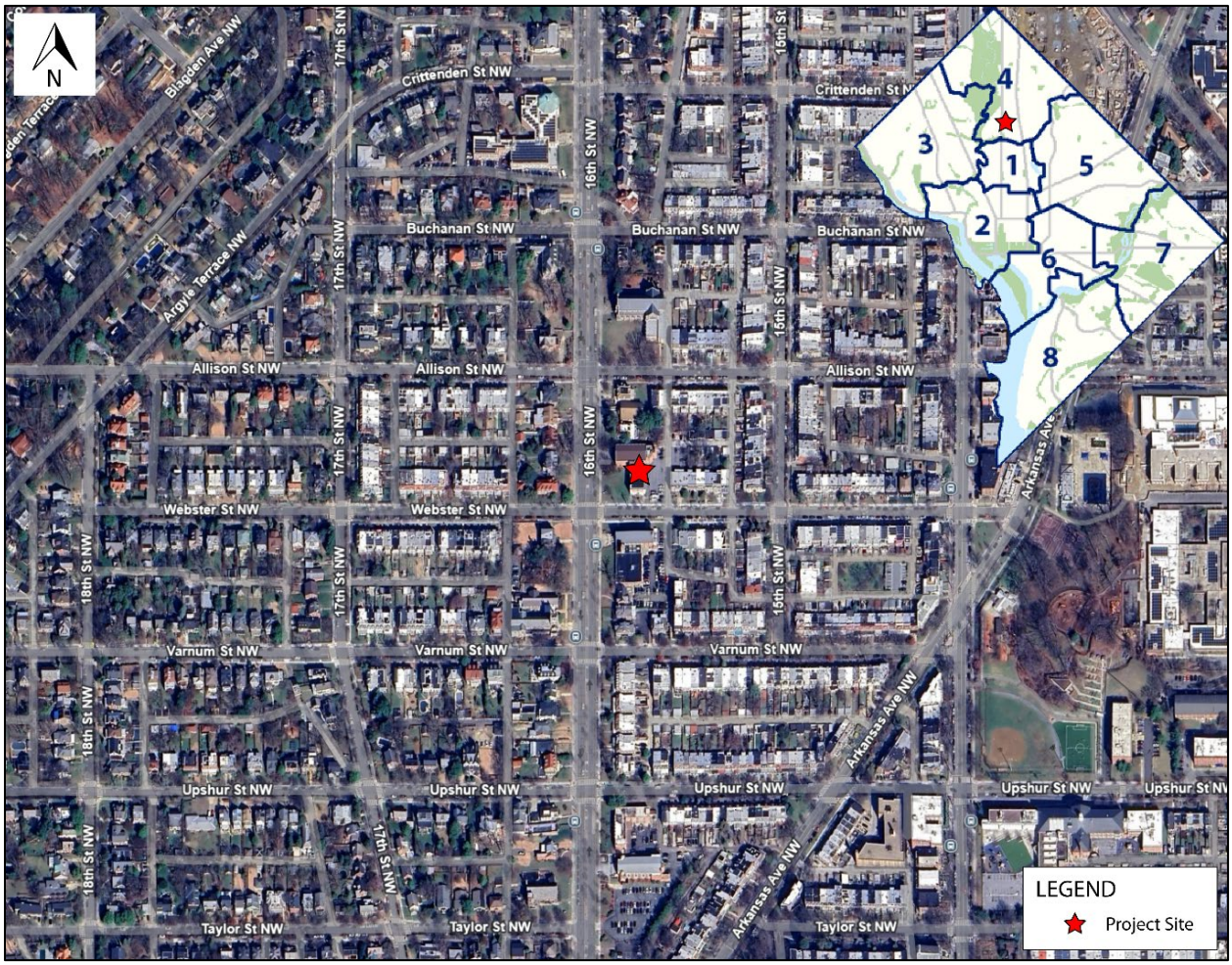

Figure 1: Site Location

Mode Split & Trip Generation

This section presents the travel mode split and trip generation calculations for the Project, which is planned to serve 118 students and 25 staff members.

The mode split data was provided by Soles Montessori based on Spring 2025 transportation survey results from their two existing locations:

- 4101 9th Street NW (serving 33 children and 10 staff), and
- 1414 Delafield Place NW (serving 12 children and 4 staff).

Both of these sites will be consolidated into the new location. All current students and staff reside within the 20011 zip code, and it is anticipated that prospective students will also be drawn from this same area. **Figure 2** illustrates the location of the existing and future sites.

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The survey asked parents and staff how they currently travel to the existing daycare locations and how they expect to travel to the new consolidated site. The mode split presented in this analysis reflects anticipated travel behavior to the new location. The survey achieved a 100% response rate from the existing student and staff populations. Survey responses are provided in the appendix.

While additional sources such as the U.S. Census Bureau and the National Household Travel Survey were reviewed, no publicly available data was found that specifically reports the travel mode split of parents transporting children to daycare in Washington, D.C.

Student mode split results are summarized in **Table 1**. The survey included responses from 45 students, representing a future student population of 118. At a 95% confidence level, the calculated margin of error is 11.54%.[1] Staff mode split results are summarized in **Table 2**, based on responses from 14 staff members, representing a future staff population of 25. The corresponding margin of error is 17.73% for a 95% confidence level.[1] Lower and upper bounds for each mode split, accounting for the margin of error, are also shown in the tables.

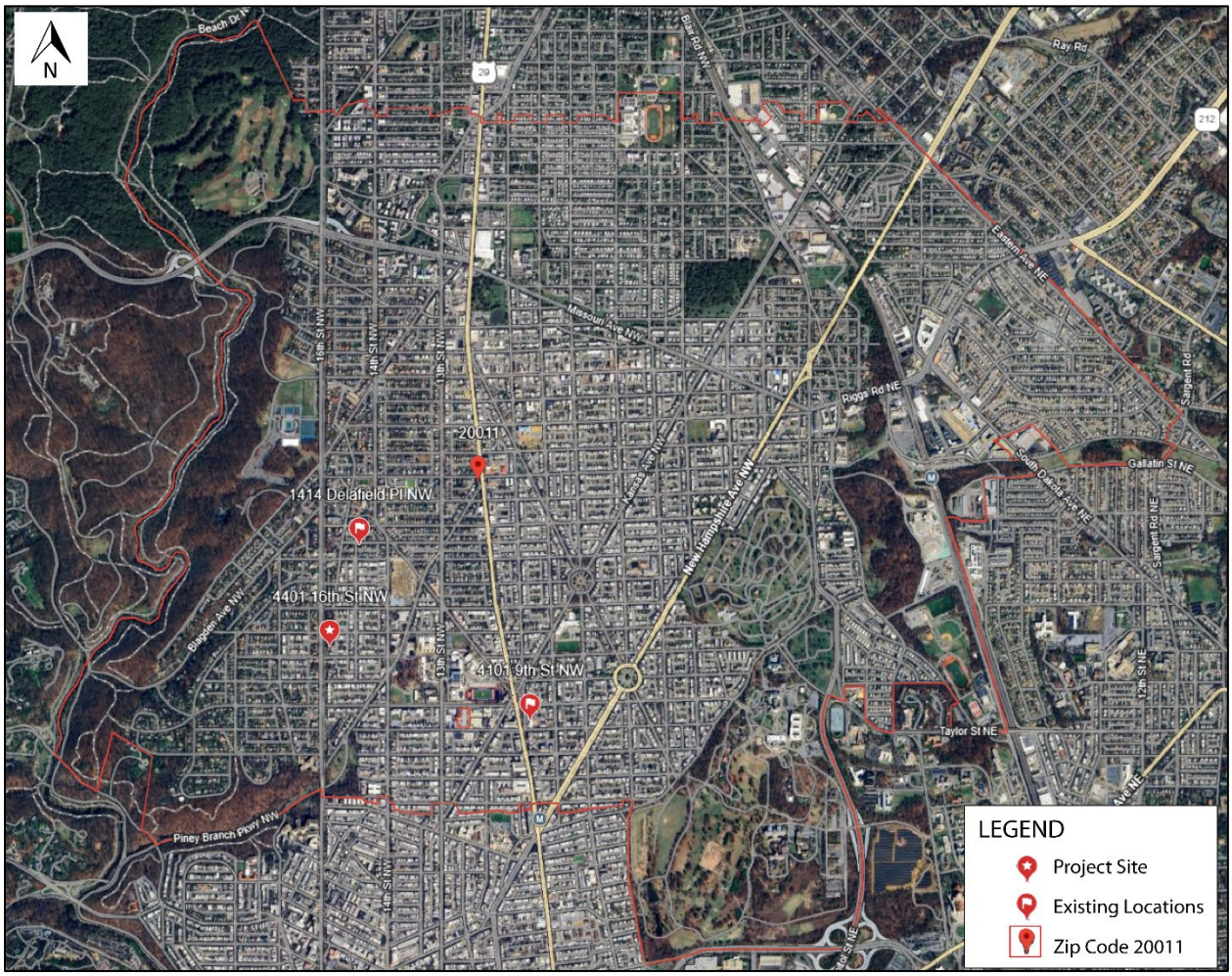

Figure 2: Proximity of Existing Daycare Locations to Proposed Site

[1] A 95% confidence level is the industry standard and typically used scientific research. The margin of error was calculated using an online calculator.

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Table 1: Student Mode Split

Mode	From Survey	Margin of Error = 11.54%	
		Lower Bound	Upper Bound
Auto	31%	20%	43%
Transit	0%	0%	12%
Bike	13%	2%	25%
Walk	56%	44%	67%
Total	100%	-	-

Table 2: Staff Mode Split

Mode	From Survey	Margin of Error = 17.73%	
		Lower Bound	Upper Bound
Auto	43%	25%	61%
Transit	29%	11%	46%
Bike	0%	0%	18%
Walk	29%	11%	46%
Total	100%	-	-

Based on surveys at the existing two locations, drop-off peak hour is from 7:30-8:30am and pick-up peak hour is from 4:30-5:30pm.

As outlined in CTR Guidelines, *a CTR is required when a proposed development generates 100 or more total person trips (i.e., combined inbound and outbound during a peak hour) OR 25 or more vehicle trips in the peak direction (i.e., higher of either inbound or outbound) during any of the critical peak hours.*

Trip generation is from ITE *Trip Generation Manual*, 11th Edition using Land Use 565 – Day Care Center for 118 students. Using a vehicle occupancy rate of 1.60 persons/vehicle per the CTR guidelines for childcare and the existing auto mode split from **Table 1**, the site will generate a total of 147 AM and 149 PM peak hour person trips and a total of 30 AM and 30 PM peak hour vehicle trips. The calculated trip generation is shown in **Table 3.** The daycare would result in a maximum of 16 AM inbound trips/16 PM outbound trips, below the District's threshold for conducting a CTR.

Due to the small sample size for the mode split, trip generation is also shown using the upper bound of auto mode split from **Table 1** and **Table 2**. The site will generate a total of 43 AM and 43 PM peak hour vehicle trips. **Table 4** presents the hypothetical trip generation based on the upper-bound vehicle mode split assumption. The daycare would result in a hypothetical maximum of 23 AM inbound trips/23 PM outbound trips, which is still below the District's threshold for conducting a CTR.

Table 3: Peak Hour Vehicle Trip Generation using Existing Mode Split

		AM Peak (7:30-8:30 AM)			PM Peak (4:30-5:30 PM)		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Student	Person Trips	64	57	121	58	65	123
	Auto Person Trips (31%)	20	18	38	18	20	38
Staff	Person Trips	14	12	26	12	14	26
	Auto Person Trips (43%)	6	5	11	5	6	11
Total Person Trips		**78**	**69**	**147**	**70**	**79**	**149**
Total Auto Person Trips		26	23	49	23	26	49
Total Auto Trips[2]		**16**	**14**	**30**	**14**	**16**	**30**

[2] A vehicle occupancy rate of 1.60 persons/vehicle per the CTR guidelines for childcare is used.

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Table 4: Hypothetical Peak Hour Vehicle Trip Generation using Upper Bound Vehicle Mode Split

		AM Peak (7:30-8:30 AM)			PM Peak (4:30-5:30 PM)		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Student	Person Trips	64	57	121	58	65	123
	Auto Person Trips (43%)	28	24	52	24	28	52
Staff	Person Trips	14	12	26	12	14	26
	Auto Person Trips (61%)	8	8	16	8	8	16
Total Person Trips		**78**	**69**	**147**	**70**	**79**	**149**
Total Auto Person Trips		36	32	68	32	36	68
Total Auto Trips[3]		**23**	**20**	**43**	**20**	**23**	**43**

Site Access

There are no curb cuts to the property. Vehicular access to the parking lot will be from the public alley east of the property. Drop-off and pick-up will occur in the parking lot on site. Parents and staff will be directed to approach the alley from Allison Street and depart to Webster Street. Alley would remain two-way for residential and other non-daycare uses. This information will be included in the parent and staff handbooks. Access to the site is illustrated in **Figure 3**.

Figure 3: Site Access

[3] A vehicle occupancy rate of 1.60 persons/vehicle per the CTR guidelines for childcare is used.

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Loading and Trash Removal

Given the size of the daycare is less than 30,000 square feet, a loading berth will not be required. Trash will be stored in a commercial dumpster located in the back yard. Trash will be picked up twice a week outside of children pick-up/drop-off periods, so it will not conflict with proposed parking and student loading operations. An illustration of the trash area is shown in **Figure 4**. Trash will be rolled out to the alley for collection. No additional maneuvering will be necessary beyond typical alley maneuvers.

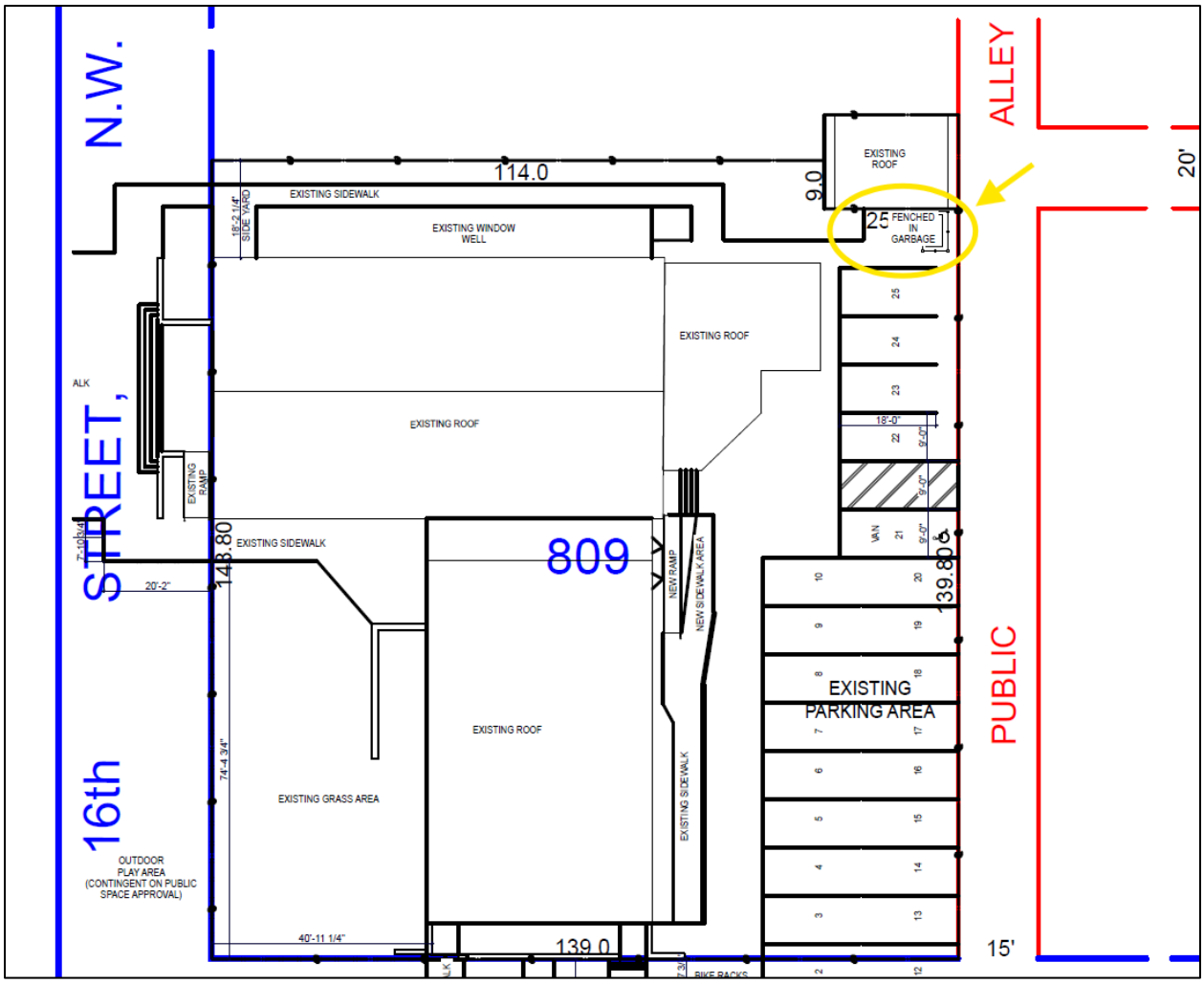

Figure 4: Trash Location

Curbside Management

Existing curbside restrictions within two blocks of the site are illustrated in **Figure 5** below. There are no proposed changes to curbside management associated with the project.

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Figure 5: Existing Curbside Restrictions

Parking

The following section provides a description of the parking requirements for the project.

The zoning requirements per the DC Zoning Regulations of 2016 (ZR-16) Title 11 Subtitle C § 701 and DDOT's Preferred Maximum rates for parking are shown in **Table 5**. The daycare has approximately 25 existing stacked parking spaces on-site; 15 spaces are in accordance with zoning requirements[4]. Parking will be stacked, one row for staff and one row for parents. Designated parking space locations are shown in **Figure 6**. An occupancy of public space permit for the four stacked parking spaces located beyond the property line near Webster Street will be pursued through a separate application process.

Table 5: Vehicle Parking Requirements

Land Use/Units	Vehicle Parking Ratio per ZR-16	Vehicle Parking Required by ZR-16	DDOT Preferred Parking Rates (Figure 10): *Less than 1/4 Mile from Priority Transit*	Parking Proposed
Daytime Care (17,917 sq. ft.)	0.5 per 1,000 sq. ft. with a minimum of 1 space required.	9	*90% of ZR-16* 8 (max)	~25 stacked spaces (staff and short-term parent parking)

[4] Per Subtitle C § 711.3, all required parking spaces must be accessible at all times. Of the 25 proposed parking spaces, 10 are stacked and therefore not considered accessible. As a result, 15 spaces meet the zoning requirements, satisfying the minimum parking requirement.

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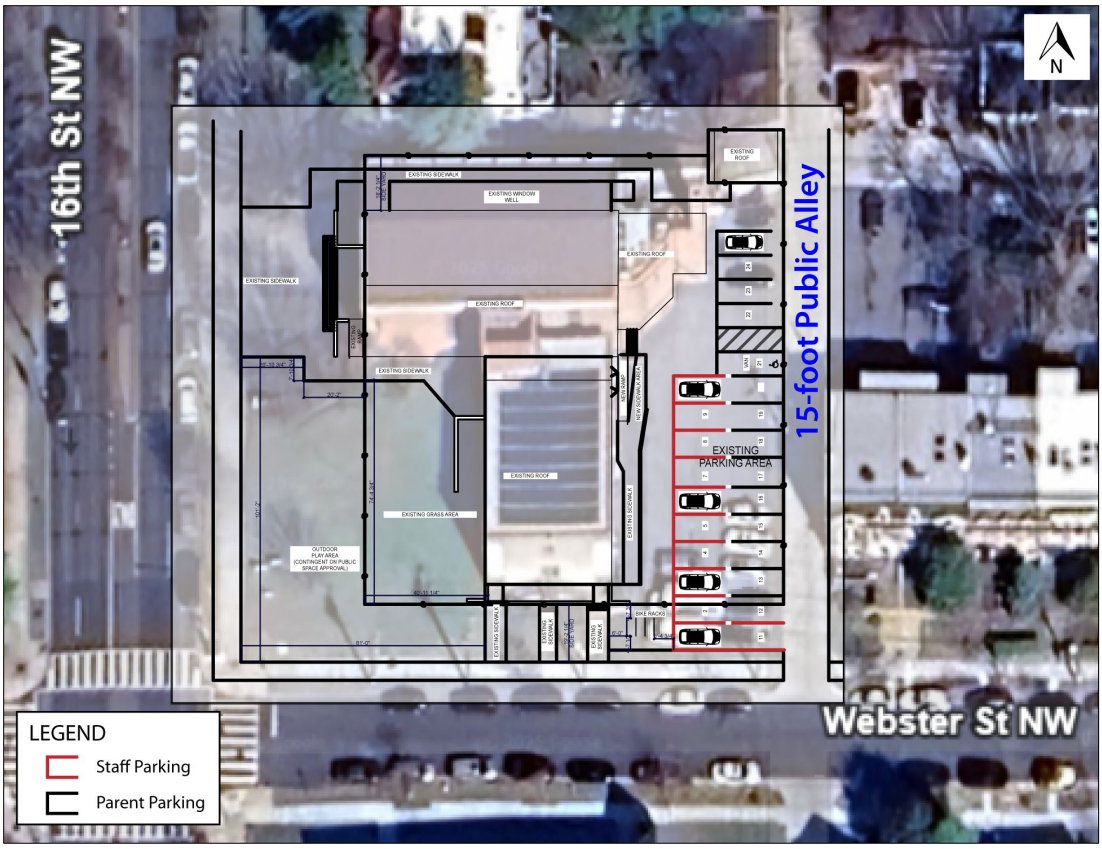

Figure 6: On-Site Parking Locations

Pick-Up and Drop-Off Plan

The following section provides a description of the pick-up/drop-off plan.

Pick-up/drop-off operations will occur in the on-site parking lot. Of the 25 stacked parking spaces, 11 would be used for staff parking (25 staff @ 43% auto mode split). Thus, the parking lot will have 14 spaces for short-term parking to accommodate 37 parent vehicles that would be dispersed throughout the peak hour (118 students @ 31% auto mode split). Drop-off and pick-up would be staggered depending on parental needs - not all students need to arrive by a specific time like a traditional school. Parents will be directed to approach the alley from Allison Street and depart to Webster Street. The following information will be included in the parent handbook to manage and enforce pick-up and drop-off operations.

Parking Policies and Alley Use

- *U-turns and double parking are strictly prohibited during pick-up and drop-off times.*
- *To ensure safety and maintain traffic flow, the alley will operate as one-way southbound during designated pick-up and drop-off times. Parents must enter from Allison Street and exit via Webster Street. Please note: the alley remains two-way at all times for residents and non-daycare users.*
- *Parking spaces in the parking lot are available for pick-up and drop-off. Do not block the alley while waiting for a space to become available.*

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Enforcement and Penalties for Policy Violations

- *Staff will actively monitor and enforce all pick-up and drop-off procedures.*
- *First Violation: A written warning will be issued to the parent or guardian outlining the policy violation.*
- *Second Violation: A monetary penalty of $50 will be assessed.*
- *Third Violation: Repeated non-compliance may result in termination of your child's enrollment at Soles Montessori.*

Pedestrian Assessment

The following section is an assessment of pedestrian facilities within proximity of the project site.

Sidewalk gaps within a quarter mile of the site are identified in **Figure 7**. The sidewalks along both sides of 16th Street and Webster Street are over five feet separated from the roadway by a buffer strip.

Crosswalks on all legs of the 16th Street/Webster Street intersection are in good condition with high visibility pavement markings and presence of stop bar. All curb ramps at the intersection meet DDOT standards. A detectable warning surface exists on all the curb ramps. There are no missing crosswalks within the study area.

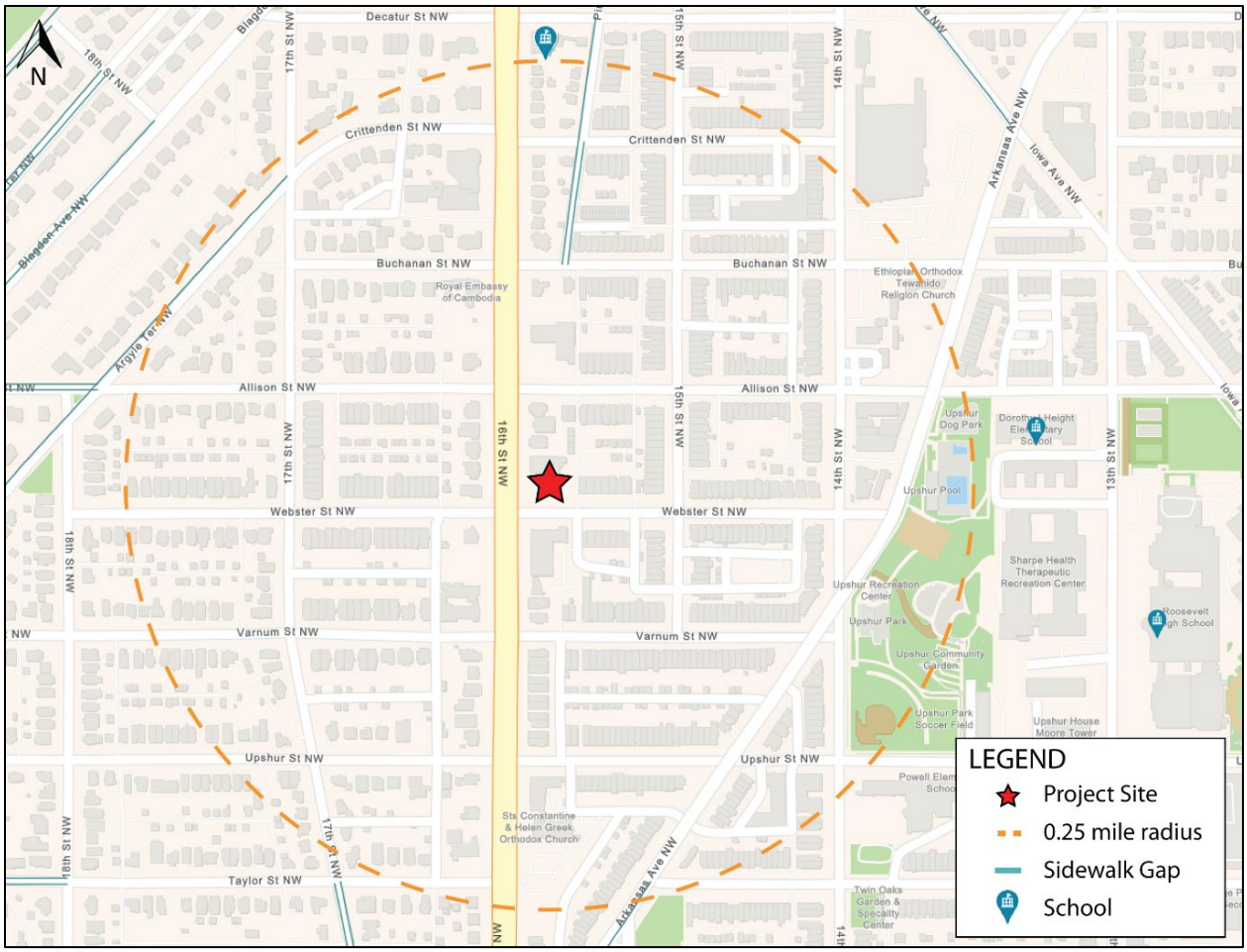

Figure 7: Sidewalk Gaps – ¼ Mile Radius (moveDC)

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Bicycle Assessment

The following section is an assessment of bicycle facilities within proximity of the project site.

Existing bicycle facilities within a half mile of the site are illustrated in **Figure 8**. There are four Capital Bikeshare stations within the study area, with the closest location on 17th Street between Varnum Street and Upshur Street. 14th Street has a bike lane. 13th Street is a signed bike route.

Compliant with ZR-16, the daycare will provide 4 short-term and 2 long-term bicycle parking spaces. The short-term spaces will be located on the south side of the parking lot. The long-term spaces are in the bike storage room by the reception area and will be compliant with zoning requirements. Details are shown in **Figure 9**.

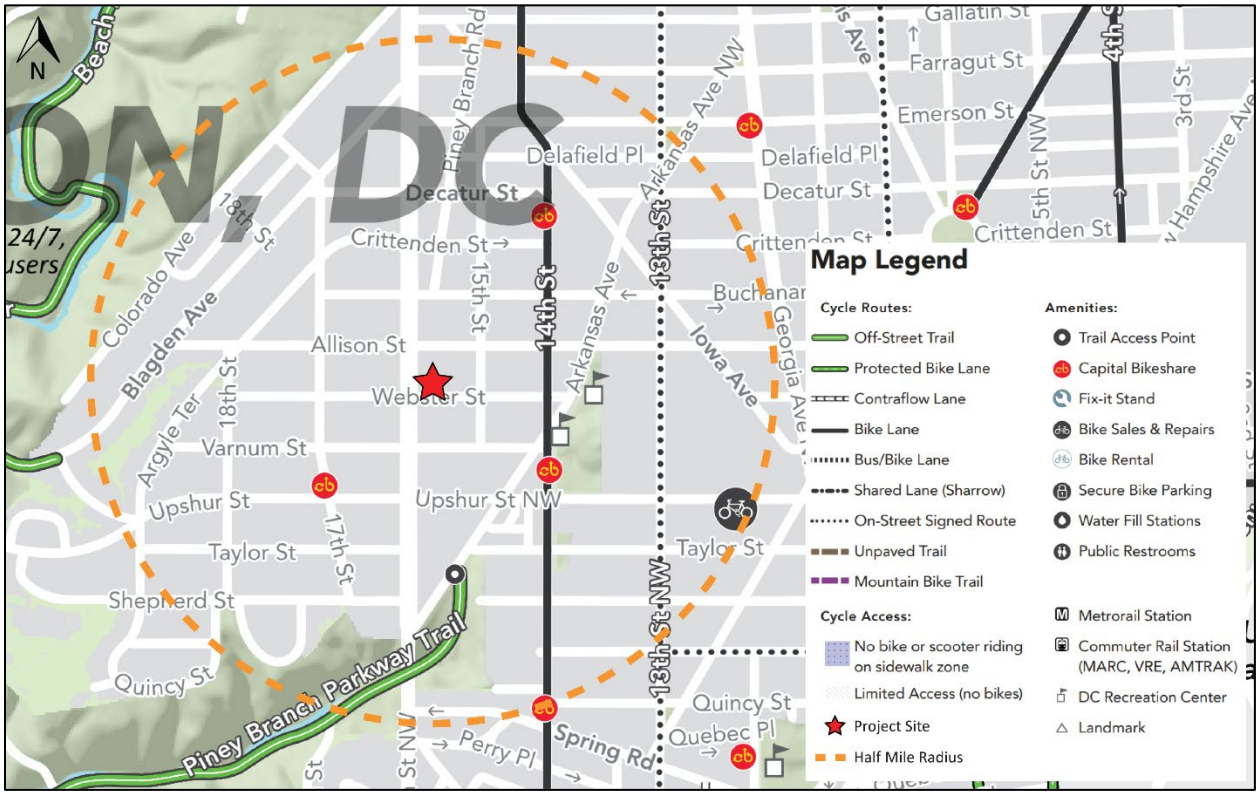

Figure 8: Bicycle Facilities – ½ Mile Radius

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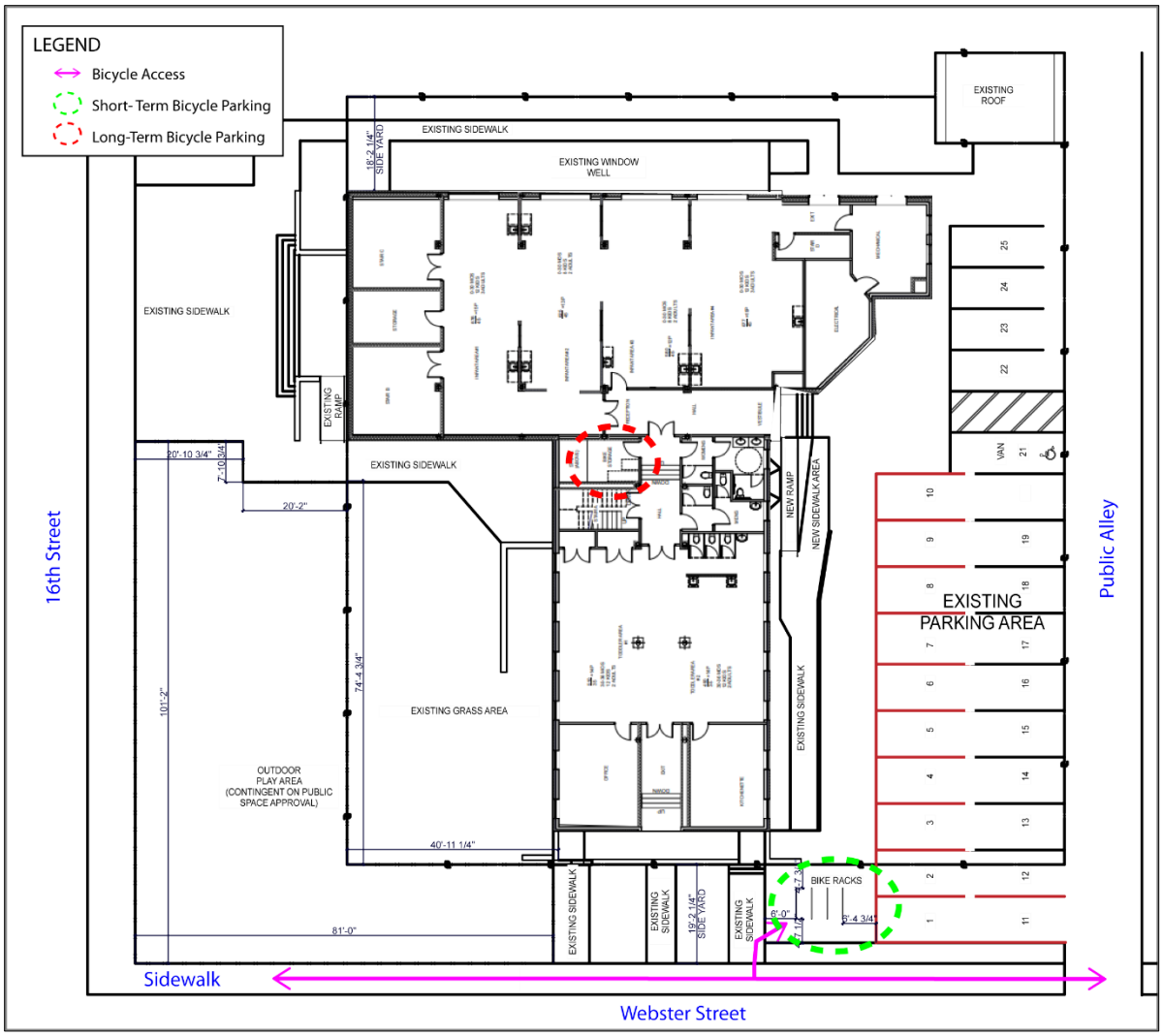

Figure 9: Short-Term and Long-Term Bicycle Parking Locations

Transit Assessment

The following section is an assessment of transit facilities and services within proximity of the project site.

The one-mile Metrorail station study area is shown in **Figure 10**. The only Metrorail station within the study area is the Georgia Avenue-Petworth Station, servicing the Green Line.

The half-mile Metrobus study area is shown in **Figure 11**. 14th Street and 16th Street are priority bus routes. The closest bus stops are on 16th Street near Webster Street for northbound service and Varnum Street for southbound service for metrobus routes D33, S2, and W45. There are also bus stops on 14th Street near Webster Street servicing routes 52 and 54. The bus stops on 16th Street and the bus stop on 14th Street in the northbound direction are accessible but do not have any bus amenities. The bus stop on 14th Street in the southbound direction has a bus shelter with seating in good condition.

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As part of the proposed 2025 Better Bus Network Redesign, Metro is taking this opportunity to review and consolidate bus stops across the region to make service faster and more direct. Metro will implement a new bus network and change all bus route names on June 29, 2025. Routes D33, S2, and W45 will be replaced by routes D6X and D60. Routes 52 and 54 on 14th Street will be replaced by routes D50 and D5X. None of the bus stops mentioned above are on the list of stops to be eliminated to make service faster and more direct.

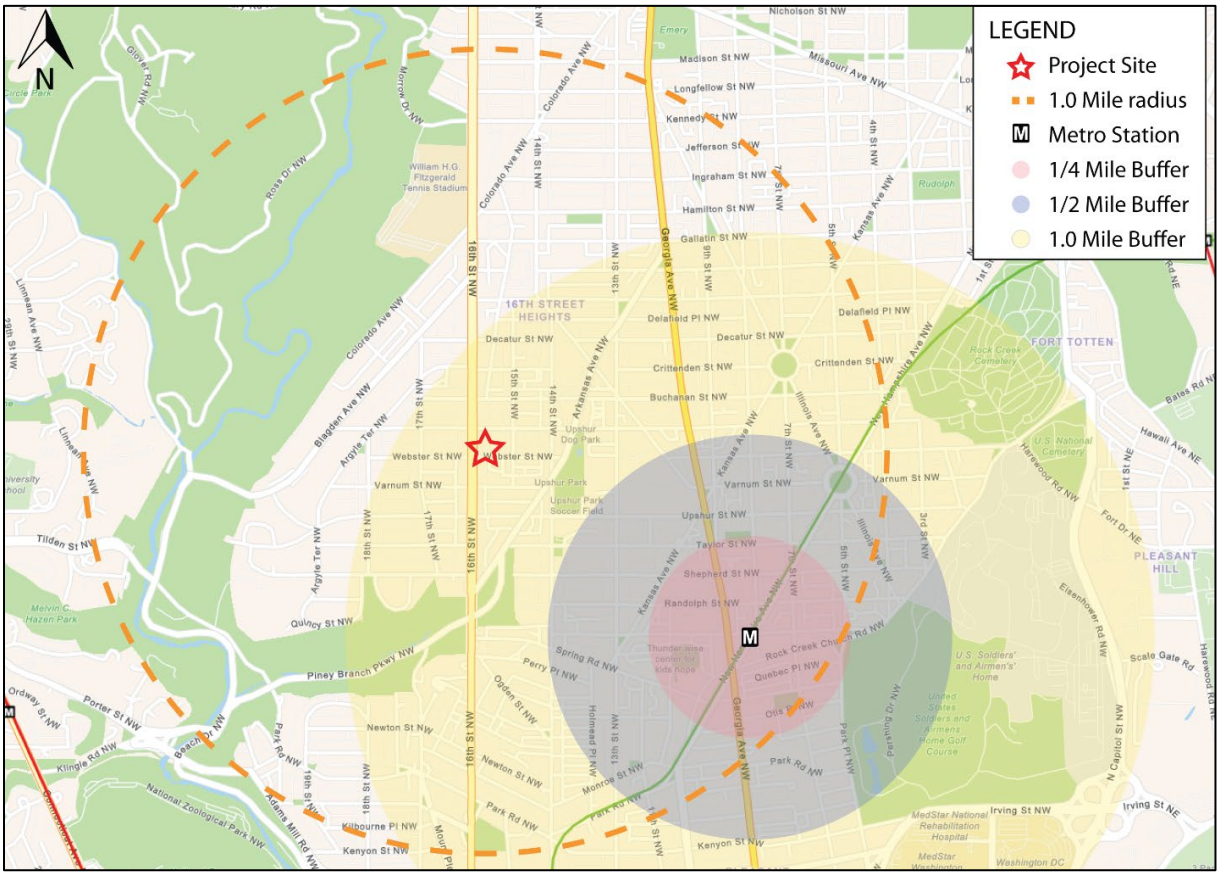

Figure 10: Metrorail Stations – 1-Mile Radius

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Figure 11: Metrobus Routes and Stops – ½ Mile Radius

Table 6: Metrobus Stations and Services – ½ Mile Radius

Route	Route Name	Key Destinations	Service Headways (Weekday)
D60/D6X (currently S2 & S9)	16th Street / 16th Street Express	• District of Columbia International School • Mt. Pleasant Library • Columbia Heights Education Campus • Metro Center Metrorail Station	D60 AM Peak: 6-10 min PM Peak: 8-12 min D6X AM Peak: 6 min PM Peak: 7 min
D50/D5X (currently 52 & 54)	14th Street/ 14th Street Express	• Tacoma Metrorail Station • Colorado Terminal • Upshur Recreation Center • Columbia Heights Metrorail Station • Metro Center Metrorail Station	D50 AM Peak: 8-16 min PM Peak: 12 min D5X AM Peak: 6 min PM Peak: 7 min

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Safety

The following section provides a qualitative assessment of safety conditions in proximity to the site.

No intersections adjacent to the site have been identified as DDOT high crash locations. Illustrated in **Figure 12** are traffic crashes by injury type that occurred on or after 1/1/2022 within the study area. The data are for persons injured, not the number of crashes. All the injuries were minor, except for the following[5]:

- a major driver injury on Varnum Street west of Arkansas Avenue (4/2/2022)
- a major bicyclist injury on 14th Street below Buchanan Street (6/6/2024)

14th Street is part of DDOT'S High Injury Network (HIN), which focuses on areas with high rates of traffic-related injuries and fatalities. 14th Street is categorized as Tier 2, which is supplemental to Tier 1 and represents the highest priority segments and corridors for each Ward.

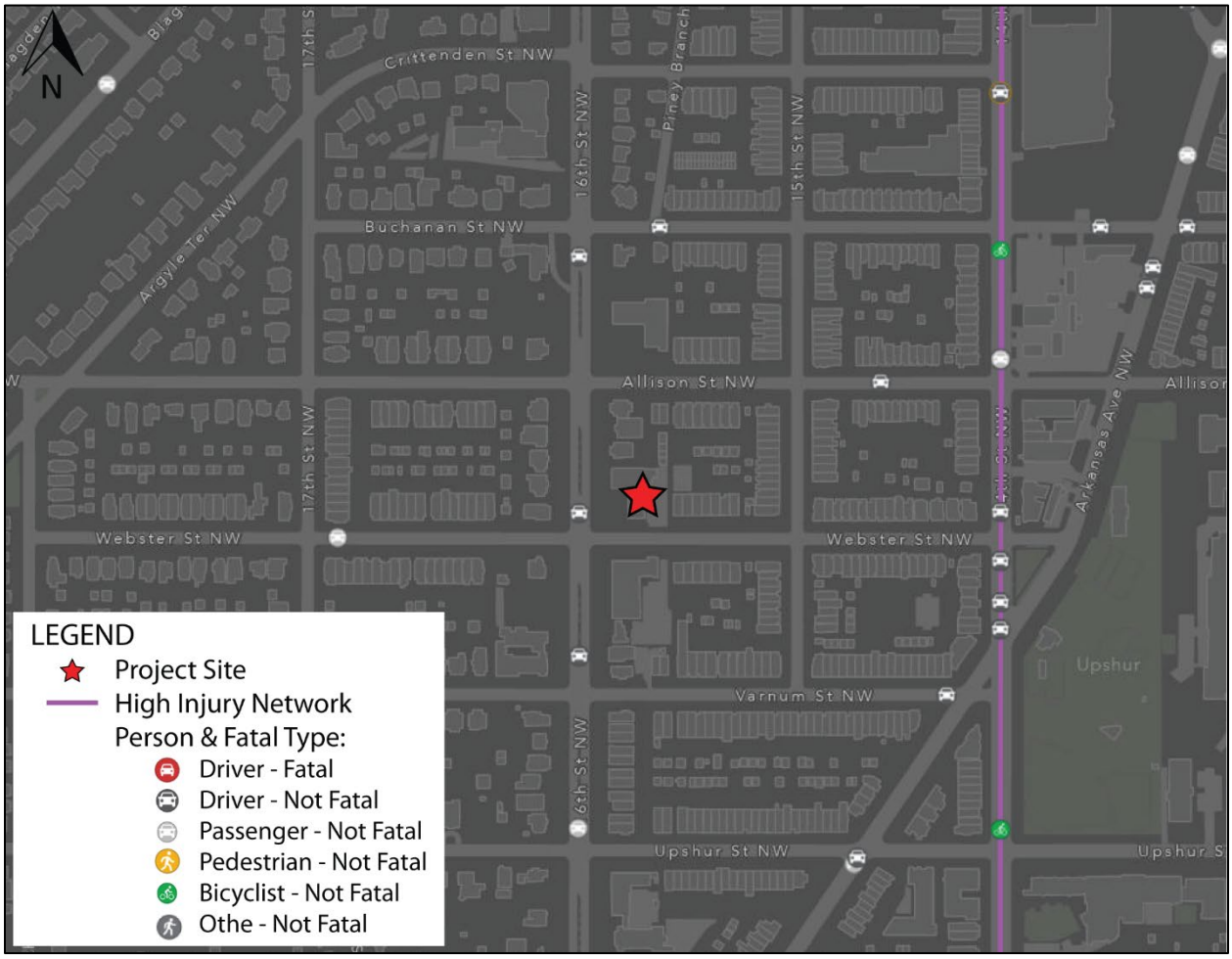

Figure 12: 2024-2025 Traffic Crash Data (Source: Metropolitan Police Department)

[5] The exact location shown on the figure may vary slightly depending on where the police report was filed.

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Transportation Demand Management

The following section provides a list of Transportation Demand Management (TDM) measures to reduce vehicular and parking demand and encourage the use of green travel choices (i.e., transit, walk, and bike).

- Appoint Daycare Transportation Coordinator
- Meet with goDCgo to develop goals and plans
- Conduct commuter survey of staff
- Conduct Show of Hands Commute Survey of students
- Check in with goDCgo's School Services Team halfway through the year to track progress
- Send out reminders for Commuter Benefits Open Enrollment
- Promote commuter benefits and other sustainable transportation programs to new and existing hires
- Provide transportation information to new and existing students and families
- Provide brochures in communal areas for staff, student, and parent inquiries
- Provide information on nearby transportation options on the daycare's website (work with goDCgo to create a Get Around Guide customized for the daycare)
- Include transportation information in daycare newsletter
- Promote sustainable transportation in communal areas
- Participate in Sustainable Transportation Holidays
    - Park(ing) Day (September)
    - Car Free Day (September)
    - Walk to School Day (October)
    - National Walk to Work Day (April)
    - Bus to Work/Transportation Equity Day (February)
    - National Bike Month (May)
    - National Bike to School Day (May)
    - Bike to Work Day (May)
- Host a tabling event with goDCgo to sign staff up for commuter benefits
- Install bike rack (get a free bike rack from DDOT through 311)
- Promote Capital Bikeshare as a form of commuting to and from the daycare
- Host bike safety course for staff
- Promote WABA bicycling classes to staff
- Facilitate car/vanpool formation meetings and ride matching (goDCgo can help with this)
- Promote the Carpool Now App and Commuter Connections' ride matching platform
- Sign up for and promote SchoolPool, a ride matching platform for students and families
- Comply with DC Parking Cashout Law

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Conclusions

The Project would result in 30 vehicle trips during the AM peak hour and 30 vehicle trips during the PM peak hour. The maximum number of vehicle trips in the peak direction is 16 trips in the AM inbound/PM outbound direction. This is below the District's threshold of 25 vehicle trips in the peak direction for a full CTR. Key takeaways of this report are stated below:

- On-site parking can sufficiently accommodate staff parking and parent pick-up/drop-off operations.
- The public alley will operate as one-way southbound during pick-up and drop-off for parents and staff. Alley would remain two-way for residential and other non-daycare uses. The parent handbook will include language to manage and enforce pick-up drop-off activities in the alley.
- Transportation Demand Management (TDM) measures are proposed to reduce vehicular and parking demand and encourage the use of green travel choices.

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