

JEWISH PRIMARY DAY SCHOOL

6045 16th Street, NW
Washington, DC

TRAFFIC IMPACT STUDY

September 11, 2012

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Board of Zoning Adjustment

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PREFACE

The following report is an update to the previous April 20th Transportation Impact Study (TIS) prepared for the Jewish Primary Day School in Northwest, Washington, DC. The TIS was updated to incorporate additional analysis outlined by DDOT in its August 10, 2012 comprehensive scoping agreement. The following additional updates have been included:

- Safety Assessment includes a summary and assessment of crash data at the following study area intersections:
 - 16th Street, NW and Fort Stevens Drive, NW
 - Fort Stevens Drive, NW & Rock Creek Ford Road, NW
 - 16th Street, NW and Decatur Street, NW
 - 16th Street, NW and Crittenden Street, NW
 - Piney Branch Avenue, NW and Crittenden Street, NW
- Traffic Operations and Queuing Assessment – Summary of traffic counts and traffic analysis at the 16th Street, NW/ Decatur Street, NW intersection and 95th Percentile queue lengths.
- Diagram showing the locations of the sidewalks, crosswalks, and ADA ramps along at the study area intersections.
- Evaluation of signage and pavement markings – Review of existing signage and pavement markings at study area intersections.
- Proposed on-street parking restrictions and number of lost parking spaces during peak pick-up and drop-off periods.
- Outline of Monitoring Plan – Outline of plan JPDS will utilize to measure performance and baseline commitments. This document would be reported to DDOT and the community.

INTRODUCTION

The following Transportation Impact Study (TIS) examines transportation impacts associated with the Jewish Primary Day School's proposal to expand its Main campus and increase its student and faculty/staff populations at both of its campus locations. The main JPDS campus is located at 6045 16th Street in Northwest Washington, D.C. JPDS recently purchased a secondary campus for its Pre-Kindergarten, Kindergarten and First Grade academic programs located at 4715 16th Street, NW. The following is being planned:

- Main Campus – JPDS purchased the neighboring property at 6107 16th Street, NW to serve as its administrative offices. The school is also seeking to increase enrollment from 275 students (current student cap) to 300 students and will seek an increase in the maximum cap of faculty/staff from 56 to 72.
- Proposed Early Childhood Campus - The JPDS has purchased the former British School of Washington (currently leased by the Washington Latin Public Charter School for ninth and tenth graders) located at 4715 16th Street. JPDS is planning to relocate its Pre-Kindergarten, Kindergarten and First grade academic programs to this location and will request an increase in the existing student cap of 125 students, by approximately 5 students, to 130 students. The JPDS will also request an increase in faculty from 15 to 26.

The location of the above referenced properties is illustrated in Figure 1.

Scope of TIS

This study includes report sections outlining existing and future conditions for both the Main Campus and for the proposed Early Childhood Campus. Some report sections such as transportation management have been assessed for the entire campus. The scope of study and TIS methodology was presented to the District Department of Transportation (DDOT) at a scoping meeting on March 30, 2012. The applicant received formal comments on August 10th 2012 and the final Scoping Form is included in the appendix.



Figure 1: JPDS Main Campus, Phillips Property and Future Early Childhood Campus

BACKGROUND

Previous Studies

In 2007, Symmetra prepared a Traffic Impact Study (TIS) for JPDS to assess impacts of increasing student population from 225 to 275 and faculty/staff from 42 to 56. The TIS included information such as JPDS's transportation characteristics and Transportation Demand Management (TDM) measures. The 2007 TIS indicated there would be no adverse impact to operations on the roadway network as a result of the proposed student population increase. Comparing 2007 and 2012 site trips, the JPDS has reduced vehicle trip generation (even with increases in student population) with a successful bus program. The comparison indicates a 37% and 50% reduction in trip generation during the AM and School dismissal peak periods since 2007.

With continued usage of the bus program, the proposed 9% increases in student enrollment and faculty/staff would not result in noteworthy changes in traffic levels and/or Levels of Service within the vicinity of the current school location. It is also expected that there would be negligible traffic impacts on the roadway surrounding the proposed Early Childhood campus as existing trips (associated with the Washington Latin Public Charter School) are comparable to projected JPDS related site trips. It is also noted DDOT Average Daily Traffic data along 16th Street indicates a decrease in traffic along the corridor with 44,000 vehicles per day in 2007 to 31,000 vehicles per day in 2009.

JPDS Program and Population

The JPDS Main Campus is located at 6045 16th Street NW Washington, DC. The school provides academic programs for Pre-Kindergarten, Kindergarten and Grades one through six. There are 273 students and 56 full-time equivalent staff. Residential zip code data indicates 53.5 percent of JPDS students live in Maryland, 46.2 percent reside in the District of Columbia and the remaining 0.3 percent of students reside in Virginia. Table 1 provides a summary of residential distribution of students.

Table 1: Residential distribution of Students by Jurisdiction

	Students	Percentage
Maryland	146	53.5%
District of Columbia	126	46.2%
Virginia	1	0.3%
Total	273	100%

A summary of faculty/staff

residential location is shown in Table 2.

Table 2: Residential distribution of Faculty by Jurisdiction

	Faculty	Percentage
Maryland	38	68%
District of Columbia	16	29%
Virginia	2	3%
Total	56	100%

As shown in Table 2, 68 percent of JPDS faculty/staff live in Maryland, 29 percent reside in the District of Columbia and the remaining 3 percent of faculty/staff resides in Virginia.

School hours are from 8:30 AM to 3:30 PM on Mondays, Wednesdays and Thursdays. On Tuesdays the school day is extended to 4:30 PM and on Fridays the school day is shorter with dismissal at 2:15 PM. The JPDS offers an on-site after-school program from 3:30 PM to 6:30 PM, Monday through Thursday and from 2:15 PM to 6:00 PM on Fridays.

Washington Latin Public Charter School (WLPCS) Program and Population

The JPDS has purchased the former British School of Washington (currently leased by the Washington Latin Public Charter School) located at 4715 16th Street. The property itself has been in operation as a school for close o 30 years. The Washington Latin Public Charter School's population is made up of 135 students (in Grades 9 and 10) and approximately 20 staff. Typical school hours are from 8:10 AM to 3:30 PM, Monday through Friday. The school also operates an unstructured after school program and students are free to leave anytime between 3:30 PM and 7:30 PM.

All WLPCS students are Washington D.C. residents, and majority of staff are also primarily D.C. residents with a few residing in Maryland.

MAIN CAMPUS – EXISTING CONDITIONS

The JPDS is located at 6045 16th Street in Northwest Washington, D.C. The roadways surrounding the JPDS School site are described below:

Roadway Network

The roadways included as part of the JPDS Project study area are described below:

- 16th Street is a four-lane, median-divided, principal arterial that extends from K Street in the south to Eastern Avenue in the north. Parking is permitted on the northbound curb-lane between Fort Stevens Drive and the Military Road ramp intersection from 9:30 AM to 4:00 PM. The posted speed limit on 16th Street is 30 miles per hour (mph).
- 14th Street is a two-way minor arterial that extends from U Street in the south to Aspen Street in the north. 14th Street is a four-lane roadway south of Military Road and a two-lane roadway north of Military Road. Curb parking is permitted on 14th Street north of Military Road on both sides of the street (except between 7:00 AM and 9:30 AM Monday through Friday). The posted speed limit on 14th Street is 25 mph.
- Military Road is a four-lane, median-divided freeway¹ that extends from Georgia Avenue in the east to Western Avenue in the west. The posted speed limit on Military Road is 30 mph.
- Fort Stevens Drive is a two-lane local road that extends from 13th Street in the east to 16th Street in the west. Both lanes on Fort Stevens are wide enough to accommodate curb parking (as well as vehicle travel). Curb parking is prohibited on Fort Stevens Drive for street cleaning on Tuesdays (eastbound lane) and Wednesdays (westbound lane) between 9:30AM and 11:30AM.
- Rock Creek Ford Road is a two-lane local road that extends from 14th Street in the east to Fort Stevens Drive in the west. Both lanes on Rock Creek Ford Road are wide enough to accommodate two-hour curb parking (as well as vehicle travel) from 7:00 AM to 8:30 PM (Monday to Friday).

Site location and roadways surrounding the main campus are shown in Figure 2.

¹ Military Road is an arterial east of 14th Street and west of Oregon Avenue.

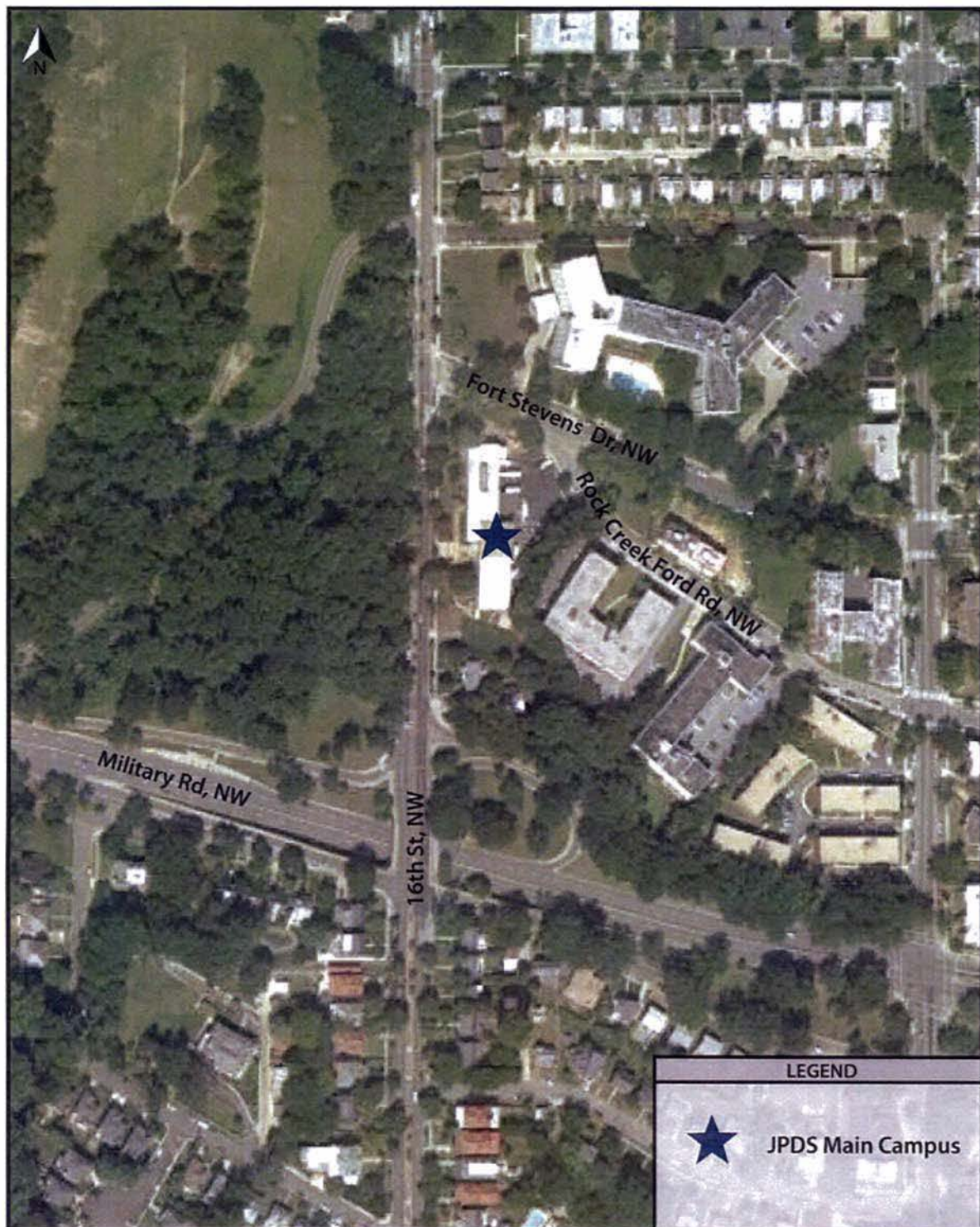


Figure 2: Site Location Map

Site Access and Circulation

Primary north-south access to the school is provided via 16th Street or 14th Street. Military Road provides primary east-west access to the school. The JPDS driveway is accessed from Rock Creek Ford Road.

Drop-off and Pick-up Operations

Vehicles

JPDS manages a two-way inbound/outbound driveway system. The typical morning drop-off is from 8:10 AM to 8:30 AM. Preparation for drop-off operations begins at 7:45 AM when security/traffic personnel place cones within the parking lot to guide inbound and outbound circulation. As vehicles pull into the parking lot, designated staff members are on-hand to assist the children exiting vehicles. At 8:30 AM all the cones are removed and the security gate is closed. Children arriving after 8:30 AM must enter through the pedestrian gate. Both the vehicular and pedestrian gates to the parking lot are automated and require key card access. Figure 3 illustrates a schematic of site access and driveway operations and designated loading area.

The typical afternoon pick-up is from 3:30 PM to 3:45 PM on Mondays, Wednesdays and Thursdays, from 4:10 PM to 4:45 PM on Tuesdays and from 2:15 PM to 2:30 PM on Fridays. Parents begin arriving to the school 15 minutes prior to dismissal time and are directed into the parking lot by security/traffic personnel. Vehicles stack within the parking lot, in four rows with four vehicles per row, and wait for dismissal. The parking lot has stacking capacity for approximately 16 vehicles at any one time. Upon dismissal, designated staff members are on-hand to assist children with boarding. After children board the vehicles, the vehicles proceed to the exit. After a group of vehicles exit then additional vehicles are permitted onto the parking lot.

It is noted some parents also park along adjacent roadways² and walk over to the school to pick-up their children. Along 16th Street (eastside near approach at Fort Stevens Road), curb parking is permitted from 9:30 AM to 4:00 pm. JPDS school buses and other vehicles waiting to pick-up children utilize this parking. During the afternoon, traffic congestion was observed along northbound 16th Street from 3:15 pm to 4:00 pm. This congestion was alleviated after 4:00 pm when the curb parking lane transitions to an additional northbound travel lane.

² 16th Street northbound curb-lane, Fort Stevens Drive and Rock Creek Ford Road.

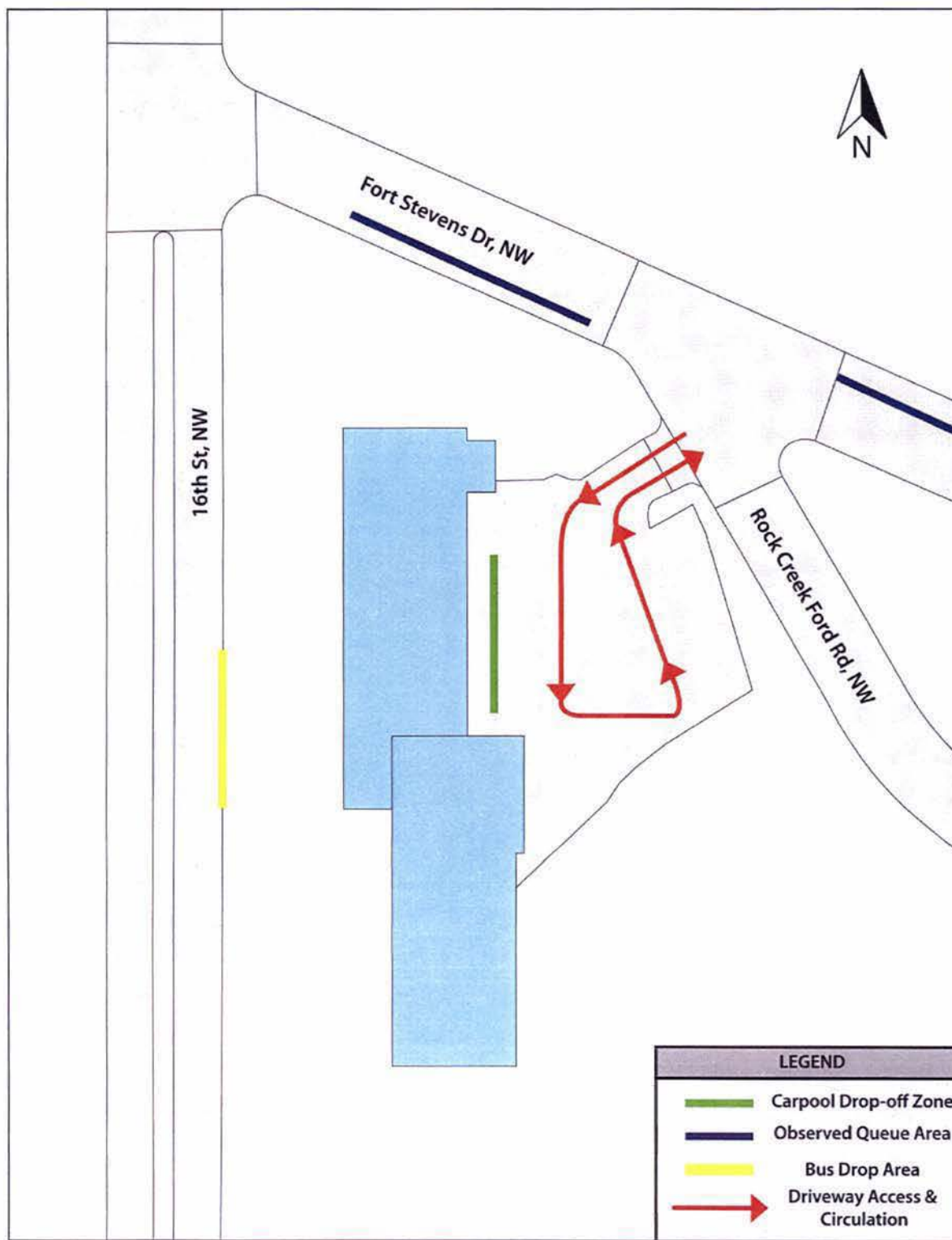


Figure 3: Schematic of Driveway Site Access and Circulation

School buses

There are three school buses. School bus drop-off takes place along the northbound curb lane on 16th Street (see Figure 3).³ Each bus took an average of five minutes to unload. During the morning drop-off, buses were stationed along 16th Street for a total duration of 14 minutes.

During the afternoon, school bus pick-up also takes place on the northbound curb-lane of 16th Street.⁴ Each bus arrives in advance of the afternoon dismissal. Children board the buses and the buses depart traveling northbound along 16th Street. Based on observations, the first bus arrived at 3:10 PM with the second and third buses arriving at 3:30 PM and 3:35 PM, respectively. Buses were stationed along 16th Street for a total duration of 35 minutes.

Queuing

Additional queuing observations were conducted on the April 2, 2012. During observations, the drop-off lasted from 8:08 AM to 8:32 AM. Vehicles waiting to access the school driveway queued along Fort Stevens Road for no more than one minute at any one time. The maximum (on-site and off-site) queue lasted for just seconds at 8:28 AM with a total of 11 vehicles. The average queue⁵ on Fort Stevens Road was one vehicle. The observed area used to support over-flow queuing (associated with vehicles wanting to access the school driveway) is illustrated in Figure 3. Fort Stevens Drive is wide enough to accommodate queuing without impacting the flow of through traffic.

During the afternoon, the pick-up period was from 3:30 pm to 3:45 pm. The maximum (on-site and offsite) queue was 22 vehicles (16 on-site and 6 vehicles on Fort Stevens Road). This lasted for approximately one minute during the 15-minute pick-up period.

³ Curb parking is permitted along 16th Street (northbound) Monday through Friday from 9:30 AM to 4:00 PM.

⁴ Curb parking is permitted along this section of 16th Street Monday through Friday from 9:30 AM to 4:00 PM

⁵ Average queue recorded in minute intervals during 25 minute drop-off period

Pedestrian Conditions and Bicycle Facilities

Sidewalks along 16th Street, Fort Stevens Drive and Rock Creek Ford Road provide pedestrian access to/from the JPDS.

The District of Columbia Bicycle Map (see Appendix) indicates the following bicycle facilities within a half (1/2) mile radius of the JPDS:

- Bike Lanes along 14th Street from Aspen Street to Columbia Road
- On-street Signed Routes along 13th Street from Georgia Avenue to New York Avenue

Traffic conditions for bicycling, especially along 16th Street and Military Road, are considered poor. There are no bike share locations within a half (1/2) mile from the JPDS site. The closest bike share site is located at the Decatur Street and 14th Street intersection.

A detailed inventory of sidewalks, bike paths, crosswalks, pedestrian signals, and ADA ramps at the study area intersections are detailed in Table 3 and illustrated in Figure 4.

Table 3: Inventory of Sidewalks, bike paths, crosswalks, pedestrian signals and ADA ramps

INTERSECTION	EAST LEG	WEST LEG	NORTH LEG	SOUTH LEG
16 th St / Fort Stevens Drive	• Sidewalks • Crosswalk with APS • ADA Ramps		• Sidewalks • Crosswalk with APS • Sheltered Bus Stop – west side • ADA Ramp – east side	• Sidewalks
Fort Stevens Drive / Rock Creek Ford Rd	• Sidewalks – north side only • Dashed Crosswalk w/Pedestrian Crossing Sign	• Sidewalks		• Sidewalks • ADA Ramp – east side only

APS- accessible pedestrian signals



Figure 4: Pedestrian Facilities Diagram

The following deficiencies are noted as indicated in Figure 4:

- ADA ramps are not provided at the Rock Creek Ford Road/ Fort Stevens Road intersection crossing Fort Stevens Road from the north side or crossing Rock Creek Ford Road from either approach.

Transit Conditions

The following Metrobus routes provide service within the vicinity of the JPDS:

- Military Road–Crosstown Lines (E2, E3, E4)
- 14th Street Lines (S2, S3, S4)
- 16 Street Lines (S2, S4)
- 16th Street –Potomac Park Line (S1)

The S2, S4, S2, S4 and E2 buses serve the area seven days a week, the S3 and E4 lines serve the area only on weekdays, the S3 and S1 buses serve the area only during the peak weekday periods and the E2 bus serves the area only on weekends. The Takoma Metrorail station on WMATA's red line is approximately 1.2 miles from the JPDS.

There are two bus stops along either approach of 16th Street at Ford Stevens Drive.

Transportation Modal Split

Student arrival and departure (by travel mode) and associated AM and PM peak hour site trips are summarized in Tables 4 and Table 5. The data, including vehicle occupancy counts, was collected on Thursday March 15, 2012.

Table 4: Student Modal Split (AM Peak Period)

	Students	%	Vehicle Trips
Ride Alone	30	11%	30
Carpool	125	45%	50
Metrobus	0	0%	0
School Bus	104	38%	3
Van	0	0%	0
Walk/Bike	0	0%	0
Before School	0	0%	0
Absent	14	6%	0
Total	273	100%	83

As shown in Table 4, 125 students (or 45%) carpooled and 104 students (or 38%) arrived by bus. Approximately 83% of JPDS students currently carpool and/or ride the bus to School.

Based on data collected, the morning peak hour was 7:45 AM to 8:45 AM and the school PM peak hour was 3:00 PM to 4:00 PM. Peak hour traffic data is shown in Figure 5. Directional distribution is shown in Figure 6. The distribution was developed based on existing travel patterns and previous zip code residential data. (Residential data and a worksheet highlighting travel patterns are provided in the Appendix).

Field observations indicated traffic congestion along northbound 16th Street during the PM peak hour. This congestion is primarily caused by commuter traffic and is further exacerbated since this section of 16th Street effectively functions as one travel lane until 4:00 PM when curb parking is no longer permitted. Parallel parking maneuvers also slightly impact through traffic from approximately 3:15 PM to 4:00 PM.

Table 5: Student Modal Split (PM Peak Period)

	Students	%	Vehicle Trips
Ride Alone	27	10%	27
Carpool	103	37%	44
Metrobus	0	0%	0
School Bus	98	36%	3
Van	12	4%	1
Walk/Bike	2	1%	0
After 6:00 PM	17	6%	0
Absent	14	6%	0
Total	273	100%	75

As shown in Table 5, 103 students (or 37%) carpooled and 104 students (or 36%) departed the School by bus. Approximately 73% of JPDS students currently carpool and/or ride the bus home. It is also noted that some JPDS students participate in After School activities and depart the School after 6:00 PM.

The modal split for JPDS faculty/staff⁶ is shown in Table 6.

Table 6: Faculty/Staff Modal Split

	Staff	%	Vehicle Trips
Drive Alone	47	84%	47
Metrobus	8	15%	0
Walk/Bike	1	1%	0
Total	56	100%	47

Of the 56 total faculty/staff members, 47 drive, 8 arrive by Metrobus and 1 person walks and/or bikes to the school. Faculty/staff typically arrive prior to the morning peak hour (7:45 AM to 8:45 AM) and depart after the school PM peak (3:00 PM to 4:00 PM).

Traffic Counts and Field Observations

Traffic data (turning movement counts) and field observations were conducted at the JPDS Driveway and along adjacent roadways⁷ on Thursday March 15, 2012 from 7:00 AM to 9:00 AM and 3:00 PM to 6:00 PM.

⁶ Based on data provided by JPDS

⁷ 16th Street, Fort Stevens Drive and Rock Creek Ford Road where drop-off and pick-up also occurs

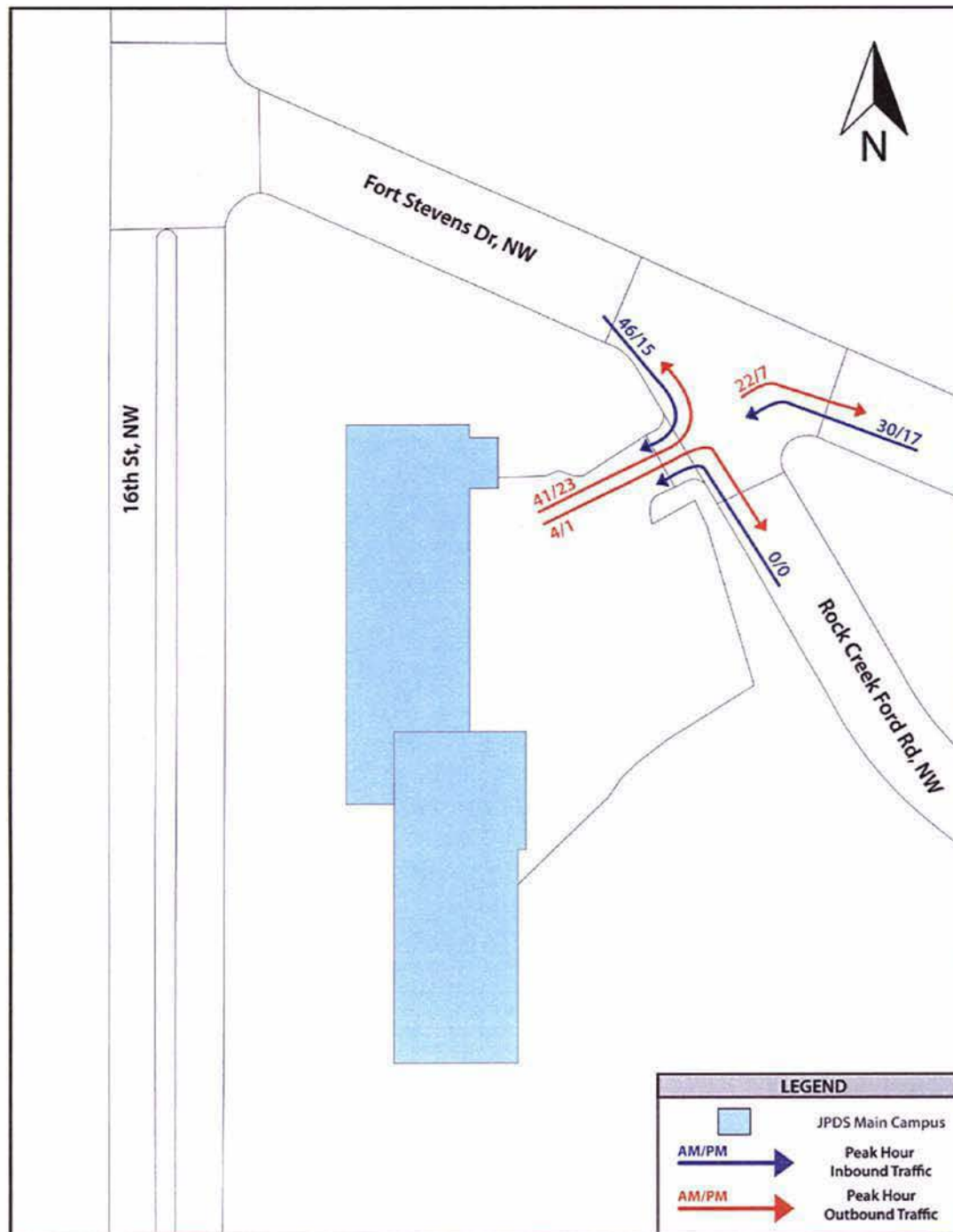


Figure 5: Peak Hour Traffic Data



Figure 6: Existing Directional Distribution

Vehicle Trip Generation

Traffic counts conducted at the school driveway and along adjacent roadways⁸ were used to determine JPDS vehicular trip generation. Table 7 summarizes vehicle trip generation for the AM peak hour (7:45 AM to 8:45 AM), School PM peak hour (3:00 PM to 4:00 PM) and commuter PM peak hour (5:00 PM to 6:00 PM).

Table 7: Existing Vehicle Trip Generation⁹

AM Peak			School Peak			PM Peak		
IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
82	54	136	57	47	104	8	10	18

As Table 7 indicates, the school currently generates 136 AM peak hour trips, 104 school PM peak hour trips and 18 commuter PM peak hour trips.

Parking

The school provides a total of 41 stacked parking spaces within the on-site parking lot. This supply meets the current zoning requirement. The parking configuration is shown in Figure 7.

⁸ 16th Street, Rock Creek Ford Road and Fort Stevens Road

⁹ Numbers include vehicle trips and do not include bus trips. It is noted there are three inbound and three outbound bus trips to the school during the morning and afternoon peak periods.

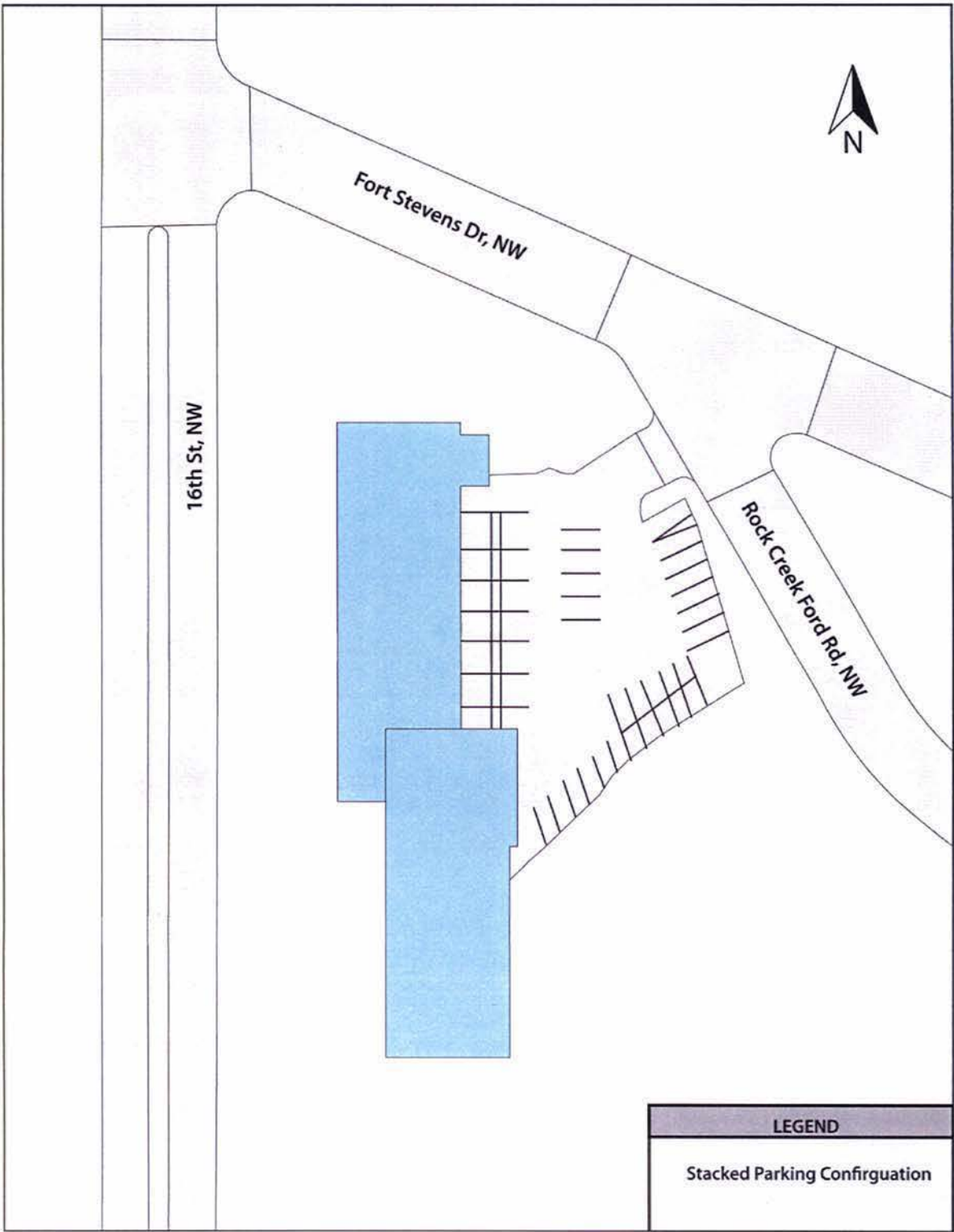


Figure 7: Parking Configuration

Safety

A general summary of accident history within a three year period¹⁰ for the Main Campus study area intersections is shown in Table 8. The data was collected from the DC Department of Transportation Traffic Accident Report and Analysis System.

Table 8: Summary of Accident History within a three-year period (2009, 2010 and 2011)

	Total Number of Accidents	Total Number of Injuries	Total Number of Pedestrians Involved	Total Number of Bicycle/Motorcycle Involved	Collision Type
16 th St & Fort Stevens Dr.	6	3	0	0	5 Rear-end 1 Side Swipe
Fort Stevens Dr. & Rock Creek Ford Rd.	2	0	0	0	1 Rear end 1 Side Swipe

As shown in Table 8, a range of two to six accidents were reported at the study area intersections over a three year period. Four of the six reported accidents at the 16th Street/ Fort Stevens Drive intersection occurred after 6:00 PM. The accident data indicates rear-end collisions were the primary collision type. A number of factors can typically be attributed to rear end crashes such as driver error (including following to close or electronic distraction), pavement conditions, and/or visibility. The accident reports are provided in the Appendix.

Signage and Pavement Markings

A summary of existing signage in and around the main campus study area intersections are shown in Figure 8.

¹⁰ January 1, 2009 to December 31, 2011



Figure 8: Main Campus Signage Inventory

All signage is in accordance with MUTCD standards.

The following section provides an assessment of the pavement markings at the 16th Street and Fort Stevens' Drive intersection and the Fort Stevens Drive and Rock Creek Ford Road intersection.

16th Street/Fort Stevens Drive

Photographs of the 16th Street/Fort Stevens Road Intersection are shown below. Crosswalks striping and lane markings at all approaches of the intersection are in good to fair condition.



16th Street/Fort Stevens Drive(looking west)



16th Street/Fort Stevens Drive (looking south)

Fort Stevens Drive/Rock Creek Ford Road

Photographs of the Fort Stevens Road/ Rock Creek Ford Road intersection are shown below. As shown in the photograph on the left, the ladder-style crosswalk along Fort Stevens Drive is significantly distressed and faded. The Design and Engineering manual notes *"High visibility crosswalks are required at all uncontrolled crosswalks and all crosswalks (including signalized or stop controlled crosswalks), leading to a block with a school, within a designated school zone area, along a designated school work route, or on blocks adjacent to a Metro station.* It is also noted the stop bar at the Rock Creek Ford Road approach is worn (photograph below right) and no crosswalk is provided for pedestrians crossing Rock Creek Ford Road.



Fort Stevens Dr./ Rock Creek Ford Rd. (looking)



Fort Stevens Dr./ Rock Creek Ford Rd. (looking)

MAIN CAMPUS – FUTURE CONDITIONS

Future Development and Financial Office

The development and financial offices would be relocated to the Phillip's property. Figure 9 illustrates the location of the Phillip's property in relation to the existing JPDS building.

Parking

Four parking spaces are proposed for faculty/staff at the Phillip's property. A total of 45 spaces will be provided in the future at the Main Campus.

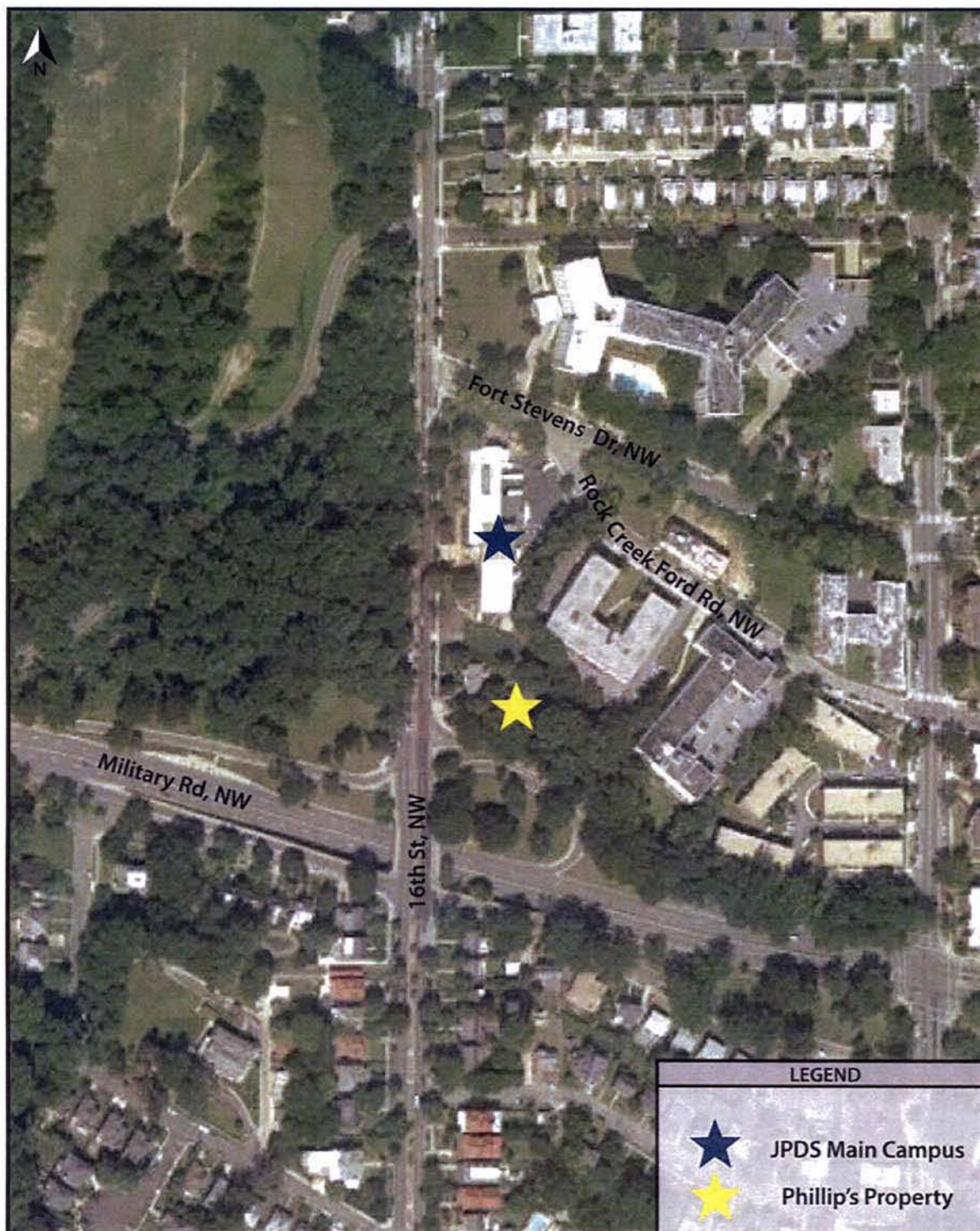


Figure 9: Aerial of Phillip's Property

Transportation Modal Split

JPDS will increase its existing student population by 9% (from 275 to 300). Faculty/Staff population will be increased by 28% (56 to 72). Student and Faculty/Staff transportation characteristics are expected to remain consistent with existing travel patterns.

Future Vehicle Trip Generation

Future trip generation was projected by increasing existing March 2012 trip generation (shown in Table 5) by the rate of increase in student enrollment. The projected increase in vehicle trips to the main campus is shown in Table 9.

Table 9: Future Trip Generation (Additional Main Campus Trips)

AM Peak			School PM Peak			Commuter PM Peak		
IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
7	5	12	5	4	9	1	1	2

With the proposed enrollment increase of 9%, there would be an increase of 10 AM peak, 7 School PM peak and 2 Commuter PM peak hour trips. This increase in trips is negligible.

Table 10 summarizes future trip generation to the main campus. The table also provides a comparison of future trip generation to the previous March 2007 trip generation data.

Table 10: Total Future Trip Generation and Comparison to March 2007

	AM Peak			School Peak			PM Peak		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
March 2012	82	54	136	57	47	104	8	10	18
9% Increase	7	5	12	5	4	9	1	1	2
JPDS Projected Main Campus Traffic*	89	59	148	62	51	113	9	11	20
March 2007	117	99	216	105	105	210	28	15	43

*Future School Year 2013-2014

As shown in Table 10, the main JPDS campus is projected to generate 148 AM peak hour and 113 School PM peak hour trips. This trip generation is considerably less than the trip generation recorded in March 2007. It is also noted there were 225 students enrolled in March 2007 versus 273 students enrolled during March 2012 traffic counts.

Queuing

In the future, the JPDS driveway will continue to operate as it does today. With the 9% population increase (from 275 to 300), the following can be expected:

- *Morning Drop-off* – The existing maximum (on-site and off-site) queue length of 11 cars can be expected to increase by **one** car. The average vehicle queue on Fort Stevens Road would remain one car.
- *Afternoon Pick-up* – The maximum (on-site and off-site) queue would increase by **two** car lengths from 22 to 24. This would increase the on-street queue from 6 to 8 cars. This maximum queue would last for approximately one minute.

PROPOSED EARLY CHILDHOOD CAMPUS – EXISTING CONDITIONS

The Washington Latin Public Charter School is currently housed in the former British School of Washington located at 4715 16th Street. Figure 10 illustrates the site location.

The roadways immediately surrounding the Washington Latin Public Charter School site are described below:

Roadway Network

The roadways included as part of the JPDS Project study area are described below:

- 16th Street is a four-lane, median divided, principal arterial that extends from K Street in the south to Eastern Avenue in the north. The posted speed limit on 16th Street is 30 miles per hour (mph).
- Decatur Street is a two-lane, two-way local road that extends from New Hampshire Avenue in the east to Blagden Avenue. Curb parking is permitted on both sides of the roadway except during street cleaning on Tuesdays (eastbound lane) and Wednesdays (westbound lane) between 9:30AM and 11:30AM.
- Piney Branch Road is a two-lane, two-way local road that extends from Colorado Avenue in the north to Buchanan Street in the south. Curb parking is permitted on both sides of the roadway except during street cleaning on Mondays (northbound lane) and Tuesdays (southbound lane) between 9:30AM and 11:30AM.



Figure 10: Proposed Early Childhood Campus Site Location

Site Access and Circulation

Primary vehicle access is provided via the School's driveway along Decatur Street. The driveway operates as a one-way inbound one-way outbound system with vehicles entering at the westernmost access (closer to 16th Street) and exiting at the easternmost access (near Piney Branch Avenue). Along 16th Street, there are two curb cuts that provide access to a circular driveway. The southernmost curb cut also provides access to an asphalt paved area in the rear of the school¹¹. Figure 11 provides a schematic of existing vehicular circulation.

Drop-off and Pick-up Operations

Vehicles

Drop-off and pick-up operations take place at the Decatur Street driveway. Some parents also stopped along Decatur Street and/or along 16th Street to drop-off students. Drop-off occurs during the morning from 7:00 AM to 8:10 AM and pick-up occurs during the evening anytime from 3:15 PM to 7:15 PM.

¹¹ This area is currently gate and is not accessible from 16th Street.

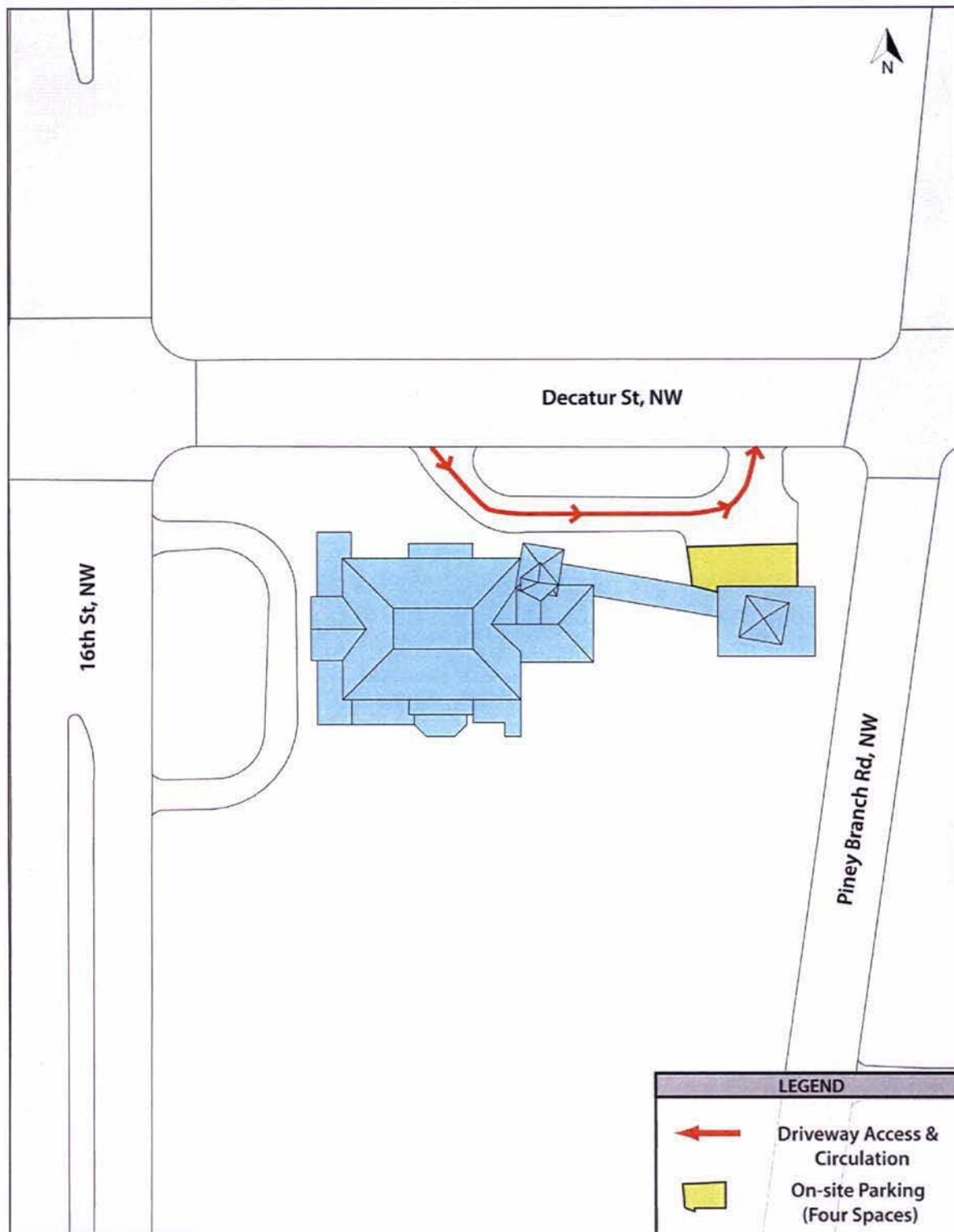


Figure 11: Schematic of Existing Access and Driveway Operations

Pedestrian Access and Bicycle Facilities

Sidewalks along 16th Street and Decatur Street provide pedestrian access to and from the School. According to the District of Columbia Bicycle Map (2011 edition), there are two types of bicycle facilities within half (1/2) mile radius from the Latin School site along 14th Street and Piney Branch Road. The bike facilities are located on the following roadway segments:

- Bike Lanes - along 14th Street from Aspen Street in the north to Columbia Road in the south.
- On-street Signed Routes - along 13th Street from Georgia Avenue in the north to New York Avenue in the south.

Traffic conditions for bicycling especially along 16th Street are considered fair to poor.

A detailed inventory of sidewalks, bike paths, crosswalks, pedestrian signals, and ADA ramps at the Early Childhood Campus study area intersections are detailed in Table 11 and illustrated in Figure 12.

Table 11: Inventory of Sidewalks, bike paths, crosswalks, pedestrian signals and ADA ramps

INTERSECTION	EAST LEG	WEST LEG	NORTH LEG	SOUTH LEG
16 th St / Decatur St	• Sidewalks • Crosswalk with APS • School Crossing Sign • ADA Ramps	• Sidewalks • Crosswalk with APS • ADA Ramps	• Sidewalks • Crosswalk with APS • ADA Ramps	• Sidewalks • Crosswalk with APS • ADA Ramps
Piney Branch Road / Decatur St	• Sidewalks • Marked Crosswalk • ADA Ramps	• Sidewalks • Marked Crosswalk • ADA Ramps	• Sidewalk – west side only • Marked Crosswalk • ADA Ramps	• Sidewalk – east side only • Marked Crosswalk • ADA Ramps
16 th St / Crittenden St	• Sidewalks • Marked Crosswalk • ADA Ramps	• Sidewalks • Marked Crosswalk • ADA Ramps	• Sidewalks • Dashed Crosswalk • ADA Ramps	• Sidewalks
Piney Branch Rd / Crittenden St	• Sidewalks • Marked Crosswalk	• Sidewalks • Marked Crosswalk	• Sidewalk – east side • Marked Crosswalk	• Sidewalk – east side • Marked Crosswalk • ADA Ramp

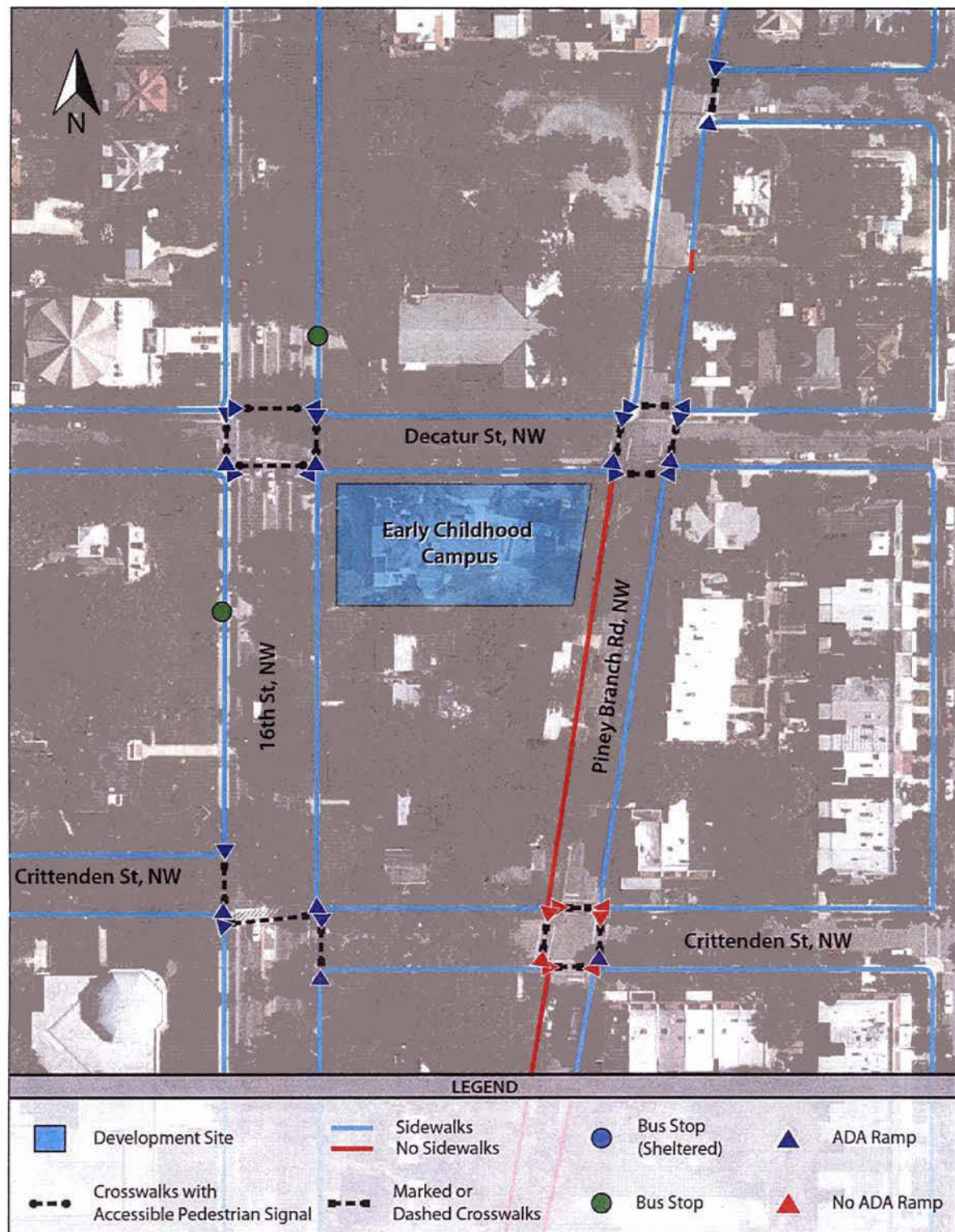


Figure 12: Early Childhood Campus Pedestrian Facilities Diagram

The following deficiencies are noted as indicated in Figure 12.

- ADA ramps are not provided at the Piney Branch Road / Crittenden Street intersection crossing Piney Branch (traveling east-west) or crossing Crittenden (traveling south on either side of the Piney Branch Road).
- There are no sidewalks along the west-side of Piney Branch Road between Decatur Street and Crittenden Street.

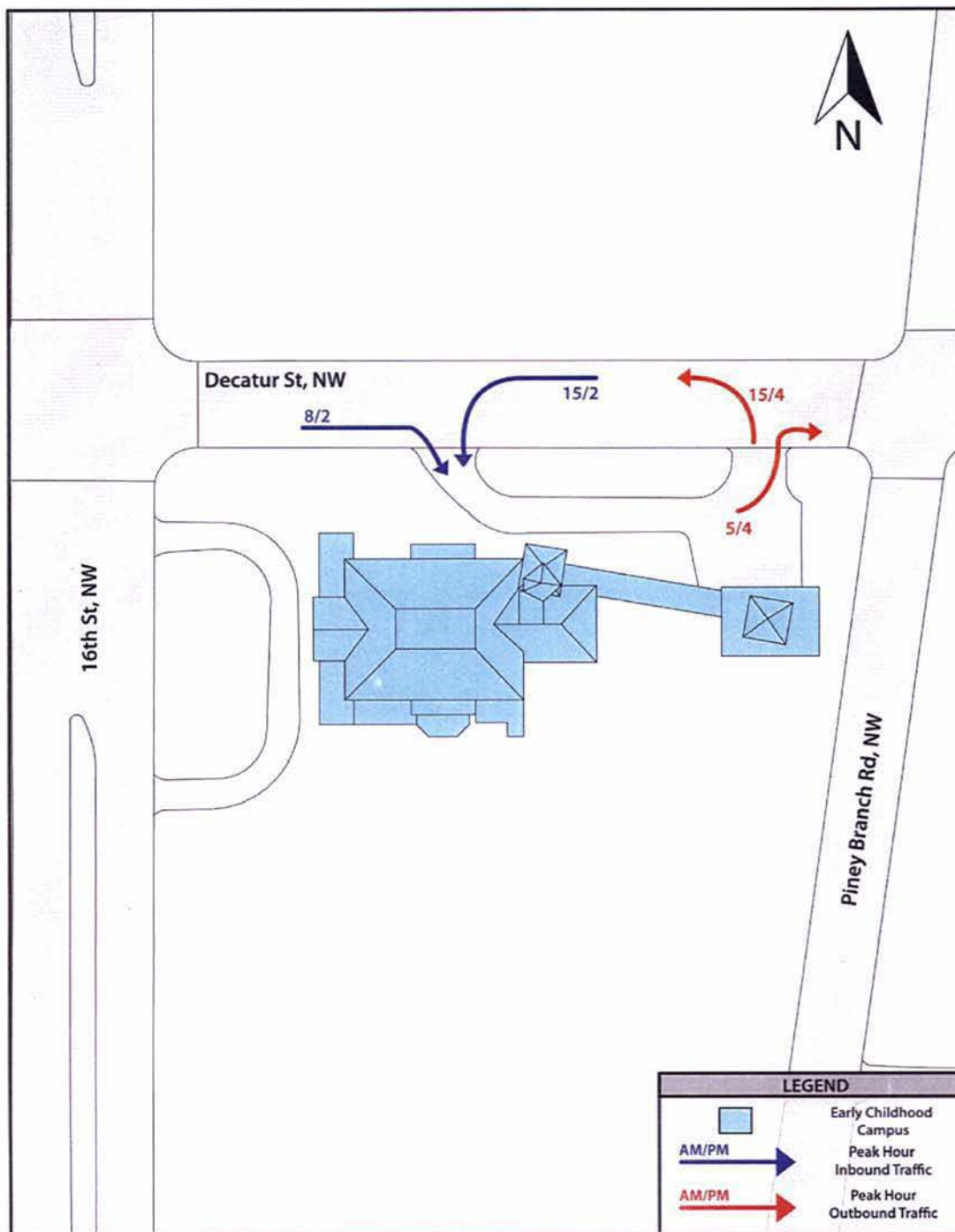
Transportation Modal Split

The majority of the students use public transportation to travel to/from school, either by Metrobus or a combination of Metrorail and Metrobus via the Columbia Heights Station. Some students walk and/or bike or ride with their parents.

Approximately fifty percent (50%) of staff ride-alone, twenty-five percent (25%) take metro bus and twenty-five percent (25%) walk/bike to/from the School.

Traffic Counts and Field Observations

Traffic data (turning movement counts) and field observations were conducted on Wednesday March 14, 2012 from 6:45 AM to 9:00 AM and from 4:00 PM to 6:15 PM at the school site driveway. Existing AM and School PM peak hour site trips (associated with the Washington Latin Public Charter School) is shown in Figure 13.



Note: This figure only shows trips that entered and exited the school driveway. A number of parents were observed picking up/ dropping off students along Decatur Street and along 16th Street thus were not included on this graphic.

Figure 13: Washington Latin Public Charter School Existing Peak Hour site Trips

Queuing

There was no school-related vehicle queuing on adjacent roadways.

Vehicle Trip Generation

Existing trip generation (associated with the Washington Latin Public Charter School) is shown in Table 12.

Table 12: Washington Latin Public Charter School Existing Trip Generation

	AM Peak			School PM Peak			Commuter PM Peak		
Month/Year	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
March 2012	32	27	59	12	18	30	16	21	37

**Includes trips on the site driveway and along Decatur Street and 16th Street.*

The Washington Latin Public Charter School currently generates 59 AM, 30 school PM and 37 Commuter PM Peak hour trips.

Peak Hour Traffic: 16th Street and Decatur Street

Turning movement counts were conducted in May 2012 from 7:00 AM to 9:15 AM and in September 2012 from 2:45 PM to 6:00 PM at the 16th Street, NW and Decatur Street, NW intersection. Peak hour traffic counts at this location are shown in Figure 14.

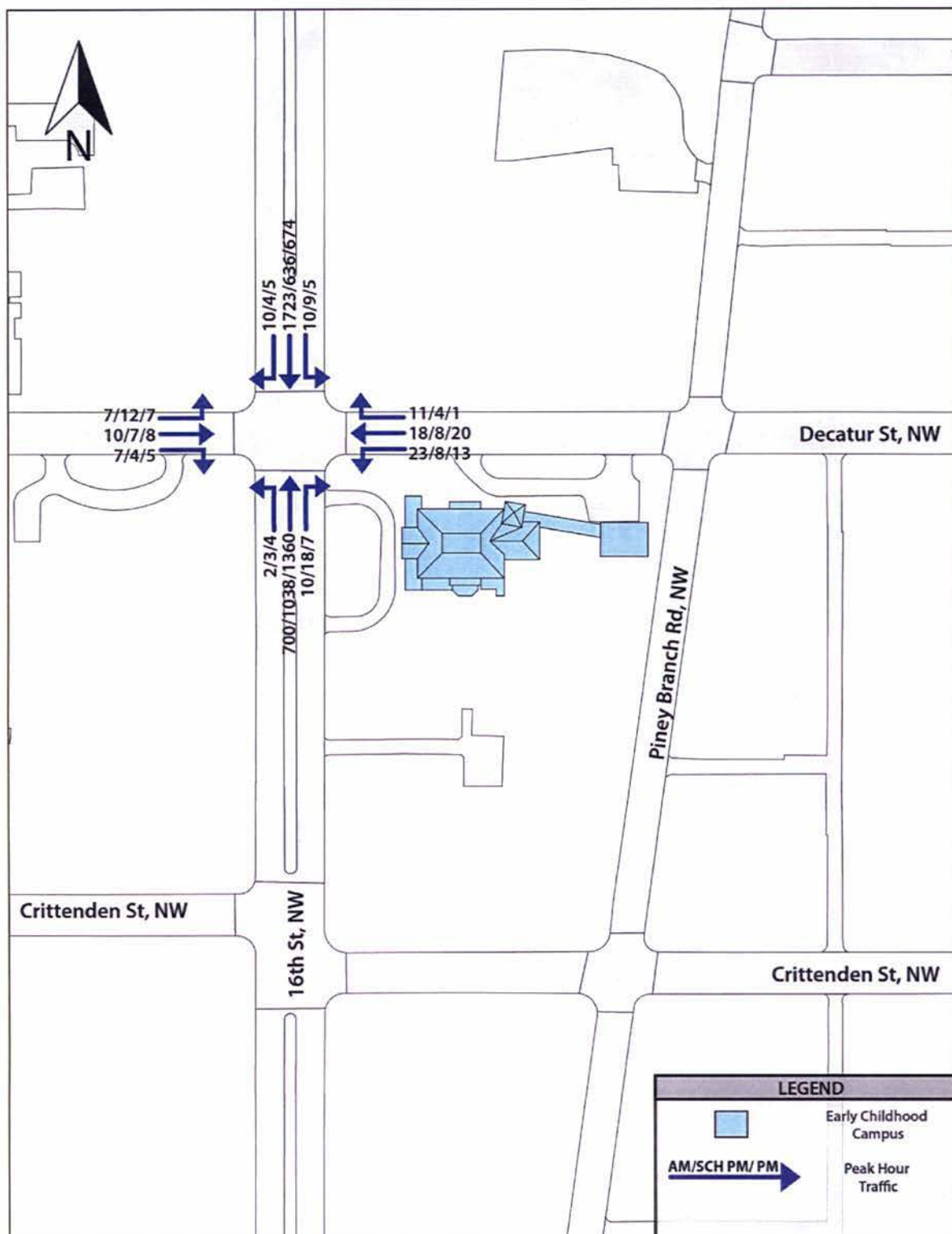


Figure 14: 16th Street and Decatur Street Intersection Peak Hour Traffic

Existing Capacity Analysis: 16th Street, NW and Decatur Street, NW

SYNCHRO 7 software was used to calculate Existing LOS (using Highway Capacity Method) for the morning, school pm and evening peak hours at the 16th Street, NW and Decatur Street, NW intersection.

Level of Service (LOS) is a measure of the average control (i.e. stop sign or traffic signal) delay experienced by all motorists arriving to an intersection. There are six representative levels of service defined for intersections and they are designated using letters A through F, with LOS A representing the best operating conditions and LOS F representing the worst. LOS "E" is typically accepted by DDOT as the minimum delay threshold limit for intersections. The threshold for the intersection levels of service is shown in Tables 13. Table 14 provides the existing LOS for the 16th Street, NW and Decatur Street intersection.

Table 13: Intersection Level of Service Threshold for Delay

Level of Service Threshold for Delay (seconds/vehicle)		
LOS	Signalized	Unsignalized
A	0-10 sec	0-10 sec
B	> 10-20 sec	> 10-15 sec
C	> 20-35 sec	> 15-25 sec
D	> 35-55 sec	> 25-35 sec
E	> 55-80 sec	> 35-50 sec
F	> 80 sec	> 50 sec

Table 14: Existing Level of Service: 16th Street, NW and Decatur Street, NW

	Overall		Eastbound Decatur St.		Westbound Decatur St.		Northbound 16 th St.		Southbound 16 th St.	
	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*	LOS	Delay*
AM (7:30 -8:30)	B	10.5	C	31.1	C	32.1	A	5.5	B	11.6
School PM (3:30-4:30)	A	6.8	C	32.9	C	32.7	A	6.7	A	5.2
Commuter PM (4:45-5:45)	A	7.9	C	32.7	C	33.4	A	8.3	A	5.4

The analysis results indicate the 16th Street/ Decatur Street intersection operates at a LOS "B" with a delay ranging from 6.8 to 10.5 vehicles per second during the AM, School PM and Commuter PM peak periods. As shown in Table 13, each approach of the intersection currently operate at acceptable LOS of "C" or better during the AM, School PM and PM peak periods. Minimal intersection delay is experienced by motorists on Decatur Street, the minor approach, while along 16th Street, the major approach, both the northbound and southbound approaches operates at LOS "A". DDOT'S Design and Engineering Manual notes LOS "D" is the minimum acceptable LOS in the district.

Table 15 summarized the 95th percentile queue lengths at the 16th Street, NW and Decatur Street, NW intersection.

Table 16: Existing 95th Percentile Queue Length: 16th Street, NW and Decatur Street, NW

	Available Storage Length	AM	School PM	Commuter PM
Eastbound Decatur Street.	615 ¹²	30	28	26
Westbound Decatur Street.	180 ¹³	56	50	47
Northbound 16 th Street	80	2	3	4
	283	105	178	269
Southbound 16 th Street	80	5	6	4
	470	441	92	98

¹² Distance between 17th Street, NW and 16th Street, NW

¹³ Distance between the corner of 16th Street, NW and the outbound school driveway on Decatur Street

As shown in Table 16, the available storage lengths at all approaches of the 16th Street/ Decatur Street intersection currently accommodates the 95th percentile queue length.

Parking

The school has seven vehicle spaces on-site located in the parking lot accessed via the Decatur Street driveway. (Figure 11 highlights the location of the parking spaces)

Safety

A general summary of accident history within a three year period¹⁴ for the Early Childhood Campus study area intersections is listed in Table 15. The data was collected from the DC Department of Transportation Traffic Accident Report and Analysis System.

Table 15: Summary of Accident History within a three-year period

	Total Number of Accidents	Total Number of Injuries	Total Number of Pedestrians Involved	Total Number of Bicycle/Motorcycle Involved	Collision Type
16 th St. & Decatur St.	6	3	0	1	2 Right angle 1 Right turn 1 Rear end 2 Side swipe
16 th St. & Crittenden St.	3	0	0	0	2 Rear end 1 Side swipe
Piney Branch Rd. and Crittenden St.	1	0	0	0	Unspecified

APS- accessible pedestrian signal

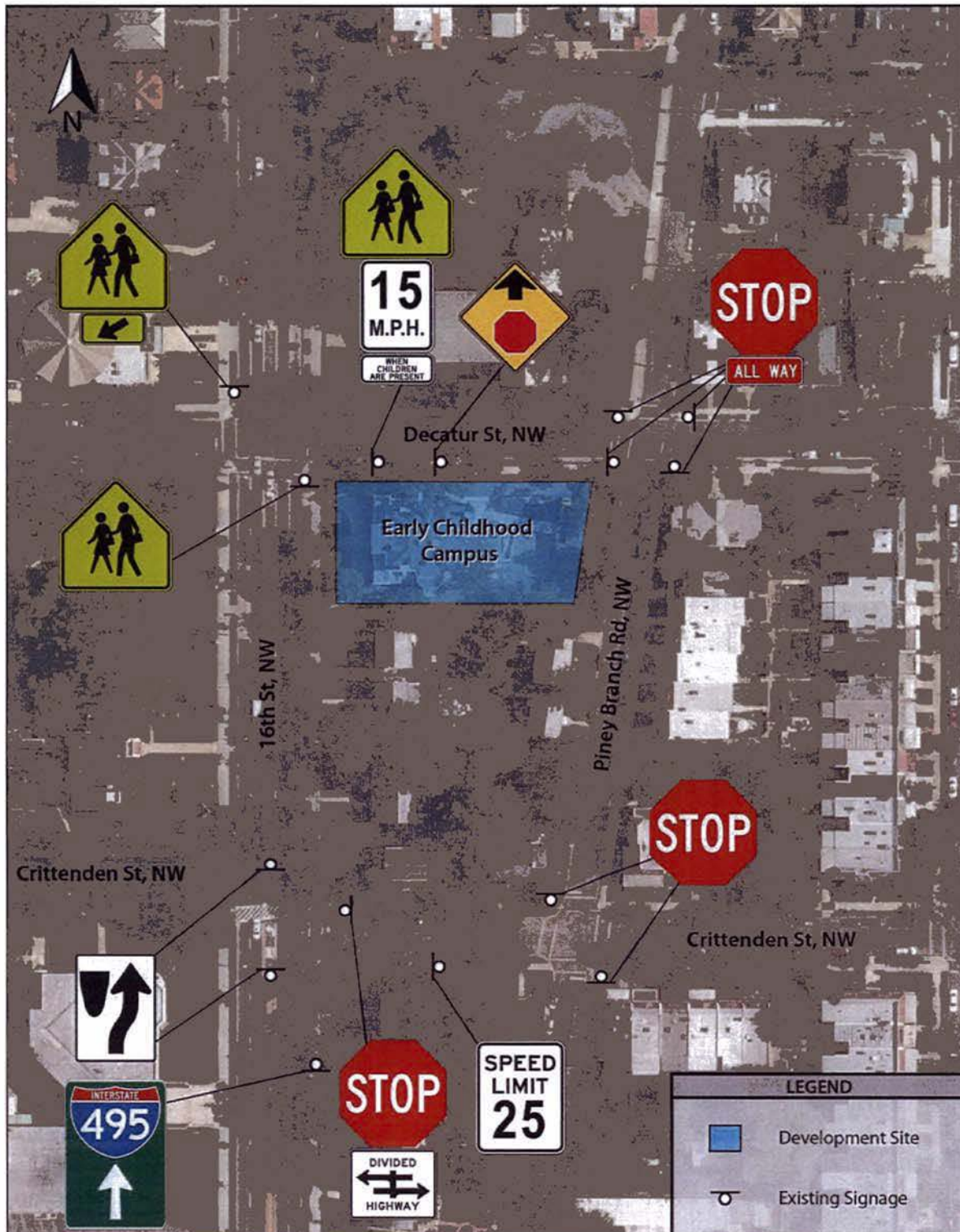
As shown in Table 15, a range of various types of collisions occurred at the 16th Street and Decatur Street intersection including two right angle, one right turn, one rear end and two side swipes over a three year period. Crash data over the past three years indicate no specific trend or causal factors. It is noted there was one bicycle/motorcycle crash at the 16th Street/Decatur Street intersection. No detailed information was provided in the crash report to determine causative factors.

No accident data was available for the Piney Branch Avenue, NW and Crittenden Street, NW intersection.

Signage and Pavement Markings

A summary of existing signage in and around the Early Childhood Campus is shown in Figures 15.

¹⁴ January 1, 2009 to December 31, 2011



All signage is in accordance with MUTCD standards.

The following section provides an assessment of the pavement markings at the following intersections near the Early Childhood Campus:

- 16th Street, NW and Decatur Street, NW
- 16th Street, NW and Crittenden Street, NW
- Decatur Street, NW and Piney Branch Avenue, NW
- Piney Branch Road, NW and Crittenden Street, NW

16th Street/Decatur Street

Photographs of the 16th Street/Decatur Street Intersection are shown below. Crosswalks are provided at all approaches of the intersection. Lane markings (such as left turn lane markings along 16th Street) along the southbound and northbound approaches of the intersection are also in good condition.



16th Street/Fort Stevens Drive (looking west)



16th Street/Fort Stevens Drive (looking south)

16th Street/Crittenden Street

Photographs of the 16th Street/Crittenden Street Intersection are shown below. The ladder-style crosswalk provided for pedestrian crossing 16th Street is in good condition as are the lane markings along the northbound and southbound approaches of the intersection.



16th Street/Crittenden Street (looking west)



16th Street/Crittenden Street (looking west)

Piney Branch Avenue/Crittenden Street

Crosswalks are provided at all approaches of the Piney Branch Road/ Crittenden Street intersection. The stop bar at the Crittenden approach of the intersection and the crosswalk is moderately distressed and faded.



Piney Branch Avenue/Crittenden Street (looking north)



Piney Branch Avenue/Crittenden Street (looking south)

Decatur Street/Piney Branch Avenue

Photographs of the Decatur Street/Piney Branch Avenue intersection are shown below. Crosswalks and stop bars are provided along all approaches of the intersection and are in good to fair condition.



Decatur Street/Piney Branch Avenue (looking south)



Decatur Street/ Piney Branch Road (looking west)

PROPOSED EARLY CHILDHOOD CAMPUS- FUTURE CONDITIONS

The JPDS is planning to relocate its Pre-Kindergarten, Kindergarten, and Grade 1 students from its main campus to the current site of the Washington Latin Public Charter School. There are currently 92 students in the Pre-Kindergarten, Kindergarten and Grade One program and that number is expected to grow to 130 (proposed cap) students in the future. There will be 26 faculty/staff members on-site. School hours will be the consistent with hours of operation at the main campus.

All students and faculty/staff members associated with the Washington Latin Public Charter School will be re-located prior to JPDS' occupancy of the property.

Proposed Campus Connection

JPDS will provide a shuttle bus to connect the main campus with the new early childhood campus. Children and/or siblings that currently ride the bus will continue to ride the bus in the future and will be dropped off at the appropriate campuses.

Families who drive to school with siblings in both campuses will have a single drop off point at one campus and the sibling(s) that attends the other campus will be shuttled via the designated shuttle bus.

Drop-Off and Pick-up Operations

Vehicles

Vehicle drop-off and pick-up operations will take place along the Decatur Street driveway. During pick-up and drop-off operations, the school would be require all parents make a right from Decatur Street onto the school's driveway and proceed left out of the driveway onto Decatur Street. Right-turns out of the school's driveway would be prohibited.

School buses

Buses will load/unload along the east-side curb lane (school side) of 16th Street. The bus station location would be between the inbound and outbound site driveway along 16th Street. This area could store up to two buses.

Proposed On-Street Parking Restrictions

A number of on-street parking restrictions are being proposed to help manage site access and traffic patterns during pick-up and drop-off operations. Along Decatur Street (between 16th Street and Piney Branch), JPDS is proposing to prohibit parking Monday through Friday from 8:00 AM to 9:00 AM and from 3:00 PM to 4:30 PM. This would result in the loss of approximately 17 (ten on the north-side and seven on the south-side of the street) on-street parking spaces along Decatur Street (only during drop-off and pick-up operations). Along 16th within the proposed bus stop station, the school proposes to implement a "School Bus Parking Only" sign that would also

be enforced Monday through Friday from 8:00 AM to 9:00 AM and from 3:00 PM to 4:30 PM. Existing DC law (18 DCMR 2406.2) supports “No Parking School Day” adjacent to schools and the law also states *“The Director is authorized to have signs prohibiting parking places on streets adjacent to any school on school days, or playgrounds between the hours of 7:00 AM and 6:30 PM, or for such lesser time as the Director may, in his or her discretion, establish.”*

Figure 16 illustrates the proposed drop-off and pick-up vehicular circulation and the proposed on-street parking restrictions.

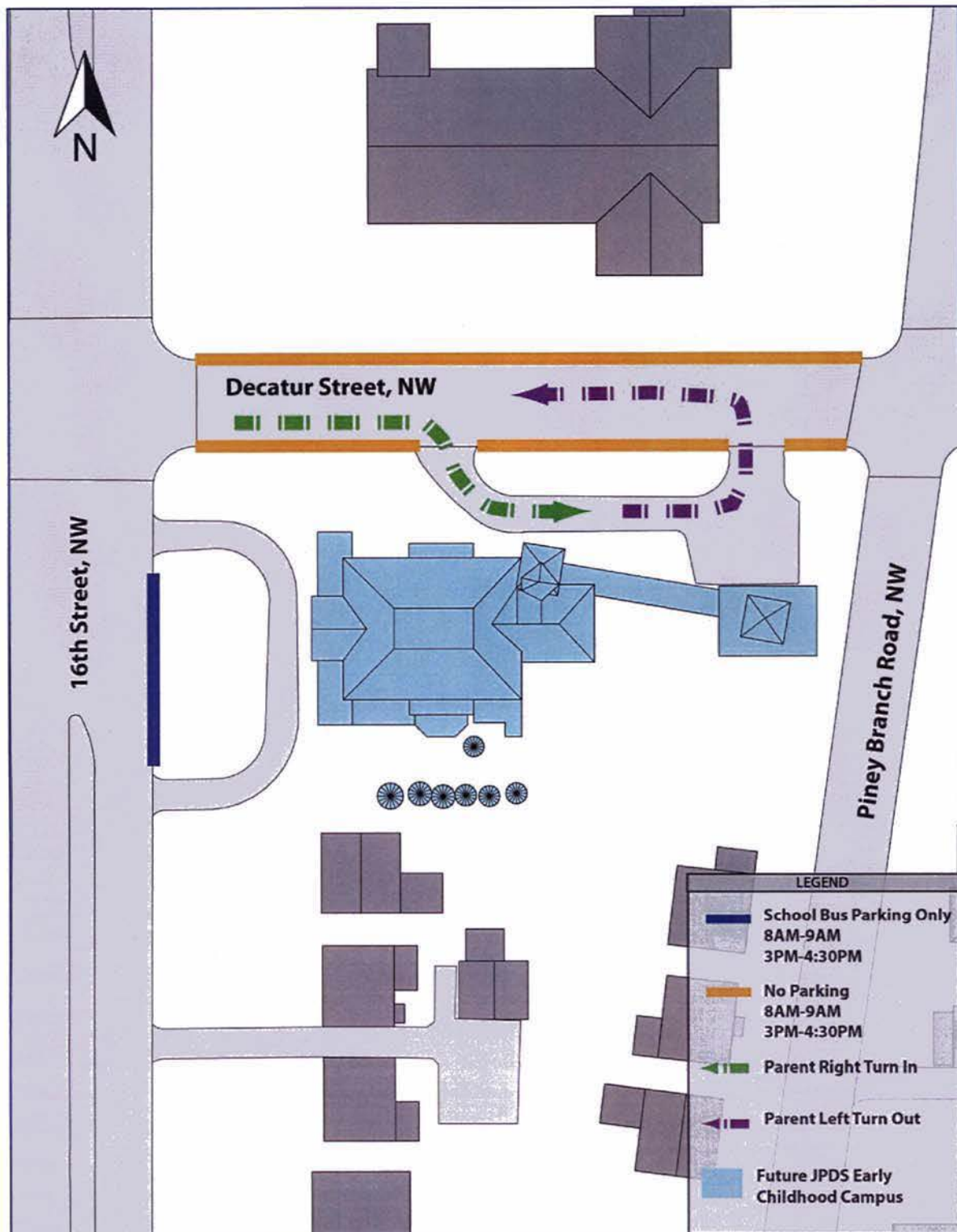


Figure 16: Proposed Vehicular Circulation and On-Street Parking Restrictions

Transportation Modal Split Students

The Proposed Early Childhood Campus would operate the same hours of operation as the Main Campus and students are expected to continue to arrive/depart the school similar to the way they do today (see Tables 4 and 5). It should be noted that the early childhood students currently has carpool and bus ridership percentages comparable to or greater than the carpool and bus ridership rates for the older students.

Queuing

In order to project potential queuing, it is assumed the Early Childhood Campus would have the same transportation characteristics as the Main Campus. This assumption is viable since the early childhood students (Pre-Kindergarten, Kindergarten and First Grade) currently have carpool and bus ridership percentages comparable to or greater than the carpool and bus ridership rates for the older students¹⁵. At the Main Campus, the 273 student body currently generates a maximum (on-site and off-site) vehicle queue of 11 cars during the morning and 22 cars during the afternoon. It can be expected a student population of 130 students at the Early Childhood Campus would generate a maximum vehicle queue of 5 cars during the morning and 10 cars during afternoon. This queue is calculated by creating a ratio between the existing student body (273) and the existing vehicle queue (11 AM and 22 School PM) to the proposed Early Childhood Student population (130). While there were no observed differences in loading/un-loading associated with smaller children, JPDS acknowledges smaller kids theoretically take longer to get into and out of vehicles and some parents at the main campus park on local streets and walk to pick-up children and were not included the queue length counted at the driveway. Thus the projected maximum queue of 10 cars has been increased by two vehicles to 12 cars. The additional queue length factor is determined assuming one additional vehicle could be added to the maximum queue associated with the potential of younger kids taking longer to load and one vehicle associated with a parent who would usually park on the street and walk to pick-up their child/children whom would now have to pick-up children in driveway. The existing driveway (along Decatur Street) has a capacity of 8 car spaces; thus four cars may potentially queue on the street. The queue would be maintained on Decatur Street and would not extend back to 16th Street. On-street queuing is expected to last for a short period.

¹⁵ Existing ridership data indicates 51% of Early Childhood population (pre-kindergarten, kindergarten and first grade) ride the bus to school and 69% ride the bus home from School. Of the students in grades two through six, 42% ride the bus to school in the morning and 58% ride the bus home from school in the afternoon.

Future Vehicle Trip Generation

Peak hour trip generation to the Early Childhood campus was projected by multiplying the existing trip rate¹⁶ to the potential Early Childhood program population (130 students). Table 16 illustrates the net difference in site trips expected to the early childhood campus compared to existing WLPCS vehicle trips.

Table 16: Net Future Trip Generation

Scenario	AM Peak			School PM Peak			PM Peak		
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Future Early Childhood Campus	37	25	65	26	21	47	4	4	8
Existing WLPCS	32	27	59	12	18	30	16	21	37
Net Site Trips	5	-2	6	14	3	17	-12	-17	-29

The proposed JPDS early childhood development relocation is projected to result in a net increase of 6 AM and 17 School PM trips. This increase in site trips is negligible. In addition, during the Commuter PM peak hour there would be a net decrease of approximately 29 trips to the school. Distribution of the site trips (shown in Table 16) to the Early Childhood Campus is illustrated in Figure 17. The distribution was developed based on existing travel patterns and previous zip code residential data. (residential data and a worksheet highlighting travel patterns are provided in the Appendix).

¹⁶ Trips per students



Figure 17: Future Directional Distribution

Future Peak Hour Traffic: 16th Street and Decatur Street

Net future trip generation associated with the JPDS (shown in Table 10) was added to the existing intersection traffic to develop future traffic projections at the 16th Street/ Decatur Street intersection. Site traffic associated with the Washington Public Charter School was eliminated from the transportation network. Figure 18 provides an illustration of the future traffic volumes at the 16th Street and Decatur Street intersection.

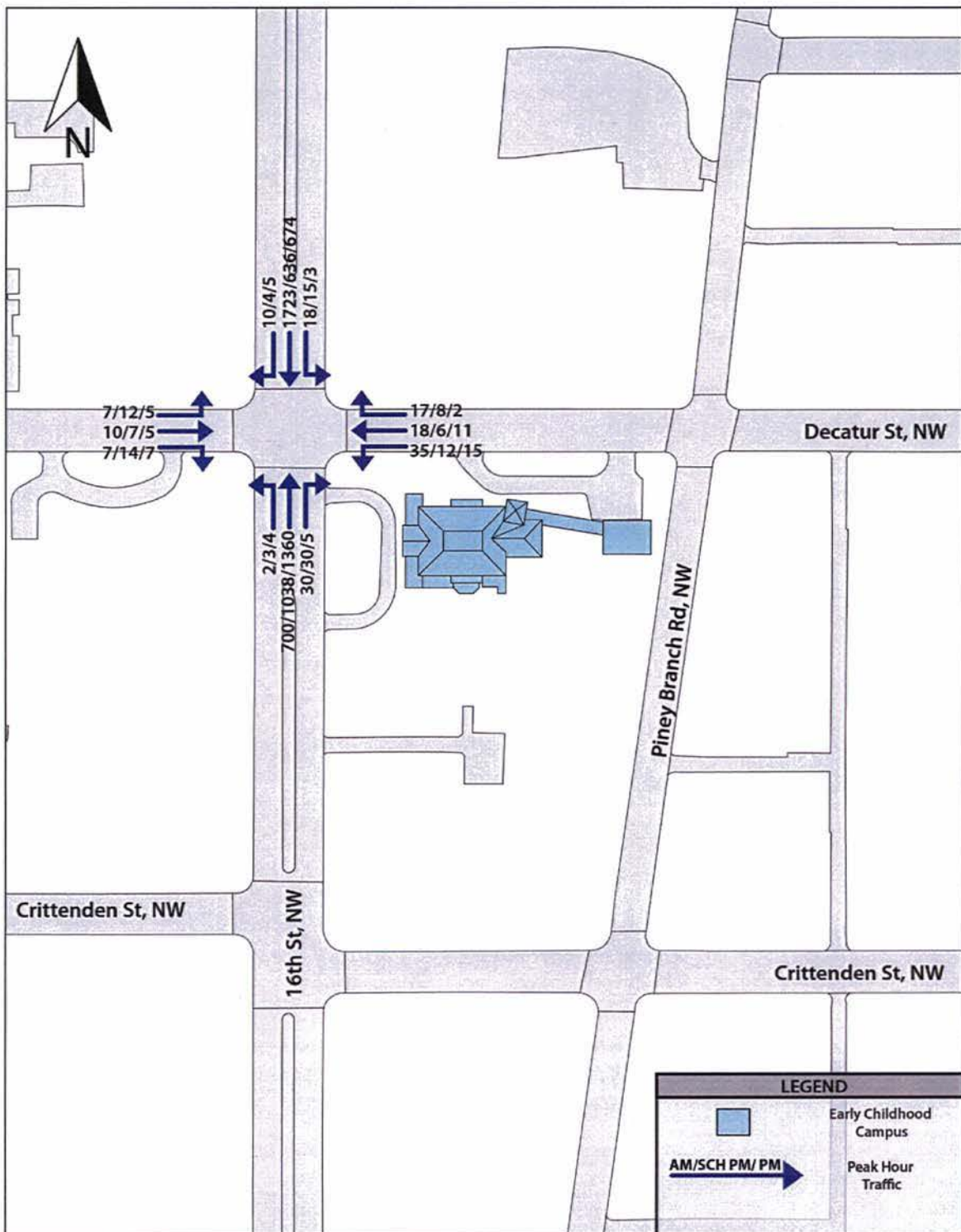


Figure 18: Future Traffic Volume at 16th Street and Decatur Street Intersection

Future Capacity Analysis: 16th Street, NW and Decatur Street, NW

SYNCHRO 7 software was used to calculate Future LOS (using Highway Capacity Method) for the morning, school pm and evening peak hours at the 16th Street, NW and Decatur Street, NW intersection. Tables 17 and 18 provide a comparison of existing and future peak hour LOS for the overall intersection and by each approach.

Table 17: Future Level of Service: 16th Street, NW and Decatur Street, NW (overall)

	Existing		Future	
	LOS	Delay*	LOS	Delay*
AM (7:30 -8:30)	B	10.5	B	10.6
School PM (3:30-4:30)	A	6.8	A	7.1
Commuter PM (4:45-5:45)	A	7.9	A	7.9

The 16th Street/ Decatur Street intersection would continue to operate at a level of service “B” or better during the AM, School PM and PM peak periods in the Future (with the JPDS occupancy of the Early Childhood Campus). Overall intersection delay would increase by no more than 0.3 seconds per vehicle during any peak hour period. This increase in delay is negligible and would cause no adverse impact to the intersection.

Table 18: Future Level of Service: 16th Street, NW and Decatur Street, NW (by approach)

	Eastbound Decatur St.				Westbound Decatur St.				Northbound 16 th St.				Southbound 16 th St.			
	Existing		Future		Existing		Future		Existing		Future		Existing		Future	
	LOS	D*	LOS	D*	LOS	D*	LOS	D*	LOS	D*	LOS	D*	LOS	D*	LOS	D*
AM (7:30-8:30)	C	31.1	C	31.1	C	32.1	C	33.0	A	5.5	A	5.6	B	11.6	B	11.6
School PM (3:30-4:30)	C	32.9	C	32.9	C	32.7	C	33.1	A	6.7	A	6.8	A	5.2	A	5.3
PM (4:45-5:45)	C	32.7	C	32.6	C	33.4	C	33.2	A	8.3	A	8.3	A	5.4	A	5.4

D*-Delay in seconds per vehicle

As shown in Table 17, all approaches of the 16th Street/ Decatur Street Intersection would continue to operate at LOS “C” or better in the future. Intersection delay would be negligible with an increase of less than 0.9 seconds per vehicle any at approach.

Table 19 summarizes the projected 95th percentile queue lengths at the 16th Street/ Decatur Street, NW intersection.

Table 19: Future 95th Percentile Queue Length: 16th Street and Decatur Street

	Available Storage Length	AM	School PM	Commuter PM
Eastbound Decatur Street.	615 ¹⁷	30	28	23
Westbound Decatur Street.	180 ¹⁸	71	39	40
Northbound 16 th Street (left turn lane)	80	2	3	4
Northbound 16 th Street (Through travel lane)	283	111	183	269
Southbound 16 th Street (left turn lane)	80	8	8	3
Southbound 16 th Street (Through turn lane)	470	441	92	98

As shown in Table 19, in the future (with JPDS occupancy of the proposed Early Childhood facility) the available storage length at all approaches of the 16th Street/ Decatur Street intersection would accommodate the 95th percentile queue length. Queuing analyses indicates additional school traffic would not adversely impact 16th Street or Decatur Street and queuing on Decatur back from 16th Street would not impede efficient drop-off/pick-up operations. **Parking**

Zoning requires the JPDS provide two parking spaces for every three faculty/staff members. A total of 26 faculty/staff members will be on-site at the Early Childhood Campus thus 17 parking spaces are required. There are seven spaces on-site today. Additional parking will be provided at an off-site location. Designated staff members will be responsible for picking up/ dropping-off JPDS Staff at this location.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

The JPDS has an active TDM program which includes the following measures:

¹⁷ Distance between 17th Street, NW and 16th Street, NW

¹⁸ Distance between the corner of 16th Street, NW and the outbound school driveway on Decatur Street

- **Bus Program** – JPDS has a successful bus program offering three school buses with 140 students (51% of current population) enrolled in the bus program. Each bus can accommodate a maximum of 66 students. In the future, the bus program will be expanded to include a fourth bus. The addition of the fourth bus will help streamline existing bus routes and provide additional service to students. The JPDS has also instated financial incentives such as subsidizing ridership cost. This has greatly increased ridership.
- **Carpool** – The JPDS provides a zip code list that helps connect families with other JPDS families interested in carpooling to/from school. Approximately 45% of students currently carpool to the JPDS.
- **Off-site parking for faculty** – Approximately six faculty/staff members currently park off-site. In the future, the JPDS will utilize an off-site location, in Maryland, for faculty/staff. A leasing agreement between the JPDS and the owner of the proposed location is underway. Designated staff members will be responsible for picking up/ dropping-off JPDS Staff at this location. Faculty/Staff members will then carpool into the District to the main JPDS campus.
- **Shower Facilities** – JPDS will provide shower facilities in the Early Childhood building as an incentive for faculty/staff members to bike to the school. Shower facilities are also available within the Phillip's property for faculty/staff at the Main Campus.
- **Intercampus connectivity** – JPDS will provide a bus to shuttle children to/from the main campus and the early childhood campus. Families who drive to school with siblings in both campuses will have a single drop off point at one campus and the sibling(s) that attends the other campus will be shuttled via the designated shuttle bus.

More than 83% of the JPDS student population currently participates in the bus program and/or carpools to the school. The JPDS will continue to implement TDM measures (listed above) and work to increase participation with the proposed increases in student population.

MONITORING PLAN

JPDS has agreed to provide post-completion monitoring of transportation impacts created by the project, and, in the event that the projected impacts exceed projections, JPDS will provide DDOT

with an updated TDM and Mitigation Plan designed to bring the impacts back to a level at or below forecasted conditions. The following specific measures will be included in the monitoring plan:

- Annual transportation surveys of parents and staff to understand travel mode and patterns. List of Transportation Demand Management measures that are currently in place. If warranted, by traffic queuing, traffic operations or safety. propose additional TDM measures to implement that are designed to reduce vehicle trip generation
- Annual traffic counts at school driveways during peak pick-up and drop-off operations Traffic counts will be conducted between Tuesday through Thursday when DC Public Schools are in session and when Congress is in session. Counts will be provided within a month of the date collected.
- A copy of the monitoring plan will be submitted annually to DDOT (no later than November 31 each year) for two consecutive years after the proposed plans are in place. If JPDS successfully meets its requirements, the need to continue the monitoring plan would be nullified.

CONCLUSIONS

- The Jewish Primary Day School's proposes to expand its Main campus and increase its student population from 275 to 300 students and increase minimum faculty/staff cap form

56 to 72. The JPDS has purchased the neighboring property to serve as administrative offices.

- The Main campus currently generates 136 AM peak hour trips, 104 school PM peak hour trips and 18 commuter PM peak hour trips. With the proposed 9% enrollment increase there would be an increase in 10 AM peak, 7 School PM peak and 2 Commuter PM peak hour trips. This increase in trips is negligible and is considerably less than the trip generation recorded in March 2007.
- With the 9% population increase (from 275 to 300), the maximum (on-site and off-site) vehicle queue is expected to increase by one car during the morning and by two cars during the afternoon. The vehicle queue would last for no more than one minute at any one time.
- The Jewish Primary Day School has purchased the former British School of Washington (currently leased by the Washington Latin Public Charter School for ninth and tenth graders) located at 4715 16th Street. JPDS will relocate its Pre-Kindergarten, Kindergarten and First grade academic programs to this location and will request an increase in the existing student cap from 125 students to 130 students.
- The Washington Latin Public Charter School (existing tenant of the Proposed Early Childhood Campus) currently generates 59 AM, 30 school PM and 37 Commuter PM Peak hour trips. With the relocation JPDS's Pre-Kindergarten, Kindergarten and First Grade programs, a net increase of 6 AM and 17 School PM trips will be generated. This increase in site trips is negligible. During the Commuter PM peak hour there would be a net decrease of approximately 29 trips.
- With the proposed 130 student population at the Early Childhood Campus, off-site vehicle queuing is expected to be a maximum of 12 cars (considering smaller kids may take longer to load/unload). The existing site driveway has a stacking capacity of 8 car spaces thus four cars may potentially queue on Decatur Street during the afternoon. No vehicle queuing is projected during the morning drop-off.
- Future intersection analysis of the 16th Street/Decatur Street intersection indicates the intersection would continue to operate at a level of service "B" or better during the AM, School PM and PM peak periods. Overall intersection delay would increase by no more than 0.3 seconds per vehicle during any peak hour period. This increase in delay is negligible and would cause no adverse impact to the intersection.

- Future queuing analyses indicates additional school traffic would not adversely impact 16th Street or Decatur Street and queuing on Decatur back from 16th Street would not impede efficient drop-off/pick-up operations.
- Student Transportation Demand Management measures including the expanded school bus program and intercampus shuttle bus will reduce impact on the local intersections and reduce the school's carbon footprint on the environment. More than 83% of the JPDS student population currently participates in the bus program and/or carpool program. The JPDS will continue to implement TDM measures and work to increase participation with the proposed increases in student population.
- Faculty/Staff Transportation Demand Management measures including providing an off-site location for faculty/staff to park and carpool into the District. The JPDS will also provide shower facilities within the Early Childhood Campus as an incentive for faculty/staff member to bike to the school. Shower facilities are also available within the Phillip's property for faculty/staff at the Main Campus.
- There are 41 stacked spaces at the Main Campus, 7 vehicle spaces at the Early Childhood Campus and 4 parking spaces at the Phillip's property. Additional off-site parking will be provided for Faculty/Staff. Faculty/Staff members will carpool to JPDS from the off-site parking location.
- A number of on-street parking restrictions are being proposed to help manage site access and traffic patterns during pick-up and drop-off operations. Existing DC law support prohibiting parking on streets adjacent to schools, if necessary.
- JPDS has agreed to provide post-completion monitoring of transportation impacts created by the project. A copy of the monitoring plan will be submitted annually to DDOT and/or the community.