



District Department of Transportation

Roadway Safety Audit Edgewood Road Washington, DC

DDOT Traffic Engineering and Safety Team

September 2, 2014



INTRODUCTION

The District Department of Transportation (DDOT) has received several complaints of traffic safety issues along the 601 block of Edgewood Street, NE. The traffic safety issues, especially related to pedestrians and school children, are a major concern as there are four (4) school campuses at this location. The Road Safety Audit (RSA) team identified several issues related to traffic safety of pedestrians, bicyclists, motor vehicles and transit at this location. Based on the inputs of the RSA team, DDOT staff has developed recommendations addressing transportation issues pertaining to the traffic safety for all roadway users. This document represents the final Road Safety Audit (RSA) report to address traffic safety issues, especially pertaining to pedestrians and school children, along Edgewood Street, between 6th Street and 8th Street, NE.

BACKGROUND

Members of the RSA team consisted of several members from the District Department of Transportation - the Safety Team, the Traffic Signal Team, the Pedestrian /Bike Teams, the Progressive Transportation Services Administration (PTSA), the ADA Coordinator from Infrastructure Program Management Administration (IPMA), Traffic Control Officers (TCOs), members of the Policy, Planning and Sustainability Administration (PPSA) as well as members from the Washington Metropolitan Area Transit Authority (WMATA) and the Metropolitan Police Department (MPD).

A formal field review of transportation safety issues on intersections in the study area was conducted on March 31, 2014. Further, the RSA team also met with Staff personnel and Executives from DC Prep School, High Road School, William E. Doar Junior Public Charter School (PCS) and EMC Management to discuss safety issues for school students, crossing guards and school bus operations. **Table 1** lists the members and affiliation of the RSA team and the personnel from school boards

Table 1. Members from Road Safety Audit Team and School Boards

RSA Team Member	Agency/Affiliation
James Cheeks, Connie Wheeler and Rahul Jain	DDOT Safety
Ogechi Elekwachi and Ray Robinson	DDOT Signals
Brett Rouillier	DDOT ADA Coordinator
Jennifer Hefferan	Safe Routes to School Coordinator, DDOT PPSA
Karen Gay	Passenger Safety Liaison, DDOT PPSA
George Branyan	DDOT Pedestrian and Bike, PPSA
Dena Thweatt and Eric Ambrose	DDOT School Crossing Guards
Bryant McClary	WMATA
Spring Worth	DDOT PTSA
Dierdre Porter	MPD
John Host, Emily Johannsen and Wendy Scott	DC Prep Schools
Rita Lawson and Kester Gregorio	William E Doar Junior Public Charter School (PCS)
Dean Weeks	High Road School
James Bowers	EMC Management

PROJECT LOCATION DESCRIPTION

Edgewood Street, NE is a two-lane roadway in the study area. The south extension of Edgewood Street provided vehicular access to the following four (4) schools:

1. DC Prep Edgewood Elementary School
2. DC Prep Edgewood Middle School
3. William E Doar Junior Public Charter School (PCS)
4. High Road Upper School

The four school campuses generate considerable student pedestrian volumes on Edgewood Street intersections at 7th Street and 8th Street, NE. The aerial image of the study area is shown in **Figure 1**. There are residential homes, retail businesses and restaurants along Edgewood Street, between 6th Street and 8th Street, NE. The intersection of 7th Street and Edgewood Street, NE has a skewed intersection geometry which complicates traffic flow and pedestrian movement. Rhode Island Avenue and Franklin Street are arterial roads in the vicinity of the study area.

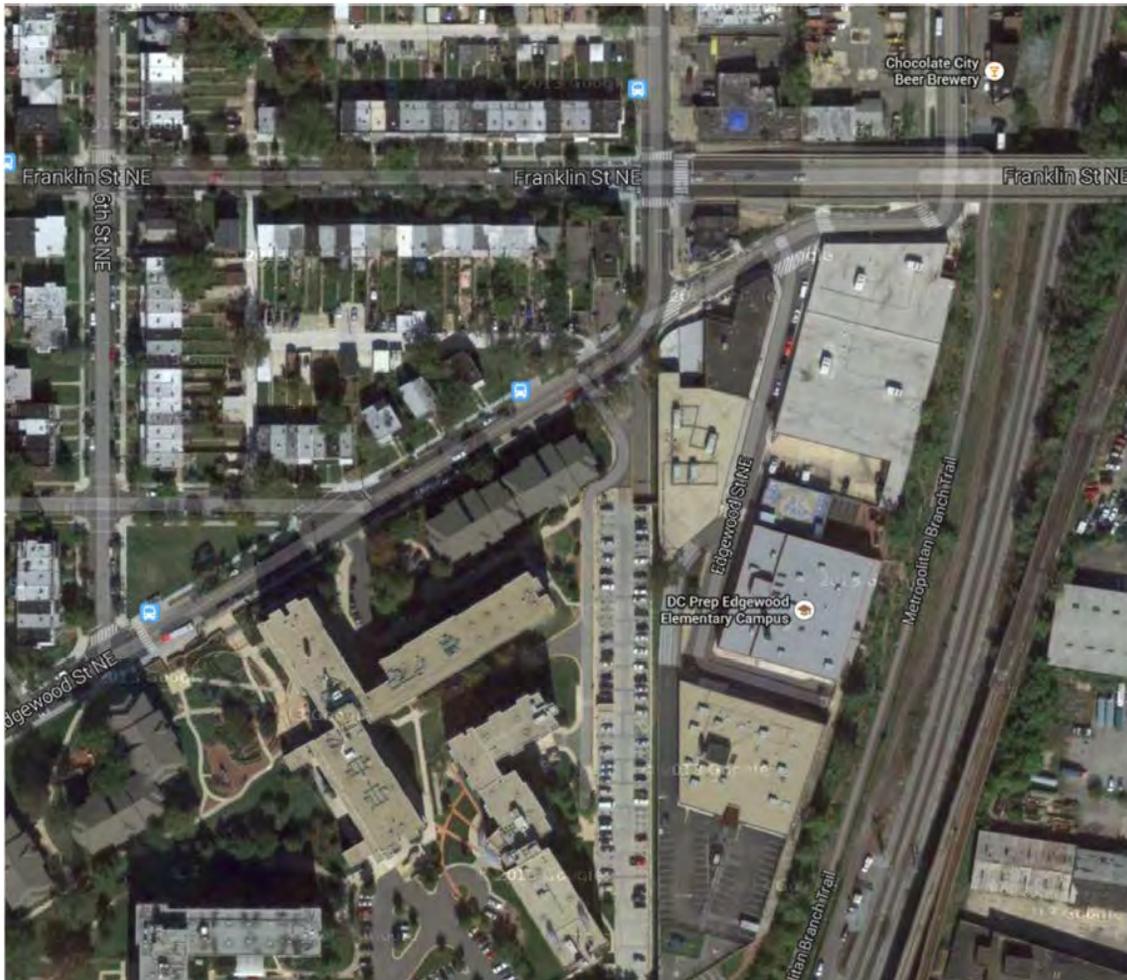


Figure 1: Study Area Location

SCHOOL OPERATIONS

The following is a description of school operations, including student enrollment, school hours, extended care program, staff parking and school bus services at the four (4) school campuses at the subject location.

1. DC Prep Edgewood Elementary School

- The Elementary Campus for DC Prep School is located at 707 Edgewood Street, NE in Washington, DC.
- The Elementary Campus has an enrollment of approximately 400 students with an additional 90 school staff personnel. The Elementary Campus also provides an Extended Care Program for the school students
- The school hours for this campus are:
 - From 7:30 am to 4:00 pm, Monday to Thursday
 - From 7:30 am to 3:00 pm on Friday
- About 25% of the students are enrolled in the Extended Care Program which runs till 6:00 pm from Monday to Friday.
- There are twenty (20) on-site reserved parking spaces that are exclusively allocated to staff personnel from both the DC Prep Elementary School Campus and the DC Prep Middle School Campus.
- All other staff personnel presently must utilize on-street parking
- Elementary Campus does not provide any school bus services for drop-off and pick-up of the students

2. DC Prep Edgewood Middle School

- The Middle Campus for DC Prep School is located at 701 Edgewood Street, NE in Washington, DC.
- The Middle Campus has an enrollment of approximately 300 students with an additional 45 school staff personnel. The Middle Campus also provides an Extended Care Program for the school students
- The school hours for this campus are as:
 - From 7:30 am to 5:00 pm, Monday to Thursday
 - From 7:30 am to 3:00 pm on Friday
- About 25% of the students are enrolled in the Extended Care Program which runs till 6:00 pm from Monday to Friday.
- There are twenty (20) on-site reserved parking spaces that are exclusively allocated to staff personnel from both the Elementary School Campus and the Middle School Campus.
- All other staff personnel presently must utilize on-street parking
- Middle Campus does not provide any school bus services for drop-off and pick-up of the students

3. William E Doar Junior Public Charter School (PCS)

- The William E. Doar Junior Public Charter School is located at 705 Edgewood Street, NE in Washington, DC.
- The school has enrollment of approximately 400 students with an additional 60 school staff personnel.
- The school hours are from 8:00 am to 4:00 pm, Monday to Friday
- All staff personnel utilize on-street parking
- The school does not provide any bus services for drop-off and pick-up of the school students

4. High Road Upper School

- The High Road Upper School is located at 711 Edgewood Street, NE in Washington, DC.
- The school has enrollment of approximately 100 students with an additional 20 school staff personnel.
- The school hours are from 8:30 am to 4:30 pm, Monday to Friday
- All staff personnel utilize on-street parking
- There are about 6-8 school buses at the High Road Upper School that provide transportation services to approximately 60 school students.

The south extension of Edgewood Street provides important vehicular access to all the four school campuses at the subject location.

Table 1 describes vehicular operations at all four school campuses along Edgewood Street, NE.

Table 1 - Vehicular Operations for School Campuses along Edgewood Street, NE

School	Total Enrollment	School Staff	School Hours	Vehicular Operations		School Buses
				Drop-Off	Pick-Up	
1. DC Prep Edgewood - Elementary School	400 students	90 personnel	7:30 AM to 4:00 PM Monday - Thursday	7:00 - 7:45 AM	4:30 - 5:30 PM	No
			7:30 AM to 3:00 PM; Friday	7:00 - 7:45 AM	2:30 - 3:30 PM	
2. DC Prep Edgewood - Middle School	300 students	45 personnel	7:30 AM to 5:00 PM Monday - Thursday	7:00 - 7:45 AM	3:30 - 4:30 PM	No
			7:30 AM to 3:00 PM; Friday	7:00 - 7:45 AM	2:30 - 3:30PM	
3. William E. Doar Jr. Public Charter School	400 students	60 personnel	8:00 AM to 4:00 PM Monday - Friday	7:30 - 8:15 AM	3:30 - 4:30 PM	No
4. High Road Upper School	100 students	20 personnel	8:30 AM to 4:30 PM Monday - Friday	8:00 - 9:00 AM	4:00 - 5:00 PM	Yes

ROADWAY CONDITIONS

Below is a description of the existing roadways in the study area:

Edgewood Street, NE

Edgewood Street is a two-lane road in the study area with a speed limit of 25 mph. There are multiple bus stops along Edgewood Street in the study area. Edgewood Street presently serves Metro transit routes D8 and G8. Per the 2011 Functional Classification Map, Edgewood Street is classified as a “Collector” road west of 7th Street. It is classified as a local road, east of 7th Street. On-street parking is restricted on Edgewood Street in the vicinity of the existing four school campuses. There are protected bike lanes on both sides of Edgewood Street in the study area from 7th Street up to roadway extent north of Franklin Street Overpass. It has shared bike lanes from the roadway extent south of Franklin Street Overpass up to Hamlin Street.

Franklin Street, NE

Franklin Street is a three-lane road with two westbound lanes and one eastbound lane in the study area. The posted speed limit on Franklin Street is 25 mph. There are multiple bus stops along Franklin Street that serve Metro transit route D8. Per the 2011 Functional Classification Map, Franklin Street is classified as a “Minor Arterial” in the area between Rhode Island Avenue and Michigan Avenue, NE. Per the 2012 Traffic Volume Maps, Franklin Street carries an Average Daily Traffic (ADT) volume of about 12,000 vehicles.

7th Street, NE

7th Street is a two-lane road in the vicinity of site with speed limit of 25 mph. There are multiple bus stops along 7th Street in the study area that serve Metro transit route G8. Per the 2011 Functional Classification Map, 7th Street is classified as a “Collector” road, between Edgewood Street and Michigan Avenue, NE. Per the 2012 Traffic Volume Maps, 7th Street carries an Average Daily Traffic (ADT) volume of about 1,600 vehicles.

8th Street, NE

8th Street is a two-lane road in the vicinity of the site with a speed limit of 25 mph. Per the 2011 Functional Classification Map, 8th Street is classified as a “Collector” road, between Edgewood Street and Monroe Street, NE. 8th Street provides important vehicular access to the Imagine Hope Community Charter School which is located less than ¼-mile from the existing four school campuses along the Edgewood Street, NE.

ROAD SAFETY AUDIT OBSERVATIONS

The RSA team conducted a formal safety audit to identify transportation safety issues at the study location on Monday, March 31, 2014. After the completion of the safety audit, the RSA team met with the Advisory Neighborhood Commission (ANC) members, school personnel and local residents to discuss several concerns pertaining to traffic circulation, vehicular parking and safety for school students. The following traffic safety issues were identified based on the findings of the safety audit and meeting discussions at various intersections in the study area.

7th Street and Edgewood Street, NE Intersection

The study intersection is presently unsignalized with stop-control on Edgewood Street and free-flow traffic on 7th Street, NE. The intersection has only one pedestrian crosswalk, which is located on the east leg, across Edgewood Street. There are bus stops on both sides of Edgewood Street, west of 7th Street, NE.

There is an industrial warehouse at the southwest corner of the study intersection. The DC Prep Edgewood Middle School is located south of the industrial warehouse. The following safety issues were identified at this location:

- On-street parking is prohibited on Edgewood Street at this location. However, several vehicles were observed to park illegally at or near the pedestrian crosswalk. The illegally parked vehicles restrict the available sight distance for motorists to observe pedestrians in crosswalks. This results in pedestrian-vehicular conflicts that impacts traffic safety for school students, particularly during the drop-off and pick-up sessions. **Figure 2** shows several vehicles parked illegally near the existing pedestrian crosswalk.



Figure 2 – Illegally Parked Vehicles on Edgewood Street

The 7th Street approach presently intersects Edgewood Street at a skewed angle at this location. The skewed roadway geometry in conjunction with the illegally parked vehicles obstruct motorist sight distance which causes eastbound left-turning vehicles, particularly metro transit buses, to partially traverse across the pedestrian crosswalk on the east leg of the study intersection. This creates conflicts between eastbound left-turning vehicles and pedestrians, especially school students and crossing guards, are traversing in the crosswalk. **Figure 3** shows eastbound left-turning metro bus traversing in close vicinity of the crosswalk.



Figure 3 – EB Left Turning Bus Close to Pedestrian Crosswalk

- There are parking restriction signs on Edgewood Street that prohibit parking in a bus zone. However, as shown in **Figure 4**, motorists were observed to parking and standing illegally in the bus zone. Further, the RSA team also observed parents illegally standing and parking their vehicles in the bus pad for drop-off purposes during the morning peak-hour. This creates direct conflicts between Metro bus operations and vehicles that are illegally parked and standing on the bus pad.

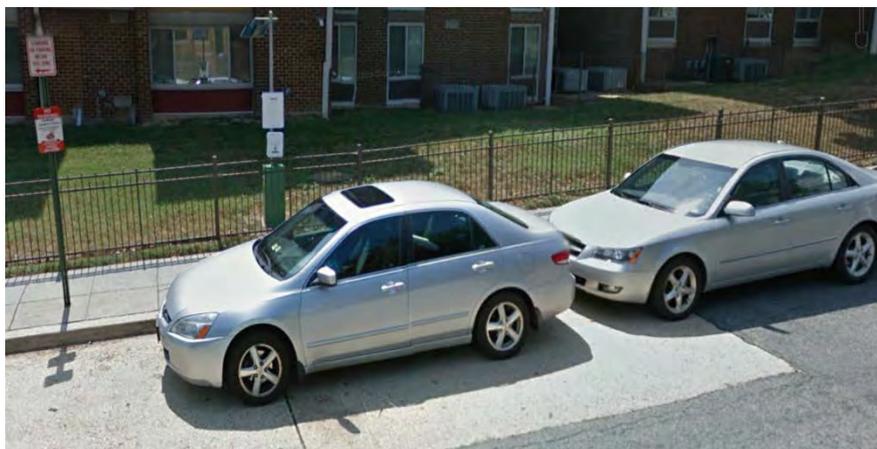


Figure 4 – Illegally Parked and Standing Vehicles on Bus Pad

- There are two bus stops on both sides of Edgewood Street at this location. However, there are no crosswalks to provide safe pedestrian access to these bus stops. As such, transit riders are regularly exposed to the oncoming vehicular traffic when crossing Edgewood Street to take the metro bus. This creates significant pedestrian safety issues, especially during the morning and evening peak hours when southbound vehicles are traversing at higher speeds. **Figure 5** shows the location of two existing bus stops on Edgewood Street.



Figure 5 – Existing Bus Stops on Edgewood Street

- Presently, 7th Street transitions to Edgewood Street at a sharp radius which restricts the available sight distance for southbound vehicles (on 7th Street) to observe pedestrians. The limited sight distance in conjunction with the higher vehicle speeds creates additional traffic safety issues for transit patrons crossing Edgewood Street, especially in absence of any safe pedestrian crossings at the existing bus stop locations.
- Metro bus operations along Edgewood Street exacerbate the traffic congestion, particularly during morning peak-hour at this location. Several motorists engage in aggressive driving to overtake and pass the Metro buses stopped in the bus zone.
- Motorists routinely fail to yield to pedestrians in the crosswalk. Vehicles block the pedestrian crosswalk during the morning drop-off and afternoon pick-up sessions. This creates direct pedestrian-vehicular conflicts as pedestrians, especially school students, are forced to go around the stopped vehicles in the crosswalk. **Figure 6** shows motorist blocking the pedestrian crosswalk at this location.

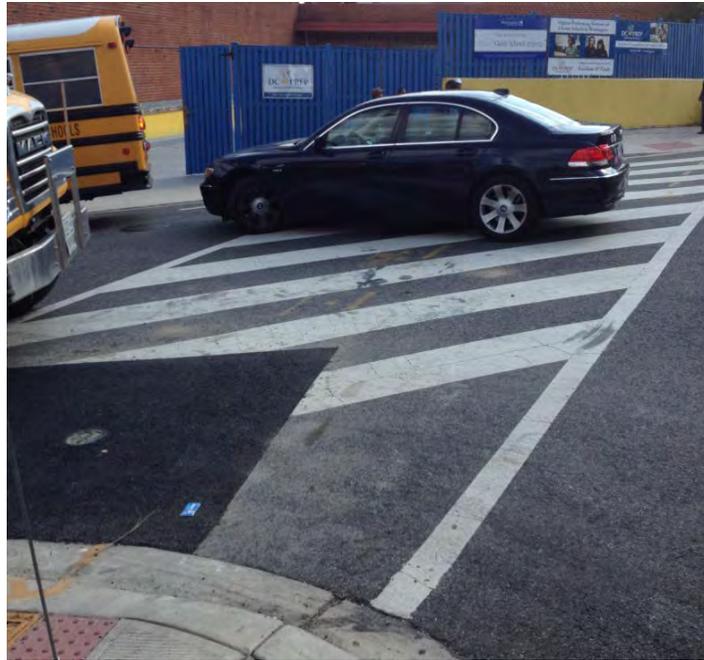


Figure 6 – Motorist Blocking Pedestrian Crosswalk

- The RSA team also observed a few motorists, especially school buses, traveling in the wrong travel lanes. This deliberate motorist behavior of driving in the wrong travel lanes, significantly increases the potential for head-on collisions, injury-related crashes and fatal crashes. **Figure 7** shows school buses traveling in the wrong travel lanes at this location.



Figure 7 – School Bus in Wrong Lane

- The pedestrian ramps do not meet the ADA specifications at this location; as they are too steep and have non-standard dimensions. Further, the counter slopes for gutter are too steep and the turning spaces are inadequate. The non-standard pedestrian ramps create safety hazards for the wheelchair users at this location. **Figure 8** shows the existing pedestrian ramp which is not in compliance with the ADA requirements.



Figure 8 – Non-Standard Pedestrian Ramp

- The traffic control signs are either damaged or incorrectly mounted at this location (as shown in **Figure 8**). Further, there are no advance warning signs for the school zone installed at this location. The pavement markings for the existing crosswalk are faded and need to be replaced.
- The utility pole is installed very close to the pedestrian ramp, as shown in **Figure 9**. The utility poles obstruct access, especially for wheelchair users, to pedestrian facilities. It should also be noted that the sidewalk is very narrow at the terminus of the pedestrian ramp, and there is not enough turning space for wheelchair users to maneuver after leaving the crosswalk.



Figure 9 – Obstruction at Pedestrian Ramp

Crash Analysis

DDOT performed a crash analysis, from year 2011 to 2014 Year-to-Date (YTD), at the 7th Street and Edgewood Street, NE intersection. The 4-year crash analysis shows six (6) total accidents at the study intersection. Below is the summary of the type of crashes and crash severity:

- Total Accidents – 6
- Total Injuries – 3
- Total Number of Pedestrians Involved – 2
- Total Number of Motorcycles Involved – 1
- Right Angle Crashes – 1
- Rear-End Crashes – 1
- Side Swipe Crashes – 2
- Pedestrian Involved Crashes – 2

All the crashes occurred during the morning and evening peak-hours; two (2) crashes occurred during the morning peak-hour (7:30-9:30 AM), while the remaining four (4) crashes occurred during the evening peak-hour (4:00-6:30 PM).

The crash statistics clearly show the study locations experience a high frequency of pedestrian-related involved crashes. A detailed review of the crash report shows a school crossing guard was hit and injured by a left-turning vehicle while crossing the students in the pedestrian crosswalk. The location also experiences a high frequency of injury-related crashes.

School Access at Edgewood Street, NE Intersection

The study intersection is presently unsignalized with stop-control for the school access and free-flow traffic on Edgewood Street (mainline), NE. The intersection has two pedestrian crosswalks; one on the north approach across the school access roadway and one on the east approach across Edgewood Street. The school access provides important vehicular and pedestrian access to all the four school campuses. The following safety issues were identified at this location:

- On-street parking is prohibited on both Edgewood Street and the school access roadway at this location. However, several motorists illegally park their vehicles for drop-off and pick-up purposes during the morning and afternoon peaks.
- The drop-off and pick-up areas are also not clearly defined which compounds the practice of parents parking their vehicles illegally to escort their students into the schools. In addition, the motorists have to make a 3-point turn maneuver for exiting because of the narrow width of the school alley. This creates direct conflicts between motorists and pedestrians, particularly school students at this location. **Figures 10 and 11** show illegally parked vehicles at this location.



Figure 10 – Illegally Parked Vehicles



Figure 11 – Illegally Parked Vehicles

- The schools have constructed pedestrian ramps at their entrance doors that do not meet the current ADA specifications. As shown in **Figure 12**, the pedestrian ramps have sub-standard landing areas and the cross slopes do not meet any ADA guidelines.
- Furthermore, there are no parking restriction signs that prohibit vehicular parking in the vicinity of the pedestrian ramps at this location. **Figure 12** shows motorist parked immediately adjacent to the pedestrian ramp at the school entrance. The non-standard pedestrian ramps, in conjunction with illicit vehicular parking, create safety issues for school students.



Figure 12 – Non-Standard Pedestrian Ramp at School Entrance

- The sidewalks are either narrow or missing at the pedestrian ramps, as shown in **Figure 13**, at this location. Hence, there is not sufficient turning space for wheelchair users to maneuver after leaving the crosswalk. The landing area in the pedestrian ramp is damaged and needs repairs.



Figure 13 – Narrow Sidewalks at Pedestrian Ramp

- The pavement markings at existing crosswalks, as shown in **Figure 13**, are faded and need to be replaced with new markings. A few school signs are either damaged or worn-out at this location and should be replaced with new school signs.

Crash Analysis

DDOT performed a crash analysis, from year 2011 to 2014 Year-to-Date (YTD), on the Edgewood Street corridor, between 8th Street and Evarts Street, NE. The 4-year crash analysis shows twenty-two (22) total accidents along the study corridor. Below is the summary of the type of crashes and crash severity:

- Total Accidents – 22
- Total Injuries – 6
- Total Number of Pedestrians Involved – 4
- Total Number of Motorcycles Involved – 2
- Right Angle Crashes – 1
- Rear-End Crashes – 3
- Side Swipe Crashes – 8
- Parked Crashes – 2
- Pedestrian Involved Crashes – 5
- Unspecified – 3

The majority of the crashes occurred during the morning peak-period (7:30-9:30 AM), afternoon peak-period (1:30-4:00 PM) and PM peak-period (4:00-6:30 PM). Following is a break-down of crashes based on time of day:

- Morning peak-hour – 10 crashes
- Afternoon peak – 4 crashes
- Evening peak-hour – 4 crashes

The crash statistics show that Edgewood Street presently experiences a high frequency of side swipe crashes and parked car collisions in the study area. The ongoing illegal vehicular parking can be attributed as one of the main reasons causing such high occurrence of these crashes.

The crash analysis also shows that Edgewood Street experiences a high frequency of pedestrian-involved crashes in the study area. A detailed review of the crash report shows a student was hit by a motorist while crossing the street with their parent during the morning peak-hour. Further, there is also a high occurrence of injury-related crashes in the study corridor.

Edgewood Street at 8th Street, NE Intersection

- Edgewood Street transitions to 8th Street, NE underneath the Franklin Street Overpass. There are two pedestrian crosswalks at this location. The pedestrian ramps at both crosswalks are non-standard and do not meet any ADA specifications.
- The landing areas at ramps are either missing or damaged. Further, the cross slopes are steep which create safety hazards for pedestrians, particularly wheelchair users. **Figure 14** and **Figure 15** show the non-standard and damaged ramps, respectively at this location.

- The pavement markings at existing crosswalks are either faded or completely missing and should be replaced with new markings. Some of the traffic signs are also worn-out and should be replaced with new signs at this location.



Figure 14 – Non-Standard Pedestrian Ramp



Figure 15 – Damaged Pedestrian Ramp

- There is a utility pole in the middle of the curb ramp to the Metropolitan Branch (MB) Trail at this location. The ramp is non-standard and does not meet ADA specifications. Further, the ramp is not aligned properly with the opposite pedestrian ramp which creates safety hazards for pedestrians with disabilities. **Figure 16** shows the improperly installed pedestrian ramp.



Figure 16 – Improper Pedestrian Ramp to MB Trail

Crash Analysis

DDOT performed a crash analysis, from year 2011 to 2014 Year-to-Date (YTD), at the study intersection. The 4-year crash analysis shows four (4) total accidents at this location. Below is the summary of type of crashes and crash severity:

- Total Accidents – 4
- Total Injuries – 1
- Total Number of Pedestrians Involved – 1
- Rear-End Crashes – 1
- Side Swipe Crashes – 1
- Fixed Object Crashes – 1
- Pedestrian Involved Crashes – 1

Two crashes occurred during the morning peak-hour (7:30-9:30 AM) while one crash occurred during the afternoon peak (1:30-4:00 PM). Further, a detailed review of crash reports shows that an on-duty personnel directing traffic (presumably traffic control officer) was hit by a motorist during the start of the evening peak-hour. The motorist immediately fled the crash scene to make their identity unknown. Similarly, the motorist involved in the one (1) rear-end crash at this location immediately drove away so that his identity could not be verified.

Mess Hall Kitchen Incubator Facility

The Applicant, Mr. Al Goldberg, is proposing to convert the existing dilapidated warehouse, located on 703 Edgewood Street NE, to a kitchen incubator facility. The proposed Mess Hall Kitchen Incubator would provide shared kitchen facilities, on a fixed timeslot basis, to several entrepreneurs and food businesses. The proposed Mess Hall Kitchen facility would be open on a 24/7/365 basis (24-hours, 7-days a week, 365-days a year) to the food businesses.

Presently, the parking and traffic signs along Edgewood Street prohibit on-street parking from 7:30 am to 5:00 pm, Monday to Friday. The Applicant sent an email to DDOT staff stating the existing prohibition for on-street parking is overly restrictive and identified the following parking spaces that can be made available for employees, customers and food businesses that will utilize the proposed Mess Hall Kitchen facility:

- 100-feet of potential curb parking directly in front of the proposed Mess Hall Kitchen
- Additional 50-feet of potential curb parking further down the block from Mess Hall Kitchen
- 130-feet of potential curb parking on the opposite side of Mess Hall Kitchen
- Potential curb parking along other segments of Edgewood Street NE

The email also mentions there is little risk of “all-day parking” because there are no commercial businesses or residential units on that particular block of Edgewood Street, NE and that schools have their own parking lots. Further, the email specifically requests DDOT staff to implement the following items along the Edgewood Street NE:

- Remove the existing “No Parking” signs and eliminate the current on-street parking prohibition
- Install traffic signage that would allow 2-hour parking without any restrictions, similar to parking signs for Union Market (on 5th Street, between Morse Street and Neal Street, NE)

Finally, the email states that implementation of the above requested items is very important to ensure adequate on-street parking is available for employees, customers and food members of the proposed Mess Hall Kitchen facility.

DDOT staff attended meeting on July 26, 2014 with the Applicant and Advisory Neighborhood Commission (ANC) Chairman, Ms. Debbie Steiner and other members. Following are the main items that were discussed with the Applicant during this meeting:

- DDOT staff discussed the current issues on traffic safety for school children and pedestrians along Edgewood Street with the Applicant
- DDOT staff explained Applicant’s request to allow on-street parking for truck delivery operations would adversely impact traffic safety, accessibility and circulation for all roadway users including school children and school staff

- ANC members specifically asked the Applicant to consider other potential locations for the proposed Mess Hall Kitchen facility, in lieu for traffic safety to school children and school personnel
- DDOT staff further specified they would only consider providing on-street parking that is outside the duration of regular school hours

RECOMMENDATIONS

The road safety audit identified several issues pertaining to transportation safety for pedestrians (including school students and crossing guards), transit and motor vehicles at the study locations. The RSA team has developed the following recommendations, based on the findings of safety audit and subsequent meeting with school staff and ANC members, to improve transportation safety, traffic operations and vehicular congestion in the study area.

- **Install new parking restriction signs, "No Parking Or Standing Anytime", on the north side of Edgewood Street at school access location**
- **Increase MPD Enforcement on Edgewood Street, particularly during drop-off and pick-up sessions**
- **Convert traffic flow on Edgewood Street to One-Way in the Eastbound direction between 7th Street and Franklin Street Overpass during school drop-off and pick-up sessions only**

Presently, Edgewood Street has two-way traffic flow along the entire study area. The study intersections along Edgewood Street experience heavy traffic congestion, particularly during the morning drop-off session, which impacts traffic safety for pedestrians and school children. Further, motorists were observed illegally standing and parking their vehicles on Edgewood Street at school access location (see **Figure 11**). Hence, new parking restriction signs "No Parking or Standing Anytime" should be installed to prohibit illegally standing and parking of vehicles at this location. In addition, MPD staff should increase enforcement to ensure motorists do not violate the existing and proposed parking restrictions at this location.

Converting existing traffic flow from two-way to one-way operation in the eastbound direction, during school drop-off and pick-up sessions, along with the parking restrictions and MPD enforcement, would have following traffic operation and safety benefits:

- Alleviate vehicular congestion and improve traffic operations at all study intersections
- Decrease frequency of sideswipe crashes, rear-end crashes and parked vehicle crashes along the study corridor, as illegal parking in the westbound direction would be eliminated
- Negate sight distance issues for motorists traveling westbound from 8th Street to Edgewood Street. This would improve traffic safety for the pedestrians, school students, crossing guards and traffic control officers in the study corridor
- Left-turns from school access to Edgewood Street would be prohibited. Hence, the school alley would function as a right-in/right-out only connection, which would eliminate left-turn conflicts at this location

The review of existing traffic counts shows about 220 vehicles and 240 vehicles traveling southwest on Edgewood Street during the estimated drop-off session (7-8 am) and pick-up session (4-5 pm) respectively. The proposed one-way eastbound only prohibition would impact accessibility for motorists and local patrons (residents and businesses) as they would not be

able to travel southwest on Edgewood Street during the drop-off and pick-up sessions. As such, there would be diversion of vehicular traffic as motorists desiring to travel southwest on Edgewood Street would now have to turn right on Hamlin Street, left on 7th Street and then right on Edgewood Street to reach their final destination.

Impacts to Hope Community Charter School

The proposed one-way eastbound only prohibition would likely impact accessibility for patrons (including parents) at Hope Community Charter School as they would not be able to travel southwest on Edgewood Street during the drop-off and pick-up sessions. The school patrons desiring to travel southwest on Edgewood Street, after corresponding drop-off and/or pick-up activities, would now have to access Hamlin Street, then turn left on 7th Street and right on Edgewood Street to reach their final destination.

Alternatively, Hope Community Charter School can coordinate their drop-off and pick-up sessions before or after the scheduled drop-off and pick-up sessions for four school campuses along the Edgewood Street to alleviate the impacts on accessibility.

The proposed one-way eastbound traffic prohibition would alleviate vehicular congestion, and improve traffic operations and traffic safety during the drop-off and pick-up sessions. However, this would require extensive coordination between all the five school campuses in developing and implementing a synchronized drop-off and pick-up session schedule to minimize impacts on accessibility to Edgewood Street.

Impacts to Bike Accessibility

Edgewood Street presently has protected bike lanes on both sides from 7th Street up to the roadway extent, north of Franklin Street Overpass. It has shared bike lanes from the roadway extent, south of Franklin Street Overpass, to Hamlin Street.

Presently pedestrian and bicyclists utilize the existing crosswalk across Edgewood Street, south of the Franklin Street Overpass, to access the Metropolitan Branch Trail (MB Trail). Hence, bicyclists traveling southwest on 8th Street/Edgewood Street (on shared bike lanes) would be able to access the MB Trail via the existing crosswalk. Hence, proposed one-way eastbound only prohibition on Edgewood Street, during school drop-off and pick-up sessions, would not impact bike accessibility to the MB Trail.

Additional traffic signage and pavement markings would have to be installed to allow bicyclists travel westbound on Edgewood Street (protected bike lanes) when the one-way eastbound only travel restriction is in effect during the school drop-off and pick-up sessions.

- **Schools Implement Valet System to improve efficiency of Drop-Off and Pick-Up Activities**

The study intersections along Edgewood Street, particularly the school access, experience significant vehicular congestion during the drop-off and pick-up sessions. Hence, the schools should implement a valet system in which school staff, parent volunteers and/or student safety patrols help students into and out of cars so that parents don't need to park their vehicles. School valet system would shorten the length of time that each individual vehicle spends at the school, and as such, would alleviate traffic congestion on Edgewood Street. Further, many schools in the District of Columbia have successfully implemented the School Valet programs. The following suggestions are recommended:

- Schools should identify specific areas for drop-off and pick-up and operate a valet system to help students into and out of the vehicles. One suggested location is Edgewood Street, between the school access and 8th Street, be designated as school valet for the drop-off and pick-up activities; for e.g. school valet area on Edgewood Street, between the school access and 8th Street, NE
- School staff or other volunteers should help students get safely into and out of the cars during drop-off and pick-up activities
- The school valet area should be delineated by using appropriate traffic signs and traffic control devices
- Parents arriving in the vehicles are asked to pull forward as far as possible within the drop-off/pick-up area and they are not allowed to exit their vehicle
- The valets help open car doors so that students can get into and out of their parents' vehicles more quickly
- At some schools, school staff or student safety patrols or older students are available to escort younger children from their parents' vehicles to where they need to go inside the school
- After school, a valet system is more complicated. Most schools with successful afternoon valet programs use walkie-talkies to match students to the correct vehicle. Some schools give parents placards to place in their windshield to identify which student should be sent to their vehicle
- The schools should effectively coordinate arrival and dismissal times to minimize vehicular congestion. The arrival and dismissal times should be staggered so that not all vehicular traffic is arriving to the schools at the same time
- Parent vehicles accessing the school campuses should not be allowed on the dead-end street since 3-point turns and U-turns present a safety hazard to students; drop-off and pick-up activities should be limited to the specific designated areas only. Stokes Public Charter Schools is an example of another DC school on a dead-end street. During arrival and dismissal, the school bans parents from driving on the dead-end street unless they have students with disabilities. A school staff member is assigned to the mouth of the street. He puts out cones to block parent vehicles from the dead-end portion of the

street and moves them aside as needed to allow access for school staff, neighbors, or parents of children with disabilities. A similar system is recommended for the dead-end street in the study area

- Parents desiring to accompany students must find a safe and legal parking space outside the valet area and walk inside with the students
- School staff should organize special PTA workshops to explain the drop-off and pick-up process to all the parents
- Schools should coordinate with MPD for enforcement and issuing warnings or tickets
- The school valet area should be delineated by using appropriate traffic signs and traffic control devices. Some schools put out cones to delineate the drop-off only lane as shown in the **Figure 17**. The cones are placed between the drop-off lane and the travel lane. The idea is that parents pull in at one end of the drop-off lane, and leave from the front. Parents are not allowed to enter or leave the drop-off lane anywhere in the middle and are instructed to stay close to the car in front of them. Putting a “Pull Forward” or “Pull Up Here” sign at the very front of the drop-off/pick-up area is also helpful to show parents where to stop. Position the valets near this location.

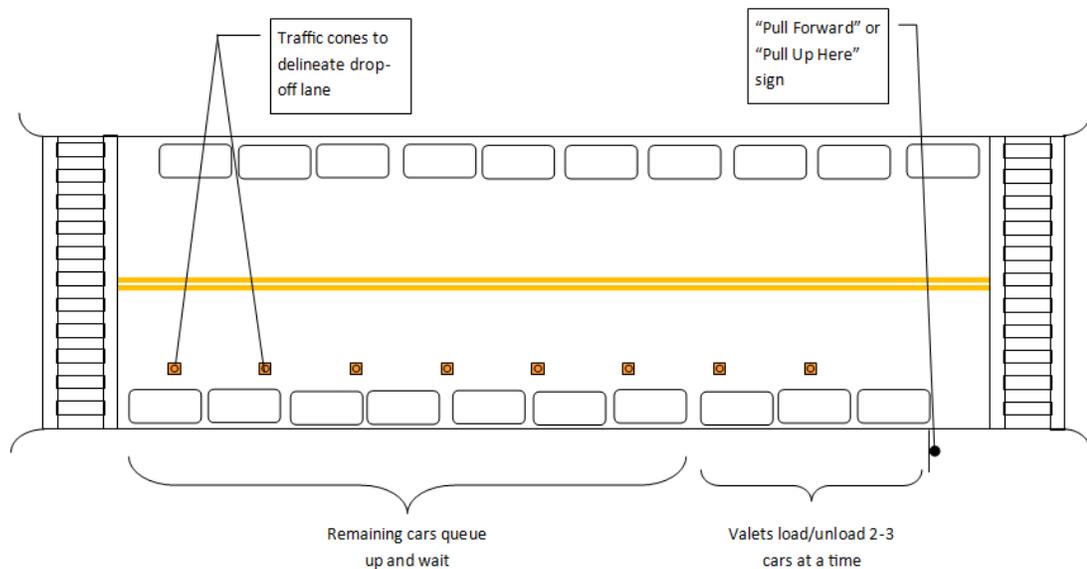


Figure 17 School Valet Layout

- **Implement Valet System on Rhode Island Ave Parking Lot**

All the four schools in the study area should consider negotiating the use of the existing parking lot, directly south of Edgewood Street and accessible from the Rhode Island Avenue, as a potential school valet location as discussed above. The parking lot owner has decided to no longer allow schools use of the parking lot for parking, however they might allow use of the parking lot for a valet system in which parents are not allowed to park or leave their vehicles

- The parking lot would be designated as a school valet for drop-off and pick-up activities only. Parents would not be allowed to park outside the scheduled valet hours, or to park there any time
- Schools shall designate their staff personnel to serve as valets to supervise student safety during the drop-off and pick-up activities. There would need to be staff in the parking lot as well as in the covered pedestrian walkway connecting the parking lot to the schools.
- The valet system should follow the process described in the previous section of this document
- Only trained school staff would accompany children from the parking lot to the school
- Schools should coordinate with MPD for enforcement and issuing warnings or tickets

- **Implement Park and Walk Program**

The school staff can consider implementing a Park and Walk program to reduce vehicular congestion and enhance traffic safety around the school area. The proposed Park and Walk Program would include following items:

- School staff shall establish a pre-determined area, such as a parking lot or a park, as a meeting area for the families
- School staff should establish a safe and accessible route from the pre-determined meeting area to the school
- Parents can then drive to the pre-determined area and then walk their children to the school
- Schools can also designate their staff or parent volunteers to walk groups of children from the meeting place to the school, this strategy is known as a Walking School Bus and is described in more detail in the next section
- School staff should organize special PTA workshops to promote the Park and Walk Program to all the students and parents
- In the past, the small park located near Edgewood Street, 6th Street and Evarts Street has been used as a meeting place for this purpose

- **Implement a Walking School Bus Program**

A Walking School Bus is a program where families within a given community agree to walk their children together to school, at least once every week. Schools can consider promoting the Walking School Bus program to reduce vehicular congestion and enhance traffic safety in the vicinity of school areas. This strategy can be used on its own or as part of a Park and Walk program as described in the previous section.

- Parents identify a designated meeting place and time schedule
- Parents and/or school staff establish a safe and accessible route from the meeting area to the school.

- Families meet at the designated meeting area and then walk together to the school. Parents can take turn walking, so not every parent needs to take the time to walk every day
- Alternatively, walking school bus can follow a designated route with scheduled "walking school bus stops" at specific point along the way, such as a family home, a park, or a designated street corner
- In some cases, schools designate their staff personnel for the Walking School Bus program

The structure of the Walking School Bus program primarily depends upon the community's active participation, interests, shared goals and available resources. It can be very formal with designated routes and times or it can be as informal as two families agreeing to take turns walking with each other's kids.

- **Relocate existing WMATA Bus Stops on Edgewood Street**

Edgewood Street presently has bus stops on both sides of the street in the study area. However, there are no crosswalks or pedestrian ramps on Edgewood Street that would provide transit patrons a safe and ADA-compliant accessible route to these bus stops. As such, transit patrons are routinely exposed to traffic while crossing the Edgewood Street to access the Metro buses. Furthermore, the Metro bus operations along Edgewood Street worsen the vehicular congestion, particularly during morning peak-hour in the study area. Several motorists were observed to engage in aggressive driving to overtake and pass the Metro buses stopped in the bus pad. Hence, the following changes are recommended to relocate the existing bus stops on Edgewood Street to improve traffic safety and vehicular congestion in the study area:

Westbound Bus Stop

There are two alternative locations to relocate the existing bus stops in the westbound direction on Edgewood Street, NE:

- i. Existing westbound bus stops on Edgewood Street at 7th Street and 6th Street can be consolidated into one bus stop at Evarts Street, NE. There is a crosswalk at the new proposed location which would provide safe pedestrian access to the transit patrons. This alternative would require relocation of the existing bus shelter on 6th Street, NE.
- ii. Eliminate the westbound bus stop on 7th Street and direct transit patrons to the existing bus stop at Edgewood Street and 6th Street, NE. This alternative would not require relocation of the existing bus shelter. However, this alternative would increase the total walking distance by 350 feet.

Eastbound Bus Stop

Eliminate the eastbound bus stop on 7th Street and direct transit patrons to the existing bus stop at Edgewood Street and 6th Street, NE. The public space designated as the Bus Stop Zone in front of 625 Edgewood Street, NE can be designated as school valet system for drop-off and pick-up activities.

- **Install new traffic signs and school warning signs**

The Safety Audit showed several signs for traffic control and advance warning for schools were either damaged or completely missing in the study area. Hence, the damaged traffic signs should be replaced with new traffic signs to improve pedestrian safety and convey advance school warnings to the motorists in the study area.

- **Install ADA-compliant pedestrian facilities**

Most of the pedestrian facilities in the study area do not meet the specifications for ADA compliance. The ramps and gutter counter slopes are steep and there is not adequate turning space for pedestrians, particularly wheel chair users. Further, curb ramps are completely missing at some crosswalks. Hence, the pedestrian facilities in the study area should be removed and replaced with new pedestrian facilities that are in compliance with the new ADA specifications.

- **Install new pedestrian crosswalks**

Most of the pedestrian crosswalks in the study area are faded, damaged or completely missing. This impacts visibility of pedestrians, particularly students, during inclement weather and low visibility conditions. Hence, all the damaged crosswalks should be removed and replaced with high-visibility ladder-type crosswalks in the study area.

- **Promote Safe Routes to School Program**

The schools should organize workshops to promote the Safe Routes to School (SRTS) Program to students and parents. The SRTS program uses a variety of educational, engineering and enforcement strategies that help make routes safer for children to walk and bicycle to school, and provides encouragement strategies to attract more students to walk and bike to school. The primary goal of the SRTS program is to reduce the number of cars accessing schools, which alleviates vehicular congestion and improves traffic safety around the schools. The DDOT Safe Routes to School Coordinator is available to assist with this recommendation.