District Department of Transportation

2016 High Crash Intersection Site Visits

Summary and Next Steps

February 2017

VISION ZERO SAFE STREETS FOR WASHINGTON, DC

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GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

District Department of Transportation

High Crash Intersection Site Visits

Summary and Next Steps

Table of Contents

List of Tables

List of Figures

1.0 Introduction

The District Department of Transportation (DDOT) and Councilmember Mary Cheh coordinated site visits to eight "high crash" intersections during 2016. Five of the site visits occurred during a two-week period from May 25 to June 2, 2016. The remaining three were conducted on August 17 and 18, 2016. The site visits engaged members of the local Advisory Neighborhood Commissions (ANCs), Business Improvement Districts (BIDs) and other business groups, members of the Bicycle and Pedestrian Advisory Councils (BAC and PAC), the Washington Area Bicyclist Association (WABA), All Walks DC and other concerned stakeholders. The following table outlines the locations and dates of each of the conducted site visits.

Site Visit Location	Date
Firth Sterling and Suitland Parkway SE	May 25, 2016
14th Street and Columbia Road NW	May 26, 2016
Georgia Avenue and Kennedy Street NW	May 26, 2016
44th Street and Nannie Helen Burroughs Avenue NE	May 31, 2016
18th Street and Adams Mill Road NW	June 2, 2016
Wisconsin Avenue and Albemarle Street NW	August 17, 2016
Connecticut Avenue and Porter Street NW	August 17, 2016
Wisconsin Avenue, Van Ness Street, and 39th Street NW	August 18, 2016

Table 1. Site Visit Locations and Dates

Collectively, these eight intersections were the locations of 3 fatalities and 23 disabling injuries in the last three years. With the Vision Zero Initiative, DDOT and the District as a whole seeks to eliminate traffic-based fatalities and serious injuries within 10 years. To accomplish this requires a proactive approach to analyzing and addressing behaviors and physical conditions that contribute to traffic deaths. DDOT analyzed historical crash data to inform the discussion and formulation of action steps at each of the intersections. This process reinforced the incomplete nature of crash data. For example, a contributing factor is not specified in many of the crashes at the eight intersections visited. Through our efforts to enhance data collection and reporting as part of the Vision Zero initiative, we will work collaboratively with our enforcement partners to ensure that we have comprehensive data to inform our safety priorities and improvements.

The site visits were conducted in an open and collaborative manner, with participants identifying and discussing issues and potential solutions. Each site visit summary includes:

1. Crash analysis and data

2. Recent and planned projects for the location
3. A discussion of site visit observations
4. A summary of next steps and action items

DDOT intends to use these site visit summaries as a guide to inform and prioritize short-term, interim, and longer-term infrastructure improvements to promote increased safety at these locations. DDOT values the collaborative nature of the site visits and intends to utilize this method of targeted stakeholder engagement on safety issues moving forward.

2.0 Firth Sterling and Suitland Parkway SE

The intersection of Firth Sterling and Suitland Parkway, SE is located east of the Anacostia River, between Interstate 295 and the historic Anacostia neighborhood. It is one block from the Anacostia Metro station.

Figure 1. Firth Sterling and Suitland Parkway SE Site Visit

Suitland Parkway SE is a four-lane roadway, oriented east-west, with exclusive left-turn and right-turn lanes. Per the DDOT Functional Classification Map, Suitland Parkway SE is classified as a freeway/expressway roadway, and Firth Sterling Avenue SE is classified as a collector roadway. The posted speed limit on Suitland Parkway is 35 mph. North of Suitland Parkway, Firth Sterling Avenue SE is a three-lane road (with one inbound through lane and one exclusive left-turn lane and one receiving lane). South of Suitland Pkwy, Firth Sterling Avenue SE is a four-lane road (with one inbound through lane, one exclusive right-turn lane, and two receiving lanes). The only marked and signalized crosswalk is on the east side of Firth Sterling. There are two free right turn slip lanes with marked crosswalks (northeast-bound Firth Sterling to southeast-bound Suitland Parkway and northwest-bound Suitland Parkway to northeast-bound Firth Sterling). Firth Sterling Avenue is an important connection for people walking between the Anacostia Metro Station on one side of Suitland Parkway and the Barry Farm community, St. Elizabeths, and Joint Base Anacostia-Bolling on the other.

There are no bus stops at the intersection and no parking at or near the intersection. There is an existing speed camera on Suitland Parkway, in the northwest direction, approximately 0.3 miles prior to Firth Sterling Avenue SE.

The August 2016 site visit included staff from Councilmember Cheh's office, bicycle advocates, media organizations, as well as representatives from the Pedestrian Advisory Council.

2.1. Traffic and Pedestrian Volume Data

Below is the summary of Average Daily Traffic (ADT) volumes, on Suitland Parkway SE and Firth Sterling Avenue SE in the vicinity of the study intersection, per the 2014 DDOT Traffic Volume Maps:

- Suitland Parkway SE handles ADT volumes of 55,500 vehicles per day (VPD).
- Firth Sterling Avenue SE handles ADT volumes of 11,500 VPD.
- AM peak hour pedestrian volume (counted in November 2012) is 67.
- Mid-day peak hour pedestrian volume is 35 pedestrians.
- PM peak hour pedestrian volume is 96 pedestrians.

Figure 2. Southbound Suitland Parkway approach to Firth Sterling Ave. SE

2.2. Crash Data

From January 1, 2013 to December 31, 2015, there were 132 crashes at this intersection. The predominant crash type was "left turn, hit vehicle," which accounted for approximately 40 percent of all crashes. A substantial number of these crashes occurred when eastbound Suitland Parkway drivers

attempted turn left to northbound Firth Sterling. Nearly 30 percent of crashes were rear ends, which occur due to sudden stops.

The severity of theses crashes is high. Out of 132 total crashes, there were two fatalities, and 112 injuries, of which 11 were disabling injuries, while only 14 were non-disabling injuries. Speed may be a factor in the high crash severity, as vehicle speeds on Suitland Parkway are relative high for an at-grade intersection (Suitland Parkway has a posted speed limit of 35 mph). There were two pedestrian crashes and one bicycle crash at this intersection. Figure 5 is a crash data summary table for the intersection and Figure 6 provides an overall crash diagram. Almost half of the crashes happened between 6:30pm and 7:30am.

Accident Summary Report (R-7)

Intersection: FIRTH STERLING AVE and SUITLAND PKWY, SE

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** George Branyan **Prepared Date:** 11/22/201

Total Number of Accident:	132
Total Number of Fatalities:	2
Total Number of Injuries:	112
Total Number of Disabling Injuries:	11
Total Number of Non Disabling Injuries:	14
Total Number of Pedestrians Involved:	2
Total Number of Bicycles Involved:	0
Total Number of Motorcycles Involved:	0

Collision Type	#ACC	%
Right Angle:	8	6.1%
Left Turn:	30	22.7%
Right Turn:	3	2.3%
Rear End:	34	25.8%
Side Swiped:	17	12.9%
Head On:	11	8.3%
Parked:	1	0.8%

Collision Type	#ACC	%
Fixed Object:	1	0.8%
Ran Off Road:	1	0.8%
Ped. Involved:	2	1.5%
Backing:	0	0.0%
Non Collision:	1	0.8%
Under/Over Ride:	0	0.0%
Unspecified:	23	17.4%

Time of Day	#ACC	%
07:30 ~ 09:30:	10	7.6%
09:30 ~ 11:30:	7	5.3%
11:30 ~ 13:30:	12	9.1%
13:30 ~ 16:00:	16	12.1%
16:00 ~18:30:	23	17.4%
18:30 ~ 07:30:	64	48.5%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	20	15.2%
Monday:	22	16.7%
Tuesday:	14	10.6%
Wednesday:	19	14.4%
Thursday:	16	12.1%
Friday:	20	15.2%
Saturday:	21	15.9%

Weather Condition	#ACC	%
Clear:	108	81.8%
Rain:	10	7.6%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	1	0.8%
Crosswind/Blowing Sand:	1	0.8%
Unspecified:	12	9.1%

Surface Condition	#ACC	%
Dry:	115	87.1%
Wet:	13	9.8%
Snow/Ice:	1	0.8%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	1	0.8%
Unspecified:	2	1.5%

Type of Vehicle	#VEH	%
Passenger Car:	241	88.0%
Bus:	5	1.8%
Truck:	13	4.7%
Taxi:	5	1.8%
Minivan:	0	0.0%
Police/Emergency Vehicle:	4	1.5%
Motorcycle/Moped:	0	0.0%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	6	2.2%

Accident Severity Type	#ACC	%
Fatal Collision:	2	1.5%
Injury Collision:	63	47.7%
PDO Collision:	67	50.8%

Light Condition	#ACC	%
Daylight:	71	53.8%
Dawn/Dusk:	4	3.0%
Dark(Lighted):	41	31.1%
Dark(Not Lighted):	12	9.1%
Dark(Uniknown Lighting):	0	0.0%
Unspecified:	4	3.0%

Contributing Factor	#VEH	%
Driver: Speed:	7	2.6%
Driver: Alcohol/Drug:	4	1.5%
Driver: Electronic Device:	0	0.0%
Driver: Others:	51	18.6%
Vehicle:	0	0.0%
Roadway:	5	1.8%
Unspecified:	207	75.5%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	1	50.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	1	50.0%

28 Records are not approved as of 11/22/2016 5:32:03 PM

Figure 3. Firth Sterling and Suitland Parkway SE Crash Data

2016 High Crash Intersection Site Visits

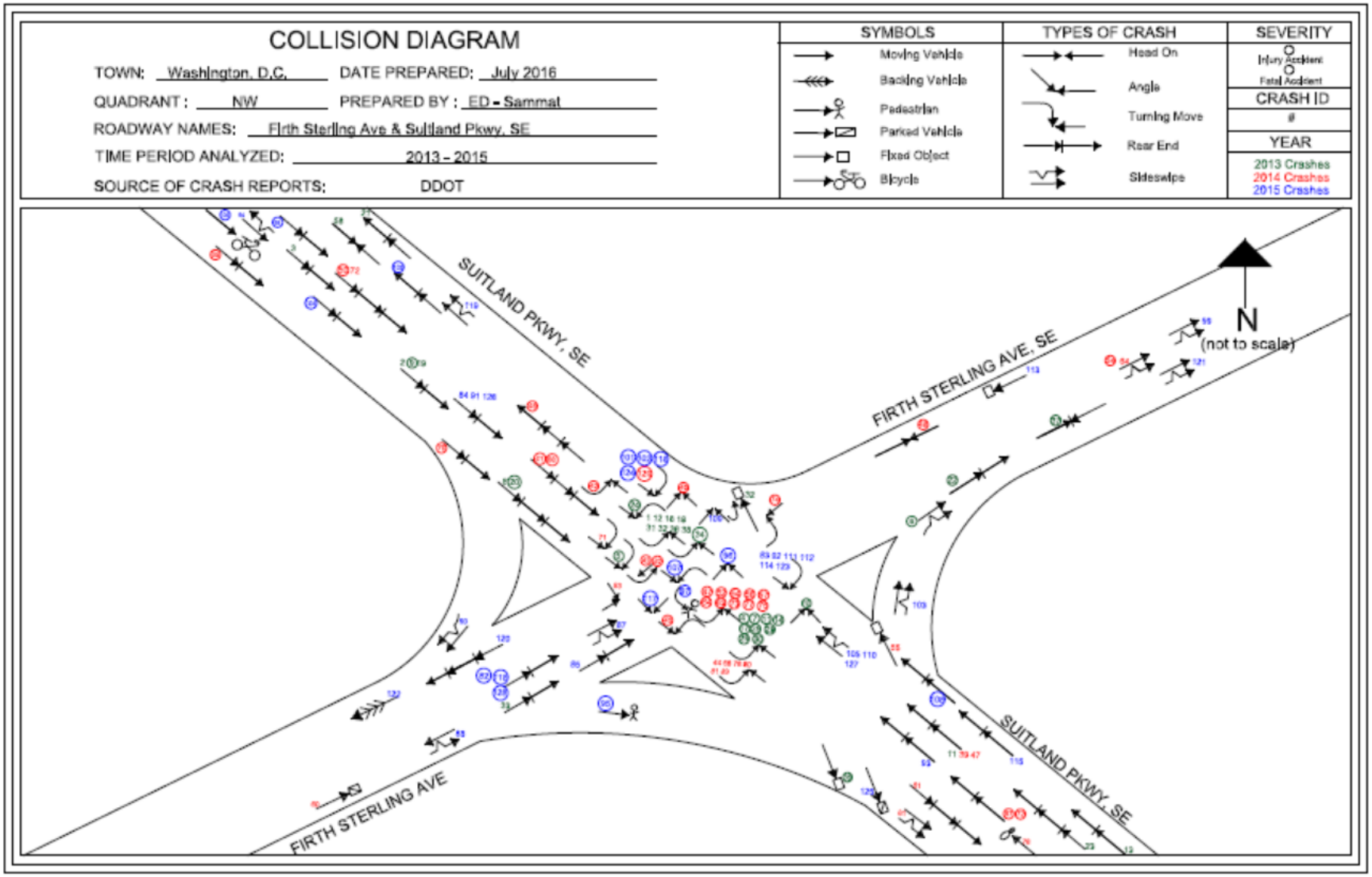

Figure 4. Firth Sterling and Suitland Parkway SE Crash Diagram

2016 High Crash Intersection Site Visits

2.3. Site Visit Observations

On May 25, a DDOT Vision Zero site visit to the intersection of Suitland Parkway and Firth Sterling Avenue SE was conducted. The following are initial observations based on the site visit and DDOT's preliminary assessment of crash data.

Figure 5. Eastbound Firth Sterling Ave approach to Suitland Parkway SE

As seen in Figure 2, the traffic signal arrays on Suitland Parkway provide protected/permissive left-turn phases. As part of the ongoing HSIP process, the feasibility of converting the left-turn signal displays to protected-only phasing will be evaluated. This could mitigate the left-turn angular collisions previously identified from the intersection crash history. During the PM peak-hour observations conducted on May 25, left-turn volumes and the storage capacity of the southbound left-turn bay appear to support the provision of protected-only phasing.

Beyond the left-turn issue, the site visit provided some insights into issues to investigate further:

The right lane on eastbound Firth Sterling Avenue ends at Suitland Parkway, with only one lane carried across the intersection (except for buses, which are allowed to cross the intersection in the right lane). The pavement markings, however, are worn, which might reflect (and also contribute to) the relatively large number of vehicles that maintain a second through lane across the intersection by driving over the pavement markings. A review of the current configuration should be undertaken to determine the

feasibility of restoring the second travel lane across the intersection. In addition, although left turns are apparently prohibited for traffic on eastbound Firth Sterling Avenue onto northbound Suitland Parkway/South Capitol Street, there are no signs mounted on the mast arm to indicate No Left Turns.

Figure 6. Southeast corner of Suitland Parkway at Firth Sterling Ave SE

The curve radius for traffic on eastbound Firth Sterling Avenue turning right onto southbound Suitland Parkway allows for relatively high travel speeds and likely contributed to one of the two pedestrian crashes, which occurred in this location. Consideration should be given to reducing the turn radius as a pedestrian safety measure. One site visit attendee questioned the need for a slip lane at all. This would dramatically slow turning vehicles, but may not be feasible without major changes because of the amount of truck traffic using this intersection.

While the site visit was during the day, the issue of lighting levels was raised. It is important that lighting levels are adequate to provide proper visibility of all road users, especially pedestrians in the crosswalks. The site visit was in May, which made it quite noticeable that the sidewalk along Firth Sterling Avenue is virtually devoid of trees.

Overall Issues

O1. Roadway markings are faded.

O2. Roadway lighting may be a factor in crashes and was identified by pedestrian users as being dim at night.

Pedestrian Issues

P1. Crosswalk markings are faded.

P2. Fast right turns at slip lane for vehicles turning eastbound from Suitland to Firth Sterling cause hazard to pedestrians, and vegetation obstructs view for drivers.

P3. Slip lane from northbound Firth Sterling to eastbound Suitland Parkway, encourages fast turns and creates pedestrian hazards.

P4. Some curb ramps do not meet current ADA requirements.

P5. Pedestrian connection to Barry Farm community is lacking.

Bicycle Issues

B1. No designated bicycle facilities on Firth Sterling (which has streetcar tracks). Bicyclists must share facilities.

B2. No designated bicycle facilities along Suitland Parkway.

Vehicular Issues

V1. Vehicles observed cutting through the pedestrian cut-through in the island on the north side.

V2. Cars observed blocking the box.

V3. Vehicles observed driving straight in the right turn only lane of northbound Firth Sterling.

2.4. Next Steps

The following table identifies the next step for each issue and the associated timeline. Wherever possible, both design/evaluation and implementation timelines are noted, but further exploration for some issues may find potential solutions infeasible.

Issue	Next Step	Timeline
Overall Issues		
O1. Roadway markings are faded.	Refurbish all roadway markings.	Evaluation: July 2016 Implementation: Shop order for refurbishment to be submitted in April 2017.
O2. Roadway lighting may be a factor in crashes and was identified by pedestrian users as being dim at night.	Evaluate lighting levels and location of street lights.	Evaluation: February 2017 Implementation: Mitigation will be based on outcome of evaluation.
Pedestrian Issues		
P1. Crosswalk markings are faded.	Refurbish crosswalks markings.	Evaluation: February 2017 Implementation: A subsequent field visit determined that the crosswalk is in good condition, and no action is needed at this time.
P2.Fast right turns at slip lane for vehicles turning eastbound from Suitland to Firth Sterling cause hazard to pedestrians, and vegetation obstructs view for drivers.	Install signage to warn drivers to stop for pedestrian in slip lane crosswalks.	Evaluation: July 2016 Implementation: Shop order for advanced warning signage for pedestrian crossings to be submitted by mid-March 2017. Service request submitted to UFA for vegetation trimming.
P3. Slip lane from northbound Firth Sterling to eastbound Suitland Parkway encourages fast turns and creates pedestrian hazards.	Reconfigure intersection geometry to tighten the slip lane radius (exiting is a 189’ radius) of slip lane or remove slip lane.	Evaluation: Winter 2017 Implementation: Long-term, part of South Capitol Street Phase 1 project.
P4. Some curb ramps do not meet current ADA requirements.	Assess all ramps for ADA compliance.	Evaluation: July 2016 Implementation: Long-term, part of South Capitol Street Phase 1 project.
P5. Pedestrian connection to Barry Farm community is lacking.	Component of Barry Farm redevelopment and South Capitol Street Corridor project.	Evaluation: Fall 2016 Implementation: Further study necessary to identify optimal connection solution. To be identified and implemented as part of South Capitol Street Corridor Project, Segment 3.

Issue	Next Step	Timeline
Bicycle Issues		
B1. No designated bicycle facilities on Firth Sterling (which has freight rail and streetcar tracks). Bicyclists must share facilities.	DDOT has started a feasibility study for creating a multi-use trail along the rail corridor adjacent to Firth Sterling Ave.	Evaluation: Winter 2017 Implementation: Subject to feasibility study findings.
B2. No designated bicycle facilities along Suitland Parkway.	A multi-use trail is planned for the north side of Suitland Parkway between Firth Sterling and the new South Capitol St. bridge.	Evaluation: Spring 2017 Implementation: Long-term, part of South Capitol Street Phase 2
Vehicular Issues		
V1. Vehicles observed cutting through the freight rail cut-through in the island on the north side.	Assess how to block the cut through to vehicular traffic (possibly with flex posts).	Evaluation: July 2016 Implementation: Shop order for installing flex posts and pavement markings to be submitted by April 2017.
V2. Cars observed blocking the box.	Review traffic signal timing to minimize northbound traffic queuing on Firth Sterling during the PM peak period.	Evaluation: July 2016 Implementation: A new timing plan was developed and implemented on January 30, 2017. Signal timing adjustments reduce potential occurrences for intersection blockage.
V3. Vehicles observed driving straight in the right turn only lane of northbound Firth Sterling.	Assess how to channelize vehicular traffic (possibly with flex posts).	Evaluation: July 2016 Implementation: Spring 2017

Table 2. Firth Sterling and Suitland Parkway SE Next Steps

3.0 14th Street and Columbia Road NW

The intersection of 14th Street and Columbia Road NW is located one block south of the Columbia Heights Metro Station. At the study intersection, 14th Street is a north-south roadway, with two-way traffic and Columbia Road is an east-west roadway allowing one-way westbound only traffic. East of 14th Street, from 7am to 6:30pm Columbia Road is a two-lane road with full-time on-street parking on the south side. West of 14th Street, Columbia Road is a one-lane road with the exception of north side restricted parking in the PM rush period of 4pm to 6:30pm.

Figure 7. 14th Street and Columbia Road NW Site Visit with Councilmember Cheh

The May 26, 2016 site visit included Councilmember Cheh and staff, bicycle and pedestrian advocates, media organizations, as well as representatives from the Pedestrian Advisory Council.

3.1. Crash Data

From January 1, 2013 to December 31, 2015, there were nearly 100 crashes at this intersection. Approximately 40 percent of the crashes were sideswipes, which tend to occur when drivers quickly change lanes. Over 13 percent of the crashes were rear end, which occur due to sudden stops. The severity of theses crashes was low, with no disabling injuries, and seven non-disabling injuries. Speed

was a factor in one collision, and alcohol/drugs in three of the crashes. Figure 8 provides the summary report of crashes at this intersection. The seventeen bicycle collisions at 14th Street and Columbia Road makes this intersection the second highest intersection in the city for bicycle crashes. Analysis of sixteen of the seventeen bicycle crash reports revealed that the two most prevalent crash types were dooring-related (31 percent) and sideswipe crashes (25 percent). Figure 8 provides a collision diagram for the bicycle crashes at this intersection.

3.2. Recent and Planned Projects

In 2009, DDOT completed a reconstruction of 14th Street between Irving and Newton Streets. In addition to narrowing the roadway, it included a public plaza at the intersection of Kenyon Street and Park Road. DDOT recently analyzed east-west mobility in this area as part of its Crosstown Multi-Modal Study (dccrosstownstudy.com). At the time of the site visit, south of Columbia Road there was a half-mile gap in the existing bicycle lane network to Florida Avenue. DDOT's 2005 Bicycle Master Plan and moveDC Plan call for installing bicycle lanes in this section of 14th Street, and installation is currently in progress.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: 14TH ST and COLUMBIA RD, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** Steven Arhin **Prepared Date:** 5/24/2016

Total Number of Accident:	98
Total Number of Fatalities:	0
Total Number of Injuries:	33
Total Number of Disabling Injuries:	0
Total Number of NonDisabling Injuries:	7
Total Number of Pedestrians Involved:	8
Total Number of Bicycles Involved:	17
Total Number of Motorcycles Involved:	2

Collision Type	#ACC	%
Right Angle:	7	7.1%
Left Turn:	3	3.1%
Right Turn:	7	7.1%
Rear End:	13	13.3%
Side Swiped:	38	38.8%
Head On:	0	0.0%
Parked:	3	3.1%

Collision Type	#ACC	%
Fixed Object:	2	2.0%
Ran Off Road:	0	0.0%
Ped. Involved:	7	7.1%
Backing:	4	4.1%
Non Collision:	0	0.0%
Under/Over Ride:	0	0.0%
Unspecified:	14	14.3%

Time of Day	#ACC	%
07:30 ~ 09:30:	22	22.4%
09:30 ~ 11:30:	3	3.1%
11:30 ~ 13:30:	8	8.2%
13:30 ~ 16:00:	7	7.1%
16:00 ~18:30:	26	26.5%
18:30 ~ 07:30:	32	32.7%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	13	13.3%
Monday:	12	12.2%
Tuesday:	9	9.2%
Wednesday:	18	18.4%
Thursday:	22	22.4%
Friday:	16	16.3%
Saturday:	8	8.2%

Weather Condition	#ACC	%
Clear:	77	78.6%
Rain:	12	12.2%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	2	2.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	7	7.1%

Surface Condition	#ACC	%
Dry:	82	83.7%
Wet:	13	13.3%
Snow/Ice:	0	0.0%
Slush:	1	1.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	2	2.0%

Type of Vehicle	#VEH	%
Passenger Car:	114	63.0%
Bus:	21	11.6%
Truck:	11	6.1%
Taxi:	14	7.7%
Minivan:	0	0.0%
Police/Emergency Vehicle:	2	1.1%
Motorcycle/Moped:	2	1.1%
Bicycle:	17	9.4%
Fixed Object:	0	0.0%
Unspecified:	0	0.0%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	28	28.6%
PDO Collision:	70	71.4%

Light Condition	#ACC	%
Daylight:	67	68.4%
Dawn/Dusk:	0	0.0%
Dark(Lighted):	28	28.6%
Dark(Not Lighted):	1	1.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	2	2.0%

Contributing Factor	#VEH	%
Driver: Speed:	1	0.6%
Driver: Alcohol/Drug:	3	1.7%
Driver: Electronic Device:	0	0.0%
Driver: Others:	36	19.9%
Vehicle:	0	0.0%
Roadway:	0	0.0%
Unspecified:	141	77.9%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	4	50.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	1	12.5%
Not in Crosswalk:	3	37.5%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	34	0	13	3	4	5	0
2014	35	0	14	3	2	8	1
2015	29	0	6	1	2	4	1

12 Records are not approved as of 5/24/2016 10:28:58 AM

Figure 8. 14th Street and Columbia Road NW Crash Data

Spring 2016 High Crash Intersection Site Visits

Figure 9. 14th Street and Columbia Road NW Bike Crash Diagram

Spring 2016 High Crash Intersection Site Visits

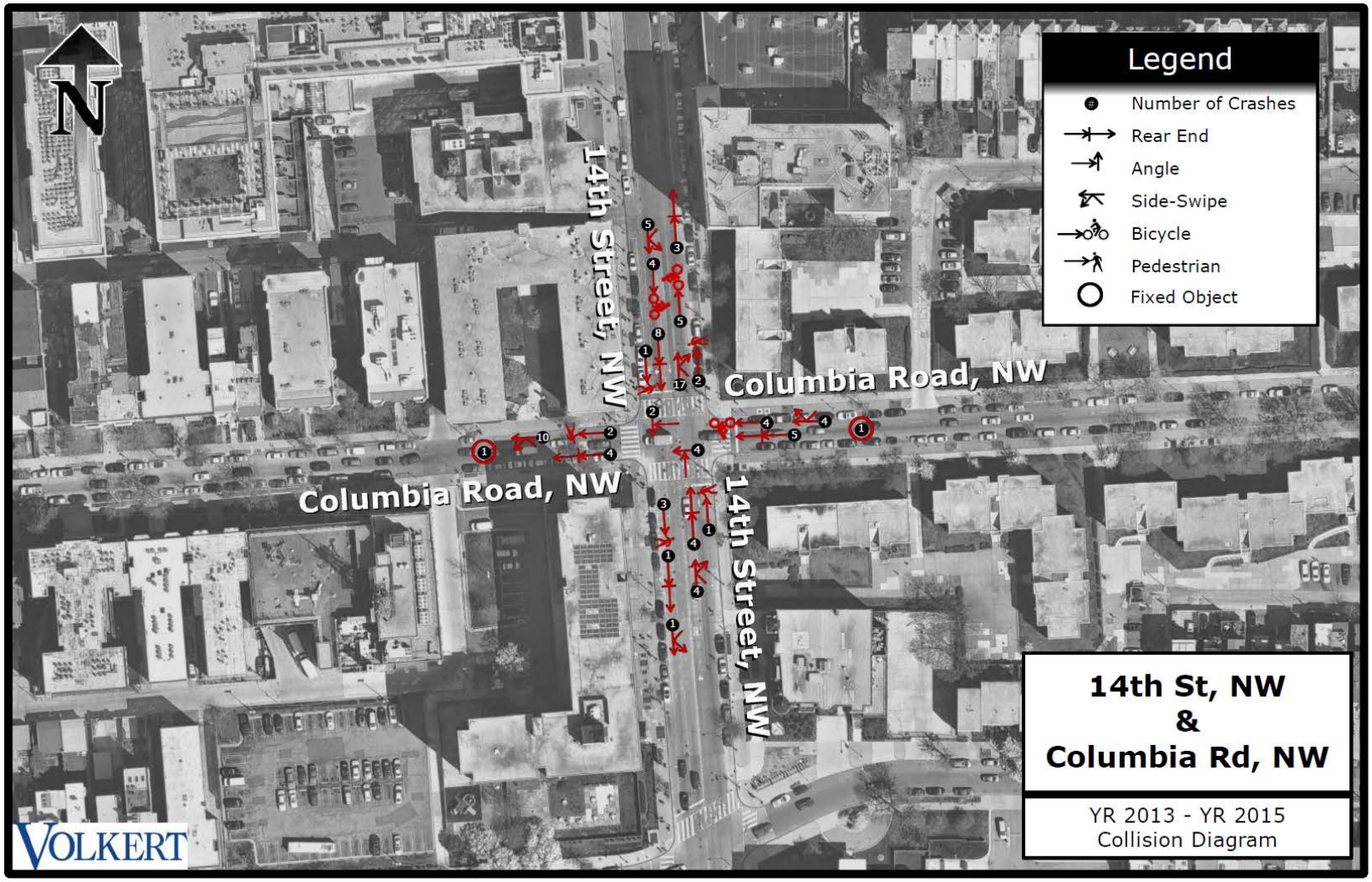

Figure 10. 14th Street and Columbia Road NW Crash Diagram

Spring 2016 High Crash Intersection Site Visits

3.3. Site Visit Observations

On Thursday May 26, 2016 beginning at 8:30am participants identified issues related to all travel modes. Some may only require minor fixes, while others could require more substantial capital improvements. Many require further investigation and evaluation by DDOT. The timeline for next steps is included in the next section.

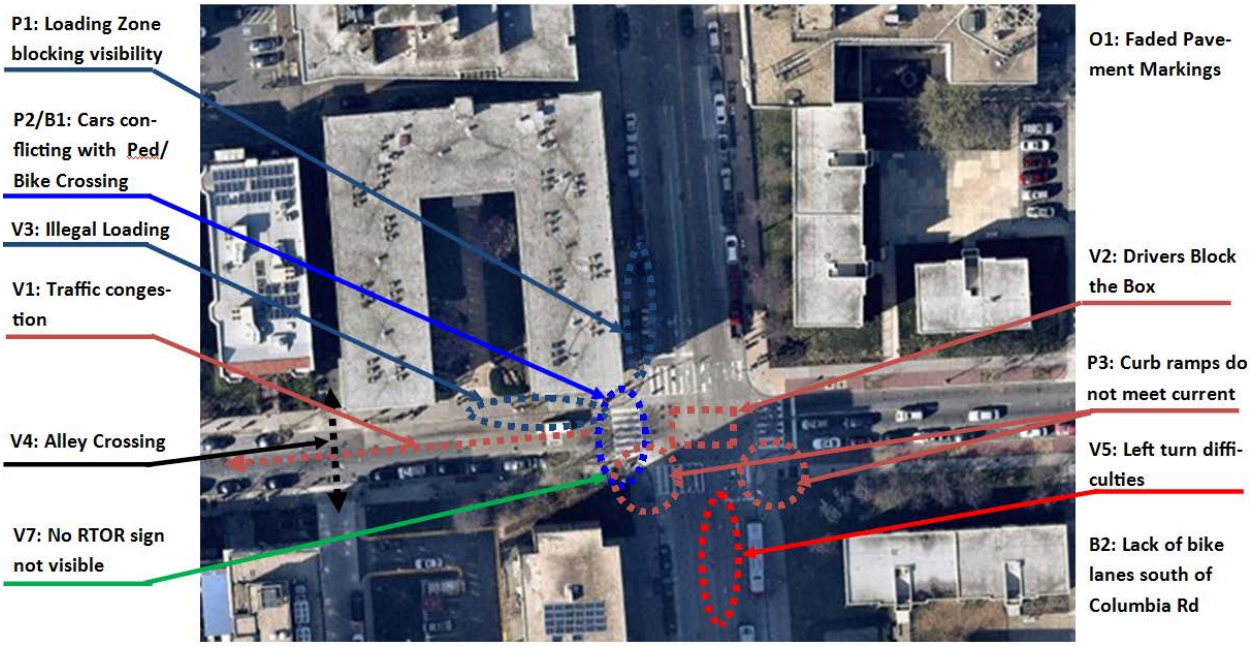

Figure 11. 14th Street and Columbia Road NW Site Visit Observations

Overall Issues

O1. Roadway markings are faded. 14th Street is four lanes south of Columbia Road, and three lanes with bicycle lanes to the north. Faded roadway markings can add to confusion for road users, particularly due to the absence of the northbound left turn lane – an essential component of the lane drop that occurs at this intersection. 14th Street is a concrete roadway, which means that thermoplastic markings have to be refurbished more frequently.

Pedestrian Issues

P1. There is a loading zone on 14th Street on the northwest corner that extends to the crosswalk. When a large vehicle is parked in this loading zone, it obstructs the visibility of drivers making a southbound right-turn, thereby endangering pedestrians in the crosswalk.

P2. 14th Street southbound cars turning right onto Columbia Road are conflicting with pedestrians in the crosswalk.

P3. Some of the curb ramps at the intersection of 14th Street and Columbia Road do not meet ADA slope and truncated dome requirements. They may also require audible pedestrian signals (APS).

Bicycle Issues

B1. 14th Street southbound cars turning right onto Columbia Road are conflicting with through bicyclists.

B2.Participants noted the high volume of cyclists on 14th Street and the lack of bike lanes south of Columbia Road. This observation is confirmed by a May 2013 traffic volume count at 14th Street and Columbia Road of 171 southbound bicyclists in the AM peak period, representing over 25 percent of the southbound vehicular traffic at this intersection.

Vehicular Issues

V1. There is significant traffic congestion occurring on Columbia Road to the west of 14th Street. Up until approximately two years ago, this section of Columbia Road was similar to the sections east of 14th Street – two travel lanes during rush hours. Now, there is resident permit parking (RPP) on the south side and PR rush-hour restricted parking on the north side.

V2. Participants observed that drivers frequently "block the box." Cars stop in the intersection after the light turns red, thereby obstructing the passage of vehicles from the cross street.

V3. A participant who resides near this intersection commented that illegal loading frequently occurs in the bus zone on Columbia Road just west of 14th Street, and double-parking/loading in the southbound 14th Street travel lane just north of Columbia Road.

V4. On Columbia Road, just west of 14th Street, there are alley entrances on either side of the street that nearly align (Harvard Court NW to the south). Drivers often dart across from the southern entrance to the northern side. One of the 16 bike collisions occurred at this location.

V5. The northbound 14th Street inside lane is left only at Columbia Road, but the pavement markings are faded and there is no dedicated left turn phase. Consequently, some drivers

were observed going straight from this lane and merging into the one northbound lane in the next block. The bike lane in this block is often blocked as a result of this merging.

V6. A participant noted that there are bus stops on nearly every block of 14th Street in this area. Bus stop consolidation could help to simplify operation for all modes.

V7. There is a no right turn on red sign for southbound 14th Street that is located too far to the right of the intersection.

3.4. Next Steps

The following table identifies the next step for each issue and the associated timeline. Wherever possible, both design/evaluation and implementation timelines are noted, but further exploration for some issues may find potential solutions infeasible.

Issue	Next Step	Timeline
Overall Issues		
O1. Roadway markings are faded.	Restripe all roadway markings.	Evaluation: Fall 2016 Implementation: All markings installed between Florida and Girard. Girard to Columbia to be installed in Spring 2017.
Pedestrian Issues		
P1. NW corner loading zone obstructing crosswalk visibility	Move the loading zone back from the crosswalk.	Evaluation: Fall 2016 Implementation: Signs to be installed (loading zone moved) in March 2017.
P2. Vehicle/pedestrian conflicts from SB 14th St to WB Columbia Road	Add a leading pedestrian interval (LPI) to give people walking an earlier start entering the crosswalk.	Evaluation: Fall 2016 Implementation: November 9, 2016 on all four crosswalks.
P3. Some curb ramps do not meet current ADA requirements.	Assess all ramps for ADA compliance.	Evaluation: Spring 2017 Implementation: To be scheduled following evaluation.
Bicycle Issues		
B1. Vehicle/bicycle conflicts from SB 14th St to WB Columbia Rd	Add a leading pedestrian interval (LPI) to give people biking a head start crossing the intersection. Identify pavement markings to highlight bicycle presence.	Evaluation: Fall 2016 Implementation: November 9, 2016 on all four crosswalks.

Issue	Next Step	Timeline
B2. High volume of cyclists	Bike lane does not continue south of Columbia Rd. Investigate adding a bicycle lane to improve visibility of cyclists and separation from motor vehicle traffic.	Evaluation: Summer 2016 Implementation: Bike lanes installed between Florida and Girard. Girard to Columbia to be installed in Spring 2017.
Vehicular Issues		
V1. Traffic congestion on Columbia Rd west of 14th St	Investigate why Columbia Rd was reduced to one lane during the AM rush hour.	Evaluation: Spring 2017. Current configuration is due to need for resident-only parking on north side of street. Implementation: To be based on the outcome of field evaluation.
V2. Cars observed blocking the box.	Explore adding a second lane on Columbia Rd during the AM rush, and/or signal operations that would improve traffic flow.	Evaluation: Spring 2017 Implementation: To be based on the outcome of field evaluation.
V3. Illegal loading in Columbia Rd bus zone west of 14th St and double-parking/loading in 14th St SB travel lane	Investigate if current loading zones are adequate; enforcement	Evaluation: Winter 2017 Implementation: Loading zones to be resized/repositioned in March 2017.
V4. Cars observed "shooting" across Columbia Rd west of 14th from the alleys	Explore traffic calming strategies	Evaluation: Winter 2017 Implementation: Mitigation not currently possible. DDOT practice is to not implement traffic calming in alleys due to drainage and other safety concerns.
V5. Some cars in NB left turn lane at Columbia not turning left, going straight through intersection, merging into one travel lane	Refresh faded left-turn markings; identify traffic signal changes to ease left turns; consider advance signs for left turn lane	Evaluation: Fall 2016 Implementation: Markings to be refreshed in Spring; does not meet warrant for a protected left turn signal.
V6. Multiple bus stop locations along corridor	Investigate bus stop consolidation to reduce potential conflicts	Evaluation: Fall 2016 Implementation: WMATA is not pursuing stop consolidation at this time based on community feedback.
V7. No right turn on red sign located too far from intersection.	Move sign to traffic signal mast arm.	Evaluation: Summer 2016 Implementation: March 2017

Table 3. 14th Street and Columbia Road NW Next Steps

4.0 Georgia Avenue and Kennedy Street NW

The intersection of Georgia Avenue and Kennedy Street NW is located in Ward 4. There is no nearby Metro station, but it is a major bus transfer point. The intersection is served by the 70/79 routes that travel on Georgia Avenue, and the E4 route that travels on Kennedy Street. At the study intersection, Georgia Avenue is a north-south roadway, with two-way traffic; Kennedy Street is an east-west roadway, with two-way traffic. Georgia Avenue is classified as a principal arterial with a posted speed limit of 30 mph. Kennedy Street is classified as a collector with a posted speed limit of 25 mph. The average ADT is 21,000 along Georgia Avenue and 7,100 along Kennedy Street.

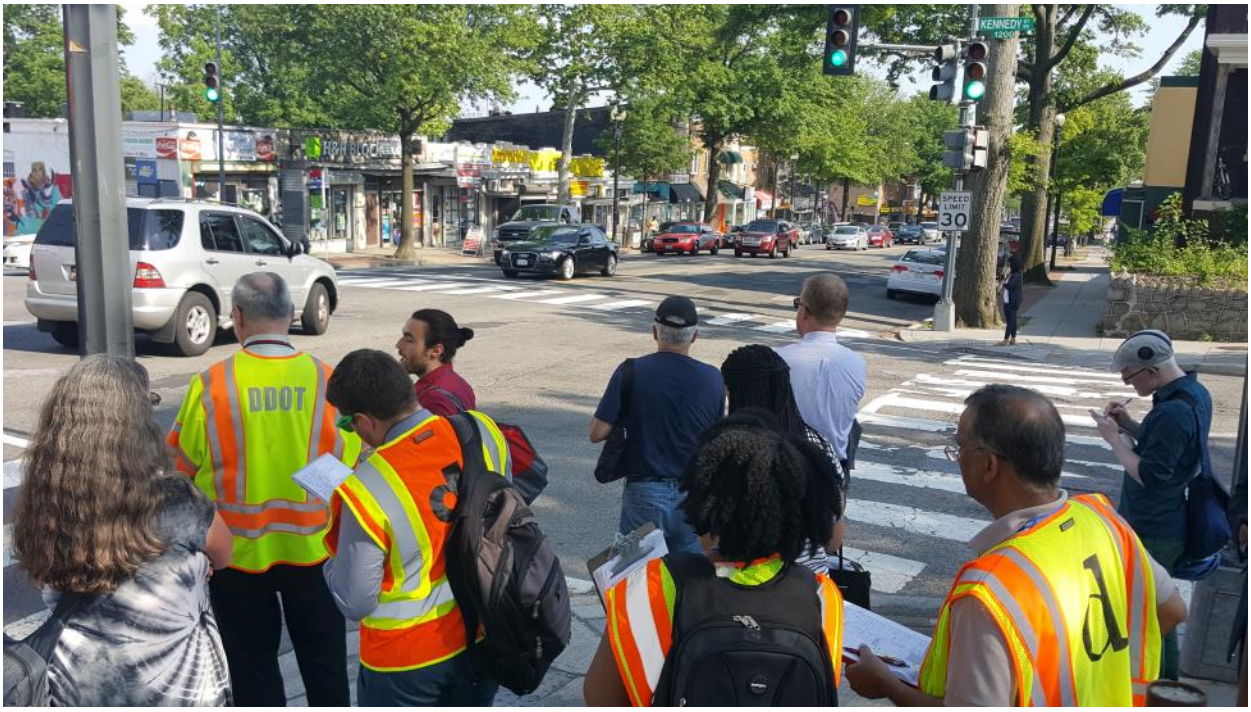

Figure 12. Georgia Avenue and Kennedy Street NW Site Visit

The May 26, 2016 site visit included Councilmember Cheh's staff, Councilmember Todd and staff, bicycle and pedestrian safety advocates, MOCRS staff, DDOT staff, and a representative from the DC Pedestrian Advisory Council.

4.1. Crash Data

From January 1, 2013 to December 31, 2015, there were 41 crashes at this intersection. Of those, 29 percent of the crashes were sideswipes, which tend to occur when drivers quickly change lanes. Another 17 percent of the crashes were rear ends, which occur due to sudden stops. The total crashes resulted in one disabling injury, and one non-disabling injury. Four pedestrians and one bicyclist were involved in crashes at this intersection. Alcohol or drugs were a factor in one crash. Figure 13 provides the summary

report of crashes at this intersection. Figure 14 provides a collision diagram for the crashes at this intersection.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: GEORGIA AVE and KENNEDY ST, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** Steven Arhin **Prepared Date:** 5/24/2016

Total Number of Accident:	41
Total Number of Fatalities:	0
Total Number of Injuries:	23
Total Number of Disabling Injuries:	1
Total Number of NonDisabling Injuries:	1
Total Number of Pedestrians Involved:	4
Total Number of Bicycles Involved:	1
Total Number of Motorcycles Involved:	0

Collision Type	#ACC	%	Collision Type	#ACC	%
Right Angle:	4	9.8%	Fixed Object:	1	2.4%
Left Turn:	3	7.3%	Ran Off Road:	0	0.0%
Right Turn:	1	2.4%	Ped. Involved:	4	9.8%
Rear End:	7	17.1%	Backing:	1	2.4%
Side Swiped:	12	29.3%	Non Collision:	0	0.0%
Head On:	1	2.4%	Under/Over Ride:	0	0.0%
Parked:	1	2.4%	Unspecified:	6	14.6%

Time of Day	#ACC	%
07:30 ~ 09:30:	2	4.9%
09:30 ~ 11:30:	4	9.8%
11:30 ~ 13:30:	6	14.6%
13:30 ~ 16:00:	5	12.2%
16:00 ~18:30:	8	19.5%
18:30 ~ 07:30:	16	39.0%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	5	12.2%
Monday:	11	26.8%
Tuesday:	4	9.8%
Wednesday:	4	9.8%
Thursday:	4	9.8%
Friday:	6	14.6%
Saturday:	7	17.1%

Weather Condition	#ACC	%
Clear:	32	78.0%
Rain:	7	17.1%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	1	2.4%
Unspecified:	1	2.4%

Surface Condition	#ACC	%
Dry:	32	78.0%
Wet:	7	17.1%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	2	4.9%

Type of Vehicle	#VEH	%
Passenger Car:	65	82.3%
Bus:	6	7.6%
Truck:	2	2.5%
Taxi:	1	1.3%
Minivan:	0	0.0%
Police/Emergency Vehicle:	1	1.3%
Motorcycle/Moped:	1	1.3%
Bicycle:	1	1.3%
Fixed Object:	0	0.0%
Unspecified:	2	2.5%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	19	46.3%
PDO Collision:	22	53.7%

Light Condition	#ACC	%
Daylight:	26	63.4%
Dawn/Dusk:	3	7.3%
Dark(Lighted):	11	26.8%
Dark(Not Lighted):	0	0.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	1	2.4%

Contributing Factor	#VEH	%
Driver: Speed:	0	0.0%
Driver: Alcohol/Drug:	1	1.3%
Driver: Electronic Device:	0	0.0%
Driver: Others:	14	17.7%
Vehicle:	0	0.0%
Roadway:	0	0.0%
Unspecified:	64	81.0%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	2	50.0%
In Crosswalk against Signal:	1	25.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not In Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	1	25.0%

7 Records are not approved as of 5/24/2016 11:46:13 AM

Figure 13. Georgia Avenue and Kennedy Street NW Crash Data

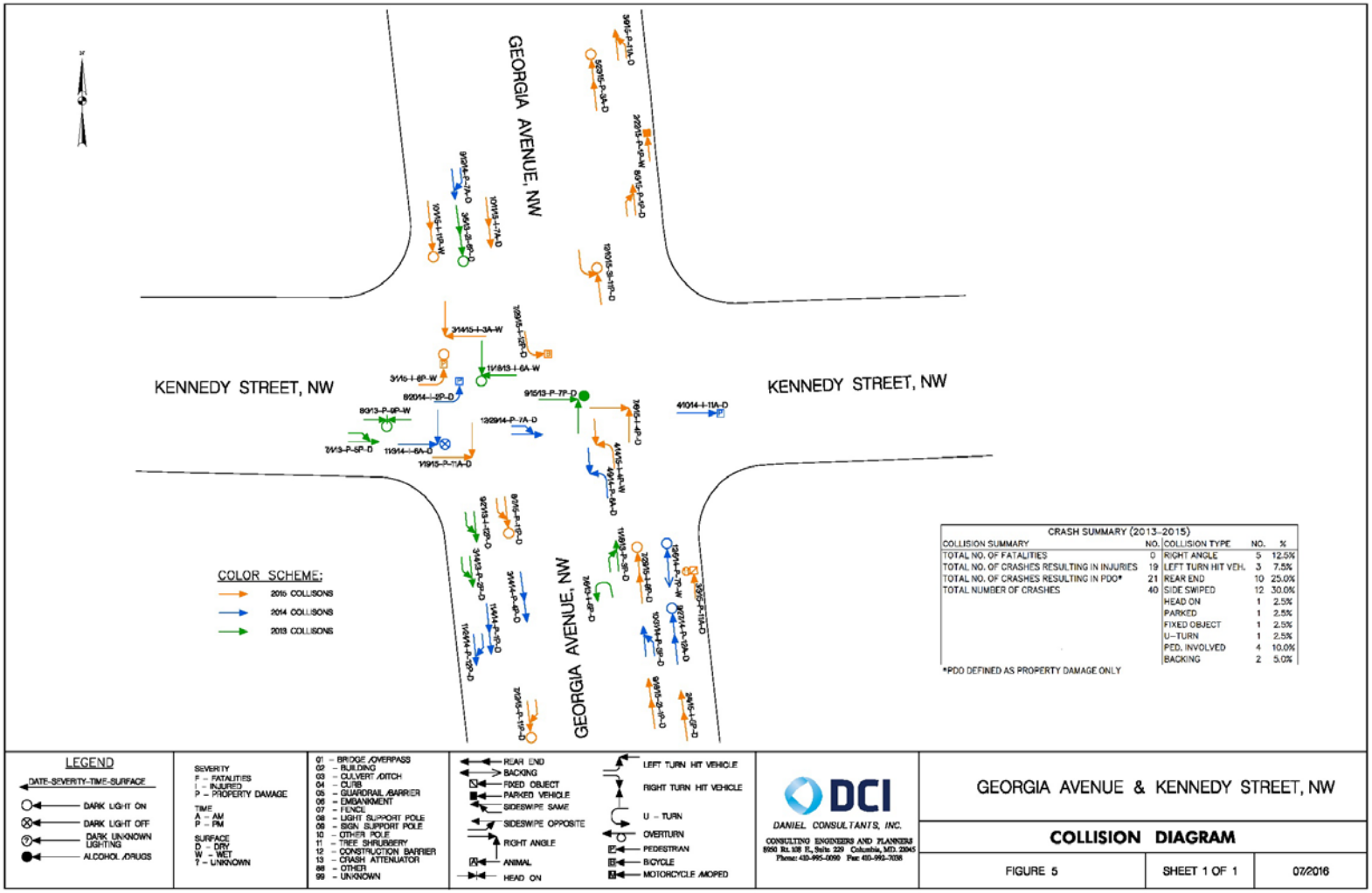

Figure 14. Georgia Avenue and Kennedy Street NW Crash Diagram

Spring 2016 High Crash Intersection Site Visits

4.2. Recent and Planned Projects

DDOT is currently administering the construction phase of the Kennedy Street Revitalization Project, which extends from Georgia Avenue to North Capitol Street. Work completed to date includes catch basin installation, new granite curbs, brick sidewalk placement, and other streetscape improvements. Construction started in October 2016 and will continue through the fall of 2017. The project has been in process for several years, starting with planning meetings in 2013.

DDOT completed the Rock Creek East II Livability Study in September 2016. The large study area included this intersection, and identified a variety of transportation and green infrastructure recommendations throughout the study area. The livability study referred to the Vision Zero efforts to enhance pedestrian safety.

DDOT is beginning design on a second phase of Kennedy Street reconstruction, from Georgia Avenue to 16th Street. The design is expected to be complete in December 2017. Several of the following recommended actions may be implemented through the street reconstruction.

4.3. Site Visit Observations

On Thursday, May 26, 2016, beginning at 4:30 PM, participants identified issues related to all travel modes. Some can be addressed with short-term measures, while others will require more substantial capital improvements. Many require further investigation and evaluation by DDOT. The timeline for next steps is included in the next section.

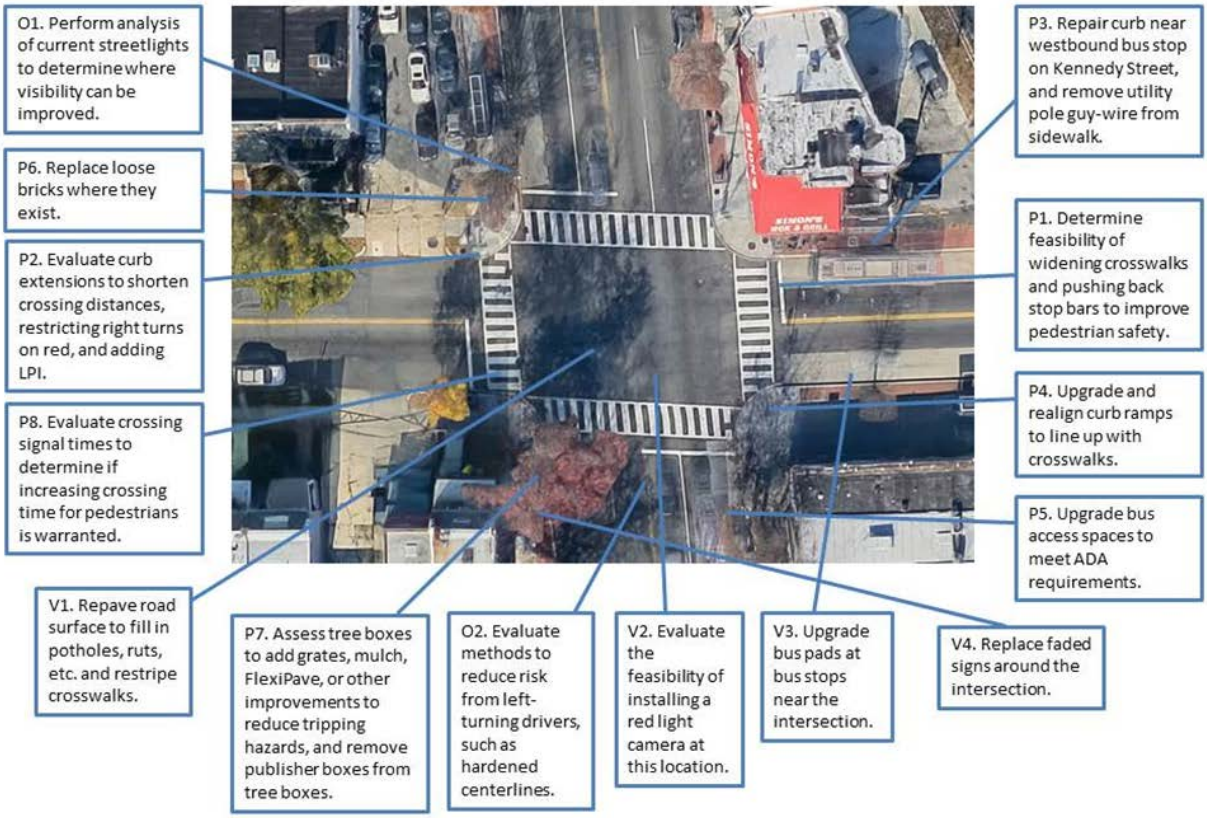

Figure 15. Georgia Avenue and Kennedy Street NW Site Visit Observations

Overall Issues

O1. Perform analysis of current streetlights to determine where visibility can be improved.

O2. Evaluate methods to reduce risk from left-turning drivers, such as hardened centerlines.

Pedestrian Issues

P1. Determine feasibility of widening crosswalks and pushing back stop bars to improve pedestrian safety.

P2. Evaluate curb extensions to shorten crossing distances, restricting right turns on red, and adding LPI.

P3. Repair curb near westbound bus stop on Kennedy Street, and remove utility pole guy-wire from sidewalk.

P4. Upgrade and realign curb ramps to line up with crosswalks.

P5. Upgrade bus access spaces to meet ADA requirements.

P6. Replace loose bricks where they exist.

P7. Assess tree boxes to add grates, mulch, FlexiPave, or other improvements to reduce tripping hazards, and remove publisher boxes from tree boxes.

P8. Evaluate crossing signal times to determine if increasing crossing time for pedestrians is warranted.

Bicycle Issues

No bicycle issues were observed, but implementation of the other recommendations will increase safety for all users, including bicyclists.

Vehicular Issues

V1. Repave road surface to fill in potholes, ruts, etc. and restripe crosswalks.

V2. Evaluate the feasibility of installing a red light camera at this location.

V3. Upgrade bus pads at bus stops near the intersection.

V4. Replace faded signs around the intersection.

4.4. Next Steps

The following table identifies the next step for each issue and the associated timeline. Wherever possible, both design/evaluation and implementation timelines are noted, but further exploration for some issues may find potential solutions infeasible.

Issue	Action	Timeframe
Overall Issues		
O1. Lack of visibility at the intersection.	Perform analysis of current streetlights to determine where visibility can be improved.	Evaluation: Spring 2017 Implementation: Improvements will be determined based on evaluation results.
O2. Three collisions involving a pedestrian or bike occurred from a left turning vehicle.	Evaluate methods to reduce risk from left-turning drivers, such as hardened centerlines.	Evaluation: Spring 2017 Implementation: To be determined based on evaluation outcome.
Pedestrian Issues		
P1. Crosswalks are too narrow for pedestrians.	Determine feasibility of widening crosswalks and pushing back stop bars to improve pedestrian safety.	Evaluation: Spring 2017 Implementation: To be determined based on evaluation outcome.

Issue	Action	Timeframe
P2. Three pedestrian collisions occurred in the crosswalks.	Evaluate curb extensions to shorten crossing distances, restricting right turns on red, and adding LPI.	Evaluation: Winter 2017 Implementation: Curb extensions under analysis. Restricting right turns on red and adding LPI are not feasible, due to no exclusive turn lanes at intersection and the turning volume is not high enough.
P3. Westbound bus stop on Kennedy Street has a chunk missing from the curb, and has a utility pole guy-wire grounded within it.	Repair curb near westbound bus stop on Kennedy Street, and remove utility pole guy-wire from sidewalk.	Evaluation: Spring 2017 Implementation: Repairing curb will be addressed through Kennedy Street reconstruction, complete by Fall 2017.Guy-wire placement and bus stop location will be evaluated through Kennedy Street Phase 1 reconstruction.
P4. Curb ramps are not aligned with crosswalks.	Upgrade and realign curb ramps to line up with crosswalks.	Evaluation: Spring 2017 Implementation: To be addressed through Kennedy Street Phase 2 reconstruction.
P5. Pedestrian bus access landings are not in compliance with ADA.	Upgrade bus access spaces to meet ADA requirements.	Evaluation: Spring 2017 Implementation: Currently evaluating improvements to bus stops, including if they should be moved to the far side for safety reasons.
P6. Bricks are loose in several places.	Replace loose bricks where they exist.	Evaluation: Winter 2017 Implementation: To be addressed through Kennedy Street Phases 1 and 2 reconstructions.
P7. Soil erosion in tree boxes presents a potential tripping hazard. Curbside trees have uplifted portions of sidewalks. Publisher boxes are in tree boxes.	Assess tree boxes to add grates, mulch, FlexiPave, or other improvements to reduce tripping hazards, and remove publisher boxes from tree boxes.	Evaluation: Winter 2017 Implementation: DDOT to place mulch in tree boxes as short term solution. Uplifted sidewalks to be addressed through Kennedy Street Phases 1 and 2 reconstructions.
P8. Crossing intervals appear short for both Georgia Avenue and Kennedy Street.	Evaluate crossing signal times to determine if increasing crossing time for pedestrians is warranted.	Evaluation: Spring 2017 Implementation: Currently evaluating if signal timing changes are recommended. Final determination in March.

Issue	Action	Timeframe
Vehicular Issues		
V1. Asphalt roadway surface on all approaches and within the crosswalks are in poor condition.	Repave road surface to fill in potholes, ruts, and other issues, and restripe crosswalks.	Evaluation: Winter 2017 Implementation: East side of Kennedy St will be resurfaced in Phase 1 of the reconstruction project, with the west side following in Phase 2.
V2. Red light running and speeding was observed.	Evaluate the feasibility of installing a red light camera at this location.	Evaluation: Winter 2017 Implementation: Crash history profile does not suggest that intersection would benefit from correction from a ride light camera.
V3. On street bus pads are in poor condition.	Upgrade bus pads at bus stops near the intersection.	Evaluation: Winter 2017 Implementation: DDOT is evaluating improvements to bus stops, including if they should be moved to the far side for safety reasons.
V4. Faded signs are present around the intersection.	Replace faded signs around the intersection.	Evaluation: Winter 2017 Implementation: Shop orders submitted February 2017 for new street cleaning, no standing, parking, and block number signs.

Table 4. Georgia Avenue and Kennedy Street NW Next Steps

5.0 44th Street and Nannie Helen Burroughs Avenue NE

The intersection of 44th Street and Nannie Helen Burroughs Avenue NE is located in Ward 7. The intersection is signalized with five approaches, including Hunt Place. This segment of 44th Street is classified as a collector, while Nannie Helen Burroughs Avenue is classified as a minor arterial street. The traffic signal operates in a pre-timed mode with a cycle length of 80 seconds during the AM peak hour, 75 seconds during the PM peak hours, and 75 seconds during off-peak hours. The posted speed limit on Nannie Helen Burroughs Avenue is 30 mph, while the unposted speed limit on 44th Street and Hunt Place are 25 mph. No parking restriction signs are posted along west curb of 44th Street between Hunt Place and Nannie Hellen Burroughs Avenue.

Figure 16. 44th Street and Nannie Helen Burroughs Avenue NE Site Visit

5.1. Crash Data

From January 1, 2013 to December 31, 2015, there were 64 police-reported crashes at this intersection, including one fatality and one disabling injury. Approximately 34 percent of the crashes were rear end, which tend to occur when drivers are distracted, fail to stay in their lane, follow too closely behind another vehicle, or speed. Over 20 percent of the crashes involved sideswipes, driver inattention, or improper lane changing. The one fatal crash involved an unlicensed driver traveling on Nannie Helen Burroughs Avenue NE on a Sunday morning. Speed was a factor in five of the crashes, and alcohol or drugs were involved in two of the crashes. Two of the crashes over the three-year period were bike related, and two involved pedestrians. Figure 17 provides the summary report of crashes at this intersection.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: 44TH ST and HUNT PL, NE

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** Steven Arhin **Prepared Date:** 11/21/201

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	64	Right Angle:	2	3.1%	Fixed Object:	3	4.7%
Total Number of Fatalities:	1	Left Turn:	1	1.6%	Ran Off Road:	1	1.6%
Total Number of Injuries:	36	Right Turn:	2	3.1%	Ped. Involved:	2	3.1%
Total Number of Disabling Injuries:	1	Rear End:	22	34.4%	Backing:	4	6.3%
Total Number of NonDisabling Injuries:	2	Side Swiped:	13	20.3%	Non Collision:	1	1.6%
Total Number of Pedestrians Involved:	4	Head On:	1	1.6%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	2	Parked:	3	4.7%	Unspecified:	9	14.1%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%
07:30 ~ 09:30:	7	10.9%
09:30 ~ 11:30:	5	7.8%
11:30 ~ 13:30:	3	4.7%
13:30 ~ 16:00:	10	15.6%
16:00 ~18:30:	10	15.6%
18:30 ~ 07:30:	29	45.3%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	9	14.1%
Monday:	7	10.9%
Tuesday:	7	10.9%
Wednesday:	7	10.9%
Thursday:	9	14.1%
Friday:	12	18.8%
Saturday:	13	20.3%

Weather Condition	#ACC	%
Clear:	44	68.8%
Rain:	11	17.2%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	1	1.6%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	8	12.5%

Surface Condition	#ACC	%
Dry:	46	71.9%
Wet:	15	23.4%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	3	4.7%

Type of Vehicle	#VEH	%
Passenger Car:	105	82.7%
Bus:	1	0.8%
Truck:	5	3.9%
Taxi:	2	1.6%
Minivan:	0	0.0%
Police/Emergency Vehicle:	8	6.3%
Motorcycle/Moped:	0	0.0%
Bicycle:	2	1.6%
Fixed Object:	0	0.0%
Unspecified:	4	3.1%

Accident Severity Type	#ACC	%
Fatal Collision:	1	1.6%
Injury Collision:	25	39.1%
PDO Collision:	38	59.4%

Light Condition	#ACC	%
Daylight:	35	54.7%
Dawn/Dusk:	2	3.1%
Dark(Lighted):	24	37.5%
Dark(Not Lighted):	1	1.6%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	2	3.1%

Contributing Factor	#VEH	%
Driver: Speed:	5	3.9%
Driver: Alcohol/Drug:	2	1.6%
Driver: Electronic Device:	0	0.0%
Driver: Others:	19	15.0%
Vehicle:	0	0.0%
Roadway:	1	0.8%
Unspecified:	100	78.7%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	1	25.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	1	25.0%
From Between Parked Cars:	0	0.0%
Unspecified:	2	50.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	24	1	12	1	0	0	0
2014	24	0	14	1	4	2	0
2015	16	0	10	0	0	0	0

7 Records are not approved as of 11/21/2016 2:59:55 PM

Figure 17. 44th Street and Nannie Helen Burroughs Avenue NE Crash Data

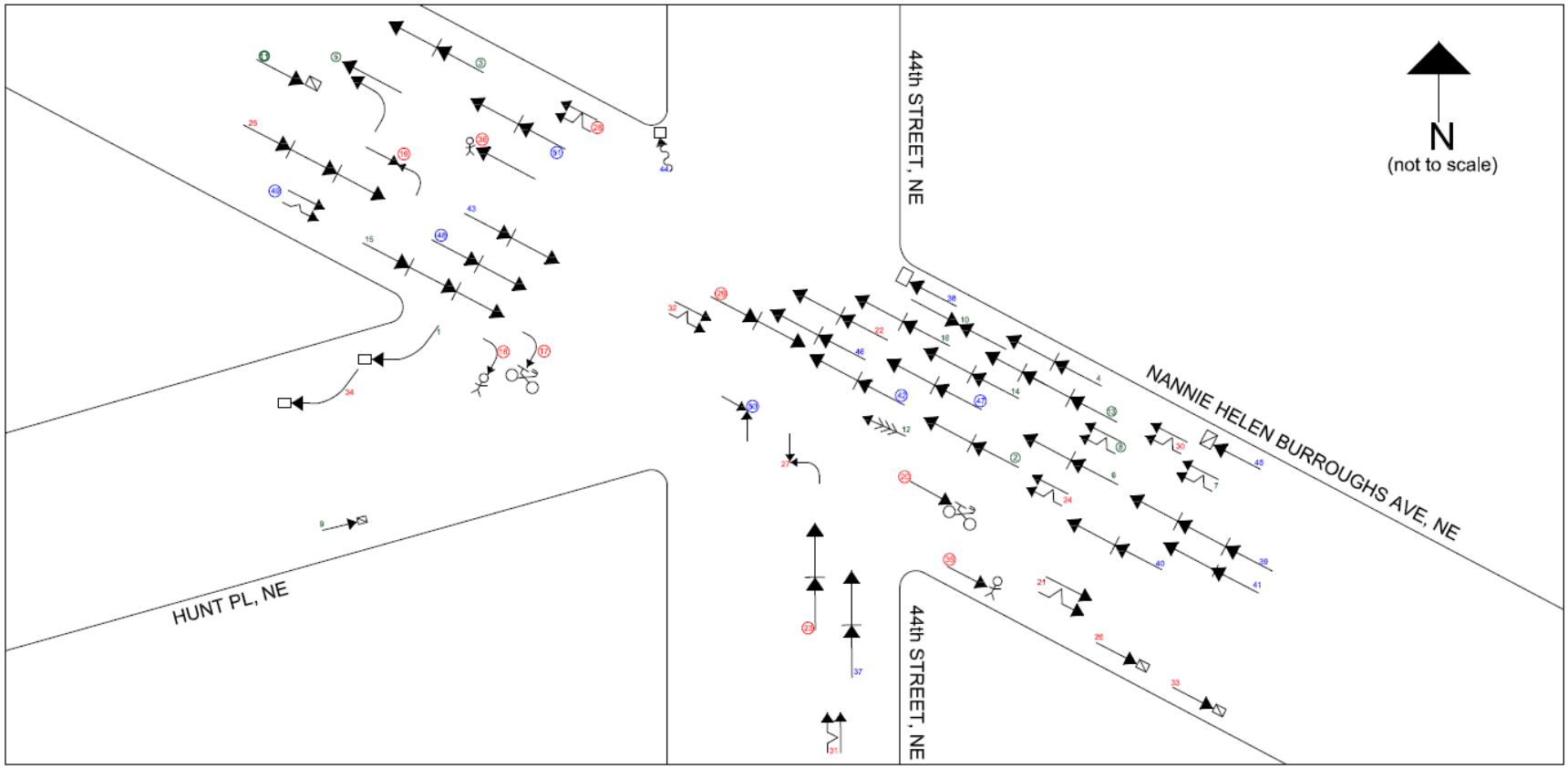

Figure 18. 44th Street and Nannie Helen Burroughs Avenue NE Crash Diagram

Figure 19. 44th Street and Nannie Helen Burroughs Avenue NE Intersection Diagram

5.2. Recent and Planned Projects

In 2012, DDOT completed a reconstruction of 44th Street, Nannie Helen Burroughs, and Hunt Place. The project improved roadway markings, signage, and traffic signal infrastructure. Other recent changes include installation of new traffic signal hardware, new street light fixtures, and new bus shelters. Nearside bus stops were installed, which appear to cause congestion when buses are stopped, most notably in the WB direction.

5.3. Site Visit Observations

Participants identified issues related to improving driver behavior. Observations conducted during the site visit found that many drivers travel along Nannie Helen Burroughs Avenue in excess of the 30 mph posted speed limit. This can contribute to crash occurrences and increase crash severity. Some such issues may only require minor fixes, while others could require more substantial capital improvements. Many require further investigation and evaluation by DDOT.

Pedestrian Issues

P1. Evaluate signal phasing and pedestrian signals.

P2. Refurbish crosswalk markings.

P3. Possible curb extension on Hunt Place.

Bicycle Issues

No bicycle issues were observed, but implementation of the other recommendations will increase safety for all users, including bicyclists.

Transit Issues

T1. Explore relocating eastbound bus stop.

Vehicular Issues

V1. Motorists observed turning too wide.

V2. Evaluate lane drop on eastbound Nannie Helen Burroughs Avenue.

5.4. Next Steps

The following table identifies the next step for each issue and the associated timeline. Wherever possible, both design/evaluation and implementation timelines are noted, but further exploration for some issues may find potential solutions infeasible.

Issue	Next Step	Timeline
Pedestrian Issues		
P1. Evaluate signal phasing and pedestrian signals across Hunt Place.	Pedestrians crossing Hunt Place currently run concurrent with 44th, although there are some heavy turn volumes. Determine if LPI would be feasible for pedestrians crossing Hunt and eastbound leg of NHB.	Evaluation: Fall 2016 Implementation: The evaluation determined that the current configuration is optimal.
P2. Crosswalk markings on NHB are not visible enough	Upgrade crosswalk markings on NHB to high visibility.	Evaluation: February 2017 Implementation: Two high visibility crosswalks will be installed by spring 2017, weather permitting.
P3. Curb extension on Hunt Place.	Potential to shorten Hunt Place crossing with curb extension on SW corner of intersection.	Evaluation: Winter 2017 Implementation: Evaluate implementing implications, with implementation in Spring 2017.

Transit Issues		
T1. Explore relocating eastbound bus stop to far side of 44th Street	To be discussed with WMATA	Evaluation: Winter 2017 Implementation: Coordinate with WMATA for implementation in Spring 2017.
Vehicular Issues		
V1. Motorists observed turning too wide.	Puppy skips to guide NB 44th Street motorists onto WB Nannie Helen Burroughs Ave	Evaluation: February 2017 Implementation: Further evaluation determined that puppy skips are not warranted at this intersection.
V2. Evaluate lane drop on EB NHB.	Contingent on T1. With relocation of bus stop to far side, lane drop could happen at 44th.	Evaluation: Winter 2017 Implementation: Contingent upon evaluation of T1.

Table 5. 44th Street and Nannie Helen Burroughs Avenue NE Next Steps

6.0 18th Street and Adams Mill Road NW

18th Street NW is classified as a minor arterial, with ADT volumes of 17,400 VPD. It is a two-lane north-south roadway, with on-street parking on both sides. It has an exclusive right-turn lane in the northbound direction. Adams Mill Road NW is classified as a collector road with ADT volumes of 4,800 vehicles per day. It is also a two-lane north-south roadway, with on-street parking on the west side of the road and exclusive right-turn and left-turn lanes in the southbound direction. Columbia Road is classified as a minor arterial with ADT volumes of 12,600 VPD. Its configuration varies from two to three lanes, with exclusive bike lanes and on-street parking on both sides in the vicinity of the study intersection. It has exclusive left-turn and right-turn lanes in the westbound direction.

Figure 20. 18th Street and Adams Mill Road NW Site Visit

6.1. Crash Data

According to the crash report, from January 1, 2013 to December 31, 2015, there were 61 crashes at this intersection out of which, 17 were sideswipes, 11 were rear ends, 3 were parked, and 9 occurred while vehicles were making turns. There was a total of 14 known injuries reported in these crashes with two known to be disabling.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: COLUMBIA RD and ADAMS MILL RD, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** Steven Arhin **Prepared Date:** 6/2/2016

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	61	Right Angle:	3	4.9%	Fixed Object:	1	1.6%
Total Number of Fatalities:	0	Left Turn:	3	4.9%	Ran Off Road:	0	0.0%
Total Number of Injuries:	14	Right Turn:	3	4.9%	Ped. Involved:	5	8.2%
Total Number of Disabling Injuries:	2	Rear End:	11	18.0%	Backing:	5	8.2%
Total Number of NonDisabling Injuries:	1	Side Swiped:	17	27.9%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	6	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	10	Parked:	3	4.9%	Unspecified:	10	16.4%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	2	3.3%	Sunday:	16	26.2%
09:30 ~ 11:30:	6	9.8%	Monday:	6	9.8%
11:30 ~ 13:30:	0	0.0%	Tuesday:	5	8.2%
13:30 ~ 16:00:	6	9.8%	Wednesday:	3	4.9%
16:00 ~18:30:	4	6.6%	Thursday:	9	14.8%
18:30 ~ 07:30:	43	70.5%	Friday:	6	9.8%
Unspecified:	0	0.0%	Saturday:	16	26.2%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	49	80.3%	Dry:	52	85.2%
Rain:	6	9.8%	Wet:	6	9.8%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	6	9.8%	Unspecified:	3	4.9%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	77	65.8%	Fatal Collision:	0	0.0%
Bus:	5	4.3%	Injury Collision:	12	19.7%
Truck:	4	3.4%	PDO Collision:	49	80.3%
Taxi:	12	10.3%			
Minivan:	0	0.0%	**Light Condition**	**#ACC**	**%**
Police/Emergency Vehicle:	1	0.9%	Daylight:	19	31.1%
Motorcycle/Moped:	1	0.9%	Dawn/Dusk:	0	0.0%
Bicycle:	10	8.5%	Dark(Lighted):	39	63.9%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	7	6.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	3	4.9%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	2	50.0%
Driver: Alcohol/Drug:	2	1.7%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	1	25.0%
Driver: Others:	28	23.9%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	1	0.9%	Not in Crosswalk:	1	25.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	86	73.5%	Unspecified:	0	0.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	16	0	6	0	6	0	0
2014	25	0	4	1	0	5	0
2015	20	0	4	0	0	5	0

13 Records are not approved as of 6/2/2016 2:10:29 PM

Figure 21. 18th Street and Adams Mill Road NW Crash Data

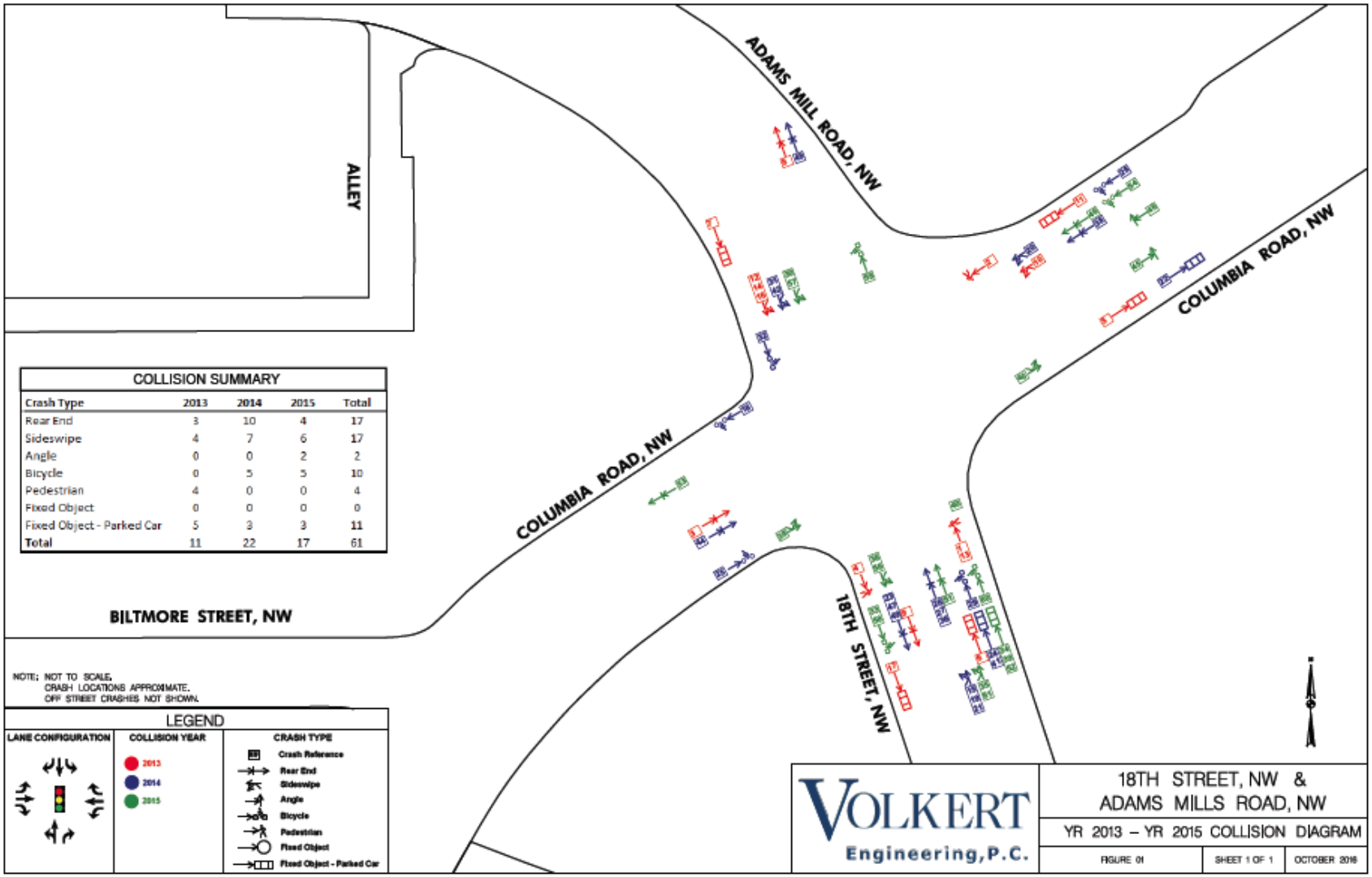

Figure 22. 18th Street and Adams Mill Road NW Crash Diagram

Spring 2016 High Crash Intersection Site Visits

6.2. Recent and Planned Projects

DDOT completed the Adams Morgan Streetscape project in 2012, which involved a full reconstruction of 18th Street from Florida Avenue to Columbia Road, and included safety, ADA, drainage, utility, and other improvements. The Metropolitan Police Department (MPD) is proposing to install a speed camera on the 1700 block of Columbia Road NW in the northbound direction.

6.3. Site Visit Observations

On Thursday, June 2, 2016, beginning at 4:30 PM, site visit participants identified issues related to all travel modes. Some may only require minor fixes while others could require more substantial capital improvements. Many require further investigation and evaluation by DDOT.

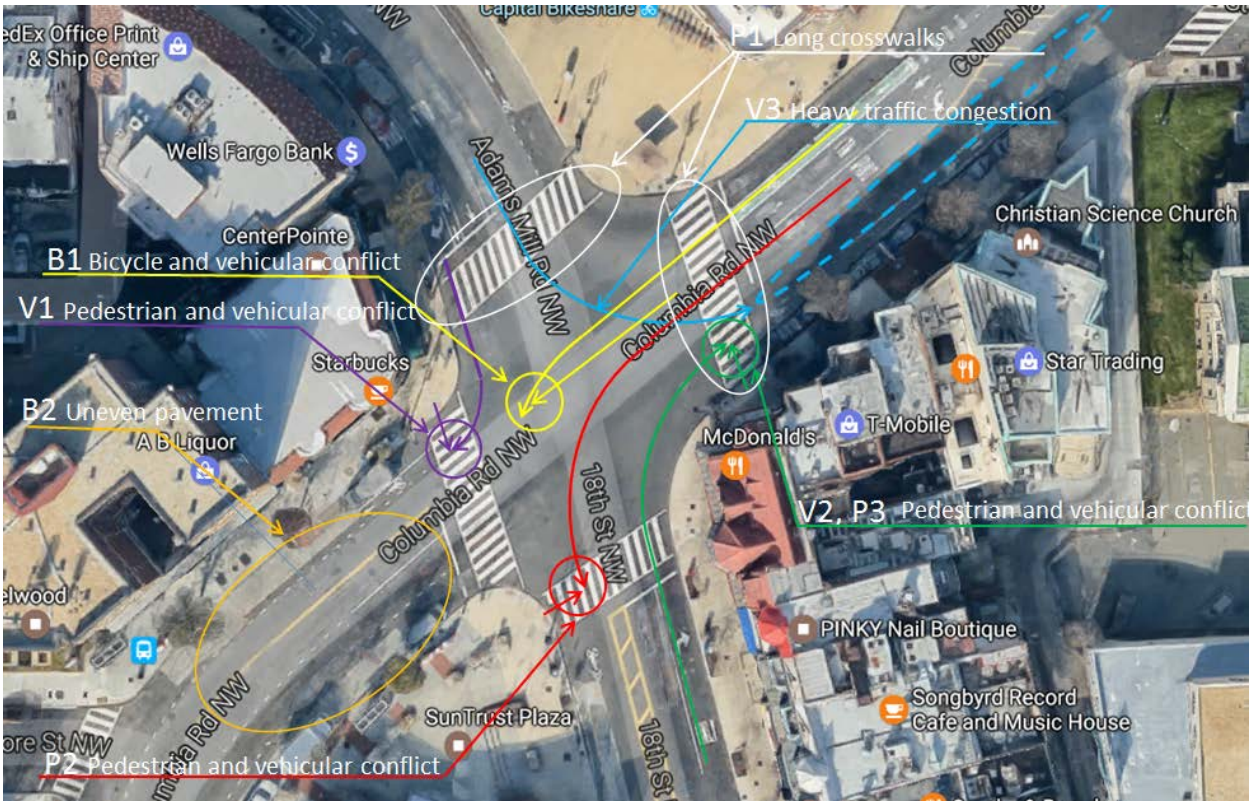

Figure 23. 18th Street and Adams Mill Road NW Site Visit Observations

Pedestrian Issues

P1. Leading left turn signal at westbound Columbia creates conflict with pedestrians who have the walk signal crossing 18th Street. Long crosswalks make crossing difficult for pedestrians.

P2. Poor visibility of pedestrians for right-turning vehicles and bikes from 18th St to eastbound Columbia.

Bicycle Issues

B1. Westbound Columbia Rd. bicyclists need a safer way to make a left turn onto southbound 18th Street.

B2. Uneven pavement on Columbia Rd west of intersection. Potential for bicycle-vehicle conflicts due to swerving.

Vehicular Issues

V1. Right-turning vehicles do not yield or stop for pedestrians with walk signal.

V2. Vehicles speed while making right turns due to large turning radius curb lines, endangering pedestrians crossing on walk signal.

V3. Congestion from Adams Mill traffic making left turn onto eastbound Columbia Rd. all the way to 16th St.

6.4. Next Steps

The following table identifies the next step for each issue and the associated timeline. Wherever possible, both design/evaluation and implementation timelines are noted, but further exploration for some issues may find potential solutions infeasible.

Issue	Next Step	Timeline
Pedestrian Issues		
P1. Leading left turn signal at westbound Columbia creates conflict with pedestrians who have the walk signal crossing 18th St. Long crosswalks make crossing difficult for pedestrians.	Signal Division to conduct a study. Curb extensions will be evaluated.	Evaluation: March 2017 Implementation: Contractor review of curb extensions to complete in April.
P2. Poor visibility of pedestrians for right-turning vehicles and bikes from 18th St to eastbound Columbia.	“Curb extensions” with paint and possibly flex posts to slow turning vehicles from NB 18th to EB Columbia Road	Evaluation: April 2017 Implementation: Study to identify potential for long-term curb realignment.
Bicycle Issues		
B1. Westbound Columbia Rd. bicyclists need a safer way to make a left turn onto southbound 18th St.	Provide exclusive lane parallel to the crosswalk crossing east side Columbia Rd. or two-stage turn box to provide a "Copenhagen left."	Evaluation: Winter 2017 Implementation: Design is currently underway, with implementation by April 2017.

Issue	Next Step	Timeline
B2. Uneven pavement on Columbia Rd south of intersection. Potential for bicycle-vehicle conflicts due to swerving.	Pavement resurfacing	Evaluation: Winter 2017 Implementation: Long-term, pending inclusion in paving plan. Not scheduled for near future resurfacing but DDOT will assess partial resurfacing.
Vehicular Issues		
V1. Right-turning vehicles do not yield or stop for pedestrians with walk signal.	Install DC Law Turning Vehicles Stop for Pedestrians	Evaluation: March 2017 Implementation: Sign installation April 2017.
V2. Vehicles speed while making right turns due to large turning radius curb lines, endangering pedestrians crossing on walk signal.	Modify the curbs and reduce the turning radiuses.	Evaluation: April 2017 Implementation: To be determined based on evaluation results.
V3. Congestion from Adams Mill traffic making left turn onto eastbound Columbia Rd. all the way to 16th St.	Modification on existing single eastbound Columbia Rd lane configuration to a possible double travel lane signal timing modification.	Evaluation: April 2017 Implementation: To be determined based on evaluation results.

Table 6. 18th Street and Adams Mill Road NW Next Steps

7.0 Wisconsin Avenue and Albemarle Street NW

The intersection of Wisconsin Avenue and Albemarle Street NW is located adjacent to the Tenleytown-AU Metro station. At the study intersection, Wisconsin Avenue is a four lane north-south roadway with two-way traffic; Albemarle Street is a two lane east-west roadway with two-way traffic. Both streets have on-street parking on both sides.

The August 17, 2016 site visit included Councilmember Cheh and staff, DDOT staff, bicycle advocates, MPD officers, residents, as well as representatives from the Pedestrian Advisory Council.

7.1. Crash Data

From January 1, 2013 to December 31, 2015, there were 53 crashes at this intersection. Approximately 45% of the crashes were sideswipes, which tend to occur when drivers quickly change lanes. Over 11% of the crashes were right turns, which occur when drivers take turns too quickly, or without looking for pedestrians or other drivers. These crashes resulted in fifteen injuries, of which one was disabling. No fatalities occurred as a result of these crashes. Speed was a factor in one crash, and alcohol/drugs was not a factor in any crash. Eight pedestrians and one bicyclist were involved in crashes at this intersection. Figure 24 provides the summary report of crashes at this intersection.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: WISCONSIN AVE and ALBEMARLE ST, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** Steven Arhin **Prepared Date:** 8/16/2016

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	53	Right Angle:	2	3.8%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	2	3.8%	Ran Off Road:	0	0.0%
Total Number of Injuries:	15	Right Turn:	6	11.3%	Ped. Involved:	5	9.4%
Total Number of Disabling Injuries:	1	Rear End:	5	9.4%	Backing:	1	1.9%
Total Number of NonDisabling Injuries:	0	Side Swiped:	24	45.3%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	8	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	1	Parked:	1	1.9%	Unspecified:	7	13.2%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	8	15.1%	Sunday:	2	3.8%
09:30 ~ 11:30:	7	13.2%	Monday:	8	15.1%
11:30 ~ 13:30:	9	17.0%	Tuesday:	6	11.3%
13:30 ~ 16:00:	9	17.0%	Wednesday:	7	13.2%
16:00 ~18:30:	10	18.9%	Thursday:	11	20.8%
18:30 ~ 07:30:	10	18.9%	Friday:	11	20.8%
Unspecified:	0	0.0%	Saturday:	8	15.1%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	43	81.1%	Dry:	43	81.1%
Rain:	2	3.8%	Wet:	8	15.1%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	1	1.9%
Fog/Mist:	3	5.7%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	5	9.4%	Unspecified:	1	1.9%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	73	71.6%	Fatal Collision:	0	0.0%
Bus:	7	6.9%	Injury Collision:	11	20.8%
Truck:	10	9.8%	PDO Collision:	42	79.2%
Taxi:	4	3.9%			
Minivan:	0	0.0%	**Light Condition**	**#ACC**	**%**
Police/Emergency Vehicle:	2	2.0%	Daylight:	37	69.8%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	1	1.9%
Bicycle:	1	1.0%	Dark(Lighted):	11	20.8%
Fixed Object:	0	0.0%	Dark(Not Lighted):	1	1.9%
Unspecified:	5	4.9%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	3	5.7%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	1.0%	In Crosswalk with Signal:	4	66.7%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	1	16.7%
Driver: Others:	18	17.6%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	1	1.0%	From Between Parked Cars:	0	0.0%
Unspecified:	82	80.4%	Unspecified:	1	16.7%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	16	0	7	0	1	1	0
2014	16	0	2	0	2	0	0
2015	21	0	6	0	5	0	0

7 Records are not approved as of 8/16/2016 2:46:27 PM

Figure 24. Wisconsin Avenue and Albemarle Street NW Crash Data

7.2. Recent and Planned Projects

In December 2016, WMATA completed the Tenleytown-AU Station Access Study Phase II, which considered improvements to the blocks around the east entrance of the Metro station. The goals of the study were to improve multimodal access, enhance the public realm, reduce vehicular conflicts, and improve the transit customer's waiting experience. The WMATA study completed the planning phase, and DDOT is responsible for the next step, which is the design phase.

7.3. Site Visit Observations

On Wednesday, August 17, 2016 beginning at 8:30am, participants identified issues related to all travel modes. Some may only require minor fixes, while others may require more substantial capital improvements. Many require further investigation and evaluation by DDOT. The timeline for next steps is included in the next section.

Figure 25. Wisconsin Avenue and Albemarle Street NW Site Visit Observations

Overall Issues

O1. Remove or push back parking on Albemarle Street between Wisconsin Avenue and Fort Drive to improve visibility.

Pedestrian Issues

P1. Install leading pedestrian interval (LPI) at intersection.

P2. Mark Whole Foods driveway with crosswalk, other markings, warning surface, or other treatments. Install an audible signal.

P3. Investigate banning right turns on red at the intersection.

Bicycle Issues

No bicycle issues were observed, but implementation of the other recommendations will increase safety for all users, including bicyclists.

Vehicle Issues

V1. Investigate better signage to decrease occurrence of illegal left turns.

V2. Add "Don't Block the Box" signs to reduce congestion.

V3. Investigate stationing a Traffic Control Officer (TCO) during the PM rush.

7.4. Next Steps

The following table identifies the next step for each issue and the associated timeframe. DDOT is coordinating internally on each issue; further exploration for some issues may find potential solutions infeasible, or may find an alternate solution than what is listed here.

Issue	Next Step	Timeframe
Overall Issues		
O1. Parking near the intersection decreases visibility.	Remove or push back parking on Albemarle Street between Wisconsin Avenue and Fort Drive to improve visibility.	Evaluation: Fall 2016 Implementation: Short-term for pushing back parking. Removing parking on block is longer-term measure
Pedestrian Issues		
P1. Turning drivers increase risks to pedestrians.	Install LPI at intersection.	Evaluation: Fall 2016 Implementation: LPI design for all crosswalks is underway. The eastbound left turn phase is protected only, which is incompatible with an LPI.
P2. Wisconsin/Whole Foods driveway is challenging for pedestrians.	Mark Whole Foods driveway with crosswalk, other markings, warning surface, or other treatments. Look into installing an audible signal at driveway.	Evaluation: Winter 2017 Implementation: Further evaluation underway, with recommendations by spring 2017.

Issue	Next Step	Timeframe
P3. Drivers making right turns on red present challenges for pedestrians.	Investigate banning right turns on red at the intersection.	Evaluation: Winter 2017 Implementation: Line of sight analysis to be performed within 120 days.
Vehicular Issues		
V1. Left turns from SB Wisconsin to Albemarle are banned during rush hour but drivers still make illegal turns.	Investigate better signage to decrease occurrence of illegal left turns.	Evaluation: Winter 2017 Implementation: Shop order submitted February 2017 for replacement "No left turn" signs.
V2. Drivers blocking the box.	Add "Don't Block the Box" signs to decrease congestion.	Evaluation: Winter 2017 Implementation: Shop orders submitted February 2017 for signs at Wisconsin Ave northbound and southbound approaches.
V3. Need TCO during PM rush.	Investigate stationing a TCO during PM rush.	Evaluation: Winter 2017 Implementation: Analysis underway, with recommendation by March 2017.

Table 7. Wisconsin Avenue and Albemarle Street NW Next Steps

8.0 Connecticut Avenue and Porter Street NW

The intersection of Connecticut Avenue and Porter Street NW is located adjacent to the Cleveland Park Metro station. At the study intersection, Connecticut Avenue is a six-lane north-south roadway with two-way traffic; Porter Street is a four-lane east-west roadway with two-way traffic. To the east of the intersection, Quebec Street NW intersects Porter Street on the north side of the roadway, with a slip lane to Connecticut Avenue for northbound traffic.

The August 17, 2016 site visit included Councilmember Cheh's staff, DDOT staff, bicycle advocates, MPD officers, and residents.

Figure 26. Connecticut Avenue and Porter Street NW Site Visit

8.1. Crash Data

From January 1, 2013 to December 31, 2015, there were 52 crashes at this intersection. Approximately 44% of the crashes were sideswipes, which tend to occur when drivers quickly change lanes. Another 28% of crashes were due to rear ends. These crashes resulted in 11 injuries, of which 2 were disabling. No fatalities occurred as a result of these crashes. Speed was not a factor in any of these crashes, but alcohol/drugs was a factor in one crash. These crashes involved two pedestrians and one bicyclist. Figure 27 provides the summary report of crashes at this intersection.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: CONNECTICUT AVE and PORTER ST, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** admin TARAS **Prepared Date:** 1/30/2017

Total Number of Accident:	52
Total Number of Fatalities:	0
Total Number of Injuries:	11
Total Number of Disabling Injuries:	2
Total Number of NonDisabling Injuries:	2
Total Number of Pedestrians Involved:	2
Total Number of Bicycles Involved:	1
Total Number of Motorcycles Involved:	0

Collision Type	#ACC	%
Right Angle:	2	3.8%
Left Turn:	2	3.8%
Right Turn:	0	0.0%
Rear End:	15	28.8%
Side Swiped:	23	44.2%
Head On:	1	1.9%
Parked:	0	0.0%

Collision Type	#ACC	%
Fixed Object:	0	0.0%
Ran Off Road:	0	0.0%
Ped. Involved:	2	3.8%
Backing:	0	0.0%
Non Collision:	0	0.0%
Under/Over Ride:	0	0.0%
Unspecified:	7	13.5%

Time of Day	#ACC	%
07:30 ~ 09:30:	3	5.8%
09:30 ~ 11:30:	10	19.2%
11:30 ~ 13:30:	5	9.6%
13:30 ~ 16:00:	6	11.5%
16:00 ~18:30:	14	26.9%
18:30 ~ 07:30:	14	26.9%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	2	3.8%
Monday:	8	15.4%
Tuesday:	7	13.5%
Wednesday:	11	21.2%
Thursday:	7	13.5%
Friday:	9	17.3%
Saturday:	8	15.4%

Weather Condition	#ACC	%
Clear:	38	73.1%
Rain:	6	11.5%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	8	15.4%

Surface Condition	#ACC	%
Dry:	41	78.8%
Wet:	6	11.5%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	5	9.6%

Type of Vehicle	#VEH	%
Passenger Car:	74	70.5%
Bus:	10	9.5%
Truck:	9	8.6%
Taxi:	3	2.9%
Minivan:	0	0.0%
Police/Emergency Vehicle:	2	1.9%
Motorcycle/Moped:	0	0.0%
Bicycle:	1	1.0%
Fixed Object:	0	0.0%
Unspecified:	6	5.7%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	10	19.2%
PDO Collision:	42	80.8%

Light Condition	#ACC	%
Daylight:	31	59.6%
Dawn/Dusk:	2	3.8%
Dark(Lighted):	15	28.8%
Dark(Not Lighted):	1	1.9%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	3	5.8%

Contributing Factor	#VEH	%
Driver: Speed:	0	0.0%
Driver: Alcohol/Drug:	1	1.0%
Driver: Electronic Device:	0	0.0%
Driver: Others:	20	19.0%
Vehicle:	0	0.0%
Roadway:	0	0.0%
Unspecified:	84	80.0%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	2	100.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	18	0	8	2	2	1	0
2014	17	0	0	0	0	0	0
2015	17	0	3	0	0	0	0

9 Records are not approved as of 1/30/2017 10:45:34 AM

Figure 27. Connecticut Avenue and Porter Street NW Crash Data

8.2. Recent and Planned Projects

DDOT completed the Cleveland Park Transportation Study in 2013, which resulted in several recommendations regarding safety, the public realm, parking management, and the service lane along Connecticut Avenue. Notably, the study recommended removing the slip lane on Quebec Street and Porter Street to Connecticut Avenue. This would allow relocation of the bus stop on Porter Street west of the intersection with Quebec Street, adjacent to a new pedestrian plaza area.

Currently, DDOT is leading the Cleveland Park Streetscape and Drainage Improvement Project in coordination with WMATA. The project aims to address the recurring flooding problem near the Metro station, improve pedestrian safety, access and visibility at all intersections, and upgrade public amenities (curb ramps, adding bike racks, benches, and tree boxes). DDOT presented design concepts and gathered comments from the community at a public meeting in September 2016.

8.3. Site Visit Observations

On Wednesday, August 17, 2016 at 5:30 pm, participants identified issues related to all travel modes. Some may only require minor fixes, while others may require more substantial capital improvements. Many require further investigation and evaluation by DDOT. The timeline for next steps is included in the next section.

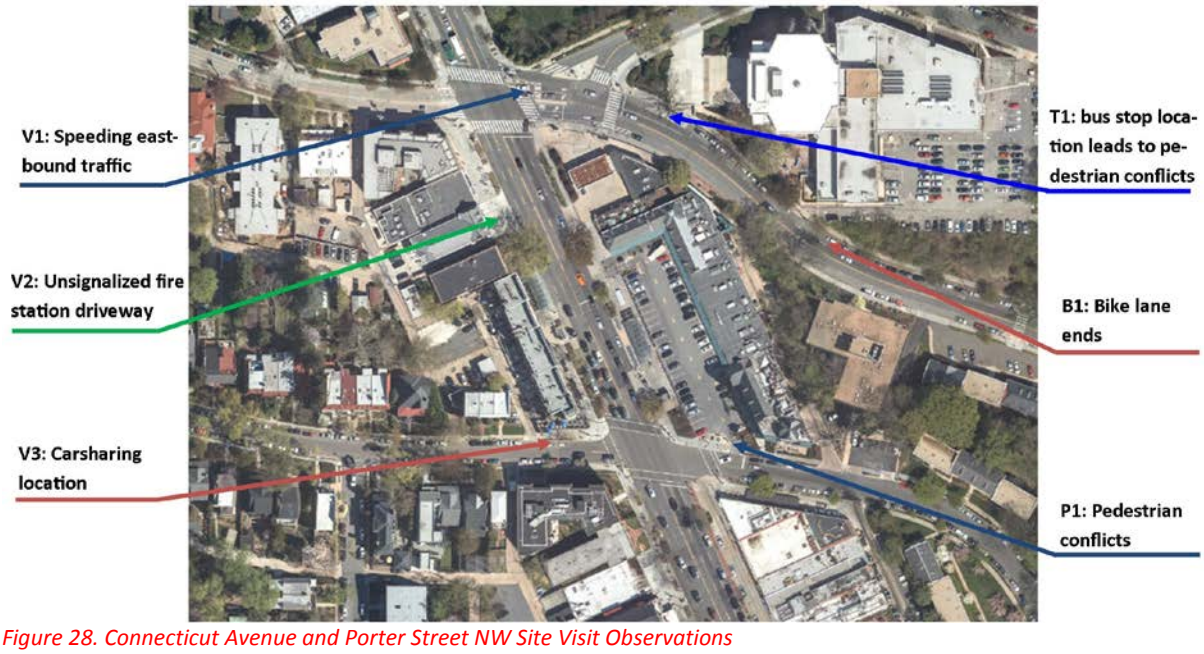

Figure 28. Connecticut Avenue and Porter Street NW Site Visit Observations

Pedestrian Issues

P1. Pedestrian conflicts with vehicles exiting the parking lot onto Ordway Street.

Bicycle Issues

B1. Bike climbing lane on Porter Street stops short of intersection with Connecticut Avenue.

Transit Issues

T1. Location of eastbound bus stop on Porter Street is nearside but far from the intersection, leading to conflicts with pedestrians accessing Metro and Park & Shop.

Vehicle Issues

V1. Eastbound traffic from Porter Street speeds through 30th Street and adjacent alleys due to queuing on approach to intersection with Connecticut Avenue.

V2. Fire station driveway on Connecticut Avenue is unsignalized.

V3. Carsharing location on the west side of Connecticut Avenue and Ordway Street not optimal.

8.4. Next Steps

The following table identifies the next step for each issue and the associated timeframe. DDOT is coordinating internally on each issue; further exploration for some issues may find potential solutions infeasible, or may find an alternate solution than what is listed here.

Issue	Next Step	Timeframe
Pedestrian Issues		
P1. Pedestrian conflicts with vehicles exiting the parking lot onto Ordway Street.	On SE corner at service drive, consider realignment to eliminate conflict. At NE corner, no options to modify historic plaza access to Ordway.	Evaluation: Winter 2017 Implementation: To be included in Cleveland Park Streetscape and Drainage Improvement Project.
Bicycle Issues		
B1. Bike lane on Porter Street stops short of intersection with Connecticut Avenue.	Extend bike climbing lane from 2501 Porter Street to intersection with Connecticut Avenue.	Evaluation: Winter 2017 Implementation: To be completed by August 2017.
Transit Issues		
T1. Location of eastbound bus stop on Porter Street is nearside but far from the intersection, leading to conflicts with pedestrians accessing Metro and Park & Shop.	Eliminate slip lane from Quebec Street to Connecticut Avenue and construct pedestrian plaza location for new bus stop.	Evaluation: Complete Implementation: To be included in Cleveland Park Streetscape and Drainage Improvement Project.

Issue	Next Step	Timeframe
Vehicular Issues		
V1. Eastbound traffic from Porter Street speeds through 30th Street and adjacent alleys due to queuing on approach to intersection with Connecticut Avenue.	Recommended installation of new off-set double yellow centerline and whiteline to create a left turn lane for northbound traffic from Porter. Crosswalk and stopbar pavement markings to be refurbished, as well as new sign installation.	Evaluation: November 2016 Implementation: Markings and sign installation completed November 2016.
V2. Fire station driveway on Connecticut Avenue is unsignalized.	Conduct signal warrant analysis for fire station driveway.	Evaluation: Winter 2017 Implementation: To be included in Cleveland Park Streetscape and Drainage Improvement Project, with completion by end of 2018.
V3. Carsharing location on the west side of Connecticut Avenue and Ordway Street conflicts with southbound vehicles turning right from Connecticut onto Ordway Street.	Eliminate one Enterprise parking location, and relocate the other to the east side of Connecticut Avenue and Ordway Street.	Evaluation: Complete Implementation: February 15, 2017

Table 8. Connecticut Avenue and Porter Street NW Next Steps

9.0 Wisconsin Avenue, Van Ness Street, and 39th Street NW

The intersection of Wisconsin Avenue, Van Ness Street, and 39th Street NW is approximately half a mile south of the Tenleytown-AU Metro station. At the study intersection, Wisconsin Avenue is a six-lane north-south roadway with two-way traffic and street parking during off-peak periods; Van Ness Street is a three-lane east-west roadway with two-way traffic. Just north of Van Ness Street, Wisconsin Avenue intersects with 39th Street NW, a one-way northbound street with two lanes of street parking and one travel lane.

The August 18, 2016 site visit included Councilmember Cheh's staff, DDOT representatives, bicycle advocates, MPD officers, and residents.

Figure 29. Wisconsin Avenue, Van Ness Street, and 39th Street NW Site Visit

9.1. Crash Data

From January 1, 2013 to December 31, 2015, there were 46 crashes at this intersection. Approximately 28% of the crashes were sideswipes, which tend to occur when drivers quickly change lanes. Another 19% involved rear ends, and 13% involved left turns. These crashes resulted in 20 injuries, of which one was disabling. No fatalities occurred as a result of these crashes (note: there was a pedestrian fatality at Wisconsin and Veazey Street in 2015). Speed was a factor in one crash. Five crashes involved pedestrians, one of which involved a pedestrian crossing with the walk signal, and one involved a bicyclist. Figure 29 provides the summary report of crashes at this intersection.

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-7)

Intersection: 39TH ST and VAN NESS ST, NW

Time Period Covered: From 01/01/2013 To 12/31/2015 **Prepared By:** admin TARAS **Prepared Date:** 1/30/2017

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	46	Right Angle:	1	2.2%	Fixed Object:	1	2.2%
Total Number of Fatalities:	0	Left Turn:	6	13.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	20	Right Turn:	3	6.5%	Ped. Involved:	4	8.7%
Total Number of Disabling Injuries:	1	Rear End:	9	19.6%	Backing:	2	4.3%
Total Number of NonDisabling Injuries:	7	Side Swiped:	13	28.3%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	5	Head On:	1	2.2%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	1	Parked:	0	0.0%	Unspecified:	6	13.0%
Total Number of Motorcycles Involved:	4						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	8	17.4%	Sunday:	2	4.3%
09:30 ~ 11:30:	5	10.9%	Monday:	5	10.9%
11:30 ~ 13:30:	6	13.0%	Tuesday:	7	15.2%
13:30 ~ 16:00:	9	19.6%	Wednesday:	13	28.3%
16:00 ~18:30:	8	17.4%	Thursday:	8	17.4%
18:30 ~ 07:30:	10	21.7%	Friday:	7	15.2%
Unspecified:	0	0.0%	Saturday:	4	8.7%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	39	84.8%	Dry:	40	87.0%
Rain:	3	6.5%	Wet:	4	8.7%
Snow:	1	2.2%	Snow/Ice:	1	2.2%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	3	6.5%	Unspecified:	1	2.2%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	63	75.9%	Fatal Collision:	0	0.0%
Bus:	6	7.2%	Injury Collision:	17	37.0%
Truck:	5	6.0%	PDO Collision:	29	63.0%
Taxi:	2	2.4%			
Minivan:	0	0.0%	**Light Condition**	**#ACC**	**%**
Police/Emergency Vehicle:	2	2.4%	Daylight:	39	84.8%
Motorcycle/Moped:	4	4.8%	Dawn/Dusk:	0	0.0%
Bicycle:	1	1.2%	Dark(Lighted):	7	15.2%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	1.2%	In Crosswalk with Signal:	1	20.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	1	20.0%
Driver: Others:	19	22.9%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	2	2.4%	From Between Parked Cars:	0	0.0%
Unspecified:	61	73.5%	Unspecified:	3	60.0%

Year	Accidents	Fatalities	Injuries	Disabling Injuries	Pedestrians	Bicycles	Motorcycles
2013	15	0	5	3	0	0	2
2014	17	0	4	0	2	0	1
2015	14	0	11	4	3	1	1

5 Records are not approved as of 1/30/2017 10:46:25 AM

Figure 30. Wisconsin Avenue and Van Ness Street NW Crash Data

9.2. Recent and Planned Projects

Several safety improvements have been made recently at this intersection. In 2015 bike lanes were installed on Van Ness Street west of Wisconsin Avenue. A contraflow bike lane was installed in 2016 on 39th Street NW between Veazey Street and Albemarle Street. Additionally in 2016, a HAWK signal was installed on Wisconsin Avenue at Veazey Street to aid pedestrian safety.

9.3. Site Visit Observations

On Wednesday, August 18, 2016 beginning at 8:30am, participants identified issues related to all travel modes. Some may only require minor fixes, while others may require more substantial capital improvements. Many require further investigation and evaluation by DDOT. The timeline for next steps is included in the next section.

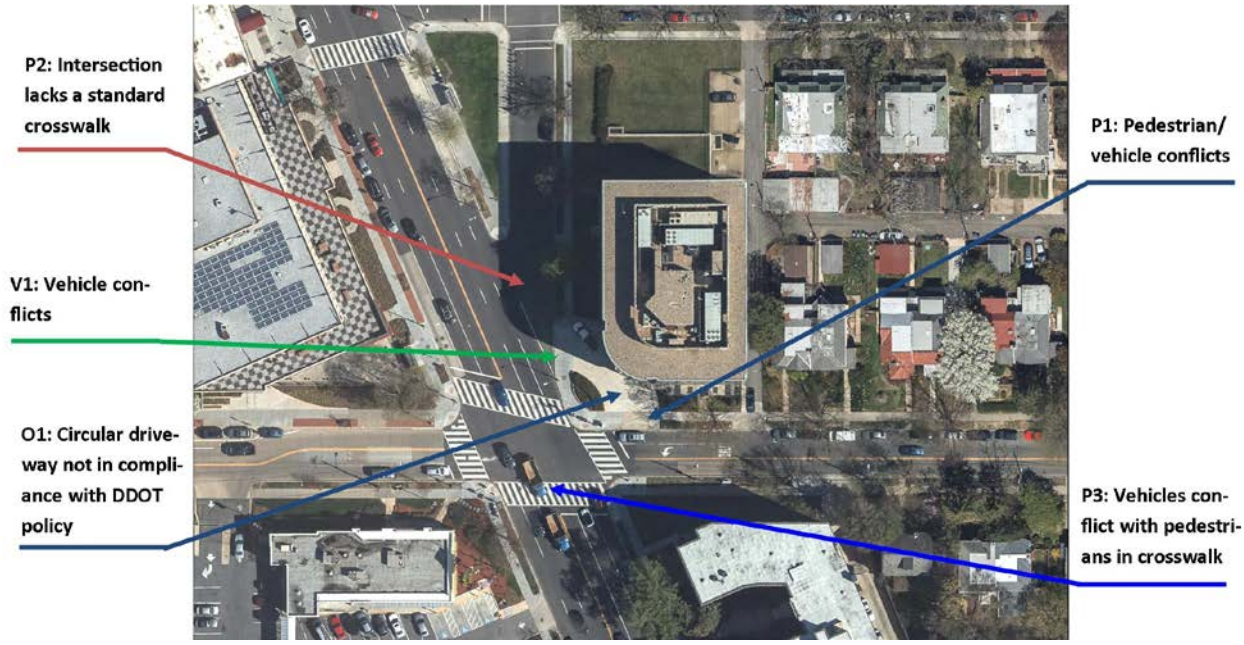

Figure 31. Wisconsin Avenue, Van Ness Street, and 39th Street NW Site Visit Observations

Overall Issues

O1. The circular driveway serving the Taipei Economic and Cultural Representative Office is too close to the intersection of Van Ness and Wisconsin. It is not in compliance with current DDOT policy, as it lies almost entirely in public space and does not provide access to off-street parking.

Pedestrian Issues

P1. Conflicts between pedestrians and vehicles at circular driveway curb cuts.

P2. The intersection of 39th Street at Wisconsin Avenue lacks a standard crosswalk. This is complicated by the circular driveway curb cut on 39th Street.

P3. Turning vehicles were observed conflicting with pedestrians legally in the crosswalk for the intersection of Van Ness Street and Wisconsin Avenue.

Bicycle Issues

No bicycle issues were observed, but implementation of the other recommendations will increase safety for all users, including bicyclists.

Vehicle Issues

V1. Vehicles entering and exiting the driveway present conflict hazards to vehicles on Van Ness Street and 39th Street.

9.4. Next Steps

The following table identifies the next step for each issue and the associated timeframe. DDOT is coordinating internally on each issue; further exploration for some issues may find potential solutions infeasible, or may find an alternate solution than what is listed here.

Issue	Next Step	Timeframe
Overall Issues		
O1. The circular driveway between Van Ness and 39th St is not in compliance with current DDOT policy.	Driveway and curb cuts should be removed, allowing the temporary diverter on the entrance to 39th St to be made permanent with a concrete curb extension. This will calm traffic and aid pedestrian safety.	Evaluation: Summer 2016 Implementation: Right of Way Office to work with Taipei Economic and Cultural Representative Office to explore a plan for removal by spring 2017.
Pedestrian Issues		
P1. Conflicts between pedestrians and vehicles at circular driveway curb cuts.	Curb cuts should be removed and curb restored.	Evaluation: Summer 2016 Implementation: Right of Way Office to work with Taipei Economic and Cultural Representative Office to explore a plan for removal by spring 2017.

Issue	Next Step	Timeframe
P2. The intersection of 39th Street at Wisconsin Avenue lacks a standard crosswalk. This is complicated by the circular driveway curb cut on 39th Street.	A permanent curb extension to reduce pedestrian conflicts on 39th St should be designed and constructed, along with a standard crosswalk.	Evaluation: Fall 2016 Implementation: Contingent upon driveway and curb cut removal timeframe.
P3. Turning vehicles were observed conflicting with pedestrians legally in the crosswalk for the intersection of Van Ness Street and Wisconsin Avenue.	Leading pedestrian intervals should be added at the intersection of Van Ness St and Wisconsin Ave.	Evaluation: Winter 2017 Implementation: Signals team to analyze and implement by spring 2017.
Vehicular Issues		
V1. Vehicles entering and exiting the driveway present conflict hazards to vehicles on Van Ness Street and 39th Street.	Driveway and curb cuts should be removed.	Evaluation: Fall 2016 Implementation: Contingent upon driveway and curb cut removal timeframe.

Table 9. Wisconsin Avenue, Van Ness Street, and 39th Street NW Next Steps

10.0 Conclusion

The high crash intersection site visit process was a useful exercise in which key stakeholders developed a common understanding of transportation safety issues and quickly evaluated a number of different issues in specific locations.

The theme of the site visits coalesces well with the District's Vision Zero Initiative to eliminate transportation fatalities and serious injuries within 10 years as Vision Zero will require concerted and collaborative effort from a number of stakeholders. These intersection evaluations and improvements are important early actions in achieving the vision, along with the engineering, infrastructure, and enforcement changes at these locations. This collaborative approach to improving data collection and analysis and engaging regularly with key stakeholders will enable us to identify and address safety issues more effectively.

With this second round of site visits, DDOT has more formally institutionalized its process, and expects to accelerate the time period to implement recommended safety improvements to the intersections.