PENN BRANCH

TRAFFIC-CALMING STUDY

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1.0 INTRODUCTION

The District of Columbia Department of Transportation (DDOT) engaged KLS Engineering (KLS) to investigate existing transportation conditions in the Penn Branch neighborhood. In this report, the Study Team refers to KLS and DDOT staff.

The main goals of the study were to:

- Reduce speeding.
- Promote vehicular, mass transit, bicycle and pedestrian safety.
- Promote traffic-calming techniques.

The study area is located in southeast Washington, DC, and is bounded by:

- Massachusetts Avenue to the north.
- 38th Street to the east.
- Pennsylvania Avenue to the south.
- 30th Street to the west.

This report summarizes and presents assessment of existing conditions (completed June 2007), public feedback, potential traffic-calming[1] recommendations, and implementation cost.

[1] Design Guidelines for Traffic-Calming Measures for Residential Streets in the District of Columbia, 2005

2.0 EXISTING CONDITIONS

The Study Team conducted an extensive data collection effort to understand the existing conditions in the study area. In addition to collecting data for the quantitative assessment of the existing conditions, the Study Team collected direct observations throughout the study area. Section 2 summarizes the data collected for the study area and addresses the issues and deficiencies in the transportation infrastructure.

Note: All roadway classifications used in this Study were taken from the District of Columbia Functional Classification, February, 2003.

2.1 ROADWAY NETWORK IN THE STUDY AREA

Figure 1 shows the study area, located in Ward 7, southeast Washington, DC. This area is classified as a low-density residential area[2].

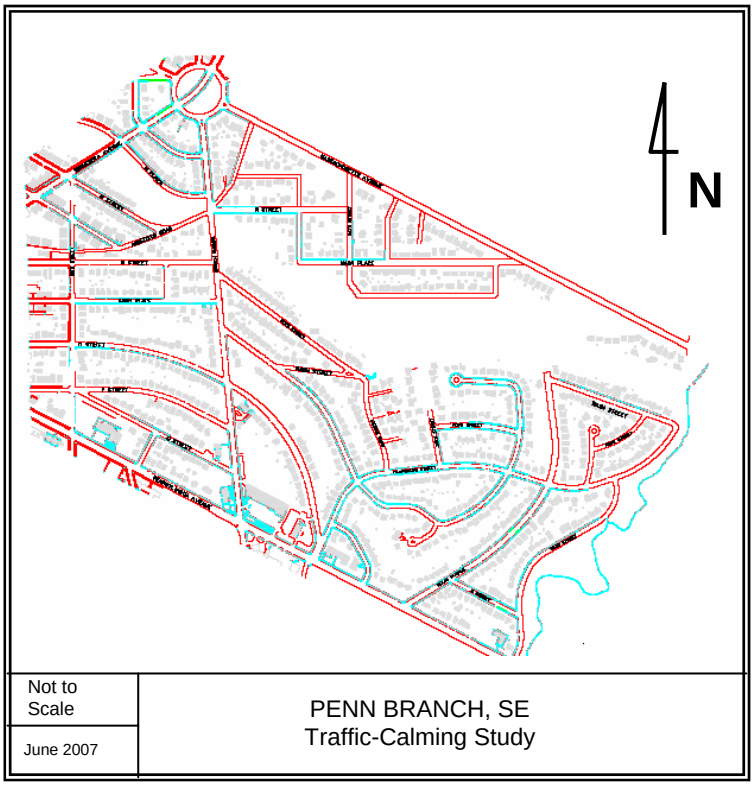

Figure 1: Study Area

[2] DC Land Use Map 2005

The following is a detailed summary of the main corridors/streets within the study area:

- Randle Circle.
- Branch Avenue.
- 30th Street.
- Streets between 30th Street (west) and Branch Avenue (east).
- Streets between Branch Avenue (west) and 38th Street (east).

RANDLE CIRCLE

Characteristics: Randle Circle is classified as minor arterial. The Study Team observed no posted speed limit. Randle Circle connects Massachusetts Avenue, Minnesota Avenue, Branch Avenue, 32nd Street, And the Fort DuPont Park access roads, as figure 2 illustrates.

Geometry: Randle Circle is a one-way, three-lane roundabout, with a road width approximately 36 ft. The horizontal and vertical alignments around Randle Circle are straight and flat, respectively, with curb radii generally 15 to 25 ft. (outer circle).

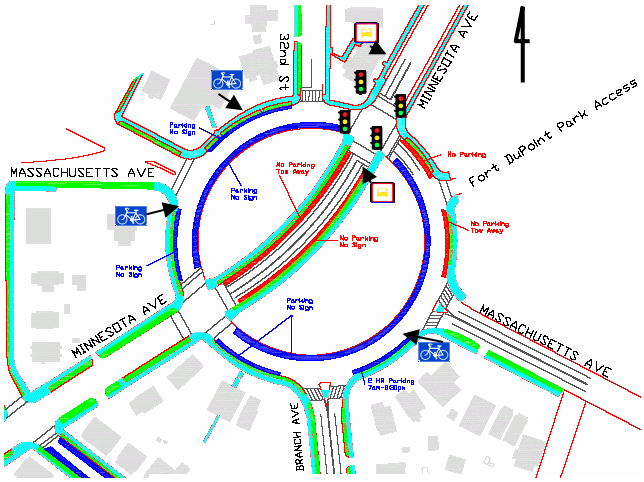

Figure 2: Randle Circle

Figure 3: Minnesota Avenue at Northern end of circle

Traffic Control: All intersections around Randle Circle are unsignalized, with the exception of Minnesota Avenue (north), as shown in figure 2. This intersection is signalized with pedestrian signals and countdown timers. At the time of our site visit, there were minimal pavement markings. Figure 3 illustrates two lanes of traffic turning west on to Minnesota Avenue and one lane turning east. There were no signs or road markings informing drivers of this movement.

Parking: At the time of our site visits, parking was permitted around Randle Circle (outer lane), except between Massachusetts Avenue and Minnesota Avenue. Between Branch Avenue and Massachusetts Avenue, parking was restricted to a 2-hour period and permit holders. No parking was permitted on either side of Minnesota Avenue inside of Randle Circle, as figure 2 shows.

Pedestrian and Bike Facilities: Both transverse (parallel lines) and high-visibility crosswalks are used at the approaches and around Randle Circle, as figure 2 illustrates. The Circle has a good network of sidewalks, generally 6-ft wide with a 5-ft buffer. Curb ramps are located on all corners; most do not have detectable warnings surfaces. As indicated in figure 2, Randle Circle is signed as a bike route; however, there is no dedicated bike lane. A dedicated bike lane is located along Massachusetts Avenue.

At the time of our site visit, the Study Team observed the following deficiencies, as shown in figure 4.

Figure 4: Randle Circle Deficiencies

BRANCH AVENUE

Characteristics: Branch Avenue is classified as a north-south minor arterial with a posted speed limit of 25 miles per hour (mph). Branch Avenue, within the study area, is bounded by Randle Circle to the north and Pennsylvania Avenue to the south.

Geometry: It is a two-way, two-lane road with a 10-ft-wide inner lane and 9-ft-wide curbside lanes. The horizontal alignment of Branch Avenue is straight; however, the vertical alignment has a few curves, as figure 5 shows. Figure 5 also illustrates poor sight distance for pedestrians in crosswalk. The curb radii are generally 15 to 25 ft.

Figure 5: Branch Ave at Randle Circle

Traffic Control: Branch Avenue is free flowing; all streets intersecting Branch Avenue are controlled by STOP signs. However, there are NO ENTRY restrictions between 7:00 a.m. and 9:30 a.m. from Branch Avenue to the following streets in the westbound directions:

- M Plaza.
- Anacostia Road.
- N Street.
- O Street.
- P Street.

This is shown in figure 11 of section 2.2.

Parking: At the time of our site visit, parking was permitted in the curbside lanes on either side of Branch Avenue. Parking was prohibited on the southbound lane, approximately 70 ft before the intersection of Pennsylvania Avenue.

Pedestrian Facilities: Transverse (parallel lines) crosswalks are used at the approaches of most intersections, except at M Plaza, Anacostia Road, and Pope Street. Sidewalks along Branch Avenue are discontinuous, as figure 6 shows. In locations where sidewalks exist, they are generally 4-ft wide with a 6-ft buffer. Curb ramps are located on all corners; however, there were no detectable warnings surfaces.

At the time of our site visit, the Study Team observed the following deficiencies as illustrated in figure 6.

Figure 6: 30th Street - Branch Avenue Deficiencies

30th STREET

Characteristics: 30th Street is classified as a north-south local street with a posted speed limit of 25 mph. 30th Street within the study area is bounded by Minnesota Avenue to the north and Pennsylvania Avenue to the south.

Geometry: It is a two-way, one-lane street, with a road width approximately of 32 ft. The horizontal and vertical alignments of 30th Street are straight and somewhat undulating, with curb radii generally 15 to 25 ft. Figure 7, illustrates poor visibility of the intersection with N Street.

Figure 7: 30th Street - Poor Visibility

Traffic Control: Intersections along 30th Street are unsignalized. However, intersections with 30th Street and Anacostia Road and O Street and P Street are controlled by 4-way STOP. There are no left-turn restrictions between 4:00 p.m. and 6:30 p.m. from 30th Street eastbound direction to the following:

- M Street.
- O Street.
- P Street.

Trucks over 1-¼ ton are prohibited on 30th and M Streets.

Parking: Parking was generally permitted along 30th Street; except between P Street and Pennsylvania Avenue.

Pedestrian Facilities: Both transverse (parallel lines) and high-visibility crosswalks were used at the approaches along 30th Street. Sidewalks along 30th Street were discontinuous, as figure 4 shows. In locations where sidewalks were available, they are generally 6-ft wide with a 3-ft buffer. Curb ramps were located on all corners although most do not have detectable warnings surfaces.

At the time of our site visits, the Study Team observed the following deficiencies as figure 6 illustrates.

Streets between 30th Street (west) and Branch Avenue (east)

These streets:

- Lyndale Street
- M Plaza
- M Street
- Nelson Street
- Anacostia Road
- N Street
- Nash Place
- O Street
- P Street
- Q Street
- 31st Street

All streets are classified as local streets with a posted speed limit of 25 mph.

Geometry: Generally, streets are two way, one lane, except Lyndale Street, which is one way (west). The following table summaries the street geometry.

Street Names	Roadway width (ft)
Lyndale Street	30
M Plaza	28
M Street	28
Nelson Street	30
Anacostia Road	varies 16-30
N Street	32
Nash Place	28
O Street	32
P Street	32
Q Street	28
31st Street	28

Traffic Control: All the intersections within this network were unsignalized. At the time of our site visit, pavement markings were located only at the approaches of the intersections.

The study area has some unique needs, as shown in figure 8, located at the intersection of Nelson Street and O Street.

Figure 8: Deaf Pedestrian sign

Parking: Parking was generally permitted along both sides of these streets. The exceptions were:

- N Street (eastbound) – NO PARKING permitted between 4:00 to 6:30 p.m. for approximately 80 ft from the intersection with 30th Street.
- P Street (east and westbound) – NO PARKING permitted for approximately 80 ft from the intersection of 30th Street.
- Q Street (east and westbound) – NO PARKING permitted for approximately 80ft from the intersection of P Street and approximately 100 ft from Branch Avenue. Between 31st Street and Branch Avenue, 2-hour parking was permitted between 7:00 a.m. to 8:30 p.m.
- 31st Street (north and southbound) – NO PARKING permitted for approximately 60 ft from the intersection of Pennsylvania Avenue.

Pedestrian Facilities:
At the time of our site visit, there were no sidewalks on Anacostia Road, N Street, and P Street. The following table shows the approximate sidewalk width and buffer width in locations where sidewalks were available. Figure 6 shows the locations where there were no sidewalks and other deficiencies observed at the time of our site visit.

Street Names	Sidewalk Width (ft)	Buffer Width (ft)
Lyndale Street	4	6
M Plaza	4	8
M Street	4	6
Nelson Street	6	6
Nash Place	6	2
O Street	6	3
Q Street	6	3
31st Street	6	3

Streets between Branch Avenue (west) and 38th Street (east)

The following is a summary of all streets between Branch Avenue (west) and 38th Street (east):

- Loud Place
- Anacostia Road
- M Street
- 33rd Place
- 34th Street
- 34th Place
- N Street
- Nash Place
- 37th Place
- Pope Street
- Nash Street
- Highwood Drive
- O Street
- Carpenter Street
- 35th Street
- 38th Street
- Texas Avenue
- S Street

These streets are classified as local streets with a posted speed limit of 25 mph.

Geometry: Generally, streets are two way, one lane. However, Nash Place (between Pope Street and Highwood Drive) is one way (westbound) and Anacostia Road (between Massachusetts Avenue and Branch Avenue) is one way (southbound). The following table summarizes other characteristics of street geometry.

Street Names	Roadway width (ft)
Loud Place	22
Anacostia Road	Varies 24-30
M Street	28
33rd Place	26
34th Street	32
34th Place	32
N Street	32
Nash Place	32
37th Place	28
Pope Street	32
Nash Street	28
Highwood Drive	30
O Street	Varies 28-30
Carpenter Street	30
35th Street	32
38th Street	32
Texas Avenue	38-42
S Street	32

Figure 9 illustrates poor visibility along Highwood Drive caused by a curve in the horizontal alignment.

Figure 9: Blind curve on Highwood Drive

Traffic Control: All intersections within this network were unsignalized. At the time of our site visit, pavement markings were located only at the approaches to the intersections.

NO ENTRY signs (7:00 a.m. to 9:30 a.m.) with NO LEFT TURN signs reinforced the prohibition from the following streets:

- From Pennsylvania Avenue to 33rd Place.
- From Carpenter Street to O Street.
- From 33rd Place to Carpenter Street.
- Pennsylvania Avenue and 38th Street.

Parking: Parking was generally permitted along both sides of these streets. The exceptions were:

- NO PARKING permitted on O Street, approximately 100 ft from the intersection with Carpenter Street.
- 2-hour parking permitted on both sides of Carpenter Street, approximately 60 ft from the intersection with Pennsylvania Avenue.

Pedestrian Facilities: At the time of our site visit, there were no sidewalks along Loud Place, Nash Place, and 37th Place. This is illustrated in figure 10.

The table below shows the approximate sidewalk and buffer widths in the locations where sidewalks are available.

Street Names	Sidewalk Width (ft)	Buffer Width (ft)
Anacostia Road	6	-
33rd Place	6	3
34th Street	6	4
34th Place	6	3
N Street	6	4
Highwood Drive	6	3
O Street	6	4
Carpenter Street	6	3
35th Street	6	3
38th Street	6	3
S Street	6	3
Pope Street	6	3
Texas Street	6	3
M Street	6	4
Nash Street	6	3

Figure 10: Branch Avenue - 38th Street Deficiencies

2.2 TRAFFIC VOLUME

Figures 11 and 12 illustrate the lane configuration and intersection controls for all intersections within the study area. To evaluate the existing conditions, the Study Team collected turning movement counts at the critical intersections in the study area during peak periods. Figure 13 illustrates the existing a.m. and p.m. peak-hour traffic volumes collected June 2007, at the following intersections:

- Minnesota Avenue and Randle Circle.
- 30th Street and Pennsylvania Avenue.
- Branch Avenue and Pennsylvania Avenue.

These counts were taken during 6:00 a.m. to 9:00 p.m. and 3:00 p.m. to 6:00 p.m., on a typical weekday.

At the intersection of Minnesota Avenue and Randle Circle, as figure 13 illustrates, the highest volume of vehicles (ranging between 574 and 1,087 vph) travels through Randle Circle via Minnesota Avenue.

In addition, as figure 14 shows, 24-hour machine counts for average daily traffic (ADT) were performed at eight locations. The data revealed that the majority of the vehicles on Branch Avenue utilize the center lanes in both directions, as opposed to the curb-side lanes. At station #3, the ADT in the center lane was 4,562 vehicles (northbound direction) and 3,485 vehicles (southbound direction), while the curbside lanes ADT was minimal (4 vehicles in northbound direction and 65 vehicles in the southbound direction). This in part results from on-street parking between Lyndale Street and Randle Circle. The south end of Branch Avenue averaged 200 vph more during both peak periods.

Cut-Through Traffic

Along O Street, P Street, and 30th Street, the data (figure 14) revealed a spike in westbound traffic just prior (6:00 a.m. to 7:00 a.m.) to the start of the NO ENTRY restriction (7:00 a.m. to 9:30 a.m.). The spike on O Street was approximately 5 times the average hourly traffic or approximately 120 to 125 vehicles. On P Street, the spike was approximately 2 times the average hourly traffic (25 vph).

The predominant movement on 30th Street was in the southbound direction during the morning peak. Massachusetts Avenue traffic variation was also the same as 30th Street, with the morning peak twice the hourly average. This is attributed to the westbound morning congestion on Pennsylvania Avenue with traffic detouring to alternate routes to the north.

Figure 11: Existing Lane Configuration and Traffic Control (sheet 1 of 2)

Figure 12: Existing Lane Configuration and Traffic Control (sheet 2 of 2)

Figure 13: 2007 Existing A.M./P.M. Peak-Hour Traffic Volumes

Figure 14: 2007 24-Hour Traffic Counts

2.3 SPEEDING

The Study Team collected 24-hour speed counts on critical corridors in order to understand driving behavior and to gather information needed to develop the traffic model for the study area. These counts were conducted at nine locations within the study area in June 2007, and are illustrated in figure 15.

The results of the study revealed that vehicles travel at higher speeds along Branch Avenue within the study area. At the north end (location #3), 30 percent of the vehicles traveling northbound (85th percentile 37 mph) and 89 percent of the vehicles traveling southbound (85th percentile 35 mph) were above the 25 mph speed limit. At the south end (location #4), 98 percent of the vehicles traveling in both directions were above the 25 mph speed limit (85th percentile was 44 mph in the southbound and 49 mph in the northbound direction). Generally, vehicles traveled at significantly higher speeds in the southern segments of Branch Avenue.

Along Massachusetts Avenue in the vicinity of Randle Circle, mean vehicle speeds were in excess of 35 mph, with the 85th percentile over 40 mph. In addition, traffic exiting Randle Circle westbound on Massachusetts averaged 5 to 7 mph (mean of 41 mph) higher than eastbound. East-west traffic on O Street averaged 30 mph, with the 85th percentile being 37 mph.

- **Figure 15: 24-Hour Speed Counts**

2.5 PEDESTRIAN VOLUME

The Study Team collected pedestrian data at the following intersections within the study area:

- Minnesota Avenue and Randle Circle.
- 30th Street and Pennsylvania Avenue.
- Branch Avenue and Pennsylvania Avenue.

The Study Team collected data in the a.m. and p.m. periods, 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m., respectively, on a typical weekday. Figure 16 illustrates the findings. In addition, observations were performed along 30th Street, Branch Avenue, and Randle Circle

The study reveals that overall there was a relatively low volume of pedestrian activity within the study area. For example, between 4 and 5 persons crossed Randle Circle at Minnesota Avenue (east side) during the peak hour. In addition, the pedestrian activity on Branch Avenue averaged fewer then 10 persons per hour. However, there was significant pedestrian activity at the Fort DuPont Park area on weekends. On Saturdays between 4:00 p.m. to 8:00 p.m., the pedestrian activity across Minnesota Avenue could average 50 pedestrians per hour.

At 30th Street and Pennsylvania Avenue, pedestrians crossing in both the a.m. and p.m. peak hour averaged 25 persons. The majority of these trips were transit and/or school based.

The study revealed little or no bicycle activity within the study area.

Figure 16: Pedestrian Volume

2.6 PUBLIC TRANSPORTATION

The Washington Metropolitan Area Transit Authority (WMATA) provides bus service in the study area. Figure 17 shows the 15 routes serving the study area on the periphery of the study area, mostly along Minnesota Avenue (six stops) and Pennsylvania Avenue (six stops).

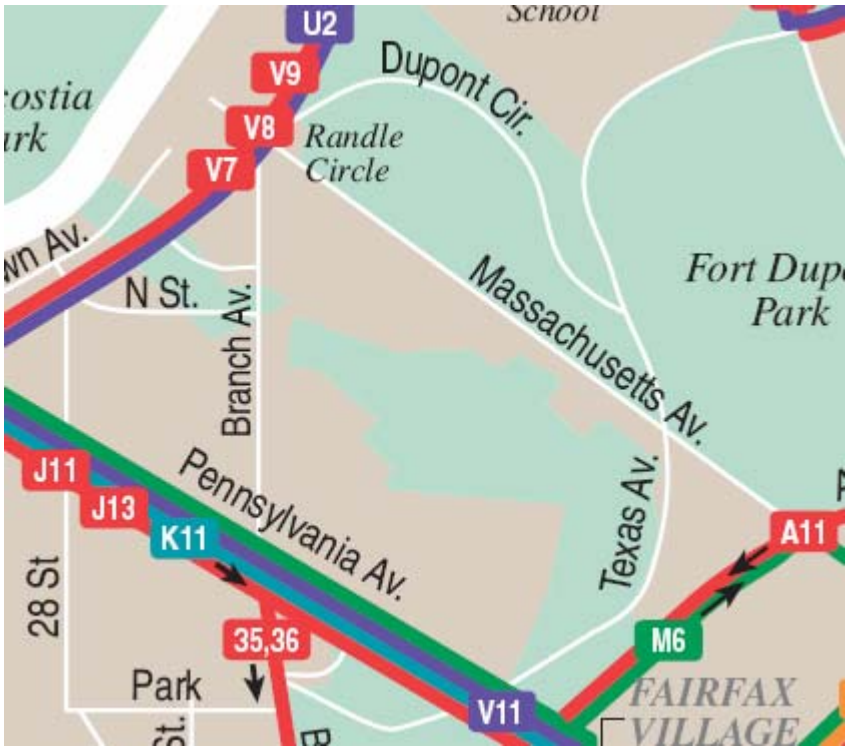

Figure 17: Public Transportation Service

2.7 SAFETY

In order to assess the safety conditions in the study area, the Study Team obtained traffic crash data from DDOT for the 3-year period 2003 to 2005. Figure 18 summarizes this information. The data revealed that the intersections with the largest number of crashes were located on the periphery of the study area — Pennsylvania Avenue with Branch Avenue, 30th Street, 31st Street, and 38th Streets. Overall, within the last 3 years (2003 to 2005), 37 vehicular crashes occurred within the study area, resulting in 14 injuries. Branch Avenue between O Street and Pope Street (figure 18, location 7, 8, and 9), and Minnesota Avenue and Randle Circle (figure 18, location 1) accounted for the majority of these crashes.

Figure 18: Crash Data

3.0 ISSUES AND RECOMMENDED IMPROVEMENTS

Through fieldwork, assessment of existing conditions and community feedback, the Study Team developed the following recommended improvements for the entire study area. These recommended improvements represent the most pressing concerns/needs for improving safety and traffic operations.

The recommended improvements are listed by roadway and address the short-term or immediate needs, followed by the longer term, more permanent solutions. These recommendations are conceptual and detailed designs must be developed before implementation. Figure 19 to 26 illustrate the recommendations made for the study area.

3.1 RANDLE CIRCLE (Figure 19)

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Road Marking and Signs	Install pavement markings.	• Around circle, as shown in figure 19, (item #1)
	Install R1-6a signs – Unsignalized Pedestrian Crosswalk signs.	• Crossings at Branch Avenue and Massachusetts Avenue, as shown in figure 19, (item #2).
	Install traffic circle sign (W2-6 and W16-2a), 200 ft advance of circle.	• Approaches of circle, along Branch Avenue and Massachusetts Avenue, see figure 19, (item #3)
	Install directional sign.	• Randle Circle, between Fort DuPont Park and Minnesota Avenue, as figure 19 shows, (item # 4).
	Install high-visibility crosswalk.	• Crossings at Minnesota Avenue (2 locations), figure 19 (item #5)
	Install Rumble Strips.	• Randle Circle (3 locations) • Massachusetts Avenue (2 locations). (As shown in figure 19, item #6).
	Install NO PARKING signs	• Minnesota Avenue within Randle Circle, figure 4, Parking Deficiencies (i). • Between Minnesota Avenue and Minnesota Avenue on the south side of Randle Circle, along the inner curb, as figure 19, item #7.
	Extend road marking (hatching).	• At the south east corner of Massachusetts Avenue and Randle Circle, as shown in figure 19, (item #8).

Evaluation:

1. Installing signs and pavement markings will improve the overall traffic safety and traffic operations on Randle Circle,
2. High-visibility crosswalks and signs will help designate the right-of-way and indicate to motorist the need to stop for pedestrians.
3. Traffic crashes with parked vehicles will be reduced.

Figure 19

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Walking/Biking Environment	Repair/replace broken or raised sidewalk sections.	• As shown in figure 4.
	Install detectable warnings.	• On all curb ramps
Evaluation: 1. Sidewalk repairs will improve pedestrian accessibility and conform to ADA requirements.		

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Streetscape	Increase street lighting intensity to 2.6 ft-candles (fc)	• Along Randle Circle
Evaluation: 1. Street lighting will help maintain the safety and security of the area residents.		

Long-Term Recommendations for Randle Circle (See figure 19):

1. Install Traffic Signals at Minnesota Avenue/Randle Circle (east side), (item #9).
2. Upgrade current traffic signal at Minnesota Avenue/Randle circle (west side) with Audible pedestrian signal APS, (item #10).
3. Link the above signals (local master) and install Driver Feedback signs interconnected with them to self enforce driver speeds (item #11).
4. Reroute the left turn off Minnesota Avenue into Randle Circle north, then south, (item #14).
5. Install bulb outs at:
    a. Branch Avenue and Randle Circle, figure 19, (item #12).
    b. Branch Avenue and Lyndale Street, figure 19, (item #13).

3.2 BRANCH AVENUE (Figures 20 and 21)

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Road Marking and Signs	All crosswalks should be high visibility.	• Branch Avenue at the intersections with N Street, Nash Place, O Street, and Q Street. Figure 20 (item #1).
	Remove pedestrian crosswalk	• Branch Avenue and Q Street , figure 21 (item #8)
	Install Pedestrian signing (W11-2 and W16-7p) at crosswalk locations	• Branch Avenue at the intersections with N Street, (figure 20, item #2) and Q Street, (figure 21, item #2).
	Install pedestrian crossing sign with flashers	• Branch Avenue at the intersection with Nash Place (figure 20, item #3) and Q Street, (figure 21, item #3)
	Install Flashing LED STOP sign and advance warning signs (W3-1 and R1-1)	• Branch Avenue at the intersection with N Street (figure 20, item #6) and O Street (figure 21, item #6).
	Virtual markings 60 ft before the approach to all crosswalks.	• On Branch Avenue at the intersections with Nash Place (figure 20, item #7)and Q Street (figure 21, item #7).
	Install painted partial street enclosure with traffic delineators.	• At the corner of Anacostia Road, see figure 20, (item #8).
	Extend NO ENTRY restrictions	• Branch Avenue at the intersections with M Plaza, Anacostia Road, N Street, Nash Place (figure 20, items #9,10 and 11). • Branch Avenue at the intersections with O Street and P Street (figure 21, items # 9,10 and 11).

Evaluation:
1. High-visibility crosswalks and signs will help designate the right-of-way and indicate to motorists to stop for pedestrians, as figures 20 and 21 shows.
2. Partial Street enclosure reduces the width of street, improving driver attention and reduces exit speed.

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Walking/Biking Environment	Repair/replace broken or raised sections of sidewalk.	• Various locations shown on figure 6.
	Install sidewalks.	• As listed/illustrated in figure 6.
	Install detectable warnings.	• On all curb ramps.

Evaluation:
1. Sidewalk repairs will improve pedestrian accessibility and conform to ADA requirements.

Figure 20

Figure 21

Long Term Recommendation (OPTION) Figure 22

1. Install center median along Branch Avenue from south of P Street to north of M Street (with appropriate cut through for pedestrian and turning traffic), as shown in figure 23. This recommendation will reduce speeding, cut-through traffic, and mitigate crashes at Pope Street, Highwood Drive, and O Street with Branch Avenue.

   This recommendation is conceptual and detailed designs needs to be completed.

Figure 22

3.3 OTHER STREETS (Figures 23 – 26)

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Road Marking and Signs	Install missing NO PARKING signs.	• As shown in figure 6.
	Extend NO ENTRY restrictions from 6:00 a.m. to 9:30 a.m. (existing 7.00 to 9.30 a.m.).	• From Pennsylvania Avenue to 38th Street, Carpenter Street, and O Street, figure 26 (items # 4,5 and 6)
	Install advance warning of sharp bend.	• On Highwood Drive, as shown in figure 25 (item #4).
Evaluation: 1. Increased NO ENTRY restriction will reduce cut-through traffic and speeding on neighborhood streets.		

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Walking/Biking Environment	Repair/replace broken or raised sections of sidewalk.	• Various locations shown on figures 6 and 10
	Install sidewalks.	• As listed/illustrated in figures 6 and 10.
	Install detectable warnings.	• On all curb ramps.
Evaluation: 1. Sidewalk repairs will improve pedestrian accessibility and conform to ADA requirements.		

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Traffic Calming	Install speed humps and related signing and road marking	• Along 30th Street, M Street, Anacostia Road (figure 23 items #1, 2 and #). • Along O Street, P Street and Q Street (figure 24, items # 1, 2 and 3) • Along N Street (figure 25, items # 1, 2 and 3).
	Install rumble strips	• Along 30th Street, figure 23 (item #4).
Evaluation: 1. Reduce cut through traffic and vehicle speeds.		

ISSUE	SHORT-TERM RECOMMENDATIONS	LOCATIONS
Landscaping	Trim trees	• On 30th Street, between Anacostia Road and Nelson Street, shown in Figure 6
Evaluation: 1. Will improve visibility.		