

Bicycle and Pedestrian Priority Area Plan

March 2018



Prince George's Plaza Metro

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I INTRODUCTION

Program Summary

The Maryland Department of Transportation (MDOT) seeks to improve safety, economic prosperity, and community vitality by working cooperatively with local governments to enhance multimodal transportation options. Designating Bicycle and Pedestrian Priority Areas (BPPA) throughout the State is a way to facilitate the coordinated planning of bicycle and pedestrian facilities in areas with a high potential for bicycling and walking. This collaborative approach, which results in the development of a Bicycle and Pedestrian Priority Area Plan (BPPA Plan), can help state and local transportation agencies focus on overcoming a wide range of impediments to bicycle and pedestrian travel, regardless of facility ownership.

Each Spring, the BPPA program allows a local jurisdiction to apply to MDOT's State Highway Administration (MDOT SHA) for one or more areas to be selected for a state designation for the development of a BPPA Plan. The BPPA designation process will include the application submittal, application screening by an inter-agency team, BPPA designation by the MDOT SHA Administrator, BPPA Plan development, and the BPPA evaluation.

The BPPA Plan is a comprehensive report, prepared through a coordinated effort by various agencies and jurisdictions. The BPPA Plan is a tailored document and can be more strategic or comprehensive, dependent on the needs of the BPPA. The BPPA Plan can include but is not limited to: an evaluation of the field visit investigation, evaluation of bicycle and pedestrian recommendations in documented plans, and the assessment of the feasibility of the bicycle and pedestrian improvements.

Prince George's Plaza Metro was designated a state BPPA in August 2016. For the Prince George's Plaza Metro BPPA Plan, coordination involved the Department of Public Works & Transportation (DPW&T) in Prince George's County, Maryland, the Maryland-National Capital Park and Planning Commission (M-NCPPC), the Cities of Hyattsville and University Park, the Washington Metropolitan Area Transit Authority (WMATA), and MDOT SHA. This Prince George's Plaza Metro BPPA Plan includes an analysis of the existing conditions, an evaluation of DPW&T's planned bicycle and pedestrian improvements, an assessment of the feasibility of the improvements, and recommendations for the implementation of the improvements.

Study Area Description

As identified in the DPW&T's 2016 BPPA application, the Prince George's Plaza Metro BPPA boundary was created in accordance with Section 2-604 of the Annotated Code of Maryland, which delegates this responsibility to local jurisdictions. The 0.68-square-mile area is centered on the Prince George's Plaza Metro, which is located in the southwest corner of MD 410 (East-West Highway) and Belcrest Road. The study area is generally bounded by the Anacostia Tributary Trail System, located 1,300 feet west of the intersection of MD 410 and Toledo Terrace; Northwestern High School to the north; Adelphi Road and 41st Avenue to the east; and Queensbury Road and Nicholson Street to the south. The study area boundary and existing environmental features are shown in **Figure 1**.

The BPPA is mostly within the city limits of Hyattsville, one of the oldest municipalities in Prince George's County. Established in 1886, the City currently has a diverse population of approximately 18,000

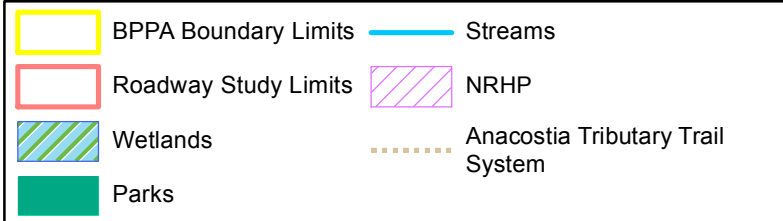
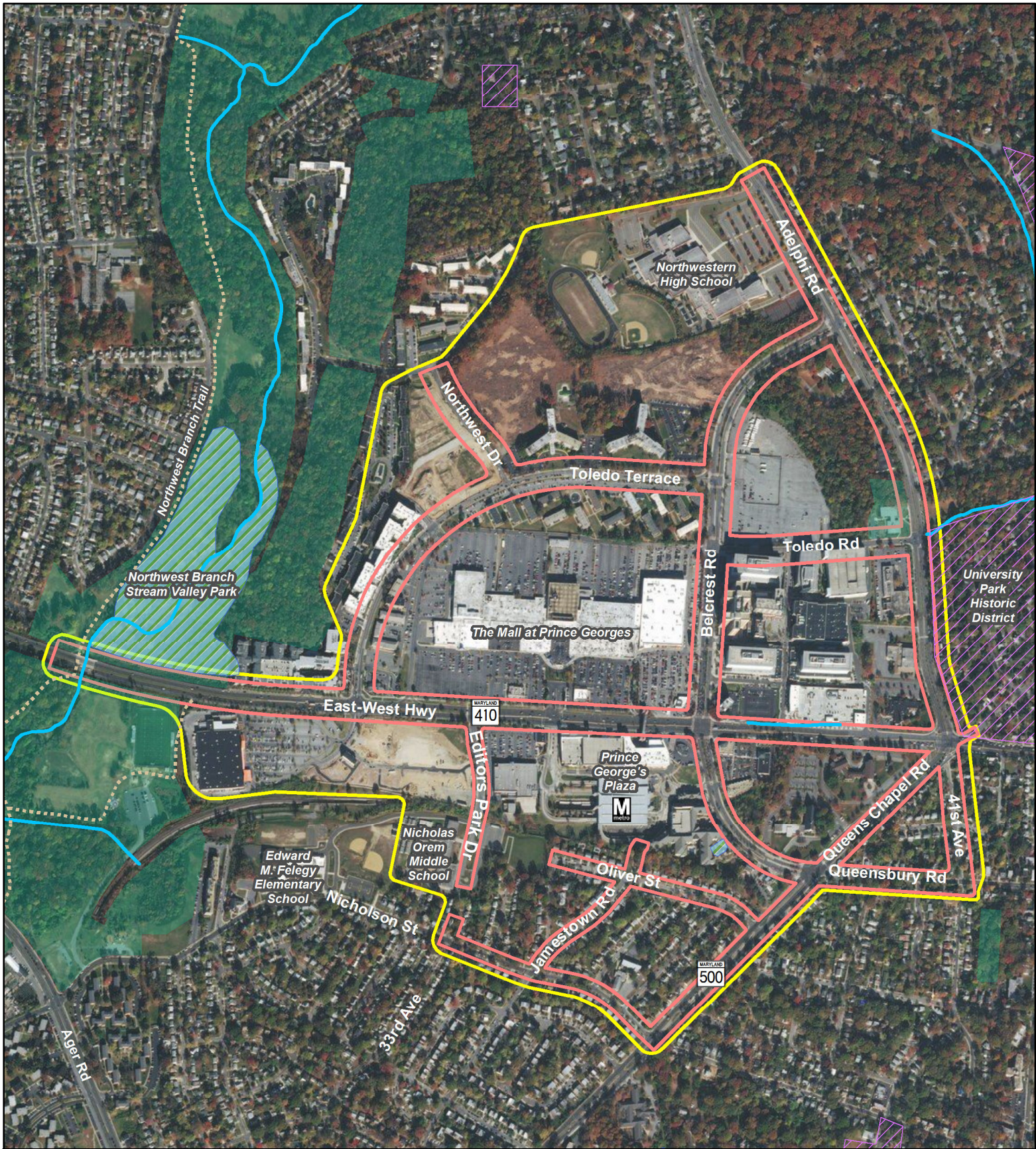
residents. The region is comprised of single and multifamily residential, commercial, and mixed-use land uses, as shown in **Figure 2**.

Some of the major generators of pedestrian and bicycle traffic in the BPPA include: The Mall at Prince Georges, the Prince George's Plaza Metro, Northwest Branch of the Anacostia River, the Northwest Branch Trail, and the Kaiser Permanente Medical Center. Some of the main pedestrian traffic contributors include office complexes, shopping centers, high-density housing, the Metrorail station, the Hyattsville Branch of the Prince George's County Memorial Library System, and three public schools: Northwestern High School, Nicholas Orem Middle School, and Edward M. Felegy Elementary School.

With the rising growth in this area, the Prince George's County DPW&T was prompted to evaluate and address a variety of transportation needs for all its residents and visitors. The increase in new developments and points of interest have also inspired the City of Hyattsville to promote the "2017-2021 Community Sustainability Plan." The objective of this Plan is based on the following three key notes:

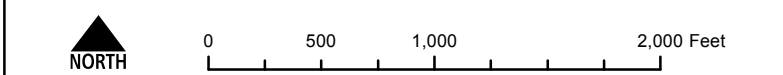
- **Community** - involves the collaboration between the city and the local communities to produce a more favorable result for its residents;
- **Connectivity** - strives to provide a safe and functional pedestrian and bicycle facilities to help network the residents, retailers and other users; and
- **Development** - to encourage growth, the City will support the draw of new development to the area.

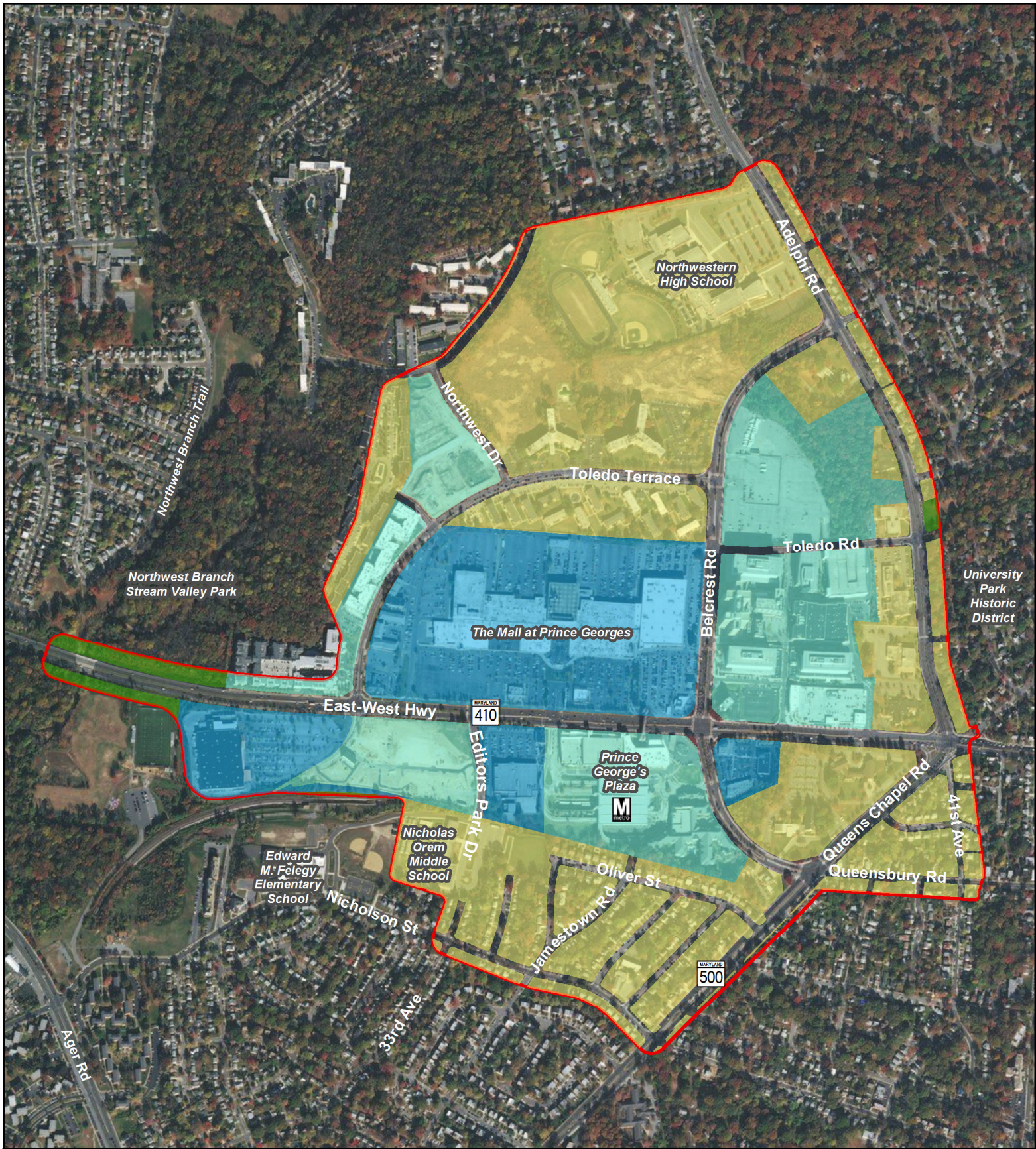
The enhancements recommended by DPW&T for this area, discussed in Chapter III, are long-term objectives to encourage more pedestrian and bicycle traffic, and to provide a safe and improved transportation infrastructure network throughout the communities.



Bicycle and Pedestrian Priority Area Plan Prince George's Plaza Metro

Figure 1: Study Area Boundary and Environmental Features

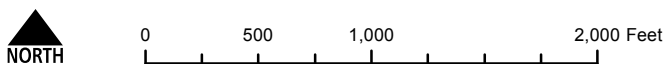




- BPPA Boundary Limits
 - Open Space
 - Commercial
 - Residential
 - Mixed Use
- Source: Prince Georges County 2015

Bicycle and Pedestrian Priority Area Plan Prince George's Plaza Metro

Figure 2: Study Area Zoning



II EXISTING CONDITIONS

The existing conditions were identified through a desktop review of available data and a field visit. The desktop review of the existing conditions included reviewing the study limits on Google Streetview and obtaining available Geographic Information Systems (GIS) data, such as wetlands, parks, streams, and historic properties. The field visit was conducted between the hours of 7:30 AM and 4:00 PM on October 10, 2017. The field visit included walking and driving along the 14 roadways listed in **Table 1** and taking pictures to record the existing conditions. The findings from the existing conditions surveyed are presented below.

Roadway Segments

As shown in **Table 1**, a total of 14 roadways were evaluated in the Prince George's Plaza Metro BPPA. Descriptions of the existing conditions along each of the 14 roadways are provided below. Aerial plan views for each roadway are provided in **Appendix A** and a table describing the existing conditions for each roadway is provided in **Appendix B**.

Table 1 - Roadways Evaluated in Prince George's Plaza Metro BPPA Plan

Roadway	Roadway Owner	From	To	Length
MD 410 (East-West Highway)	MDOT SHA	Anacostia Tributary Trail System	Adelphi Road	1.2 miles
MD 500 (Queens Chapel Road)	MDOT SHA	Nicholson Street	MD 410	0.5 miles
Belcrest Road	Prince George's County	MD 500 (Queens Chapel Road)	Adelphi Road	0.8 miles
Adelphi Road	Prince George's County	MD 500	Northwestern High School North Entrance	0.8 miles
Toledo Terrace	Prince George's County	MD 410	Belcrest Road	0.6 miles
Northwest Drive	Prince George's County	Toledo Terrace	Dean Drive	0.2 miles
Toledo Road	Private	Belcrest Road	Adelphi Road	0.3 miles
Editors Park Drive	City of Hyattsville	Nicholas Orem Middle School	MD 410	0.2 miles
33rd Avenue	City of Hyattsville	Nicholson Street	Dead end near Nicholas Orem Middle School	0.1 miles
Oliver Street	City of Hyattsville	35 th Avenue	MD 500	0.3 miles

Roadway	Roadway Owner	From	To	Length
Jamestown Road	City of Hyattsville	Nicholson Street	Oliver Street	0.2 miles
Nicholson Street	City of Hyattsville	33 rd Avenue	MD 500	0.3 miles
Queensbury Road	City of Hyattsville	MD 500	41 st Avenue	0.2 miles
41st Avenue	City of Hyattsville	Queensbury Road	Dead end near MD 500	0.1 miles

1. MD 410 (East-West Highway)

i. *Roadway*

The BPPA limits along MD 410 (East-West Highway) extend approximately 1.2 miles from the Anacostia Tributary Trail System to Adelphi Road. The posted speed limit is 40 miles per hour (mph) and the roadway functions as an urban principal arterial. The typical section is a closed section and includes two 12-foot-wide through lanes in each direction, except between Editors Park Drive and Adelphi Road, where there are three westbound lanes. In addition to the through lanes, continuous right-turn lanes are carried through the intersections for most of the corridor. Between the Anacostia Tributary Trail System and the entrance to the Post Park Apartments, an eight-foot-wide shoulder is provided along the eastbound lanes and a 12-foot-wide shoulder is provided along the westbound lanes. Turn lanes are provided at five signalized intersections (Toledo Terrace, Editors Park Drive, the entrance to the Mall at Prince Georges, Belcrest Road, and Adelphi Road). The eastbound and westbound directions are separated by a grass median, which narrows down to a concrete monolithic median to accommodate the left-turn lanes.

Based on the latest available GIS data, the existing MDOT SHA right-of-way line is offset approximately 15 to 20 feet from the eastbound and westbound edges of pavement for most of the corridor. However, near the Mall at Prince Georges, the right-of-way line is only offset zero to ten feet from the westbound edge of pavement.

Through most of the BPPA, the existing land use along MD 410 is commercial and mixed-use, as shown on **Figure 2**. However, the land use is open space near the western BPPA limit and residential near the eastern BPPA limit.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of MD 410 for the majority of the BPPA. The only segment where sidewalks are not included is along eastbound MD 410, west of the Northwest Branch Trail, and along westbound MD 410, west of the Post Park Apartments. In most cases, the sidewalk width is approximately 7.5 feet. However, a 20-foot-wide sidewalk is provided along eastbound MD 410 near the entrance to the Mall at Prince Georges. A pedestrian bridge crossing of MD 410 is provided west of Belcrest Road to provide a connection between the Mall at Prince Georges and the Metro station.

Between the Post Park Apartment entrance and the pedestrian bridge over MD 410, a grass buffer of at least five feet is provided. Near the Mall at Prince Georges, the grass buffer widens to 22 feet. East of the pedestrian bridge over MD 410, the eastbound grass buffer varies between zero feet and three feet. There is no westbound grass buffer.

Crosswalks are located at the following intersections:

- Post Park Apartment entrance (north leg);
- Toledo Terrace (north, south, and west legs);
- Toledo Road (north leg);
- Editors Park Drive (south and west legs);
- Prince George's Plaza (all four legs);
- Eastern entrance to Mall at Prince Georges (north leg);
- Belcrest Road (all four legs);
- America Boulevard (north leg); and
- Adelphi Road/MD 500 (all four legs).

Pedestrian signals are located at the following intersections:

- Toledo Terrace (north and west legs);
- Editors Park Drive (south and west legs);
- Prince George's Plaza (all four legs);
- Belcrest Road (all four legs); and
- Adelphi Road/MD 500 (all four legs).

To discourage pedestrians from making mid-block crossings of MD 410, there is an existing median fence that extends approximately 850 feet between the Prince George's Plaza and Belcrest Road intersections.

There are no existing striped bicycle facilities along MD 410 within the BPPA.

Data from 2010 through 2014 shows that seven pedestrian or bicycle-involved crashes occurred along MD 410 within the BPPA, including one fatal crash at the Toledo Terrace intersection. The six non-fatal crashes include:

- 1 at the Post Park Apartment entrance;
- 1 at the Mall at Prince Georges entrance;
- 2 at the Belcrest Road intersection; and
- 2 at the Adelphi Road/MD 500 intersection.

iii. *Utilities*

Along eastbound MD 410, utility poles for overhead electric lines are located behind the existing sidewalk. Along westbound MD 410, the utility poles are located behind the existing sidewalk from the Post Park Apartments to Toledo Terrace and near the Adelphi Road intersection. Utility poles are located within the

grass buffer along westbound MD 410 from Toledo Terrace and the pedestrian bridge crossing at the Mall at Prince Georges.

Pedestrian-level street lighting is provided along eastbound MD 410 from the western limit of the existing sidewalk to the existing pedestrian bridge. Roadway lighting is provided from the pedestrian bridge to Adelphi Road. Along westbound MD 410, most of the lighting is overhead roadway lighting, except near the Post Park Apartments where pedestrian-level lighting is provided.

iv. Street View Typical Sections

MD 410 West of Anacostia Tributary Trail System:

Westbound Lane – East view



MD 410 West of Anacostia Tributary Trail System:

Eastbound Lane – East view



MD 410 @ Belcrest Road:
Westbound Lane – East view



MD 410 @ Belcrest Road:
Eastbound Lane – West view



MD 410 @ MD 500:
Westbound Lane – East view



MD 410 @ MD 500:
Eastbound Lane – West view



2. MD 500 (Queens Chapel Road)

i. *Roadway*

The BPPA limits along MD 500 (Queens Chapel Road) extend approximately 0.5 miles from Nicholson Street to MD 410. The posted speed limit is 35 mph and the roadway functions as an urban minor arterial. The typical section is a closed section and includes two 11-foot-wide through lanes and a five-foot-wide bicycle lane in each direction. Turn lanes are provided at two signalized intersections (Belcrest Road and MD 410) and left-turn lanes are provided at several unsignalized intersections. The northbound and southbound directions are separated by a grass median, which narrows down to a concrete monolithic median to accommodate the left-turn lanes.

Based on the latest available GIS data, the existing MDOT SHA right-of-way line is offset approximately 20 to 30 feet from the northbound edge of pavement and zero to 20 feet from the southbound edge of pavement.

The existing land use along MD 500 is residential, as shown on **Figure 2**.

ii. *Pedestrian and Bicycle*

A five-foot-wide sidewalk is provided along both sides of MD 500 through the entire limits of the BPPA. There is no buffer between the sidewalk and the curb.

Crosswalks are located at the following intersections:

- Belcrest Road/Queensbury Road (all four legs);
- Quintana Street (north leg); and
- MD 410 (all four legs).

Pedestrian signals are located at the following intersections:

- Belcrest Road (all four legs); and
- MD 410 (all four legs).

There is an existing five-foot-wide striped bicycle lane that extends for the complete limits of the BPPA along both the northbound and southbound lanes.

Data from 2010 through 2014 shows that five pedestrian or bicycle-involved crashes occurred along MD 500 within the BPPA. The five crashes include:

- 1 at Nicholson Street;
- 1 at Oglethorpe Street;
- 2 at Belcrest Road; and
- 2 at the MD 410 intersection.

iii. *Utilities*

Along northbound and southbound MD 500, utility poles for overhead electric lines are located behind the existing sidewalk. Overhead roadway lighting is provided along both northbound and southbound MD 500.

iv. *Street View Typical Sections*

MD 500 @ Nicholson Street:
Southbound Lane – South view



MD 500 @ Nicholson Street:
Southbound Lane – North view



MD 500 @ MD 410:
Northbound Lane – South view



MD 500 @ MD 410:
Northbound Lane – North view



Note: A construction project was underway when these photographs were taken. The existing conditions description reflects the now completed project.

3. Belcrest Road

i. *Roadway*

The BPPA limits along Belcrest Road extend approximately 0.8 miles from MD 500 (Queens Chapel Road) to Adelphi Road. The posted speed limit is 30 mph and the adjacent land use is primarily commercial. The typical section is a closed section and includes two 11-foot-wide through lanes in each direction. Between MD 410 and Adelphi Road, a two- to three-foot shoulder (including gutter pan) is provided along the outside lane of both directions. Turn lanes are provided at four signalized intersections (MD 500, MD 410, Toledo Road, and Adelphi Road) and at three unsignalized intersections (entrance to the Metro station, Freedom Way, and Toledo Terrace). The eastbound and westbound directions are separated by a grass median.

Based on the latest available GIS data, the existing Prince George's County right-of-way line is offset approximately 10 to 20 feet from the northbound and southbound edges of pavement for most of the corridor.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of Belcrest Road through the entire BPPA. In most cases, the sidewalk width varies between six and seven feet. For all sidewalks along Belcrest Road, a two-foot-wide paver buffer is provided between the curb and sidewalk.

Crosswalks are located at the following intersections:

- MD 500 (all four legs);
- Entrance to Mosaic at Metro Apartments (west leg);
- Entrance to Prince George's Plaza Metro (north and west legs);
- MD 410 (all four legs);
- Liberty Lane (east leg);
- Entrance to Target (north and west legs);
- Freedom Way (east leg);
- Exit from University Town Center (east leg);
- Toledo Road (all four legs);
- Toledo Terrace (north, south, and west legs); and
- Adelphi Road (all four legs; however, the north, south, and east legs are faded).

Pedestrian signals are located at the following intersections:

- MD 500 (all four legs);
- MD 410 (all four legs);
- Toledo Road (all four legs); and
- Adelphi Road (all four legs).

There are no existing striped bicycle facilities along Belcrest Road within the BPPA.

Data from 2010 through 2014 shows that six pedestrian or bicycle-involved crashes occurred along Belcrest Road within the BPPA, including:

- 1 at the MD 500 intersection;
- 2 at the MD 410 intersection;
- 1 at the Liberty Lane intersection;
- 1 at the Toledo Road intersection; and
- 1 at the Adelphi Road intersection.

iii. *Utilities*

No overhead utilities or utility poles are located along Belcrest Road.

Roadway lighting is provided along both directions of Belcrest Road through the entire BPPA.

iv. Street View Typical Sections

Belcrest Road @ MD 500:
Southbound Lane – North view



Belcrest Road @ MD 500:
Northbound Lane – North view



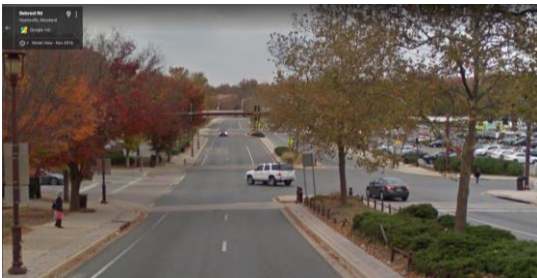
Belcrest Road @ MD 410:
Southbound Lane – North view



Belcrest Road @ MD 410:
Northbound Lane – North view



Belcrest Road @ Toledo Road:
Southbound Lane – North view



Belcrest Road @ Toledo Road:
Northbound Lane – North view



Belcrest Road @ Toledo Terrace:
Southbound Lane – North view



Belcrest Road @ Toledo Terrace:
Northbound Lane – North view



Belcrest Road @ Adelphi Road:
Southbound Lane – South view



Belcrest Road @ Adelphi Road:
Northbound Lane – South view



4. [Adelphi Road](#)

i. *Roadway*

The BPPA limits along Adelphi Road extend approximately 0.8 miles from MD 500 to the north entrance of Northwestern High School. The posted speed limit is 30 mph and the adjacent land uses are residential and mixed-use, with the majority of properties being residential units and community centers (churches, library, community center, and a high school). The typical section is a closed section and includes two 11-foot-wide through lanes in each direction. Turn lanes are provided at three signalized intersections (MD 500, Toledo Road, and Belcrest Road) and at four unsignalized intersections (Tennyson Road, Beechwood Road, Van Burn Street, and the north entrance to Northwestern High School). For most of the corridor, on-street parking is provided along both the northbound and southbound lanes. The northbound and southbound directions are separated by a grass median, which narrows down to a concrete monolithic median to accommodate the left-turn lanes.

Based on the latest available GIS data, the existing Prince George's County right-of-way line is offset approximately 5 to 15 feet from the northbound edge of pavement and 10 to 20 feet from the southbound edge of pavement.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of Adelphi Road through the entire BPPA. Between MD 500 and Beechwood Road, the sidewalk width is five feet and between Beechwood Road and the northern entrance to Northwestern High School, the sidewalk width is four feet. Along northbound Adelphi Road, the sidewalk buffer varies between zero and ten feet between MD 500 and Beechwood Road, and is seven feet north of Beechwood Road. Along southbound Adelphi Road, the sidewalk buffer varies between zero and four feet between MD 500 and Beechwood Road, and is two feet north of Beechwood Road.

There are no existing striped bicycle facilities along Adelphi Road within the BPPA. However, "Bicycles May Use Full Right Lane" signage is provided along both northbound and southbound Adelphi Road, and "Share the Road" signage is provided along the northbound direction.

Crosswalks are located at the following intersections:

- MD 410 (all four legs);
- Tennyson Road (north leg);
- Toledo Road (south and west legs; however, the west leg is faded);
- Belcrest Road (all four legs; however, the north, south, and east legs are faded); and

- Van Buren Street (north and south legs).

Pedestrian signals are located at the following intersections:

- MD 410 (all four legs);
- Toledo Road (south and west legs); and
- Belcrest Road (all four legs).

Data from 2010 through 2014 shows that four pedestrian or bicycle-involved crashes occurred along Adelphi Road within the BPPA, including:

- 2 at the MD 500 intersection;
- 1 at the Toledo Road intersection; and
- 1 at the Belcrest Road intersection.

iii. *Utilities*

Along northbound and southbound Adelphi Road, utility poles for overhead electric lines are generally located in the grass buffer between the roadway and sidewalk.

Roadway lighting is provided along both directions of Adelphi Road through the entire BPPA.

iv. *Street View Typical Sections*

Adelphi Road @ MD 410 (East-West Hwy):
Southbound Lane – North view



Adelphi Road @ MD 410 (East-West Hwy):
Northbound Lane – North view



Adelphi Road @ Belcrest Road:
Southbound Lane – North view



Adelphi Road @ Belcrest Road:
Northbound Lane – North view



**Adelphi Road @ Northwest HS Entrance:
Southbound Lane – South view**



5. Toledo Terrace

i. *Roadway*

The BPPA limits along Toledo Terrace extend approximately 0.6 miles from MD 410 to Belcrest Road. The posted speed limit is 25 mph and the adjacent land use includes a variety of commercial, mixed-use, and residential properties, including apartment buildings along the eastbound roadway and condominiums along the westbound roadway. The typical section is a closed section and includes one 12-foot-wide through lane in each direction. Striped bicycle lanes are provided between MD 410 and Toledo Place and on-street parking is provided between Toledo Place and Belcrest Road. However, parking is prohibited adjacent to the eight bus stops in the corridor.

Based on the latest available GIS data, the existing Prince George's County right-of-way line is offset approximately 20 to 25 feet from the eastbound edge of pavement and 10 to 20 feet from the westbound edge of pavement.

i. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of Toledo Terrace through the majority of the BPPA. However, there is a 360-foot-long gap in the sidewalk along eastbound Toledo Terrace near the entrance to the Prince George's Plaza Professional Park. West of Toledo Place, the sidewalk width is generally eight feet along westbound and four feet along eastbound, and the grass buffer width is generally five feet along westbound and 12 feet along eastbound. East of Toledo Place, the sidewalk width is four feet and the grass buffer is 3.5 feet for both directions.

Crosswalks are located at the following intersections:

- MD 410 (north, south, and west legs);
- Entrance to Post Park Apartments (west leg);
- Toledo Place (all four legs);
- Entrance to condominium building (west leg); and
- Belcrest Road (north, south, and west legs).

Pedestrian signals are located at the following intersection:

- MD 410 (north and west legs).

There are striped bicycle lanes along eastbound and westbound Toledo Terrace between MD 410 and Toledo Place. The bicycle lanes are approximately five feet wide, including the gutter pan.

Data from 2010 through 2014 shows that one pedestrian or bicycle-involved crash occurred along Toledo Terrace within the BPPA. The crash occurred at the Northwest Drive intersection.

ii. *Utilities*

Along eastbound and westbound Toledo Terrace, utility poles for overhead electric lines are generally located in the grass buffer between the roadway and sidewalk.

Roadway lighting is provided along the westbound side of Toledo Terrace through the BPPA.

iii. *Street View Typical Sections*

Toledo Terrace @ Northwest Drive:
North view



Toledo Terrace @ Adelphi Road:
South view



6. Northwest Drive

i. *Roadway*

The BPPA limits along Northwest Drive extend approximately 0.2 miles from Toledo Terrace to Dean Drive. The posted speed limit is 25 mph and the adjacent land use is primarily residential. The typical section is a closed section and includes one ten-foot-wide through lane in each direction. On-street parking is provided along both directions of Northwest Drive.

Based on the latest available GIS data, the existing Prince George's County right-of-way line is offset approximately 10 to 15 feet from the northbound and southbound edges of pavement.

ii. *Pedestrian and Bicycle*

The properties adjacent to the roadway are currently under redevelopment. The developer will be installing six-foot-wide sidewalks and five-foot-wide grass buffers along both sides of the roadway through the limits of the BPPA.

There are no existing crosswalks or pedestrian signals at any of the intersections along Northwest Drive.

There are no existing striped bicycle facilities along Northwest Drive within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Northwest Drive within the BPPA.

iii. *Utilities*

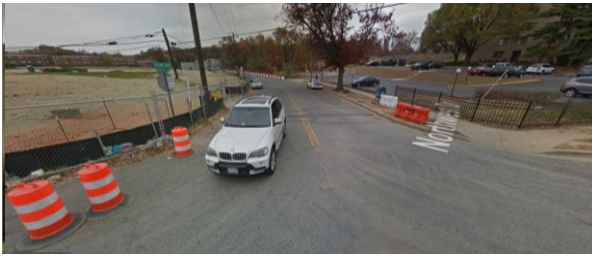
Utility poles for overhead electric lines are generally located along the southbound side of Northwest Drive.

Roadway lighting is provided along the southbound side of Northwest Drive through the BPPA.

iv. *Street View Typical Sections*

Northwest Drive @ Toledo Terrace:

North view



Northwest Drive @ Dean Drive:

South view



7. Toledo Road

i. *Roadway*

The BPPA limits along Toledo Road extend approximately 0.3 miles from Belcrest Road to Adelphi Road. The posted speed limit is 25 mph and the adjacent land uses are primarily mixed-use and residential. The typical section is a closed section and includes one 17-foot-wide through lane in each direction.

Based on the latest available GIS data, the existing right-of-way line is offset approximately 10 to 15 feet from the eastbound and westbound edges of pavement.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of Toledo Road through the BPPA. For the eastbound direction, the sidewalk width is eight feet. For the westbound direction, the sidewalk width is five feet. For most of the corridor, there is no buffer between the curb and the sidewalk.

Crosswalks are located at the following intersections:

- Belcrest Road (all four legs);
- Mid-block crossing at 6525 Toledo Road;
- America Boulevard (south, east, and west legs);
- Road from/to parking garage (south leg);
- Road from/to parking garage (south leg); and
- Adelphi Road (south and west legs; however, the west leg is faded).

Pedestrian signals are located at the following intersections:

- Belcrest Road (all four legs); and
- Adelphi Road (south and west legs).

There are no existing striped bicycle facilities along Toledo Road within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Toledo Road within the BPPA.

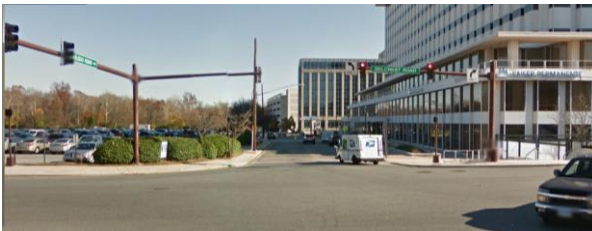
iii. *Utilities*

Utility poles for overhead electric lines are generally located within the existing sidewalk along westbound Toledo Road.

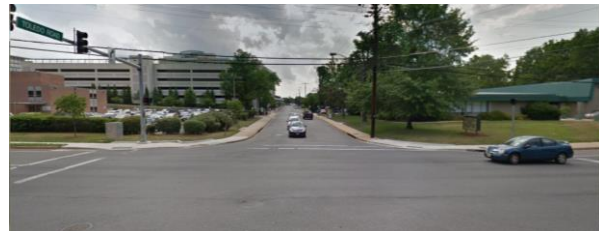
Roadway lighting is provided along the westbound side of Toledo Road and pedestrian-level street lighting is provided along the eastbound direction.

iv. *Street View Typical Sections*

Toledo Road @ Belcrest Road
East view



Toledo Road @ Adelphi Road
West view



8. Editors Park Drive

i. *Roadway*

The BPPA limits along Editors Park Drive extend approximately 0.2 miles from Nicholas Orem Middle School to MD 410. The posted speed limit is 25 mph and the adjacent land use is zoned commercial, residential, and mixed-use, and includes properties such as a school and a grocery store. The typical section is a closed section and includes one 17-foot-wide through lane in each direction.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 10 to 15 feet from the northbound and southbound edges of pavement.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of Editors Park Drive through the BPPA. Along both the northbound and southbound directions, the sidewalk width is five feet and the grass buffer width is four to five feet.

Crosswalks are located at the following intersection:

- MD 410 (south and west legs).

Pedestrian signals are located at the following intersection:

- MD 410 (south and west legs).

There are no existing striped bicycle facilities along Editors Park Drive within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Editors Park Drive within the BPPA.

iii. *Utilities*

Utility poles for overhead electric lines are generally located within the grass buffer along the northbound side of Editors Park Drive.

Roadway lighting is provided along the northbound side of Editors Park Drive.

iv. *Street View Typical Sections*

Editors Park Drive @ Nicholas Orem M.S.:

North view



Editors Park Drive @ MD 410:

South view



9. 33rd Avenue

i. *Roadway*

The BPPA limits along 33rd Avenue extend approximately 0.1 miles from Nicholson Street to the dead end near Nicholas Orem Middle School. The posted speed limit is 25 mph and the adjacent land use is residential. The typical section is a closed section and includes one 12-foot-wide through lane in each direction. On-street parking is allowed along both directions of 33rd Avenue.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 20 feet from the northbound edge of pavement and five to ten feet from the southbound edge of pavement.

ii. *Pedestrian and Bicycle*

Sidewalk is provided along the southbound side of the roadway for the entire corridor and along the northbound side of the roadway for a small portion of the corridor. Along both the northbound and southbound directions, the sidewalk width is four feet and the grass buffer width varies between five and 7.5 feet.

It should be noted that a stairway connection is provided from the dead end along 33rd Avenue to Nicholas Orem Middle School. This connection not only provides access to the Middle School and for residents along 33rd Avenue, but for many more residents who live in the community south of the school. A goat path was also observed between the end of the existing sidewalk along 33rd Avenue and the stairway leading to the school.

Crosswalks are located at the following intersection:

- Nicholson Street (north and south legs).

There are no pedestrian signals along 33rd Avenue.

There are no existing striped bicycle facilities along 33rd Avenue within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along 33rd Avenue within the BPPA.

iii. *Utilities*

Utility poles for overhead electric lines are located immediately behind the curb along the northbound side of the roadway.

Roadway lighting is provided along the northbound side of 33rd Avenue.

iv. *Street View Typical Sections*

33rd Avenue @ Nicholson Street:
North view



33rd Avenue to Dead End:
North view



10. Oliver Street

i. *Roadway*

The BPPA limits along Oliver Street extend approximately 0.3 miles from 35th Avenue to MD 500. The posted speed limit is 25 mph and the adjacent land use is residential. The typical section is a closed section and includes one 12-foot-wide through lane in each direction. On-street parking is allowed along both directions of Oliver Street.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 10 to 15 feet from the eastbound and westbound edges of pavement.

ii. *Pedestrian and Bicycle*

Sidewalk is provided along the westbound side of the roadway for the entire corridor and along the eastbound side of the roadway for a small portion of the corridor. Along both the eastbound and westbound directions, the sidewalk width is four feet and the grass buffer width is six feet.

Crosswalks are located at the following intersections:

- Jamestown Road (east leg); and
- MD 500 (north leg).

There are no pedestrian signals along Oliver Street.

There are no existing striped bicycle facilities along Oliver Street within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Oliver Street within the BPPA.

iii. Utilities

Utility poles for overhead electric lines are located within the grass buffer along the westbound side of the roadway.

Roadway lighting is provided along the westbound side of Oliver Street.

iv. Street View Typical Sections

**Oliver Street @ 35th Avenue:
West view**



**Oliver Street @ MD 500:
East view**



11. Jamestown Road

i. Roadway

The BPPA limits along Jamestown Road extend approximately 0.2 miles from Nicholson Street to Oliver Street. The posted speed limit is 25 mph and the adjacent land use is residential. The typical section is a closed section and includes one 14-foot-wide through lane in each direction. On-street parking is allowed along both directions of Jamestown Road.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 15 to 20 feet from the northbound and southbound edges of pavement.

ii. Pedestrian and Bicycle

Sidewalk is provided along the northbound side of Jamestown Road within the BPPA. The sidewalk width is four feet and there is no buffer between the curb and the sidewalk. North of Oliver Street, an existing sidewalk and stairway provides a pedestrian connection between Jamestown Road and the Prince George's Plaza Metro station.

Crosswalks are located at the following intersections:

- Nicholson Street (north, south, and west legs); and
- Oliver Street (east leg).

There are no pedestrian signals along Jamestown Road.

There are no existing striped bicycle facilities along Jamestown Road within the BPPA.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Jamestown Road within the BPPA.

iii. Utilities

Utility poles for overhead electric lines are located behind the sidewalk along the northbound side of the roadway.

Roadway lighting is provided along the northbound side of Jamestown Road.

iv. Street View Typical Sections

Jamestown Road @ Nicholson Street:
North view



Jamestown Road @ 35th Avenue:
North view



Jamestown Road @ Oliver Street:
North view



Jamestown Road @ Oliver Street:
North view - Path to Metro Station



12. Nicholson Street

i. Roadway

The BPPA limits along Nicholson Street extend approximately 0.3 miles from 33rd Avenue to MD 500. The posted speed limit is 20 mph and the adjacent land use is residential. The typical section is a closed section and includes one 14-foot-wide through lane in each direction. On-street parking is allowed along both directions of Nicholson Street.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 10 to 15 feet from the eastbound edge of pavement and 15 to 20 feet from the westbound edge of pavement.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along both sides of the roadway for the entire BPPA, except for along the eastbound roadway between Jamestown Road and 36th Avenue. The width of all sidewalks is four feet and the grass buffer width varies between four and eight feet, except along westbound between 37th Avenue and MD 500 where there is no buffer.

Crosswalks are located at the following intersections:

- 33rd Avenue (north and south legs);
- 34th Avenue (north leg);
- Jamestown Road (north, south, and west legs);
- 36th Avenue (north leg);
- Mid-block crossing at St. Matthew's Parish Day School; and
- 37th Avenue (north leg).

There are no pedestrian signals along Nicholson Street.

There are no existing striped bicycle facilities along Jamestown Road within the BPPA. However, "Bicycle Route" signs are provided along both the eastbound and westbound roadways near the MD 500 intersection. In addition, sharrow markings are provided along the both directions through the corridor.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Nicholson Street within the BPPA.

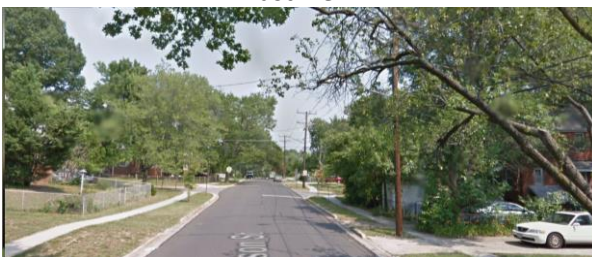
iii. *Utilities*

Utility poles for overhead electric lines are located behind the curb or in the grass buffer along the eastbound side of the roadway.

Roadway lighting is provided along the eastbound side of Nicholson Street.

iv. *Street View Typical Sections*

Nicholson Street @ 33rd Avenue:
East view



Nicholson Street @ MD 500:
East view



13. Queensbury Road

i. *Roadway*

The BPPA limits along Queensbury Road extend approximately 0.2 miles from MD 500 to 41st Avenue. The posted speed limit is 25 mph and the adjacent land use is residential. The typical section is a closed section

and includes one 12-foot-wide through lane in each direction.

Based on the latest available GIS data, the City of Hyattsville existing right-of-way line is offset approximately 5 to 15 feet from the eastbound and westbound edges of pavement.

ii. Pedestrian and Bicycle

Sidewalks are provided along both sides of the roadway for the entire BPPA. The width of all sidewalks is four feet and the grass buffer width varies between zero and one foot.

Crosswalks are located at the following intersections:

- MD 500 (all four legs);
- 39th Place (south leg);
- 40th Avenue (south leg); and
- 41st Avenue (all four legs).

Pedestrian signals are located at the following intersection:

- MD 500 (all four legs).

There are no existing striped bicycle facilities along Queensbury Road within the BPPA. However, "Bicycle Route" signing is provided along both the eastbound and westbound roadways near the MD 500 intersection.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along Queensbury Road within the BPPA.

iii. Utilities

Utility poles for overhead electric lines are located in the grass buffer along the westbound side of the roadway through the entire BPPA and along the eastbound lanes for a portion of the BPPA.

Roadway lighting is provided along the westbound side of Queensbury Road.

iv. Street View Typical Sections

Queensbury Road @ MD 500:
East view



Queensbury Road @ 41st Avenue:
East view



14. 41st Avenue

i. *Roadway*

The BPPA limits along 41st Avenue extend approximately 0.1 miles from Queensbury Road to the dead end near MD 500. The posted speed limit is 25 mph and the adjacent land use is residential. The typical section is a closed section and includes one 12-foot-wide through lane in each direction. On-street parking is allowed along the southbound side of the roadway but it is prohibited along the northbound side.

Based on the latest available GIS data, the existing City of Hyattsville right-of-way line is offset approximately 15 to 20 feet from the northbound edge of pavement and five to feet from the southbound edge of pavement.

ii. *Pedestrian and Bicycle*

Sidewalks are provided along the northbound roadway for the entire BPPA. The sidewalk width is five feet and there is no buffer between the curb and the sidewalk.

Crosswalks are located at the following intersections:

- Queensbury Road (all four legs);
- Quintana Street (north and east legs); and
- Roanoke Road (east leg).

There are no pedestrian signals along 41st Avenue.

There are no existing striped bicycle facilities along 41st Avenue within the BPPA. However, sharrows are provided along both directions and “Bicycle Route” signing is provided along the southbound roadway near the Queensbury Road intersection.

Data from 2010 through 2014 shows that no pedestrian or bicycle-involved crashes occurred along 41st Avenue within the BPPA.

iii. *Utilities*

Utility poles for overhead electric lines are generally located behind the curb along the southbound side of the roadway through the entire BPPA.

Roadway lighting is provided along the southbound side of 41st Avenue.

iv. Street View Typical Sections

41st Avenue @ Queensbury Road:

North view



41st Avenue to Dead End near MD 500:

North view



Transit

The Prince George's Plaza Metro station is located at 3575 East-West Highway and began operations in December 1993. Owned by WMATA, it is encompassed by the Mall at Prince Georges, University Town Center, the National Center for Health Statistics, residences, offices, and other retail complexes. The station has northbound and southbound tracks used by the WMATA Green Line. The southbound track goes to Branch Avenue in Suitland and the northbound track goes to Greenbelt. The adjacent parking structure has 1,068 parking spaces, 40 bicycle parking spaces, American with Disabilities Act (ADA) pedestrian access, and a pedestrian bridge across MD 410. Daily boarding for 2016 was estimated at 4,374 daily passengers. Additionally, the plaza is linked with the WMATA Metrobus, Prince George's County 'The Bus,' and the University of Maryland shuttle. Bus service operates on MD 410, MD 500, Belcrest Road, Adelphi Road, Toledo Terrace, Northwest Drive, Toledo Road, and Queensbury Road. The number of bus stops by roadway segment can be found in **Appendix B**. The multimodal access to the Prince George's Plaza Metro station provides convenient access to the growing commercial developments and the residences in the area.

Environmental Resources

Cultural Resources

No cultural resources were identified within the BPPA. The University Park Historic District, listed on the National Register of Historic Properties (NRHP), is located adjacent to the BPPA east of Adelphi Road. The University Park Historic District is significant because it is a large and intact example of an early-20th century, middle-class automobile suburb. The primarily residential district developed over the period from 1920 to 1945.

Other regional resource centers are nearby and serve to educate visitors about the area. Opened in 2017, the Maryland Milestones Heritage Center is a connecting point for visitors and residents with opportunities to explore the region. The center, located in the Pyramid Atlantic Art Center at 4318 Gallatin Street in Hyattsville, has exhibit space to showcase the story of the communities within the Heritage Area, a workshop/meeting facility, and space for local art. This project is the core of the Maryland Milestones/Anacostia Trails Heritage Area and is a hub for the work throughout the region, which includes telling local history, building bicycle infrastructure, and expanding arts opportunities.



Natural Resources

The BPPA includes largely developed land uses such as transportation, schools, and commercial use. The primary natural resources in the vicinity are centered around the Northwest Branch of the Anacostia River. The branch runs roughly north to south along the western side of the BPPA, crossing underneath MD 410 in the far western end of the BPPA. The Northwest Branch Stream Valley Park and the Northwest Branch Trail are located along the stream. Wetlands are present around the stream to the north of MD 410, per the Maryland Department of Natural Resources Wetlands GIS data. No other natural resources are located within the highly developed BPPA.

III PROPOSED BICYCLE AND PEDESTRIAN FACILITY IMPROVEMENTS AND EVALUATION

Prince George's County DPW&T Planned Improvements

The Prince George's County DPW&T included multiple potential bicycle facilities in its BPPA Designation Application. Several planning documents and reports, listed below, were reviewed to identify recommended improvements that were considered for this BPPA Plan.

- Prince George's County Master Plan of Transportation – 2009
- Metrorail Bicycle and Pedestrian Access Improvements Study – 2010
- City of Hyattsville Bicycle and Pedestrian Master Plan – 2008
- Prince George's Plaza Transit District Development Plan - 2016

A map showing the proposed facilities is shown in **Figure 3** and individual maps of each roadway segment are included in **Appendix C**. The types of planned facilities and associated roadway limits are described below.



- | | | | |
|--|-----------------------|---|---------------------------------|
|  | BPPA Boundary Limits |  | Planned Shared Lane |
|  | Existing Bicycle Lane |  | Planned Two-Way Shared Use Path |
|  | Planned Bicycle Lane |  | Planned Street Lighting |

Bicycle and Pedestrian Priority Area Plan Prince George's Plaza Metro

Figure 3: Recommended Improvements



0 500 1,000 2,000 Feet

Bicycle Lane

Per the MDOT SHA *Bicycle Policy & Design Guidelines* (2015), a bicycle lane is “any portion of a roadway or shoulder which has been designated for single directional flow and includes pavement markings for the preferential or exclusive use of bicyclists.” For State-owned roadways, the width of a bicycle lane varies between four and seven feet, depending on the posted speed limit, truck volumes, and if the bicycle lane is adjacent to a traffic barrier, a concrete barrier, a curb without a gutter pan, or on-street parking. **Table 2** is taken from the 2015 version of the MDOT SHA *Bicycle Policy & Design Guidelines*. The current version should be referenced for any bicycle lane design on State-owned roadways.

Table 2 - Marked Bike Lanes (from 2015 MDOT SHA Bicycle Policy & Design Guidelines)

MINIMUM SHOULDER WIDTHS FOR MARKED BIKE LANES		
POSTED SPEED LIMIT	TRUCK VOLUMES (%ADT)	SHOULDER/LANE WIDTH*
≤ 35 MPH	-----	4 FEET
> 35 MPH and ≤ 45 MPH	≤ 8% trucks	5 FEET
> 35 MPH and ≤ 45 MPH	> 8% trucks	6 FEET
> 45 MPH	-----	6 FEET

*The shoulder/lane width is measured excluding the gutter pan.

*Add 1 foot minimum to the shoulder/lane width if operating adjacent to traffic barrier, concrete barrier, a curb without a gutter pan, or on-street parking.

Bicycle lanes on County or State roadways shall be signed according to the 2011 version of the *Maryland Manual on Uniform Traffic Control Devices for Streets and Highways* (MdMUTCD). The primary sign used to denote a bicycle lane is the R3-17 sign, as shown in **Figure 4**, which is placed along the limits of the striped bicycle lane.

Figure 4 - MdMUTCD R3-17



Per the 2012 DPW&T *Specifications and Standards for Roadways and Bridges*, the minimum bicycle lane width along County-owned roadways is five feet, as measured from the outside stripe of the motorists' travel way to the face-of-curb. The County standards require bicycle lane signage to be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities*, which also recommends usage of the R3-17 sign.

In the reviewed plans, it was recommended bicycle lanes be implemented along the following roadway segments within the BPPA:

- MD 410: Anacostia Tributary Trail System to Adelphi Road; and
- Jamestown Road: Nicholson Street to Oliver Street (with an additional connection from Oliver Street to the Metro station).

Shared-Use Path

Per the MDOT SHA *Bicycle Policy & Design Guidelines* (2015), a shared-use path is "a paved or unpaved bikeway outside the motor vehicle traveled way and physically separated from motorized vehicular traffic by an open space, curb, curb and gutter, or barrier, and either within the highway right-of-way or within an independent alignment." For State-owned roadways, the minimum width of a two-way shared-use path is ten feet with two-foot-wide shoulders on both sides. For County-owned roadways, the DPW&T *Specifications and Standards for Roadways and Bridges* (2012) states that an eight-foot-wide shared-use path may be permitted in areas with right-of-way limitations and where bicycle and pedestrian traffic volumes are expected to be low.

The AASHTO *Guide for the Development of Bicycle Facilities* (2012) states that the minimum recommended distance between a shared-use path and the roadway curb is five feet. A physical barrier between the curb and shared-use path is required if the separation is less than five feet.

In the reviewed plans, it was recommended a shared-use path be implemented along the following roadway segments within the BPPA:

- Belcrest Road: MD 500 to Adelphi Road; and
- 41st Avenue: Queensbury Road to dead end near MD 500.

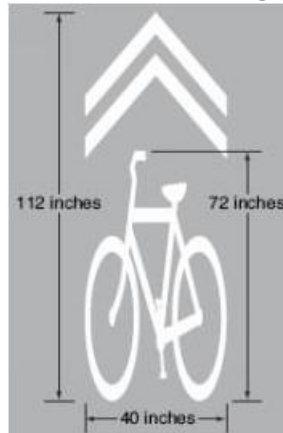
Shared Lane

Per the MDOT SHA *Bicycle Policy & Design Guidelines* (2015), a shared lane is "a roadway lane which is open to both bicycle and motor vehicle travel, without assigned space for each." To increase automobile driver and bicyclist awareness of a shared lane, specific pavement markings and/or signs can be installed to denote the limits of the shared lane. However, any new pavement markings and/or signs along State-owned roadways must be approved by the MDOT SHA Office of Traffic and Safety (OTS) before implementation.

One specific type of pavement marking that can be used along a shared lane is a sharrow, as shown in **Figure 5**. Sharrows encourage safe passing of bicyclists by motorists and help alert road users to the potential presence of bicyclists. Sharrows, once approved by MDOT SHA OTS, are allowed to be installed along State-owned roadways where the rightmost lane width is greater than or equal to 13 feet and less than 15 feet, and where the posted speed limit is less than or equal to 35 mph. Per the Prince George's

County Department of Permitting, Inspections and Enforcement (DPIE) *Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency.

Figure 5 - Shared Lane Marking (Sharrows)



Signing along shared lanes could include the “Share the Road” assembly (W11-1 and W16-1), as shown in **Figure 6**. Along State-owned roadways, this assembly should be used when the rightmost travel lane is less than 15 feet wide and there is insufficient shoulder width, or where there are obstructions to an otherwise rideable shoulder. However, per the MDOT SHA *Bicycle Policy & Design Guidelines* (2015), “Share the Road” signs should not be used in combination with sharrows. Use of the W11-1 and W16-1 signs, either as standalone signs or in combination with sharrows, along County roads should be approved by the appropriate agency before implementation.

Figure 6 - "Share the Road" Assembly



In the reviewed plans, it was recommended shared lanes be implemented along the following roadway segments within the BPPA:

- Adelphi Road: MD 500 to Northwestern High School North Entrance;
- Toledo Terrace: Northwest Drive to Belcrest Road;
- Northwest Drive: Toledo Terrace to Dean Drive;
- Toledo Road: Belcrest Road to Adelphi Road;
- Editors Park Drive: Nicholas Orem Middle School to MD 410;
- 33rd Avenue: Nicholson Street to dead end near Nicholas Orem Middle School;
- Oliver Street: 35th Avenue to MD 500;
- Nicholson Street: 33rd Avenue to MD 500; and
- Queensbury Road: MD 500 to 41st Avenue.

Feasibility Analysis

A high-level feasibility analysis was performed for each of the bicycle and pedestrian improvements recommended by DPW&T to determine any issues, concerns, potential impacts, or further considerations for each recommendation. The results of the feasibility analysis for each of the 14 roadway segments are provided below in **Table 3**. State guidelines were used to determine feasibility along the State-owned roadways and County guidelines were used to determine feasibility along the County-owned roadways. Unlike MDOT SHA, the DPW&T does not have any published guidelines for bicycle facilities. Instead, it uses industry standards such as those published by the National Association of City Transportation Officials (NACTO) and AASHTO. In addition, DPW&T considers MDOT SHA guidelines on a case-by-case basis.

Also included in **Table 3** is the County’s prioritization of the proposed improvements, with “1” being the highest priority and “13” being the lowest priority. The County developed the priority rankings through a survey of project stakeholders from DPW&T, M-NCPPC, WMATA, the City of Hyattsville, and the Town of University Park.

Table 3 - Feasibility of Recommended Improvements

Roadway	Limits		Recommendation	Feasible?	County Prioritization	Comments
	From	To				
MD 410	Anacostia Tributary Trail System	Adelphi Road	Bicycle Lane	Yes	1	Contingent upon the MD 410 road diet project
MD 500	Nicholson Street	MD 410	None	N/A	N/A	Urban reconstruction project was recently completed
Belcrest Road	MD 500	Adelphi Road	Shared-Use Path	No	3	Constrained on both sides of roadway by adjacent properties and grading
			Street Lighting	Yes	N/A	Project completed

Roadway	Limits		Recommendation	Feasible?	County Prioritization	Comments
	From	To				
Adelphi Road	MD 410	Northwestern High School North Entrance	Shared Bicycle Lane	Yes	2	Implement by installing sharrows
Toledo Terrace	MD 410	Belcrest Road	Shared Bicycle Lane	Yes	5	Implement by installing sharrows and new signing
Northwest Drive	Toledo Terrace	Dean Drive	Shared Bicycle Lane	Yes	11	Implement by installing sharrows and new signing
Toledo Road	Belcrest Road	Adelphi Road	Shared Bicycle Lane	No	8	Consider installing bicycle lanes
Editors Park Drive	Nicholas Orem Middle School Entrance	MD 410	Shared Bicycle Lane	No	6	Consider installing bicycle lanes
33 rd Avenue	Nicholson Street	Dead Ends 260' north	Shared Bicycle Lane	Yes	12	Implement by installing new signing
Oliver Street	35 th Avenue	MD 500	Shared Bicycle Lane	Yes	13	Implement by installing new signing
Jamestown Road	Nicholson Street	Oliver Street	Bicycle Lane	No	7	Roadway is not wide enough to accommodate bicycle lanes
Nicholson Street	33 rd Avenue	MD 500	Shared Bicycle Lane	Yes	9	Enhance existing sharrows
Queensbury Road	MD 500	41 st Avenue	Shared Bicycle Lane	Yes	4	Implement by installing new signing
41 st Avenue	Queensbury Road	Dead End 100' north	Shared Use Path	Yes	10	Implement along northbound side of roadway

1. MD 410

As described above, the Prince George's Plaza BPPA Work Group's highest priority recommendation is to install bicycle lanes along MD 410 between the Anacostia Tributary Trail System and Adelphi Road. Between the Anacostia Tributary Trail System and the Post Park Apartments, where there are full shoulders along both eastbound and westbound MD 410, bicycle lanes could be implemented by installing new signage. However, east of the Post Park Apartments, there is no roadway shoulder so both the eastbound and westbound roadways would need to be widened to accommodate new bicycle lanes.

Widening both sides of MD 410 to provide bicycle lanes could potentially result in numerous drainage, utility, pedestrian, and right-of-way impacts. All existing drainage inlets would need to be relocated to the new curb line and the underground pipes would need to be modified to tie into the relocated inlets. In most cases, the existing utility poles are offset far enough from the existing curb and therefore, would not be directly impacted by the widening. However, existing utility poles could be indirectly impacted if the existing buffer and sidewalk widths are maintained and the poles are shifted to accommodate the roadway widening. To avoid impacting the utility poles, the grass buffer or the sidewalk could be narrowed but this would negatively affect the walking environment for pedestrians. There would also be property impacts, particularly along westbound MD 410 near Prince George's Plaza Metro, that would require right-of-way purchase to construct the widened roadway.

Since widening the roadway could result in numerous impacts, an option to remove vehicular lanes along MD 410 to create space for the bicycle lanes was considered. In 2015, MDOT SHA initiated a study, performed by the National Transportation Center at the University of Maryland, to consider potential traffic impacts associated with the possible removal of lanes (referred to as a "road diet") along MD 410. The road diet project would reduce the number of through lanes from three to two along westbound MD 410 and truncate the existing continuous right-turn lanes, which would create space for the bicycle lanes without widening the roadway. Widening would only be required at intersections where there are only two existing lanes and a right-turn lane is required. The widening could still have drainage, utility, pedestrian, and right-of-way impacts, but the impacts would be much less than if the roadway was widened for the entire length of the BPPA. However, along eastbound MD 410, because there are only two existing through lanes, the road diet approach would not be feasible without widening, and the associated impacts with widening, to accommodate right-turn lanes where appropriate.

The MD 410 Road Diet Study considered the direct local impact on MD 410 and the regional impacts in the neighborhood area and alternative routes. The analytical analysis used the Metropolitan Washington Council of Governments travel demand model to evaluate trip generation and distribution, mode choice, and route choice, and to consider 2030 future-year scenarios. The Study concluded that the road diet would result in little to no reduction in average speed on MD 410 in 2030. However, no follow-up studies or design/construction projects have been initiated since the completion of the MD 410 Road Diet Study.

Therefore, due to the high potential for impacts if the roadway is widened, it is assumed that implementing the proposed bicycle lanes along MD 410 is contingent upon the road diet project.

One item for further consideration along MD 410 would be to construct a shared-use path along eastbound MD 410 between the Northwest Branch Trail and the Toledo Terrace intersection so that westbound bicyclists have a connection to the Anacostia Tributary Trail System. Without a shared-use path, westbound bicyclists using the proposed bicycle lanes would not have an opportunity to access the trail.

In conclusion, the recommended bicycle lanes along MD 410 are contingent upon the road diet project and are only feasible if the road diet project is implemented. If the road diet and bicycle lanes move forward, consideration should be given to a shared-use path along eastbound MD 410 between the Northwest Branch Trail and the Toledo Terrace intersection.

2. [MD 500](#)

A construction project was recently completed for MD 500 from MD 208 to MD 410. This project involved construction of a landscaped median, inclusion of ADA-compliant sidewalks and curb and gutters, and other related improvements. Existing sidewalks and bicycle lanes along the corridor were replaced in-kind or improved with new sidewalks and bicycle lanes. As a result, this section of MD 500 meets current standards for pedestrian and bicycle accommodations and therefore, there are no proposed improvements along MD 500 within the BPPA.

3. [Belcrest Road](#)

As described above, the Prince George's Plaza BPPA Work Group's third priority recommendation is to install a shared-use path and street lighting along Belcrest Road between MD 500 and Adelphi Road. However, the proposed street lights were installed in 2017 so this feasibility analysis focuses on the proposed shared-use path. To meet AASHTO and County design guidelines, the minimum buffer between the face of curb and the shared-use path must be five feet, and the minimum width of the shared-use path must be eight feet.

One of the difficulties with implementing a shared-use path along Belcrest Road would be determining which side the path should be located. The ideal condition would be to build the path along one side of Belcrest Road for the entire length of the BPPA, but there are constraints along both sides of the roadway that make it difficult to determine which side would have fewer impacts without completing a detailed design. The major constraints along each side of the roadway are listed below.

Constraints with Placing the Shared-Use Path Along the Northbound Side of Belcrest Road

- Between the entrance to First United Methodist Church and the shopping center, there are fill slopes beyond the curb, so constructing a shared-use path would require extensive earthwork or a retaining wall.
- North of MD 410, there is not enough width for the buffer and shared-use path near the entrance to the parking lot for the large office building that is in the northeast corner of the MD 410/Belcrest Road intersection.
- Between Freedom Way and Toledo Road, there is not enough width for the buffer and shared-use path due to the proximity of large buildings to the roadway and to a retaining wall near the Toledo Road intersection.
- North of Toledo Road, it is unclear if there is enough width adjacent to the large parking lot for the buffer and shared-use path. Furthermore, the newly constructed light poles are located in what would likely be the alignment of the shared-use path.
- South of the entrance to University Christian Church, there is intense vegetation that would need to be cleared for the shared-use path. Furthermore, there is guardrail to protect vehicles from the steep fill slope, so a shared-use path would require extensive earthwork or a retaining wall.

Constraints with Placing the Shared-Use Path Along the Southbound Side of Belcrest Road

- South of Adelphi Road, there is intense vegetation that would need to be cleared for the shared-use path. Furthermore, there is guardrail to protect vehicles from the steep fill slope, so a shared-use path would require extensive earthwork or a retaining wall.
- Between Toledo Terrace and MD 500, there are several physical features that would be impacted by the proposed shared-use path, such as: parking lots, retaining walls, concrete steps, and buildings.

Given that the County's existing right-of-way is generally offset 10 to 20 feet from the face of curb, some property would need to be purchased or easements would need to be established to construct an eight-foot-wide path with a five-foot offset. In some cases, the width of the buffer may be more than five feet to avoid impacting light poles, trees, or other features, which means that additional right-of-way could be required.

In conclusion, the recommended shared-use path along Belcrest Road is determined to not be feasible due to the inability to implement the path along one side of the street without incurring significant impacts. As described in Chapter II, the north, south, and east crosswalks at the Adelphi Road intersection are faded. Pedestrian safety would be improved if these crosswalks were restriped.

4. Adelphi Road

As described above, the Prince George's Plaza BPPA Work Group's second priority recommendation is to install shared lanes along Adelphi Road between MD 500 and the northern entrance to Northwestern High School. Since "Bicycles May Use Full Right Lane" and "Share the Road" signage is already provided along both northbound and southbound Adelphi Road, it is assumed that the proposed recommendation is to install sharrow pavement markings along the roadway.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Adelphi Road has two travel lanes in each direction and in many cases an additional parking lane, sharrows would be appropriate based on the referenced checklist.

In conclusion, sharrow pavement markings along Adelphi Road would be feasible because the roadway is owned by the County and because sharrows would be consistent with the County's design guidelines. However, because there is existing "Share the Road" and "Bicycles May Use Full Right Lane" signage along the roadway, Adelphi Road already acts as a shared roadway. As described in Chapter II, the north, south, and east crosswalks at the Belcrest Road intersection and the west crosswalk at the Toledo Road intersection are faded. Pedestrian safety would be improved if these crosswalks were restriped.

5. Toledo Terrace

As described above, the Prince George's Plaza BPPA Work Group's fifth priority recommendation is to install shared lanes along Toledo Terrace between Northwest Drive and Belcrest Road.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since

Toledo Terrace has one travel lane and one parking lane in each direction, sharrows would be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would be appropriate along Toledo Terrace.

In conclusion, the proposed recommendation of implementing a shared roadway along Toledo Terrace could be accomplished by implementing sharrows and “Bicycle May Use Full Lane” signage.

6. Northwest Drive

As described above, the Prince George's Plaza BPPA Work Group's 11th priority recommendation is to install shared lanes along Northwest Drive between Toledo Terrace and Dean Drive.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Northwest Drive has one travel lane and one parking lane in each direction, sharrows would be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would be appropriate along Northwest Drive.

In conclusion, the proposed recommendation of implementing a shared roadway along Northwest Drive could be accomplished by implementing sharrows and “Bicycle May Use Full Lane” signage.

7. Toledo Road

As described above, the Prince George's Plaza BPPA Work Group's eighth priority recommendation is to install shared lanes along Toledo Road between Belcrest Road and Adelphi Road.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Toledo Road only has one travel lane in each direction, sharrows would not be appropriate based on the referenced checklist, however, Toledo Road is private and design guidelines are not required.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along Toledo Road. However, Toledo Road is private and design guidelines are not required.

One item for further consideration along Toledo Road would be to implement striped bicycle lanes instead of a shared roadway. Since the roadway lanes are currently 17 feet wide, the vehicular lanes could be striped as 12-foot-wide lanes which would leave space for a five-foot-wide bicycle lane in each direction.

In conclusion, the proposed recommendation of implementing a shared roadway along Toledo Road is could be implemented if the private property owner allows. Bicycle lanes could be considered for Toledo Road as implementation would result in minimal impacts. It should also be noted that as

described in Chapter II, the west crosswalk at the Adelphi Road intersection is faded. Pedestrian safety would be improved if this crosswalk were restriped.

8. [Editors Park Drive](#)

As described above, the Prince George's Plaza BPPA Work Group's sixth priority recommendation is to install shared lanes along Editors Park Drive between Nicholas Orem Middle School and MD 410.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Editors Park Drive only has one travel lane in each direction, sharrows would not be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that "Bikes May Use Full Lane" signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along Editors Park Drive.

One item for further consideration along Editors Park Drive would be to implement striped bicycle lanes instead of a shared roadway. Since the roadway lanes are currently 17 feet wide, the vehicular lanes could be striped as 12-foot-wide lanes which would leave space for a five-foot bicycle lane in each direction.

In conclusion, the proposed recommendation of implementing a shared roadway along Editors Park Drive is not in accordance with the County guidance for shared lanes. However, bicycle lanes could be considered for Editors Park Drive as implementation would result in minimal impacts.

9. [33rd Avenue](#)

As described above, the Prince George's Plaza BPPA Work Group's 12th priority recommendation is to install shared lanes along 33rd Avenue between Nicholson Street and the dead end near Nicholas Orem Middle School.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since 33rd Avenue only has one 12-foot-wide travel lane in each direction, sharrows would not be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that "Bikes May Use Full Lane" signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along 33rd Avenue. However, this sign is appropriate when the State guidelines are used.

In conclusion, the proposed recommendation of implementing a shared roadway along 33rd Avenue could be accomplished by implementing "Bicycle May Use Full Lane" signage if the State guidelines are used. Sharrows are not in accordance with the County guidance for shared lanes, so they are not recommended for 33rd Avenue.

10. [Oliver Street](#)

As described above, the Prince George's Plaza BPPA Work Group's 13th priority recommendation is to install shared lanes along Oliver Street between 35th Avenue and MD 500.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Oliver Street only has one 12-foot-wide travel lane in each direction, sharrows would not be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along Oliver Street. However, this sign is appropriate when the State guidelines are used.

In conclusion, the proposed recommendation of implementing a shared roadway along Oliver Street could be accomplished by implementing “Bicycle May Use Full Lane” signage if the County guidelines are used. Sharrows are not in accordance with the County guidance for shared lanes, so they are not recommended for Oliver Street.

11. Jamestown Road

As described above, the Prince George's Plaza BPPA Work Group's seventh priority recommendation is to install bicycle lanes along Jamestown Road between Nicholson Street and Oliver Street, and to provide a connection from Oliver Street to the Prince George's Plaza Metro station.

Per the 2012 DPW&T *Specifications and Standards for Roadways and Bridges*, the minimum bicycle lane width along County-owned roadways is five feet, as measured from the outside stripe of the motorists' travel way to the face-of-curb. Since the existing roadway width is 28 feet, installing two five-foot-wide bicycle lanes would leave 18 feet of pavement, enough space for two nine-foot-wide travel lanes. However, there would not be any space remaining to be able to maintain the existing on-street parking which is required along Jamestown Road because there are several houses that do not have driveways. Therefore, it is not feasible to implement bicycle lanes along Jamestown Road.

The DPW&T recommendations also included a connection between Oliver Street and the Prince George's Plaza Metro station. In a meeting with the County, it was suggested a trundle be installed along one side of the existing stairway. A trundle is a smooth, paved surface adjacent to a stairway that allows someone to push their bike while walking up or down the stairway. More detailed design would be needed to determine the feasibility of the trundle, specifically if there is enough space between the stairway and the existing chain link fence that is adjacent to the stairway. Coordination with the WMATA would be required as the stairway is located on the Metro station property.

In conclusion, the proposed recommendation of implementing bicycle lanes along Jamestown Road is not feasible due to the limited roadway width and need for on-street parking along Jamestown Road. More detailed design and coordination with WMATA would be required to determine the feasibility of adding a trundle along the stairway between Oliver Street and the Metro Station to create a connection for bicyclists.

12. Nicholson Street

As described above, the DPW&T's ninth priority recommendation is to install shared lanes along Nicholson Street between 33rd Avenue and MD 500.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Nicholson Street only has one 14-foot-wide travel lane in each direction, sharrows would not be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along Nicholson Street.

In conclusion, the proposed recommendation of implementing shared lanes along Nicholson Street is feasible and could be implemented by increasing the number of sharrows along the roadway. However, shared-lane signing is not recommended as it would not be consistent with the referenced checklist and the State guidelines.

13. Queensbury Road

As described above, the Work Group's fourth priority recommendation is to install shared lanes along Queensbury Road between MD 500 and 41st Avenue.

According to the *DPIE Signing & Pavement Marking Design Review Checklist*, sharrows shall only be used on roadways with more than one lane per direction and with the approval of the permitting agency. Since Queensbury Road only has one 12-foot-wide travel lane in each direction, sharrows would not be appropriate based on the referenced checklist.

The *DPIE Signing & Pavement Marking Design Review Checklist* also specifies that “Bikes May Use Full Lane” signage is appropriate for roadways with more than one lane per direction. Therefore, this signage would not be appropriate along Queensbury Road.

In conclusion, the proposed recommendation of implementing a shared roadway through “Bicycle May Use Full Lane” signage or sharrows along Queensbury Road are not in accordance with the County guidance for shared lanes, so they are not recommended for Queensbury Road.

14. 41st Avenue

As described above, the Prince George's Plaza BPPA Work Group's tenth priority recommendation is to install a shared-use path along 41st Avenue between Queensbury Road and the dead end near MD 500. To meet AASHTO and County design guidelines, the minimum buffer between the face of curb and the shared-use path would be five feet, and the minimum width of the shared-use path would be eight feet.

Based on the location of the exiting sidewalk, utilities, and right-of-way, it appears feasible to construct a shared-use path along the northbound side of 41st Avenue. If a shared-use path were constructed along the northbound side, the existing sidewalk along northbound 41st Avenue would be removed and pedestrians would use the newly constructed path. Since the utility poles are located along the southbound side of the street, there should not be any major utility impacts. While the offset to the existing right-of-way is greater on the northbound side than on the southbound side, there still could be some property impacts, either permanent or temporary, with the installation of a shared-use path. However, no properties would be displaced and the impacts would be relatively minor.

In conclusion, the recommended shared-use path along 41st Avenue appears to be feasible with minor right-of-way impacts if it is implemented along the northbound side of the roadway.

IV CONCLUSION

The existing conditions along 14 roadways within the Prince George's Plaza Metro BPPA were documented and the bicycle and pedestrian improvements proposed by Prince George's County along those roadways were analyzed for general feasibility. As shown in **Table 3**, ten of the recommended improvements were determined to be feasible, four were determined to be infeasible, and one was not applicable. One of the feasible improvements, adding street lighting along Belcrest Road, has already been implemented.

In general, the improvements that were determined to be infeasible were identified as such due to limited right-of-way or because the proposed improvement was not consistent with the County and/or State guidance. However, many of the roadways are owned by the County and the County has the ability to use discretion on how to appropriately address each proposed recommendation. Industry standards, such as the guidance published by NACTO and AASHTO, can assist the County to determine the best way to ultimately implement the proposed improvements on the County roadways.

MD 410 is the only State-owned roadway in the BPPA where the BPPA Work Group's recommended an improvement. The proposed bicycle lanes along MD 410 were determined to be feasible if the MD 410 road diet project is implemented. The MD 410 bicycle lanes are not feasible without the road diet project due to the anticipated costs and impacts associated with roadway widening. Prince George's County should continue to coordinate with MDOT SHA on the proposed recommendations along MD 410.

Next Steps

As discussed in Chapter III, Prince George's County has prioritized the proposed improvements for implementation. While considering the outcome of the feasibility analysis in this BPPA Plan, the County should look to move forward with the improvements in the order of priority as funding becomes available. Since the highest priority improvement for the County is to install bicycle lanes along MD 410, a State-owned roadway, the County DPW&T should continue to work closely with MDOT SHA to look for opportunities to fund the project.

All other feasible proposed bicycle and pedestrian facility improvements can be initiated by the County, including restriping of crosswalks. Those improvements determined to be infeasible can be reconsidered following additional study.

APPENDIX A
AERIAL PLAN VIEW EXISTING CONDITONS

MD 410 – 1 of 2



MD 410 – 2 of 2



MD 500



Belcrest Road – 1 of 2



Belcrest Road – 2 of 2



Adelphi Road – 1 of 2



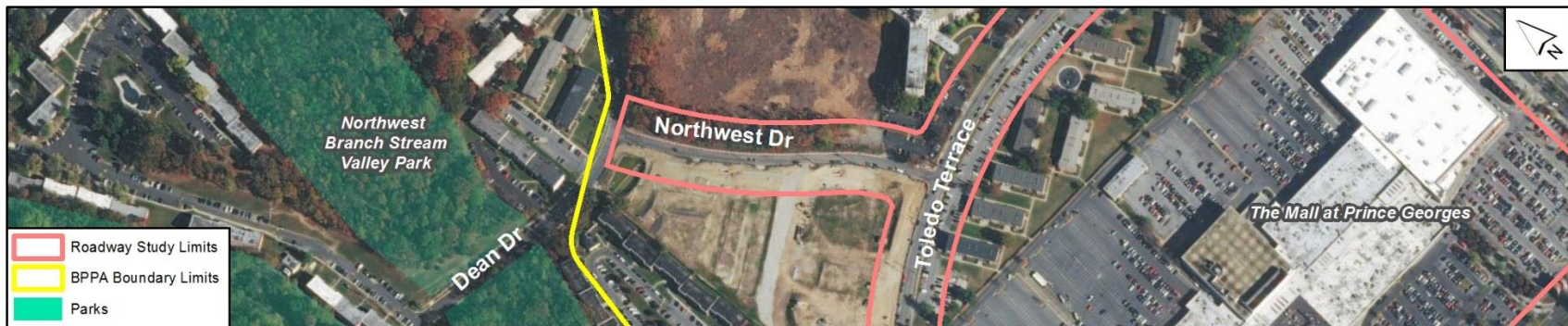
Adelphi Road – 2 of 2



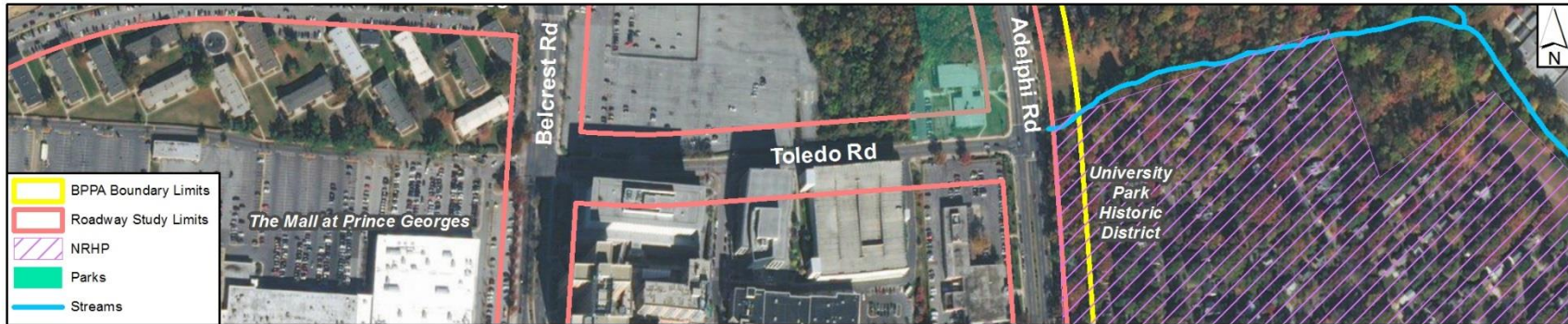
Toledo Terrace



Northwest Drive



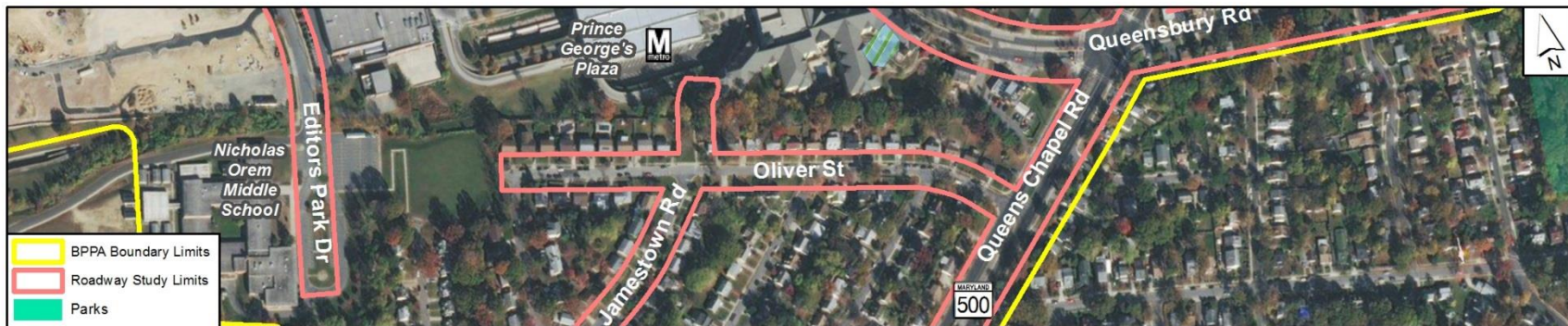
Toledo Road



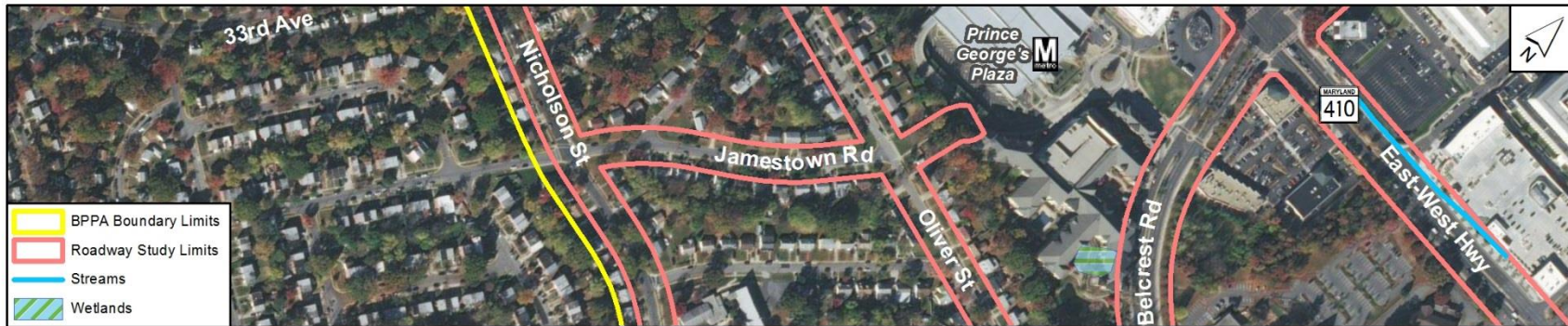
Editors Park Drive/33rd Avenue



Oliver Street



Jamestown Road



Nicholson Street



Queensbury Road



41st Avenue



APPENDIX B
EXISTING CONDITIONS SUMMARY TABLE

Existing Conditions Summary Table

Area and Speed	Location	Direction	Number of Thru Lanes	Thru Lanes Width Paved	Turn Lanes	Turn Lanes Width	Median Width	Shoulder Width	Pedestrian Path		Bus Stops No.	Striped Bike Lane	On Street Parking	Street Lighting
				(+/-)	(+/-)	(+/-)	(+/-)	(+/-)	Grass Buffer	Sidewalk				
MD 410 (East-West Highway) Posted: 40 MPH	From Anacostia Tributary Trail System to Post Park Apartment Entrance	WB	2	12.0'	-	0.0'	16'	12.0'	0.0'	0.0'		No	No	Yes
	From Anacostia Tributary Trail System to Post Park Apartment Entrance	EB	2	12.0'	-	0.0'		8.0'	0.0'	0.0'		No	No	Yes
	From Post Park Apartment Entrance to Toledo Terrace	WB	2	12.0'	LT & RT	11.0'	Varies (4'-16')	0.0'	5.0'	7.5'	1	No	No	Yes
	From Post Park Apartment Entrance to Toledo Terrace	EB	2	12.0'	LT & RT	11.0'		0.0'	8.0'	7.5'	1	No	No	Yes
	From Toledo Terrace to Editors Park Drive	WB	2	12.0'	LT & RT	11.0'	Varies (4'-16')	0.0'	22.0'	7.5'	1	No	No	Yes
	From Toledo Terrace to Editors Park Drive	EB	2	12.0'	LT & RT	11.0'		0.0'	Proposed 5'	Proposed 8'	0	No	No	Yes
	From Editors Park Drive to Mall at Prince Georges	WB	3	12.0'	LT & RT	11.0'	Varies (4'-16')	0.0'	22'-12'	7.5'	1	No	No	Yes
	From Editors Park Drive to Mall at Prince Georges	EB	2	12.0'	LT & RT	11.0'		0.0'	5.5'	7.5'	1	No	No	Yes
	From Mall at Prince Georges to Belcrest Road	WB	3	12.0'	LT & RT	11.0'	Varies (4'-16') w/ Metal Fence	0.0'	16'-0'	7.5'	0	No	No	Yes
	From Mall at Prince Georges to Belcrest Road	EB	2	12.0'	LT & RT	11.0'		0.0'	20'-0'	20'-7.5'	0	No	No	Yes
	From Belcrest Road to Adephi Road	WB	3	12.0'	LT & RT	11.0'	Varies (4'-16')	0.0'	16'-0'	7.5'	2	No	No	Yes
	From Belcrest Road to Adephi Road	EB	2	12.0'	LT & RT	11.0'		0.0'	3'	5.0'	1	No	No	Yes
MD 500 (Queens Chapel Road) Posted: 35 MPH	From Nicholson Street to MD 410	NB	2	11.0'	LT & RT	12.0'	Varies (12'-36')	0.0'	0.0'	5.0'	2	Yes	No	Yes
	From Nicholson Street to MD 410	SB	2	11.0'	LT	10.0'		0.0'	0.0'	5.0'	2	Yes	No	Yes
Belcrest Road Posted: 30 MPH	From MD 500 (Queens Chapel Road) to MD 410	SB	2	11.0'	RT	11.0'	10'-20' w/ 2' paver border	0.0'	2' Paver	6.0'	1	No	No	Yes
	From MD 500 to MD 410	NB	2	11.0'	LT & RT	10.0'		0.0'	2' Paver	7.0'	2	No	No	Yes
	From MD 410 to Liberty Lane	SB	2	11.0'	LT	10.0'	16' w/ 2' Paver Border	2'-3' w/ gutter	2' Paver	7.5'	0	No	Limited	Newly Installed
	From MD 410 to Liberty Lane	NB	2	11.0'	LT	10.0'		2'-3' w/ Gutter	2' Paver	7.5'-22'	0	No	Limited	Newly Installed



Area and Speed	Location	Direction	Number of Thru Lanes	Thru Lanes Width Paved	Turn Lanes	Turn Lanes Width	Median Width	Shoulder Width	Pedestrian Path		Bus Stops	Striped Bike Lane	On Street Parking	Street Lighting
				(+/-)	(+/-)	(+/-)	(+/-)	(+/-)	Grass Buffer	Sidewalk	No.			
Belcrest Road (continued) Posted: 30 MPH	From Liberty Lane to Freedom Way	SB	2	11.0'	LT	10.0'	16' - 28' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	7.5'	1	No	Limited	Newly Installed
	From Liberty Lane to Freedom Way	NB	2	11.0'	LT	10.0'	16' - 28' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	20'-7.5'	1	No	Limited	Newly Installed
	From Freedom Way to Toledo Road	SB	2	11.0'	LT	10.0'	16' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	7.5'	0	No	Limited	Newly Installed
	From Freedom Way to Toledo Road	NB	2	11.0'	LT	10.0'	16' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	7.5'	1	No	Limited	Newly Installed
	From Toledo Road to Toledo Terrace	SB	2	11.0'	LT	10.0'	16' - 8' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	7.5'	1	No	Limited	Newly Installed
	From Toledo Road to Toledo Terrace	NB	2	11.0'	LT	10.0'	16' - 8' w/ 2' Paver Border	2'-3' w/ Gutter	2' Paver	7.5'	1	No	Limited	Newly Installed
	From Toledo Terrace to Adelphi Road	SB	2	11.0'	LT	10.0'	16' - 26'	2'-3' w/ Gutter	2' Paver	7.5'	2	No	Limited	Newly Installed
	From Toledo Terrace to Adelphi Road	NB	2	11.0'	-	10.0'		2'-3' w/ Gutter	2' Paver	7.5'	2	No	Limited	Newly Installed
Adelphi Road Posted: 30 MPH	From MD 410 to Tennyson Road	SB	2	11.0'	LT	10.0'	8' w/ 3'-4' Inside Shoulder	0.0'	0' - 4.0'	5.0'	0	No	Yes	Yes
	From MD 410 to Tennyson Road	NB	2	11.0'	-	10.0'		0.0'	6'-10'	5.0'	0	No	Yes	Yes
	From Tennyson Road to Toledo Road	SB	2	11.0'	LT	10.0'	8' w/ 3'-4' Inside Shoulder	0.0'	0' - 3'	5.0'	0	No	Yes	Yes
	From Tennyson Road to Toledo Road	NB	2	11.0'	-	10.0'		0.0'	6'-10'	5.0'	0	No	Yes	Yes
	From Toledo Road to Beechwood Road	SB	2	11.0'	LT	10.0'	6'-8' w/ 3'-4' Inside Shoulder	0.0'	0' - 3'	5.0'	0	No	Yes	Yes
	From Toledo Road to Beechwood Road	NB	2	11.0'	-	10.0'		0.0'	0' - 3'	5.0'	1	No	Yes	Yes
	From Beechwood Road to Belcrest Road/Underwood Street	SB	2	11.0'	LT	10.0'	4'-8' w/ 3'-4' Inside Shoulder	0.0'	2.0'	4.0'	1	No	Yes	Yes
	From Beechwood Road to Belcrest Road/Underwood Street	NB	2	11.0'	LT	10.0'		0.0'	7.0'	4.0'	1	No	Yes	Yes
	From Belcrest Road/Underwood Street to Northwest High School North Entrance	SB	2	11.0'	LT	10.0'	4'-8' w/ 3'-4' Inside Shoulder	0.0'	2.0'	4.0'	1	No	Yes	Yes
	From Belcrest Road/Underwood Street to Northwest High School North Entrance	NB	2	11.0'	LT	10.0'		0.0'	7.0'	4.0'	1	No	Yes	Yes

Area and Speed	Location	Direction	Number of Thru Lanes	Thru Lanes Width Paved	Turn Lanes	Turn Lanes Width	Median Width	Shoulder Width	Pedestrian Path		Bus Stops No.	Striped Bike Lane	On Street Parking	Street Lighting
				(+/-)	(+/-)	(+/-)	(+/-)	(+/-)	Grass Buffer	Sidewalk				
Toledo Terrace Posted: 25 MPH	From Northwest Drive to Belcrest Road	SB	1	12.0'	LT & RT	0.0'	0'	0.0'	3.5'	4.0'	2	No	Yes	Yes
	From Northwest Drive to Belcrest Road	NB	1	12.0'	RT	0.0'		0.0'	3.5'	4.0'	2	No	Yes	Yes
Northwest Drive Posted: 25 MPH	From Toledo Terrace to Dean Drive	SB	1	10.0'	-	-	0'	0.0'	5.0'	6.0'	1	No	Yes	Yes
	From Toledo Terrace to Dean Drive	NB	1	10.0'	-	-		0.0'	5.0'	6.0'	1	No	Yes	Yes
Toledo Road Posted: 25 MPH	From Belcrest Road to America Boulevard	EB	1	17.0'	-	0.0'	0'	0.0'	0.0'	8' w/ Lighting	1	No	No	Yes
	From Belcrest Road to America Boulevard	WB	1	17.0'	-	0.0'		0.0'	0.0'	5' w/ Utility Poles	1	No	No	Yes
	From America Boulevard to Democracy Avenue	EB	1	17.0'	-	0.0'	0'	0.0'	0.0'	8.0'	0	No	No	Yes
	From America Boulevard to Democracy Avenue	WB	1	17.0'	-	0.0'		0.0'	0.0'	5.0'	0	No	No	Yes
	From Democracy Avenue to Adelphi Road	EB	1	17.0'	-	0.0'	0'	0.0'	0.0'	8.0'	1	No	No	Yes
	From Democracy Avenue to Adelphi Road	WB	1	17.0'	-	0.0'		0.0'	0'-3.5'	5.0'	1	No	No	Yes
Editors Park Drive Posted: 25 MPH	From Nicholas Orem Middle School Entrance to Edward M. Felegy Elementary School Entrance	SB	1	17.0'	-	0.0'	0'	0.0'	4'-5'	5.0'	0	No	No	No
	From Nicholas Orem Middle School Entrance to Edward M. Felegy Elementary School Entrance	NB	1	17.0'	-	0.0'		0.0'	4'-5'	5.0'	0	No	No	Yes
	From Edward M. Felegy Elementary School Entrance to Sentinel Drive	SB	1	17.0'	-	0.0'	0'	0.0'	4'-5'	5.0'	0	No	No	No
	From Edward M. Felegy Elementary School Entrance to Sentinel Drive	NB	1	17.0'	-	0.0'		0.0'	4'-5'	5.0'	0	No	No	Yes
	From to Sentinel Drive to MD 410	SB	1	17.0'	-	0.0'	0'	0.0'	4'-5'	5.0'	0	No	No	No
	From to Sentinel Drive to MD 410	NB	1	17.0'	-	0.0'		0.0'	4'-5'	5.0'	0	No	No	Yes
33rd Avenue Posted: 25 MPH	From Nicholson Street to Dead End near Nicholas Orem Middle School	SB	1	12.0'	-	0.0'	0'	0.0'	5'-7.5'	4.0'	0	No	Yes	No
	From Nicholson Street to Dead End near Nicholas Orem Middle School	NB	1	12.0'	-	0.0'		0.0'	5'-7.5'	4.0'	0	No	Yes	Yes

Area and Speed	Location	Direction	Number of Thru Lanes	Thru Lanes Width Paved	Turn Lanes	Turn Lanes Width	Median Width	Shoulder Width	Pedestrian Path		Bus Stops No.	Striped Bike Lane	On Street Parking	Street Lighting
				(+/-)	(+/-)	(+/-)	(+/-)	(+/-)	Grass Buffer	Sidewalk				
Oliver Street Posted: 25 MPH	From 35th Avenue to Jamestown Road	EB	1	12.0'	-	0.0'	0'	0.0'	6.0'	4' (300 LF)	0	No	Yes	No
	From 35th Avenue to Jamestown Road	WB	1	12.0'	-	0.0'		0.0'	6.0'	4.0'	0	No	Yes	Yes
	From Jamestown Road to 36th Avenue	EB	1	12.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	No	Yes	No
	From Jamestown Road to 36th Avenue	WB	1	12.0'	-	0.0'		0.0'	6.0'	4.0'	0	No	Yes	Yes
	From 36th Avenue to 37th Avenue	EB	1	12.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	No	Yes	No
	From 36th Avenue to 37th Avenue	WB	1	12.0'	-	0.0'		0.0'	6.0'	4.0'	0	No	Yes	Yes
	From 37th Avenue MD 500	EB	1	12.0'	-	0.0'	0'	0.0'	6.0'	4.0'	0	No	Yes	No
	From 37th Avenue MD 500	WB	1	12.0'	-	0.0'		0.0'	6.0'	4.0'	0	No	Yes	Yes
Jamestown Road Posted: 25 MPH	From Nicholson Street to Oliver Street	SB	1	14.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	No	Yes	No
	From Nicholson Street to Oliver Street	NB	1	14.0'	-	0.0'		0.0'	0.0'	4.0'	0	No	Yes	Yes
Nicholson Street Posted: 20 MPH	From 33rd Avenue to 34th Avenue	EB	1	14.0'	-	0.0'	0'	0.0'	8.0'	4.0'	0	Sharrow	Yes	No
	From 33rd Avenue to 34th Avenue	WB	1	14.0'	-	0.0'		0.0'	8.0'	4.0'	0	Sharrow	Yes	Yes
	From 34th Avenue to Jamestown Road	EB	1	14.0'	-	0.0'	0'	0.0'	4'-8'	4.0'	0	Sharrow	Yes	No
	From 34th Avenue to Jamestown Road	WB	1	14.0'	-	0.0'		0.0'	7'-8'	4.0'	0	Sharrow	Yes	Yes
	From Jamestown Road to 36th Avenue	EB	1	14.0'	-	0.0'	0'	0.0'	4'-8'	4.0'	0	Sharrow	Yes	No
	From Jamestown Road to 36th Avenue	WB	1	14.0'	-	0.0'		0.0'	7'-8'	4.0'	0	Sharrow	Yes	Yes
	From 36th Avenue to 37th Avenue	EB	1	14.0'	-	0.0'	0'	0.0'	4'-8'	4.0'	0	Sharrow	Yes	No
	From 36th Avenue to 37th Avenue	WB	1	14.0'	-	0.0'		0.0'	4'-8'	4.0'	0	Sharrow	Yes	Yes
	From 37th Avenue to MD 500	EB	1	14.0'	-	0.0'	0'	0.0'	4'-8'	4.0'	0	"Bike Route End"	Yes	No
	From 37th Avenue to MD 500	WB	1	14.0'	-	0.0'		0.0'	0'	4.0'	0	"Bike Route Begin"	No	Yes
Queensbury Road Posted: 25 MPH BIKE ROUTE	From MD 500 to 41 st Avenue	EB	1	12.0'	-	-	0'	0.0'	1.0'	4.0'	1	No	No	Yes
	From MD 500 to 41 st Avenue	WB	1	12.0'	-	-		0.0'	0'-1'	4.0'	1	No	No	Yes

Area and Speed	Location	Direction	Number of Thru Lanes	Thru Lanes Width Paved	Turn Lanes	Turn Lanes Width	Median Width	Shoulder Width	Pedestrian Path		Bus Stops No.	Striped Bike Lane	On Street Parking	Street Lighting
				(+/-)	(+/-)	(+/-)	(+/-)	(+/-)	Grass Buffer	Sidewalk				
41st Avenue Posted: 25 MPH	From Queensbury Road to Quintana Street	SB	1	12.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	"Bike Route ↔ ↑" Sharrow	Yes	Yes
	From Queensbury Road to Quintana Street	NB	1	12.0'	-	0.0'		0.0'	0.0'	5.0'	0	Sharrow	No	No
	From Quintana Street to Roanoke Road	SB	1	12.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	Sharrow	Yes	Yes
	From Quintana Street to Roanoke Road	NB	1	12.0'	-	0.0'		0.0'	0.0'	5.0'	0	Sharrow	No	No
	From Roanoke Road to Dead End near MD 500	SB	1	12.0'	-	0.0'	0'	0.0'	0.0'	0.0'	0	Sharrow	Yes	Yes
	From Roanoke Road to Dead End near MD 500	NB	1	12.0'	-	0.0'		0.0'	0.0'	5.0'	0	Sharrow	No	No

APPENDIX C
RECOMMENDED IMPROVEMENTS

MD 410 – 1 of 2



MD 410 – 2 of 2



MD 500



Belcrest Road – 1 of 2



Belcrest Road – 2 of 2



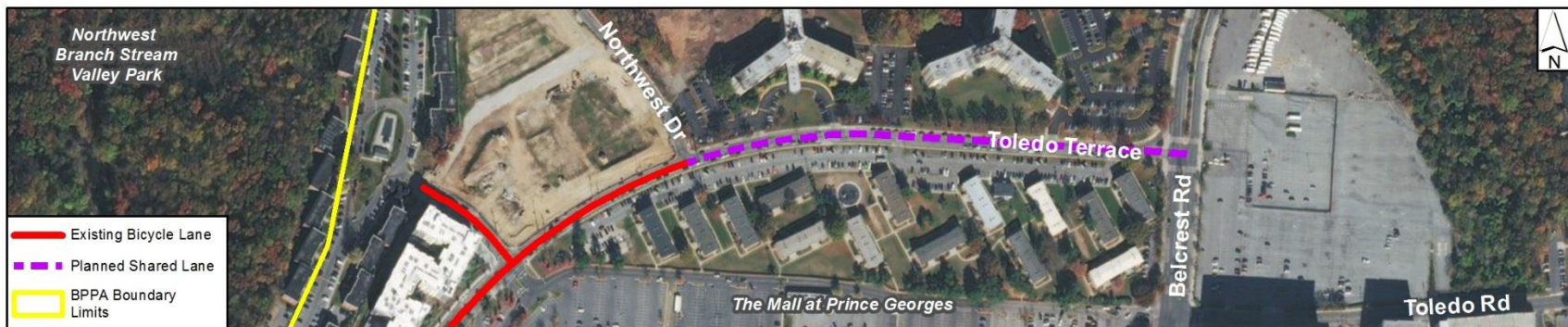
Adelphi Road – 1 of 2



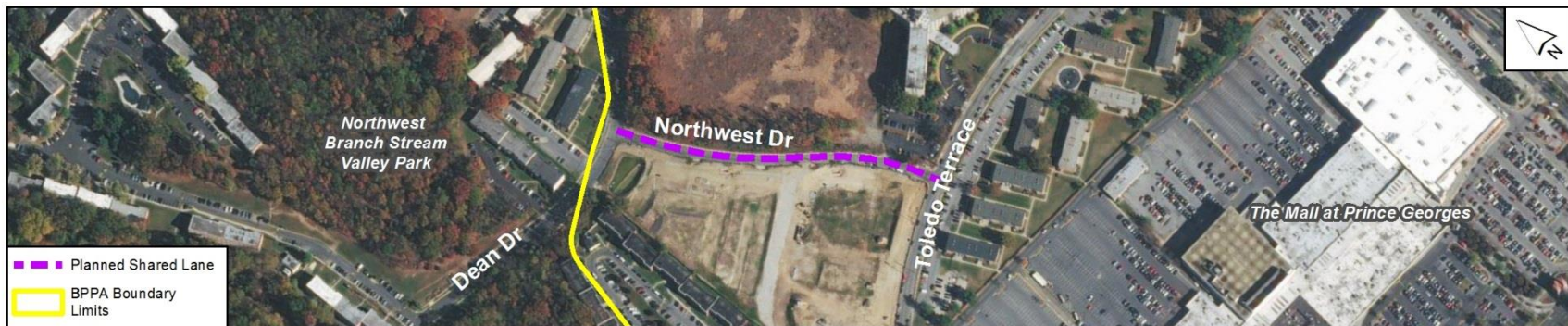
Adelphi Road – 2 of 2



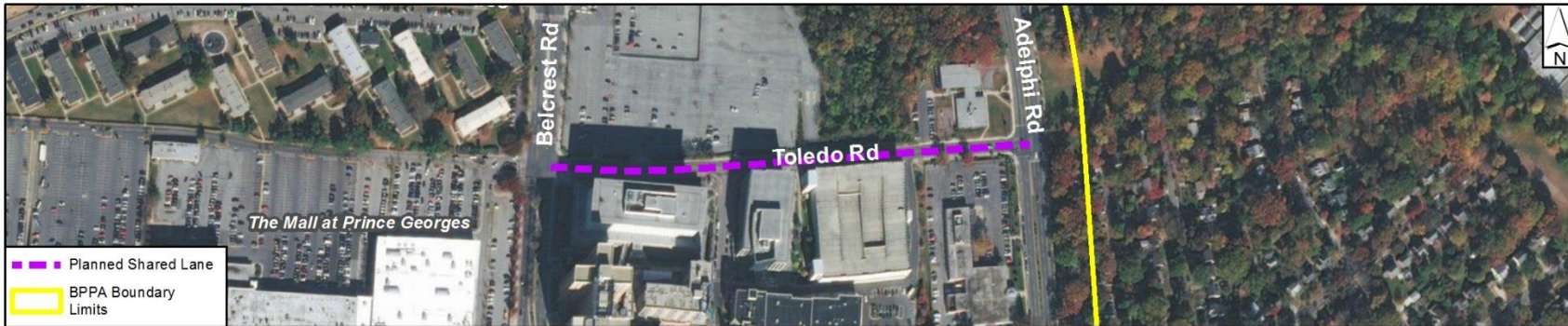
Toledo Terrace



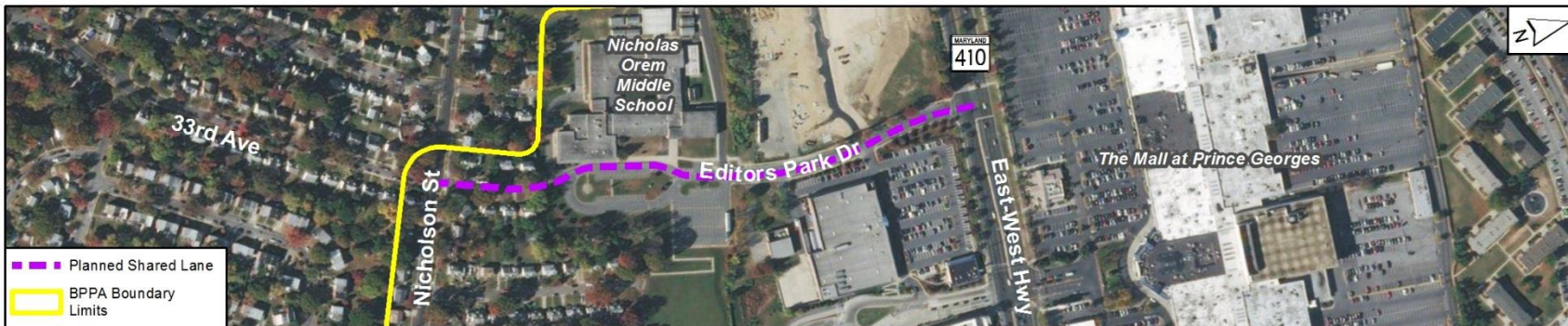
Northwest Drive



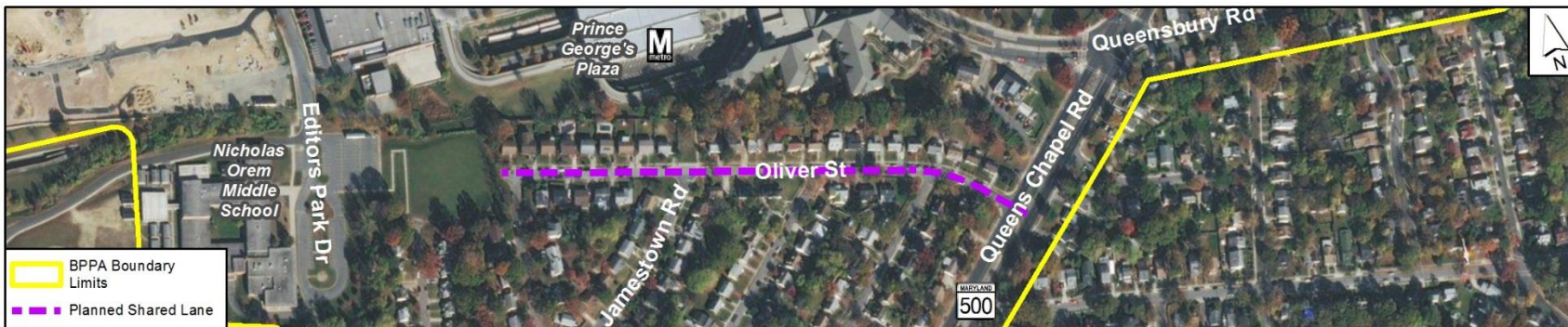
Toledo Road



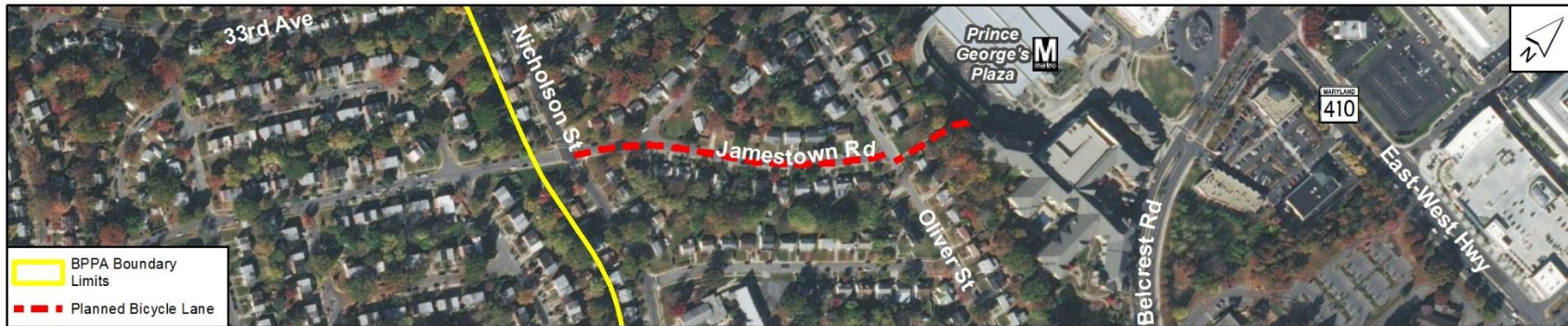
Editors Park Drive/33rd Avenue



Oliver Street



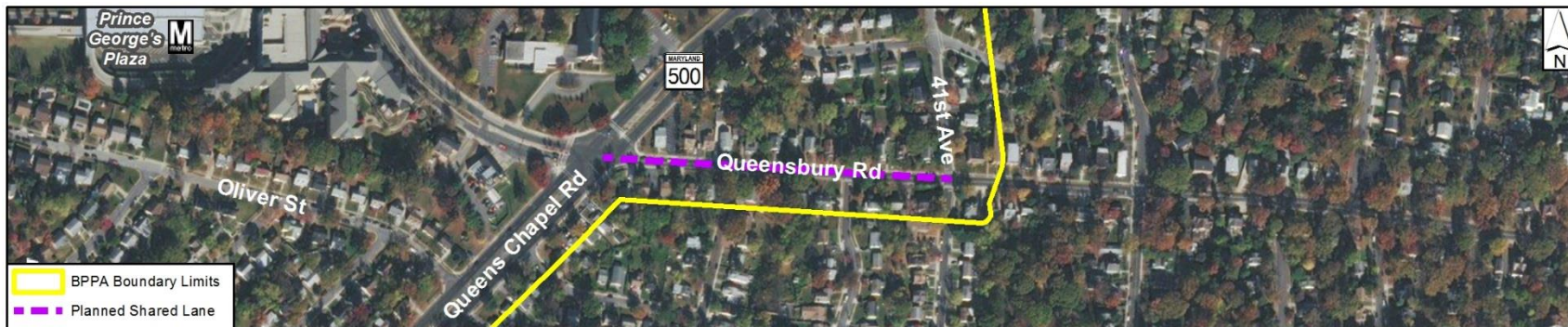
Jamestown Road



Nicholson Street



Queensbury Road



41st Avenue

