RAIL LINE: MARC Penn Line/Amtrak

STATION PROFILE: Aberdeen

#### **CHARACTER:**

The station is located in the City of Aberdeen, at the intersection of US 40 and Bel Air Avenue. It is bounded by the railroad right of way on the east (where Amtrak and MARC trains operate) and US 40, a major highway corridor on the west. The area immediately east of the station is characterized by a low density residential area for a few blocks. Just beyond the residential area is one of the secured gates to the Aberdeen Proving Ground (APG). APG is a very large military facility site with restricted access. The APG has development occurring inside and outside the facility gates as a result of base re-alignment activities.

## LAND USE CONTEXT:

The Aberdeen Station is located in an area that is designated for a mix of land uses including Central Commercial, Highway Commercial, High Density Residential, Medium Density Residential and Light Industrial. The area south and north of the station along US 40 is characterized by highway oriented commercial land uses. West of US 40 land uses are mainly low density residential land uses, with small businesses and small government offices.

The City of Aberdeen, Harford County's Office of Economic Development and the MTA have recently completed a feasibility study of the station site (and potential alternate sites) for expansion as a multi-modal transit center. The study recommended that the station site be retained and enhanced to strengthen the downtown business community. The City has a designated Enterprise Zone and a BRAC Revitalization Zone to incentivize redevelopment in the area.

| Year 2000 Population within 3 mile radius - | 19,790  |
|---|---|
| Weekday Station Ridership                   | 248   |
| Saturday Station Ridership:                 | N/A   |
| Transit Connections:                        | MTA Commuter Bus Route # 420,<br>Harford County Transit Routes 1, 1A, 6, 6A and<br>Doodle Bug Shuttle |

## **PARKING:**

There are 273 spaces provided in surface lots at the station. A 100% occupancy was observed.

The MTA has been trying to find opportunities to expand parking at the station. Plans for transforming the station into a multimodal center will likely lead to improved parking, bus and bicycle connections.

## PEDESTRIAN ENVIRONMENT:

Pedestrian access to the station from the east is possible only by way of a pedestrian bridge over the railroad tracks. The bridge structure is large and imposing on the station area. Pedestrian access from the heart of Aberdeen, west of the station is adequate with sidewalks and crosswalks generally found. Some local streets lack sidewalks and some crossings need to be improved. Sidewalks are generally provided along US 40 but the volume and speed of traffic, number of lanes and width of the highway create a negative pedestrian experience.

## **BICYCLING ENVIRONMENT:**

Local streets with low traffic volumes are adequate for bicycling. Most of the major routes do not provide bicycle accommodations lanes or signage. The City's Comprehensive Plan identifies needs for bicycling improvements. The City seeks secure bicycle

parking at the rail station and designated bike routes along MD 22, MD 132 and MD 462. These State roads currently have minimal markings and signage.

No off road trails were observed in the vicinity of the station.

## 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 13 Number of Bicycle Crashes within 3 miles 4

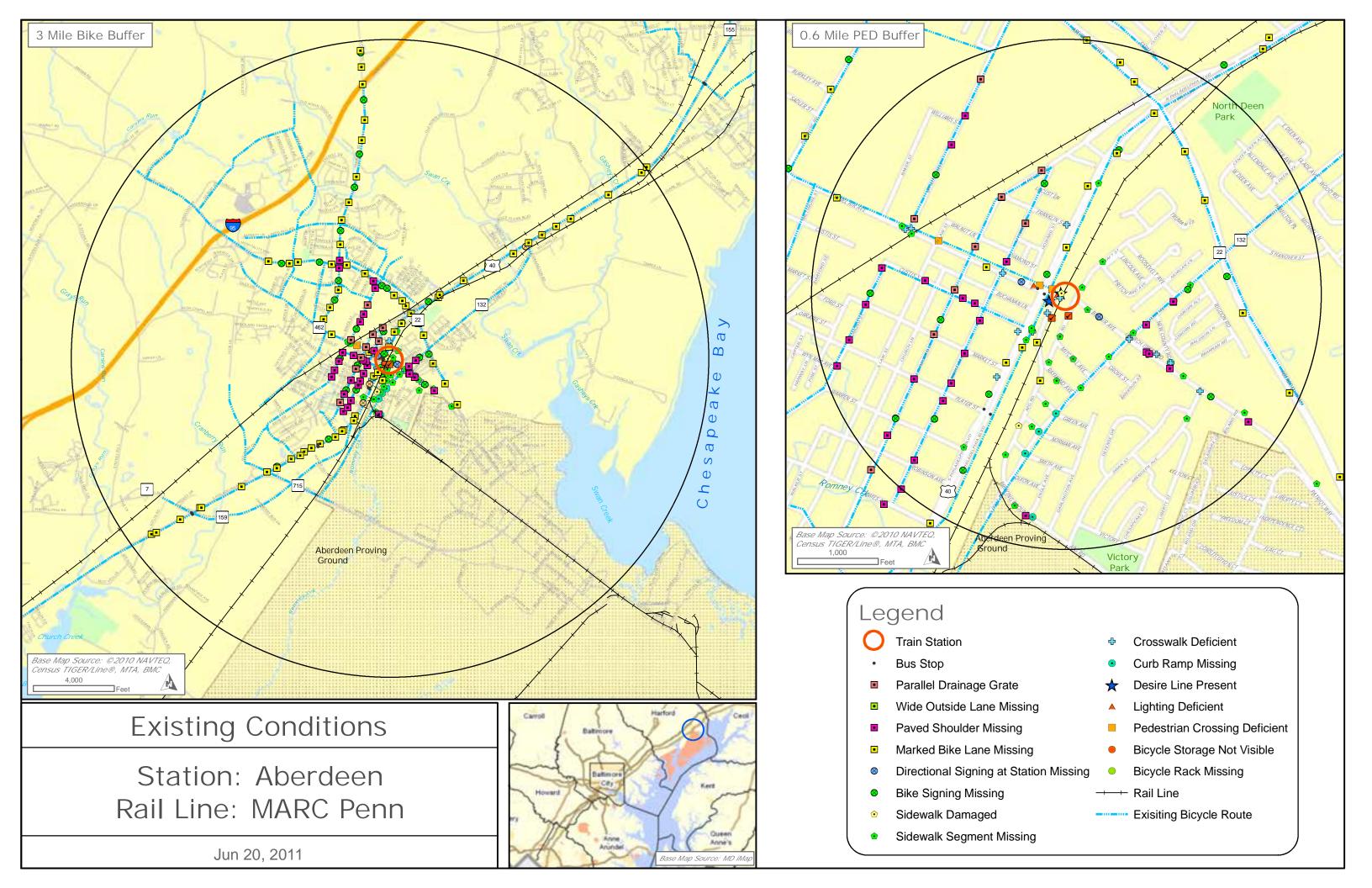
## **HIGHLIGHTS FROM FINDINGS**

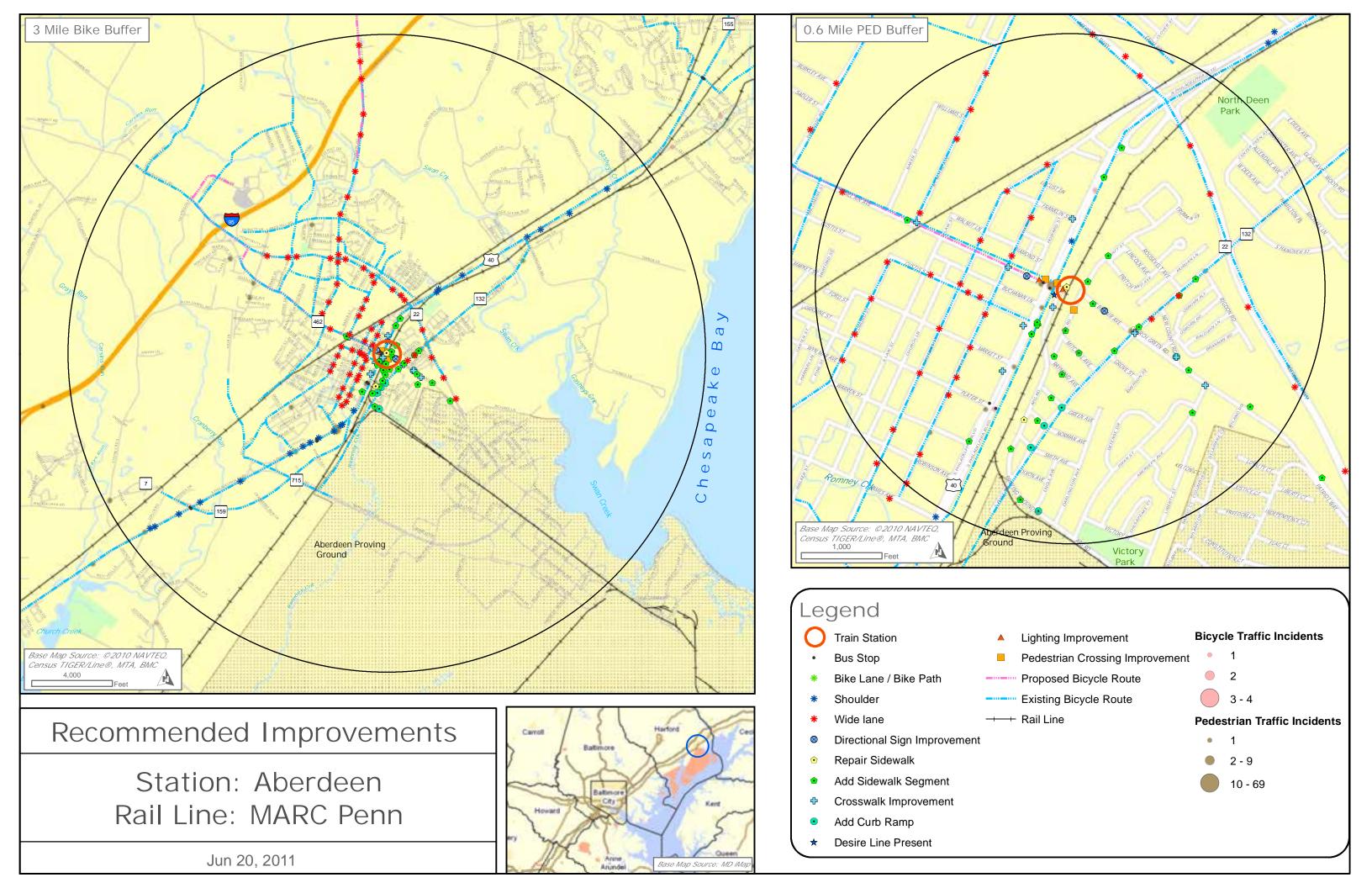
## PEDESTRIAN DEFICIENCIES

- Small segments of missing sidewalk documented in the City of Aberdeen Plan should be provided.
- Providing sidewalks where missing along N Post Road and Pulaski Highway should help address safety.
- To improve safety, crosswalks that are missing or faded in several locations should be replaced including: Pulaski Highway @ Bel Air Ave; Bel Air @ Park; Bel Air @ Mount Royal; Bel Air @ Post; Bel Air @ Aberdeen Ave.
- Curb ramps are needed along Post Road at Norman, Green and Smith.
- Street lighting is recommended for the bus stop area at the station.
- Station way finding signs are recommended for West and East Bel Air Avenue.
- Pedestrian crossing signs and advanced pedestrian warning signs are recommended for the intersection of Aberdeen Throughway and Pulaski Highway.

#### BIKE DEFICIENCIES

- Bicycle route signage is recommended along Pulaski Highway US 40 from Old Stepney Road to MD 7 to support shoulder facilities.
- For shared use lanes in many locations signage and marking is needed. Examples include MD 132, MD 22, MD 462 (Bel Air Ave) and smaller streets such as Edmund and James.
- For shared use lanes, bicycle compatible drainage is needed along with signage along Mt Royal Ave, Parke Street, and Rogers Street.
- Bicycle lockers should be provided.





# RECOMMENDED IMPROVEMENTS ABERDEEN - MARC PENN/AMTRAK

Station No. 48

| Aberdeen M    | 1ARC Penn/Amtrak          | Harford County                 | 18 E Bel Air Ave |                              |                          |                         |  |                  |
|---------------|---------------------------|--------------------------------|------------------|------------------------------|--------------------------|-------------------------|--|------------------|
| Facility Type | Recommendation Type       | Roadway<br>Intersection        | Roadway<br>Name  | From                         | То                       | Roadway<br>Jurisdiction | Recommended<br>Improvement                         | Distance<br>(Mi) |
| racility Type |                           | Intersection                   |                  |                              |                          |                         | •  | (1411)           |
|               | SIDEWALK SEGMENT MISSING  |                                | ABERDEEN AVE.    | SWAN ST                      | LIBERTY ST               | COUNTY                  | INSTALL 230'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | ABERDEEN BLVD.   | NORMAN AVENUE                | END OF PEDESTRIAN BUFFER | COUNTY                  | IMPROVE/REPLACE 2100'X4' OF SIDEWALK               |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | ABERDEEN BLVD.   | PULASKI HIGHWAY              | NORMAN AVENUE            | COUNTY                  | IMPROVE/REPLACE 2100'X4' OF SIDEWALK               |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | APG ROAD         | E BEL AIR AVE.               | THE END OF THE ROAD      | COUNTY                  | INSTALL 900'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | APG ROAD         | RAYMOND AVE.                 | TO THE STATION           | COUNTY                  | INSTALL 900'X5' OF NEW SIDEWALK                    |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | APG ROAD         | ROOSEVELT AVE.               | E BEL AIR AVE.           | COUNTY                  | INSTALL 100'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | E BEL AIR AVE.   | CHURCH                       | THE END                  | COUNTY                  | INSTALL 1250'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | E BEL AIR AVE.   | N POST ROAD                  | TO THE STATION           | COUNTY                  | INSTALL 300'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | E BEL AIR AVE.   | SCHOOL                       | CHURCH                   | COUNTY                  | INSTALL 800'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | E. BEL AIR AVE.  | 800' SOUTH OF POST ROAD      |                          | COUNTY                  | INSTALL 220'X5' OF SIDEWALK IN FRONT OF BUSINESSES |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | GREEN AVE.       | POST ROAD                    | TO THE END               | COUNTY                  | INSTALL 330'X5' OF NEW SIDEWALK                    |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | MICHELL AVE.     | POST ROAD                    | APG ROAD                 | COUNTY                  | INSTALL 600'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | N POST ROAD      | E.BEL AIR AVE.               | ROOSEVELT AVE.           | COUNTY                  | INSTALL 450'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | N POST ROAD      | ROOSEVELT AVE.               | RIGDON ROAD              | COUNTY                  | INSTALL 750'X5' OF SIDEWALK                        |                  |
| PEDESTRIAN    | SIDEWALK SEGMENT MISSING  |                                | N POST ROAD      | ROOSEVELT AVENUE AND         | POST ROAD                | COUNTY                  | INSTALL 100'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | NORMAN AVE.      | POST ROAD                    | TO THE END               | COUNTY                  | INSTALL 230'X5' OF NEW SIDEWALK                    |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | POST ROAD        | E. BEL AIR AVE.              | ABERDEEN PROVING GROUND  | COUNTY                  | INSTALL 2300'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | CUSTIS STREET                | ROAD<br>JAMES AVE.       | STATE                   | INSTALL 2500'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | N ROGERS                     | 1500' SOUTH              | STATE                   | INSTALL 1500'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | N ROGERS ST                  | 1500' NORTH              | STATE                   | INSTALL 1500'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | PLATER ST                    | STATION                  | STATE                   | INSTALL 1000'X5' OF SIDEWALK                       |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | TRAIN STATION                | PLATER STREET            | STATE                   | INSTALL 1000'X5' OF NEW SIDEWALK                   |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | PULASKI HWY      | WARREN STREET                | JAMES AVE.               | STATE                   | INSTALL 450'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  |                                | RAYMOND AVE.     | POST ROAD                    | APG ROAD                 | COUNTY                  | INSTALL 500'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  | APG/E BEL AIR AVE.             | APG ROAD         | RAYMOND AVENUE               | POST ALLEY               | COUNTY                  | INSTALL 100'X5' OF SIDEWALK                        |                  |
|               | SIDEWALK SEGMENT MISSING  | MT. ROYAL AVE./W. BEL AIR AVE. | W. BEL AIR AVE.  | 270' SOUTH OF BAKER STREET   |                          | STATE                   | INSTALL 100'X5' OF SIDEWALK INFRONT OF BUSINESS    |                  |
|               | SIDEWALK DAMAGED          |                                | ABERDEEN BLVD.   | NORMAN AVE.                  | POST ROAD                | STATE                   | REPLACE 930'X4' OF SIDEWALK                        |                  |
|               | SIDEWALK DAMAGED          |                                | ABERDEEN BLVD.   | PED BRIDGE CLOSE TO ABERDEEN |                          | STATE                   | PED BRIDGE -CONCRETE SLABS NEED TO BE LEVELED      |                  |
|               | PEDESTRIAN CROSSING SIGNS |                                |                  | STATION                      |                          | STATE                   | INSTALL 2-PED XING SIGNS, 1-ADV. PED XING SIGN FOR |                  |
|               | MISSING                   |                                |                  |                              |                          |                         | CHANNELIZED RIGHT-PULASKI HWY TO W. BEL AIR AVE    |                  |

| Facility Type |                                     | Roadway<br>Intersection              | Roadway<br>Name     | From                   | То                  | Roadway<br>Jurisdiction | Recommended<br>Improvement  | Distance<br>(Mi) |
|---------------|-------------------------------------|--------------------------------------|---------------------|------------------------|---------------------|-------------------------|---|------------------|
|               | MISSING                             | ABERDEEN BLVD. AND PULASKI HWY       | 400.0040            |                        |                     | STATE                   | INSTALL 2-PED XING SIGNS, 1-ADV. PED XING SIGN FOR CHANNELIZED RIGHT-ABERDEEN BLVD. TO PULSKI HWY |                  |
|               | PEDESTRIAN CROSSING MISSING         |                                      | APG ROAD            |                        |                     | COUNTY                  | INSTALL 250' OF CROSSWALK, 2-PED CROSSING SIGNS   |                  |
|               | LIGHTING AT BUS STOP                |                                      | AT ABERDEEN STATION |                        |                     | STATE                   | INSTALL LIGHTING AT BUS STOP  |                  |
|               |                                     | PULASKI HWY AND WEST BEL AIR AVE.    | W. BEL AIR AVE.     |                        |                     | STATE                   | INSTALL LIGHTING AT BUS STOP  |                  |
|               | DIRECTIONAL SIGNING STATION MISSING |                                      | EAST BELAIR AVE.    |                        |                     | COUNTY                  | INSTALL A MARC/AMTRAC SIGN AT ABERDEEN BLVD.  |                  |
|               | DIRECTIONAL SIGNING STATION MISSING |                                      | WEST BELAIR AVE.    |                        |                     | STATE                   | INSTALL A MARC/AMTRACK SIGN AT W. BEL AIR AVE. FOR ABERDEEN MARC STATION                          |                  |
|               | DESIRED LINE PRESENT                |                                      | APG ROAD            | FROM EAST SIDE PARKING | STATION             | STATE                   | INSTALL CROSSWALK, STOP BARS ON EACH SIDE, PED CROSSING SIGNS ACROSS APG ROAD                     |                  |
|               | DESIRED LINE PRESENT                |                                      | PULASKI HWY         | GAS STATION            | STATION PARKING LOT | STATE                   | INSTALL 150'X4' OF PATHWALK   |                  |
|               | CURB RAMP MISSING                   | ABERDEEN BLVD. AND ENGLE AVE.        |                     |                        |                     | COUNTY                  | INSTALL 2-CURB RAMPS AND 70' OF CROSSWALKS  |                  |
|               | CURB RAMP MISSING                   | EAST BEL AIR AND NEW COUNTY RD       |                     |                        |                     | COUNTY                  | INSTALL 2-CURB RAMPS TO CROSS NEW COUNTY ROAD   |                  |
|               | CURB RAMP MISSING                   | S POST RD @ SMITH AVE                |                     |                        |                     | COUNTY                  | INSTALL 2-CURB RAMPS ON THE EAST LEG OF   |                  |
| DEDECTRIAN    | CURB RAMP MISSING                   | S POST RD AND GREEN AVE              |                     |                        |                     | COUNTY                  | INTERSECTION INSTALL 2-CURB RAMPS ON THE EAST LEG OF INTERSECTION                                 |                  |
| PEDESTRIAN    | CURB RAMP MISSING                   | S POST RD AND NORMAN AVE             |                     |                        |                     | COUNTY                  | INSTALL 2-CURB RAMPS ON THE EAST LEG OF INTERSECTION  |                  |
|               | CROSSWALK MISSING                   |                                      | ABERDEEN STATION    |                        |                     | STATE                   | INSTALL 200' CROSSWALK, 2-PED XING SIGNS  |                  |
|               | CROSSWALK MISSING                   |                                      | ABERDEEN STATION    |                        |                     |                         | INSTALL 90' CROSSWALK, 2-PED XING SIGNS   |                  |
|               | CROSSWALK MISSING                   | E. BEL AIR VE. AND N POST ROAD       |                     |                        |                     | COUNTY                  | INSTALL 90' CROSSWALK, 15' S.B. ON W LEG  |                  |
|               | CROSSWALK MISSING                   | EAST BEL AIR AND ABERDEEN AVE        |                     |                        |                     | COUNTY                  | INSTALL 220' XWALK, 20' S.B.  |                  |
|               | CROSSWALK MISSING                   | EAST BEL AIR AND NEW COUNTY RD       |                     |                        |                     | COUNTY                  | INSTALL 180' XWALK, 2PED SIGNS  |                  |
|               | CROSSWALK MISSING                   | EAST BEL AIR AVE. AND N. POST ROAD   |                     |                        |                     | STATE                   | INSTALL 250'XWALK, 30'SB ON NW LEG  |                  |
|               | CROSSWALK MISSING                   | S. PHILADELPHIA BLVD. AND CURTIS ST. |                     |                        |                     | STATE                   | INSTALL 80' OF CROSSWALK ACROSS CURTIS ST.  |                  |
|               | CROSSWALK FADED                     | PULASKI HWY AND W. BEL AIR AVE.      |                     |                        |                     | STATE                   | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 1500'  |                  |
|               | CROSSWALK FADED                     | US 40 AND FRANKLIN ST                |                     |                        |                     | STATE                   | OF PAVEMENT MARKINGS<br>REPAINT CROSSWALK ON W LEG-TOTAL OF 80' OF P.M.                           |                  |
|               | CROSSWALK FADED                     | W. BEL AIR AVE. AND N. PARKE ST.     |                     |                        |                     | COUNTY                  | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 600' OF  |                  |
|               | CROSSWALK FADED                     | WEST BEL AIR AND MT ROYAL AVE        |                     |                        |                     | STATE                   | PAVEMENT MARKINGS REPAINT CROSSWALKS ON N AND W LEG -TOTAL OF 250'                                |                  |
|               | WIDE LANE                           |                                      | CUSTIS STREET       | S PHILADELPHIA BLVD    | EDMUND ST           | COUNTY                  | OF P.M.  ROUTE, SIGNING, MARKING  | 0.123106         |
|               | WIDE LANE                           |                                      | EDMUND STREET       | CUSTIS ST              | S PHILADELPHIA BLVD | COUNTY                  | ROUTE, SIGNING, MARKING   | 0.369318         |
|               | WIDE LANE                           |                                      | JAMES AVENUE        | S PHILADELPHIA BLVD    | EDMUND ST           | COUNTY                  | ROUTE, SIGNING, MARKING   | 0.454545         |
|               | WIDE LANE                           |                                      | LAUREL LANE         | MT ROYAL AVE           | HEMLOCK LN          | COUNTY                  | ROUTE, SIGNING, MARKING   | 0.434343         |
|               | WIDE LANE                           |                                      | MD 132              | PARADISE RD            | MT ROYAL AVE        | STATE                   | ROUTE, SIGNING, MARKING   | 0.311553         |
| BIKE          | WIDE LANE                           |                                      | MD 22               | GARDEN DR              | BEARDS HILL RD      | STATE                   |   |                  |
|               |                                     |                                      |                     |                        |                     |                         | ROUTE, SIGNING  | 0.214015         |
|               | WIDE LANE                           |                                      | MD 22               | GARDEN DR              | BEARDS HILL RD      | STATE                   | ROUTE, SIGNING, MARKING   | 0.214015         |
|               | WIDE LANE                           |                                      | MD 462              | W BEL AIR AVE          | LEE RD              | STATE                   | ROUTE, SIGNING  | 0.206439         |
|               | WIDE LANE                           |                                      | MD 462              | W BEL AIR AVE          | LEE RD              | STATE                   | ROUTE, SIGNING, MARKING   | 0.206439         |
|               | WIDE LANE                           |                                      | MT ROYAL AVENUE     | ABERDEEN THWY          | W BEL AIR AVE       | COUNTY                  | ROUTE, DRAINAGE   | 0.128788         |

|               |                     | Roadway      | Roadway             |                        |                                | Roadway      | Recommended             | Distance |
|---------------|---------------------|--------------|---------------------|------------------------|--------------------------------|--------------|-------------------------|----------|
| Facility Type | Recommendation Type | Intersection | Name                | From                   | То                             | Jurisdiction | Improvement             | (Mi)     |
|               | WIDE LANE           |              | MT ROYAL AVENUE     | ABERDEEN THWY          | W BEL AIR AVE                  | COUNTY       | ROUTE, SIGNING, MARKING | 0.128788 |
|               | WIDE LANE           |              | NORTH PARKE STREET  | CUSTIS ST              | N ROGERS ST                    | COUNTY       | ROUTE, DRAINAGE         | 0.189394 |
|               | WIDE LANE           |              | NORTH PARKE STREET  | CUSTIS ST              | N ROGERS ST                    | COUNTY       | ROUTE, SIGNING, MARKING | 0.189394 |
|               | WIDE LANE           |              | NORTH POST ROAD     | PROVING GROUND RD      | ABERDEEN THWY                  | COUNTY       | ROUTE, SIGNING, MARKING | 0.378788 |
| BIKE          | WIDE LANE           |              | NORTH ROGERS STREET | W BEL AIR AVE TO NORTH | WHERE THE ROAD BECOMES 4 LANES | COUNTY       | ROUTE, DRAINAGE         | 0.135417 |
|               | WIDE LANE           |              | SOUTH PARKE STREET  | JAMES AVE              | W BEL AIR AVE                  | COUNTY       | ROUTE, SIGNING, MARKING | 0.104167 |
|               | WIDE LANE           |              | SOUTH ROGERS STREET | CAROL AVE              | W BEL AIR AVE                  | COUNTY       | ROUTE, DRAINAGE         | 0.159091 |
|               | WIDE LANE           |              | SOUTH ROGERS STREET | CAROL AVE              | W BEL AIR AVE                  | COUNTY       | ROUTE, SIGNING, MARKING | 0.159091 |
|               | SHOULDER            |              | US 40               | OLD STEPNEY RD         | MD 7                           | STATE        | ROUTE, SIGNING          | 0.142992 |

| Total Cost Station (\$) | Total Cost per Jurisdiction |             | Total Cost By Responsib | ility       |
|-------------------------|-----------------------------|-------------|-------------------------|-------------|
|                         | Anne Arundel County         | \$0         |                         |             |
| \$5,349,520             | Baltimore City              | \$0         | State Roads/Stations    | \$2,154,730 |
| <u> </u>                | Baltimore County            | \$0         | County Roads            | \$3,194,790 |
|                         | Harford County              | \$5,349,520 | City Roads              | \$0         |
|                         | <b>Howard County</b>        | \$0         |                         |             |
|                         | Prince George's County      | \$0         |                         |             |

RAIL LINE: MARC Penn

STATION PROFILE: Edgewood

#### **CHARACTER:**

The station area is predominately rural residential in nature with commercial properties near the station. Auto oriented commercial activities are located west of the station along Edgewood Road. East of the station are very low density residential land uses and the secured border of the Aberdeen Proving Ground. Portions of Edgewood have been designated as an Enterprise Zone, which is intended to facilitate revitalization. The Edgewood Community Plan seeks sustainable redevelopment as a traditional neighborhood and a Main Street community.

## LAND USE CONTEXT:

The Edgewood Station is located in an area that is a mix of land uses based on the Edgewood Community Plan. An overlay zone allows for zoning flexibility for live/work housing. MDOT has not designated this station for transit oriented development; however the Edgewood Community Plan indicates that this area should be redeveloped as a transit hub for buses and the MARC trains.

| Year 2000 Population within 3 mile radius - | 27,374 |
|---|--------|
| Weekday Station Ridership                   | 307    |
| Saturday Station Ridership:                 | N/A    |
| Transit Connections:                        | None   |

## **PARKING:**

Surface parking lots provide for 294 vehicles. 88% occupancy rate was observed.

#### PEDESTRIAN ENVIRONMENT:

Because of the existing low density character of the environs, pedestrian activity is low. Sidewalks are not provided on many surrounding roads. The County's 2010 Transportation Plan seeks improvements to pedestrian accommodations.

## **BICYCLING ENVIRONMENT:**

No bicycle accommodations were observed. No bicycle lockers are provided at this station but there is one bike rack. The Winters Run proposed Greenway is in the vicinity of the station.

Websites for regional trails are listed in the Appendix.

### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 2
Number of Bicycle Crashes within 3 miles 9

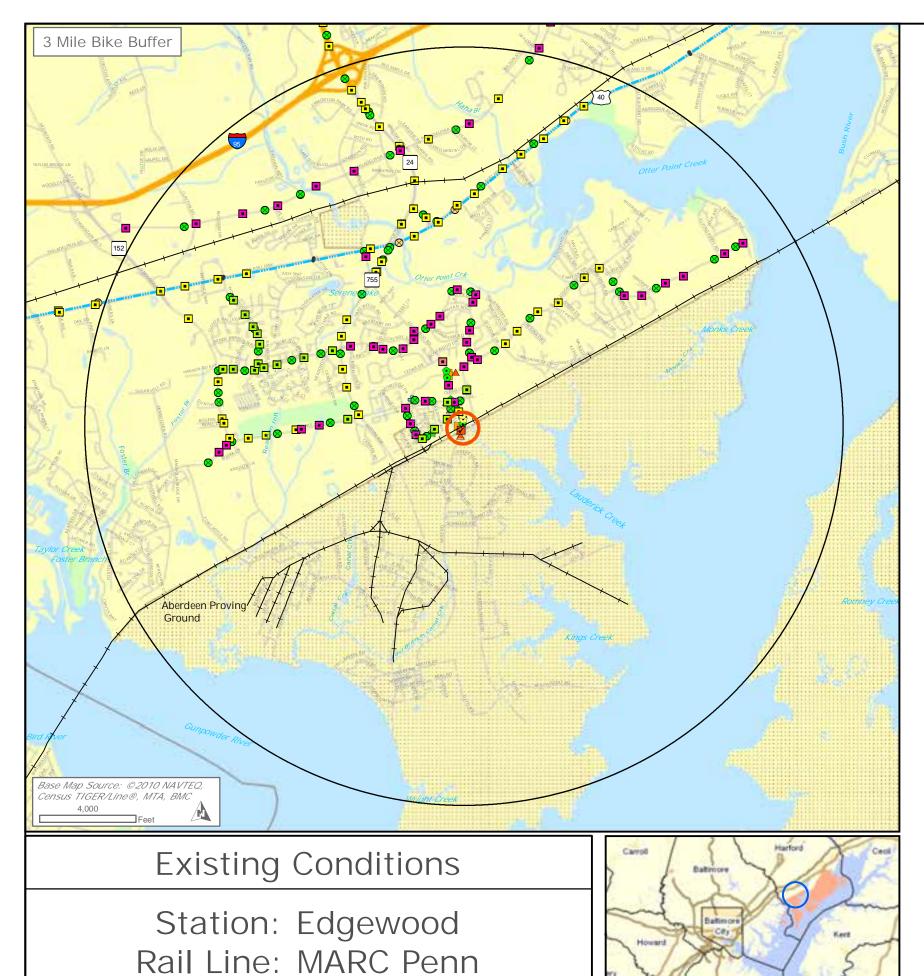
## **HIGHLIGHTS FROM FINDINGS**

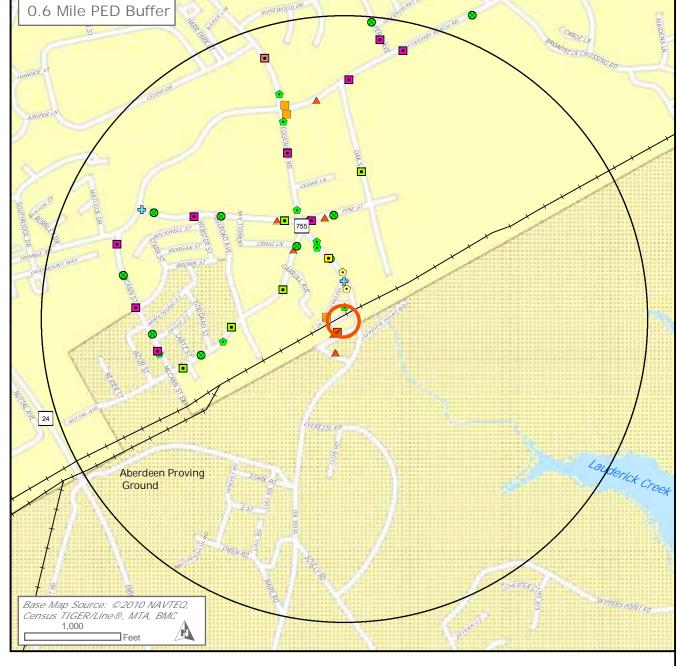
## PEDESTRIAN DEFICIENCIES

- Sidewalk gaps and missing segments in the vicinity of the station should be corrected as the area is redeveloped particularly along Edgewood Road.
- Crosswalks, curb ramps and advanced warning signs are recommended for Old Edgewood Drive at the station.
- Pedestrian crossing improvements are recommended for the intersection of Edgewood Road @ Willoughby Beach Road.
- Street lighting is recommended at the bus stops on MD 755 at Nuttal Road and Trimble Road.
- Street lighting is recommended at the station entrance at Wise Road.

## **BIKE ROUTE DEFICIENCIES**

- For the bike lane on Woodbridge Center Way from Pulaski Highway to Hanson Road, restriping, signing and marking is recommended.
- To promote shoulder use on US 40 and MD 152 bicycle signage is recommended.
- To improve safety, share the road signs should be provided along MD 24, MD 7, Trimble Road, Willoughby Beach Road among others to support shared use lanes.





## Legend

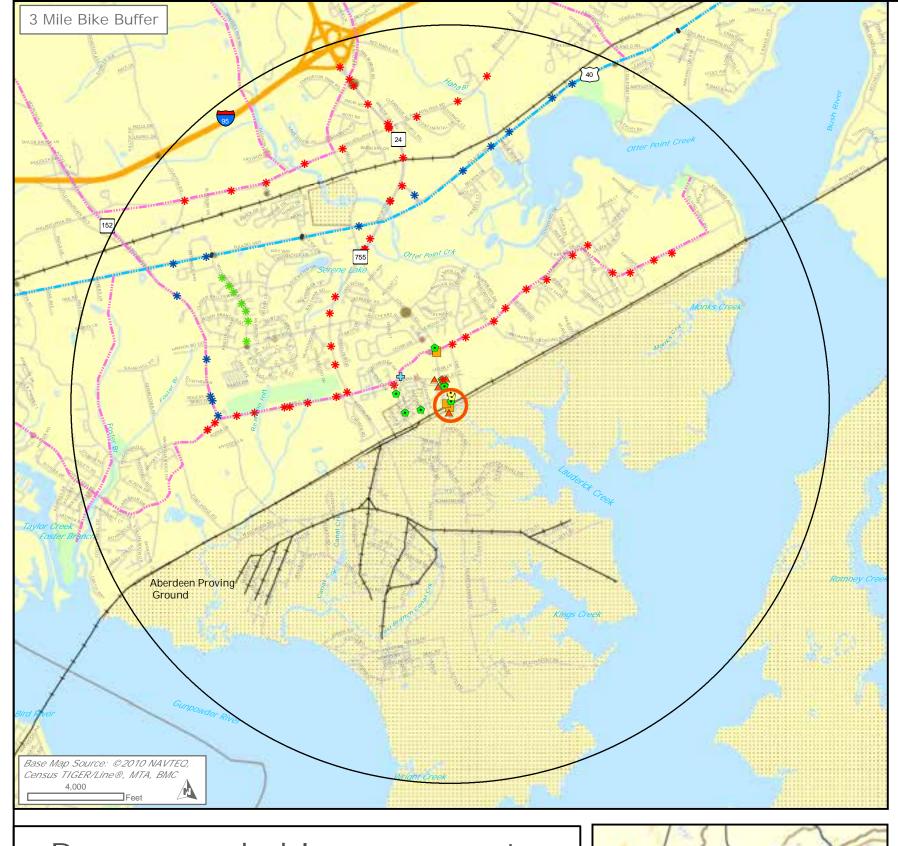


Train Station

- Bus Stop
- Parallel Drainage Grate
- Wide Outside Lane Missing
- Paved Shoulder Missing
- Marked Bike Lane Missing
- Directional Signing at Station Missing
- Bike Signing Missing
- Sidewalk Damaged
- Sidewalk Segment Missing

- Crosswalk Deficient
- Curb Ramp Missing
- Desire Line Present
- Lighting Deficient
- Pedestrian Crossing Deficient
- Bicycle Storage Not Visible
- Bicycle Rack Missing
- ------ Rail Line
- Exisiting Bicycle Route

Jun 20, 2011

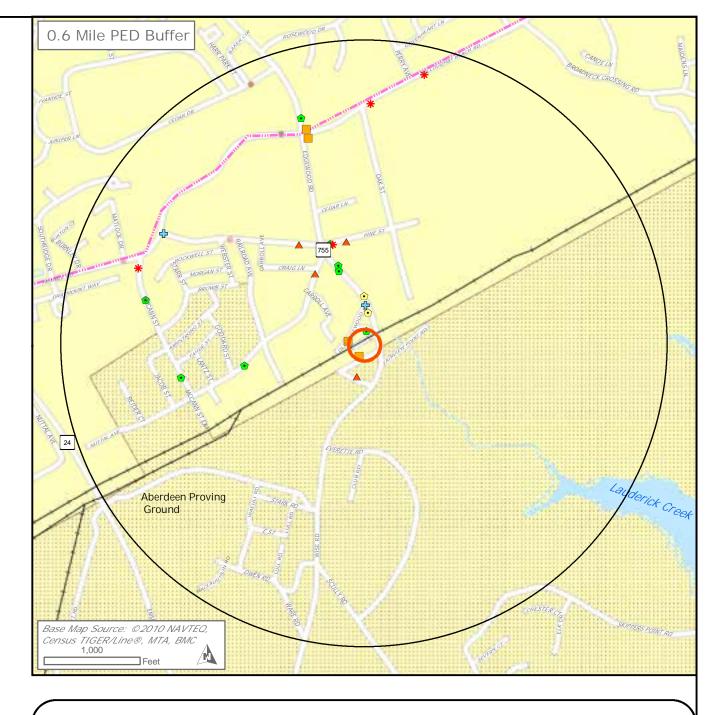


# Recommended Improvements

Station: Edgewood Rail Line: MARC Penn

Jun 20, 2011





## Legend

- Train Station
- Bus Stop
- Bike Lane / Bike Path
- Shoulder Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

## **Bicycle Traffic Incidents**

Pedestrian Crossing Improvement **2** 

Proposed Bicycle Route

Existing Bicycle Route

Lighting Improvement

----- Rail Line

**Pedestrian Traffic Incidents** 

3 - 4

## **EDGEWOOD - MARC PENN**

Station No. 49

| Edgewood N   | MARC PEIIII                       | Harford County                             | 2127 Old Edgewood Road |                                     |                                       | D                       | Bassage and all  | D'-1             |
|--------------|-----------------------------------|--|------------------------|-------------------------------------|---------------------------------------|-------------------------|--|------------------|
| acility Type | Recommendation Type               | Roadway<br>Intersection                    | Roadway<br>Name        | From                                | То                                    | Roadway<br>Jurisdiction | Recommended<br>Improvement   | Distance<br>(Mi) |
|              | SIDEWALK SEGMENT MISSING          |  | AT EDGEWOOD STATION    | PARKING LOT ACROSS<br>EDGEWOOD ROAD | TO TICKET OFFICE                      | STATE                   | INSTALL 750'X5' OF SIDEWALK  |                  |
|              | SIDEWALK SEGMENT MISSING          |  | MC CANN STREET         | TRIMBLE ROAD                        | ARMSTRONG STREET                      | COUNTY                  | INSTALL 1100'X5' OF SIDEWALK   |                  |
|              | SIDEWALK SEGMENT MISSING          |  | MCCANN STREET          | ARMSTRONG ST.                       | NUTAL AVE.                            | COUNTY                  | INSTALL 500'X5' OF SIDEWALK  |                  |
|              | SIDEWALK SEGMENT MISSING          |  | NUTTAL AVE.            | STATION                             | .6 MILES PED BUFFER                   | COUNTY                  | INSTALL 3200'X5' OF NEW SIDEWALK   |                  |
|              | SIDEWALK SEGMENT MISSING          |  | PINE STREET            | STATE HWY 755                       | TO THE END OF THE ROAD                | COUNTY                  | INSTALL 1000'X5' OF NEW SIDEWALK ON 1 SIDE   |                  |
|              | SIDEWALK SEGMENT MISSING          |  | STATE HWY 755          | EDGEWOOD AUTO SERVICES              | TO THE END OF .6 MILES PED<br>BUFFER  | STATE                   | INSTALL 2500'X5' OF NEW SIDEWALK   |                  |
|              | SIDEWALK SEGMENT MISSING          |  | STATE HWY 755          |                                     | TO THE END OF THE .6 MILES PED BUFFER | STATE                   | INSTALL 2500'X5' OF SIDEWALK   |                  |
|              | SIDEWALK SEGMENT MISSING          | STATE HWY 755 AND WILLOUGHBY BEACH ROAD    | EDGEWOOD ROAD          | INTERSECTION                        | TO 500' NORTH                         | STATE                   | INSTALL 500'X5' OF SIDEWALK  |                  |
|              | SIDEWALK DAMAGED                  |  | STATE HWY 755          | OLD EDGEWOOD ROAD                   | STATE HWY 755                         | STATE                   | REPLACE 100 'X4' OF SIDEWALK   |                  |
|              | SIDEWALK DAMAGED                  |  | STATE HWY. 755         | OLD EDGEWOOD RD.                    | 80' TO THE NORTH                      | STATE                   | REPLACE 550'X4' OF SIDEWALK  |                  |
| PEDESTRIAN   | PEDESTRIAN CROSSING SIGNS MISSING |  | AT EDGEWOOD STATION    |                                     |                                       | STATE                   | INSTALL 2-PED CROSSING SIGNS FOR THE CROSSING BETWEEN THE TWO PARKING LOTS AT EDGEWOOD               |                  |
|              | PEDESTRIAN CROSSING SIGNS MISSING | EDGEWOOD ROAD AND WILLOUGHBY<br>BEACH ROAD |                        |                                     |                                       | STATE                   | INSTALL 150' XWALK 2PED XING SIGNS, 1ADV PED XING SIGN, 4 CURB RAMPS EB CHAN. RIGHT,4PED SIG N&S LEG |                  |
|              |                                   | EDGEWOOD ROAD AND WILLOUGHBY BEACH ROAD    |                        |                                     |                                       | STATE                   | INSTALL 150' XWALK 2PED XING SIGNS, 1ADV PED XING SIGN, 4 CURB RAMPS WB CHAN. RIGHT,4PED SIG N&S LEG |                  |
|              | PEDESTRIAN CROSSING MISSING       |  | AT EDGEWOOD STATION    |                                     |                                       | STATE                   | INSTALL 200' CROSSWALK, 2-PED CROSSING SIGNS FROM PARKING LOT TO THE PLATFORM AREA                   |                  |
|              | LIGHTING AT BUS STOP              | STATE HWY 755 AND NUTTAL ROAD              | NUTTAL ROAD            |                                     |                                       | COUNTY                  | INSTALL LIGHTING AT BUS STOP   |                  |
|              | LIGHTING AT BUS STOP              | STATE HWY 755 AND PINE STREET              | PINE STREET            |                                     |                                       | COUNTY                  | INSTALL LIGHTING AT BUS STATION  |                  |
|              | LIGHTING AT BUS STOP              | STATE HWY 755 AND TRIMBLE ROAD             | TRIMBLE ROAD           |                                     |                                       | COUNTY                  | INSTALL LIGHTING AT BUS STATION  |                  |
|              | LIGHTING ALONG ROADWAY            |  | EDGEWOOD GATE ROAD     | AT EDGEWOOD STATION                 |                                       | STATE                   | INSTALL 2- LIGHT POLES AT THE ENTRANCE OF EDGEWOOD STATION WITH WISE ROAD                            |                  |
|              | CROSSWALK MISSING                 | OLD EDGEWOOD DR. TO EDGEWOOD STATION       | OLD EDGEWOOD DR.       |                                     |                                       | STATE                   | INSTALL 400' XWALK,4CURBRAMPS,4PEDSIGNS,60'SB,2ADV   |                  |
|              | CROSSWALK MISSING                 | TRIMBLE RD AND WILLOUGHBY BEACH RD         |                        |                                     |                                       | COUNTY                  | INSTALL 420' XWALK ON E. LEG   |                  |
|              | WIDE LANE                         |  | MCCANN STREET          | TRIMBLE RD                          | NUTTAL AVE                            | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.1003           |
|              | WIDE LANE                         |  | MD 24                  | TRIMBLE RD                          | I-95                                  | STATE                   | ROUTE, SIGNING   | 0.1799           |
|              | WIDE LANE                         |  | MD 7                   | CLAYTON RD                          | SAM HILL RD                           | STATE                   | ROUTE, SIGNING, MARKING  | 0.321            |
|              | WIDE LANE                         |  | PINE STREET            | EDGEWOOD RD                         | OAK ST                                | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.1373           |
| BIKE         | WIDE LANE                         |  | TRIMBLE ROAD           | FOSTER KNOLL DR                     | EMMORTON RD                           | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.2575           |
| DIKL         | WIDE LANE                         |  | WILLOUGHBY BEARCH ROAD | KENNARD AVE                         | EDGEWOOD RD                           | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.2414           |
|              | SHOULDER                          |  | MD 152                 | TRIMBLE RD                          | US 40                                 | STATE                   | ROUTE, SIGNING   | 0.2840           |
|              | SHOULDER                          |  | US 40                  | ABINGDON RD                         | MD 152                                | STATE                   | ROUTE, SIGNING   | 0.3001           |
|              | BIKE LANE                         |  | WOODBRIDGE CENTER WAY  | PULASKI HWY                         | HANSON RD                             | COUNTY                  | RESTRIPING, SIGNING, MARKING   | 0.1164           |

| Total Cost Station (\$) | Total Cost per Jurisdiction |             | Total Cost By Responsibi | lity        |
|-------------------------|-----------------------------|-------------|--------------------------|-------------|
|                         | Anne Arundel County         | \$0         |                          |             |
| \$3,763,095             | Baltimore City              | \$0         | State Roads/Stations     | \$1,989,435 |
|                         | Baltimore County            | \$0         | County Roads             | \$1,773,665 |
|                         | Harford County              | \$3,763,095 | City Roads               | \$0         |
|                         | Howard County               | \$0         |                          |             |
|                         | Prince George's County      | \$0         |                          |             |

RAIL LINE: MARC Penn

STATION PROFILE: Martin Airport

#### **CHARACTER:**

The area's main land use feature is the Martin State Airport. The station is situated between Eastern Boulevard and the Airport. There are large industrial facilities and residential areas located in Middle River.

## LAND USE CONTEXT:

The area is part of the County's Eastern Revitalization Area intended to support new and expanded business activity. The Baltimore County Plan shows the Middle Rive area as an employment center where concentrations of industrial and commercial development are anticipated. A portion of Middle River falls within the Chesapeake Bay Critical Area.

MDOT lists a 4.5 acre parcel at this station as a possible location for joint development activity although no active projects are identified.

| Year 2000 Population within 3 mile radius - | 55,842 |
|---|--------|
| Weekday Station Ridership                   | 412    |
| Saturday Station Ridership:                 | N/A    |
| Transit Connections:                        | None   |

## **PARKING:**

A surface lot with 321 spaces is provided. A 90% occupancy was observed.

## **PEDESTRIAN ENVIRONMENT:**

The immediate environs of the station are commercial/industrial and auto oriented, rather than pedestrian, oriented. There are segments of Eastern Ave and other roadways that lack sidewalks. Planned facility improvements are shown in the Eastern Baltimore County Pedestrian and Bicycle Access Plan.

## **BICYCLING ENVIRONMENT:**

There are 10 bike lockers at this station, but utilization is low. Existing bicycle accommodations on the road network were not evident but planned improvements are shown in the Eastern Baltimore County Pedestrian and Bicycle Access Plan.

The area is under consideration for a segment of the East Coast Greenway, intended to link Maine to Florida. Websites for Regional trails are listed in the Appendix.

## 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 0 Number of Bicycle Crashes within 3 miles 29

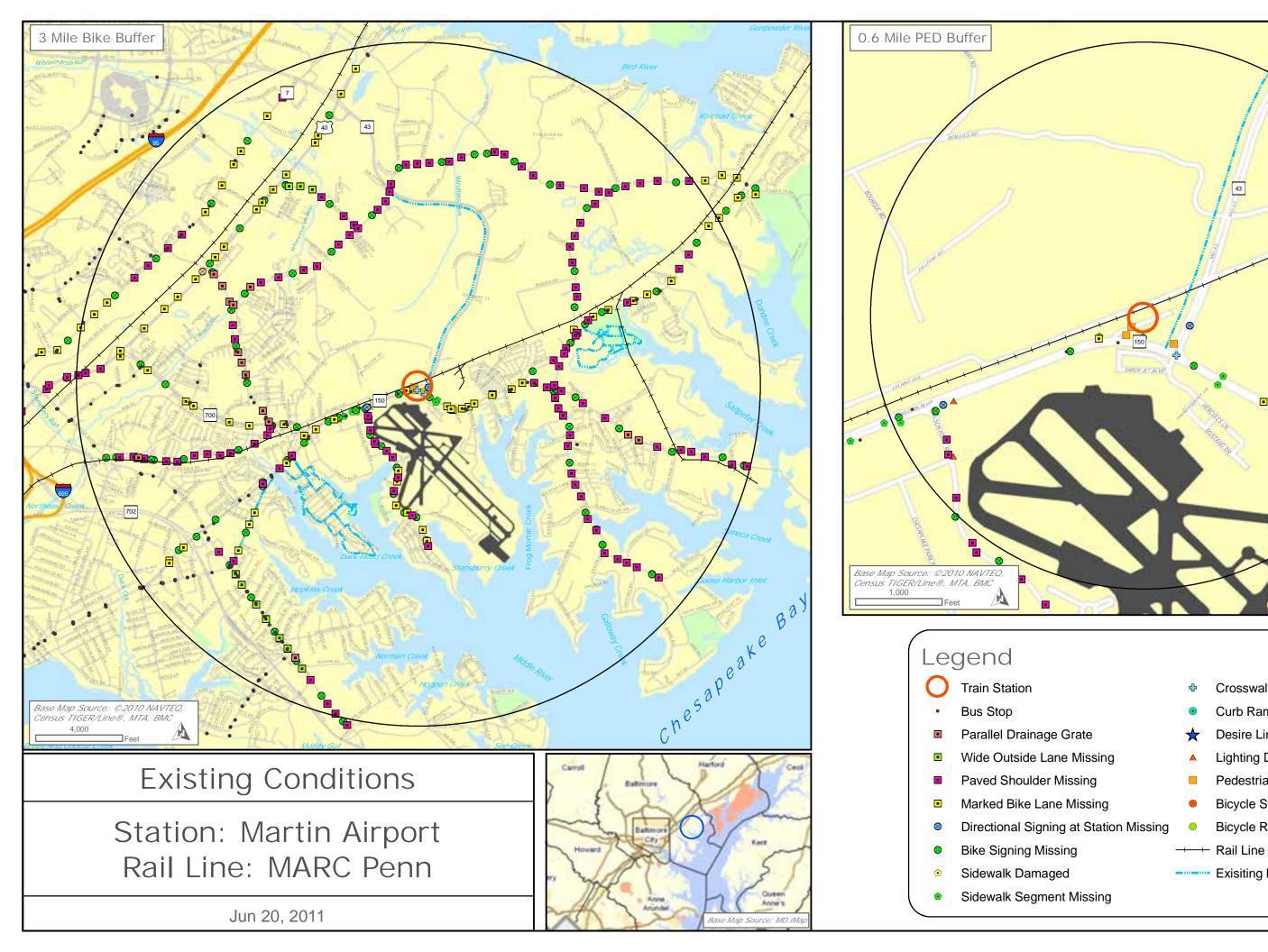
## **HIGHLIGHTS FROM FINDINGS**

## PEDESTRIAN DEFICIENCIES

- Several segments of sidewalk are missing along Eastern Ave and should be provided to improve safety. (Whitemarsh to Stevens; Wilson Point to Chesapeake Park Drive.) Sidewalks are also missing and should be provided on Wilson Point Road from Eastern to Dark Head Cove Road.
- Pedestrian crossing signs and a crosswalk are missing at the station.
- Street lighting is recommended for the intersection of Wilson Point Road and Chesapeake Park Drive.

#### **BIKE ROUTE DEFICIENCIES**

- To implement the shared use lanes in the County's Plan, and to address safety signage and bicycle compatible drainage is recommended on Back River Neck Road and Carroll Island Road.
- Signage and some marking are needed to support share use lanes along several other roads in the vicinity including Bird River, Bowley's Quarters Road, MD 150, Middle River Road and others.
- Shoulder use along MD 150 and US 40 should be supported with bicycle route signage.
- Bike path designations along portions of MD 43 and MD 150 should include signage and marking.



Crosswalk Deficient

**Curb Ramp Missing** 

Desire Line Present

Pedestrian Crossing Deficient

Bicycle Storage Not Visible

Bicycle Rack Missing

**Exisiting Bicycle Route** 

Lighting Deficient

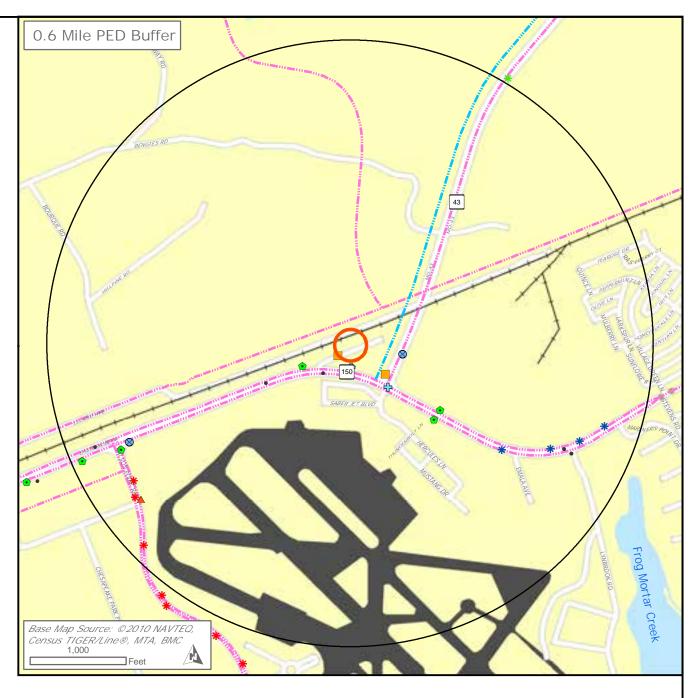


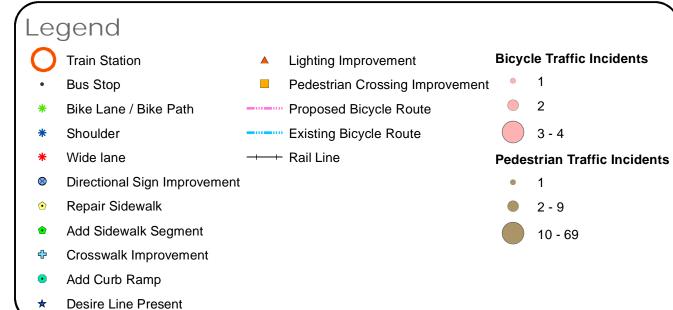
# Recommended Improvements

Station: Martin Airport Rail Line: MARC Penn

Jun 20, 2011







# RECOMMENDED IMPROVEMENTS MARTIN AIRPORT - MARC PENN

Station No. 50

|                | ort MARC Penn                       | Baltimore County                              | 2710 Eastern Blvd.             |                       |                       |                         |  |          |
|----------------|-------------------------------------|---|--------------------------------|-----------------------|-----------------------|-------------------------|--|----------|
| Fa allian Trus | Danaman dation Tons                 | Roadway                                       | Roadway                        | Fuerra                | т.                    | Roadway<br>Jurisdiction | Recommended  | Distance |
| acility Type   | Recommendation Type                 | Intersection                                  | Name                           | From                  | То                    | Julisalction            | Improvement  | (Mi)     |
|                | SIDEWALK SEGMENT MISSING            |   | EASTERN AVE.                   | WHITEMARSH BOULEVARD  | STEVENS ROAD          | STATE                   | INSTALL 3200'X5' OF NEW SIDEWALK   |          |
|                | SIDEWALK SEGMENT MISSING            |   | EASTERN AVE.                   |                       |                       |                         | INSTALL 3200'X5' OF SIDEWALK   |          |
|                | SIDEWALK SEGMENT MISSING            |   | EASTERN AVE.                   | WILSON POINT ROAD     | CHESAPEAK PARK DRIVE  | STATE                   | INSTALL 500'X5' OF NEW SIDEWALK  |          |
|                | SIDEWALK SEGMENT MISSING            |   | EASTERN AVE.                   |                       | CHESAPEAKE PARK DRIVE | STATE                   | INSTALL 700'X5' OF SIDEWALK  |          |
|                | SIDEWALK SEGMENT MISSING            |   | EASTERN AVE.                   |                       | WHITEMARSH BOULEVARD  | STATE                   | INSTALL 2900'X5' OF SIDEWALK   |          |
|                | SIDEWALK SEGMENT MISSING            |   | WILSON POINT ROAD              | EASTERN AVE.          | DARK HEAD COVE ROAD   | STATE                   | INSTALL 1400'X5' OF NEW SIDEWALK   |          |
| PEDESTRIAN     | PEDESTRIAN CROSSING SIGNS MISSING   |   | INSIDE MARTIN AIR PORT STATION |                       |                       | STATE                   | INSTALL 2- PED CROSSING SIGNS AT THE ENTRANCE OF PARKING LC                                | T        |
|                | PEDESTRIAN CROSSING SIGNS MISSING   | EASTERN BLVD. AND WHITEMARSH BLVD.            |                                |                       |                       | STATE                   | INSTALL 2-PED CROSSING SIGNS, 1-ADV. PED CROSSING SIGNS FOR RIGHT FROM SB WHITEMARSH BLVD. |          |
|                | LIGHTING ALONG ROADWAY              | WILSON POINT RD. AND CHESAPEAKE<br>PARK DRIVE | WILSON POINT ROAD              |                       |                       | STATE                   | INSTALL 2- LIGHT POLES AT THIS INTERSECTION  |          |
|                | DIRECTIONAL SIGNING STATION MISSING |   | EASTERN BLVD.                  |                       |                       | STATE                   | INSTALL A "MARC" SIGN AT EASTERN BLVD. FOR MARTIN AIRPORT MARC STATION                     |          |
|                | DIRECTIONAL SIGNING STATION MISSING |   | WHITEMARSH BLVD.               |                       |                       | STATE                   | INSTALL A "MARC" SIGN AT WHITEMARSH BLVD. FOR MARTIN<br>AIRPORT MARC STATION               |          |
|                | CROSSWALK MISSING                   |   | MARTIN AIR PORT STATION        |                       |                       | STATE                   | INSTALL 190' CROSSWALK, 2-PED XING SIGNS   |          |
|                | CROSSWALK MISSING                   | EASTERN AVE. AND WHITEMARSH BLVD.             |                                |                       |                       | STATE                   | INSTALL 360' XWALK,6PED SIGNALS,6RAMPS,4PEDSIGN  |          |
|                |                                     |   |                                |                       |                       |                         |  |          |
|                | WIDE LANE                           |   | BACK RIVER NECK ROAD           | HILLTOP AVENUE        | BROWNS ROAD           | COUNTY                  | ROUTE, DRAINAGE  | 0.151    |
|                | WIDE LANE                           |   | BIRD RIVER ROAD                | INTERMEDIATE          | EBENEZER ROAD         | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.172    |
|                | WIDE LANE                           |   | BIRD RIVER ROAD                |                       | EBENEZER ROAD         | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.172    |
|                | WIDE LANE                           |   | BIRD RIVER ROAD                | MIDDLE RIVER ROAD     | INTERMEDIATE          | COUNTY                  | ROUTE, DRAINAGE  | 0.142    |
|                | WIDE LANE                           |   | BOWLEYS QUARTERS ROAD          | EASTERN AVENUE        | NEW SECTION ROAD      | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.13     |
|                | WIDE LANE                           |   | CARROLL ISLAND ROAD            | BOWLEYS QUARTERS ROAD | HOLLY HUNT ROAD       | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.107    |
|                | WIDE LANE                           |   | CARROLL ISLAND ROAD            | BOWLEYS QUARTERS ROAD | HOLLY HUNT ROAD       | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.107    |
| BIKE           | WIDE LANE                           |   | CARROLL ISLAND ROAD            | HOLLY HUNT ROAD       | HUNTING FIELDS ROAD   | COUNTY                  | ROUTE, DRAINAGE  | 0.142    |
|                | WIDE LANE                           |   | CARROLL ISLAND ROAD            | HOLLY HUNT ROAD       | HUNTING FIELDS ROAD   | COUNTY                  | ROUTE, DRAINAGE  | 0.142    |
|                | WIDE LANE                           |   | CARROLL ISLAND ROAD            | HUNTING FIELDS ROAD   | DEAD END              | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.158    |
|                | WIDE LANE                           |   | EARLS ROAD                     | EASTERN AVENUE        | EBENEZER ROAD         | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.161    |
|                | WIDE LANE                           |   | EBENEZER ROAD                  | BIRD RIVER ROAD       | BIKE BUFFER           | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.178    |
|                | WIDE LANE                           |   | MD 150                         | BOWLEYS QUARTERS ROAD | BIKE BUFFER           | STATE                   | ROUTE, SIGNING, MARKING  | 0.142    |
|                | WIDE LANE                           |   | MD 150                         | MD 702 (OVERPASS)     | MARTIN BOULEVARD      | STATE                   | ROUTE, SIGNING, MARKING  | 0.198    |
|                |                                     |   |                                |                       |                       |                         |  |          |
|                | WIDE LANE                           |   | MD 150                         | STEVENS ROAD          | CARROLL ISLAND ROAD   | STATE                   | ROUTE, SIGNING, MARKING  | 0.116    |

|               |                     | Roadway      | Roadway            |                      |                    | Roadway      | Recommended             | Distance |
|---------------|---------------------|--------------|--------------------|----------------------|--------------------|--------------|-------------------------|----------|
| Facility Type | Recommendation Type | Intersection | Name               | From                 | То                 | Jurisdiction | Improvement             | (Mi)     |
|               | WIDE LANE           |              | MD 7               | HOSPITAL DRIVE       | SILVER SPRING ROAD | STATE        | ROUTE, SIGNING, MARKING | 0.238636 |
|               | WIDE LANE           |              | MD 700             | MIDDLE RIVER ROAD    | MD 150             | STATE        | ROUTE, SIGNING, MARKING | 0.184659 |
|               | WIDE LANE           |              | MD 700             | US 40                | MIDDLE RIVER ROAD  | STATE        | ROUTE, SIGNING          | 0.244318 |
|               | WIDE LANE           |              | MIDDLE RIVER ROAD  | BIRD RIVER ROAD      | US 40              | COUNTY       | ROUTE, DRAINAGE         | 0.128788 |
|               | WIDE LANE           |              | MIDDLE RIVER ROAD  | COMPASS ROAD         | BIRD RIVER ROAD    | COUNTY       | ROUTE, SIGNING, MARKING | 0.170455 |
|               | WIDE LANE           |              | MIDDLE RIVER ROAD  | MD 700               | COMPASS ROAD       | COUNTY       | ROUTE, DRAINAGE         | 0.151515 |
|               | WIDE LANE           |              | MIDDLE RIVER ROAD  | OREMS ROAD           | MD 700             | COUNTY       | ROUTE, SIGNING, MARKING | 0.0625   |
|               | WIDE LANE           |              | OLD EASTERN AVENUE | BACK RIVER NECK ROAD | EASTERN BOULEVARD  | COUNTY       | ROUTE, SIGNING, MARKING | 0.193182 |
| BIKE          | WIDE LANE           |              | OREMS ROAD         | ROSSVILLE BOULEVARD  | MIDDLE RIVER ROAD  | COUNTY       | ROUTE, DRAINAGE         | 0.125    |
|               | WIDE LANE           |              | OREMS ROAD         |                      |                    |              | ROUTE, SIGNING, MARKING | 0.125    |
|               | WIDE LANE           |              | REAMES ROAD        | US 40                | WHITEMARSH RUN     | COUNTY       | ROUTE, WIDENING         | 0.119318 |
|               | WIDE LANE           |              | REAMES ROAD        | WHITEMARSH RUN       | BIRD RIVER ROAD    | COUNTY       | ROUTE, SIGNING, MARKING | 0.118371 |
|               | WIDE LANE           |              | STEMMERS RUN ROAD  | EASTERN BOULEVARD    | OLD EASTERN AVENUE | COUNTY       | ROUTE, SIGNING, MARKING | 0.388258 |
|               | WIDE LANE           |              | US 40              | ROSSVILLE BOULEVARD  | MD 700             | STATE        | ROUTE, SIGNING          | 0.795455 |
|               | SHOULDER            |              | MD 150             | MD 43                | STEVENS ROAD       | STATE        | ROUTE, SIGNING          | 0.151515 |
|               | SHOULDER            |              | US 40              | MD 700               | EBENEZER ROAD      | STATE        | ROUTE, SIGNING          | 0.225379 |
|               | BIKE PATH           |              | MD 43              | BIRD RIVER ROAD      | MD 150             | STATE        | ROUTE, SIGNING          | 0.861742 |
|               | BIKE LANE           |              | MD 150             | MD 702 (OVERPASS)    | MARTIN BOULEVARD   | STATE        | ROUTE, MARKING          | 0.198864 |

| Total Cost Station (\$) | Total Cost per Jurisdiction |             | <b>Total Cost By Responsib</b> | lity        |
|-------------------------|-----------------------------|-------------|--------------------------------|-------------|
|                         | Anne Arundel County         | \$0         |                                |             |
| \$5,072,605             | Baltimore City              | \$2,890     | State Roads/Stations           | \$3,235,175 |
|                         | Baltimore County            | \$5,069,715 | County Roads                   | \$1,837,435 |
|                         | Harford County              | \$0         | City Roads                     | \$0         |
|                         | <b>Howard County</b>        | \$0         |                                |             |
|                         | Prince George's County      | \$0         |                                |             |

## RAIL LINE: MARC Penn (The station is also served by Light Rail and Amtrak)

## **STATION PROFILE: Penn Station**

### **CHARACTER:**

Penn Station is located in the northern portion of Baltimore's traditional downtown. A short spur from the main Light Rail line extends to Penn Station providing for easier transfer between the MARC/Amtrak lines and LRT. The area's generalized land use is medium intensity residential and commercial. The area is designated as Station North Arts and Entertainment District where there are tax incentives are available for specific arts related businesses. The area is built out. Two theaters and several restaurants are within walking distance. The area is built out except for surface parking lots. There have been proposals in the past for redevelopment of the area.

## LAND USE CONTEXT:

The area has a mix of land uses surrounding it including medium density residential, high density residential, high intensity commercial and public institutional facilities. The area is not planned as a TOD but there have been concepts proposed for more intensive use of Penn Station the structure itself.

| Year 2000 Population within 3 mile radius - | 332,999                            |
|---|------------------------------------|
| Weekday Station Ridership                   | 2470                               |
| Saturday Station Ridership:                 | No MARC service on weekend         |
| Transit Connections:                        | MTA Routes 3,3x,11,61,64,64x       |
|   | Charm City Circulator Purple Route |
|   | MTA Light Rail                     |
|   | Amtrak                             |

## **PARKING:**

Paid parking is available in an adjacent garage. 550 spaces provided for cars as well as parking for bicycles.89% occupancy observed. The station garage is fully utilized presumably by MARC and Amtrak customers. Nearby surface parking lots are also utilized by rail customers.

## PEDESTRIAN ENVIRONMENT:

Penn Station has an adequate walking environment. All the streets in the area have sidewalks, usually on both sides. Sidewalks in the area are in good condition. East sidewalk on North Charles Street between E Mt. Royal Avenue and the station entrance was closed during the field visit. However, this is temporary condition and sidewalks are expected to be open soon.

## **BICYCLING ENVIRONMENT:**

This station is served by the Jones Falls Trail. The Jones Falls Trail /route wraps around the station. E Lanvale Street is a shared use bike route with shared use pavement marking. Even though St Paul Street and N Charles Street are shown as the part of Jones Falls route, no bicycle facilities were observed on these streets. The majority of streets in the area are wide enough to accommodate bicycles. Websites for regional trails are listed in the Appendix.

## 2007-2008 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 34 Number of Bicycle Crashes within 3 miles 19

## HIGHLIGHTS FROM FINDINGS

## PEDESTRIAN DEFICIENCIES

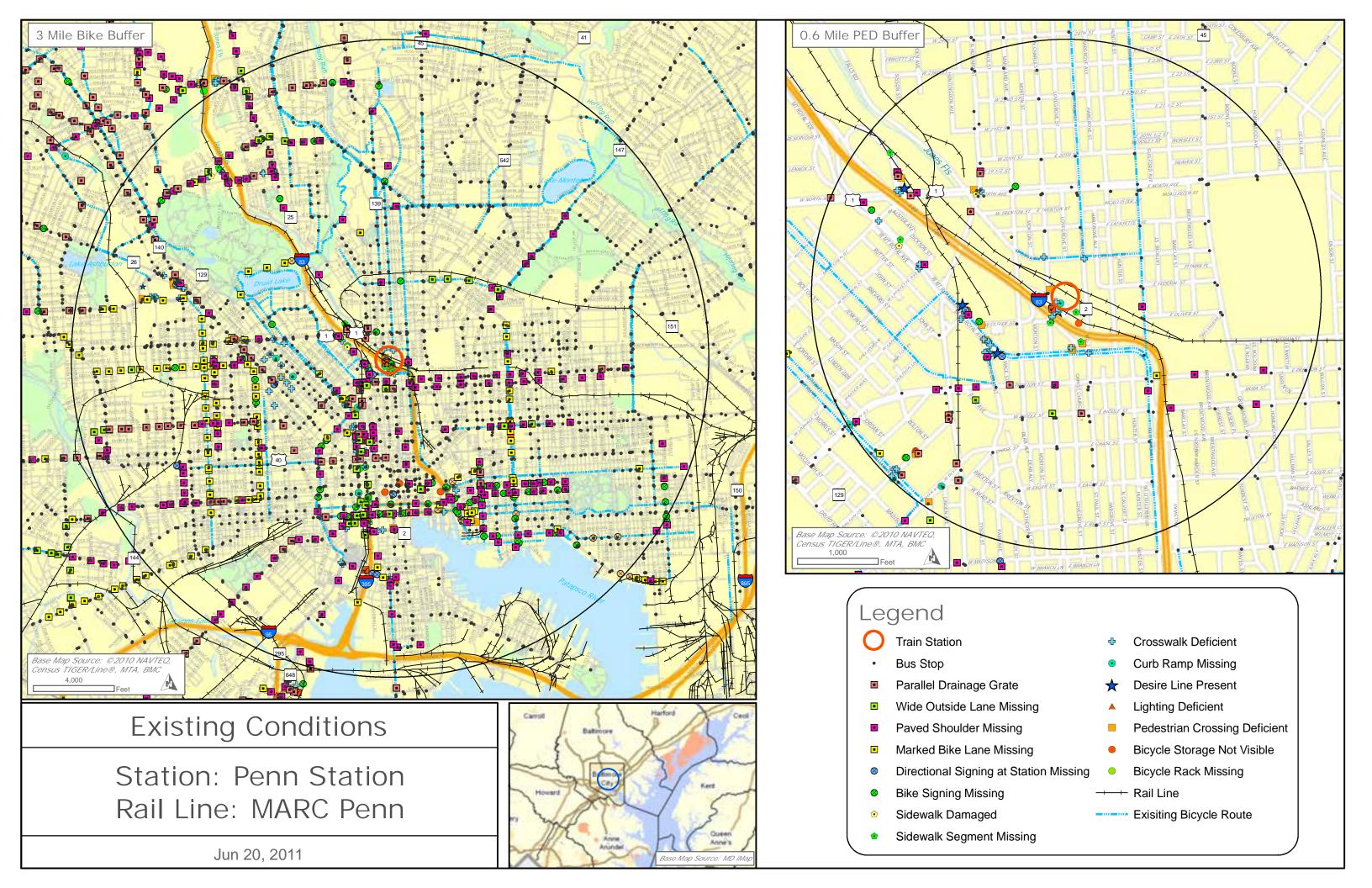
- It was assumed that a missing section of sidewalk observed on Charles Street near the station would be replaced when construction is completed.
- A segment of missing sidewalk was documented on West Mt Royal Ave and should be installed.
- Crosswalks are faded or missing in the following locations and should be provided: at the station entrance; within the station in the 3 minute loading /unloading area; at St Paul @ East Mt Royal Ave; N. Charles @ Lanvale; N.Charles @ Academic Center; I-83 off ramp to W. Mt Royal.

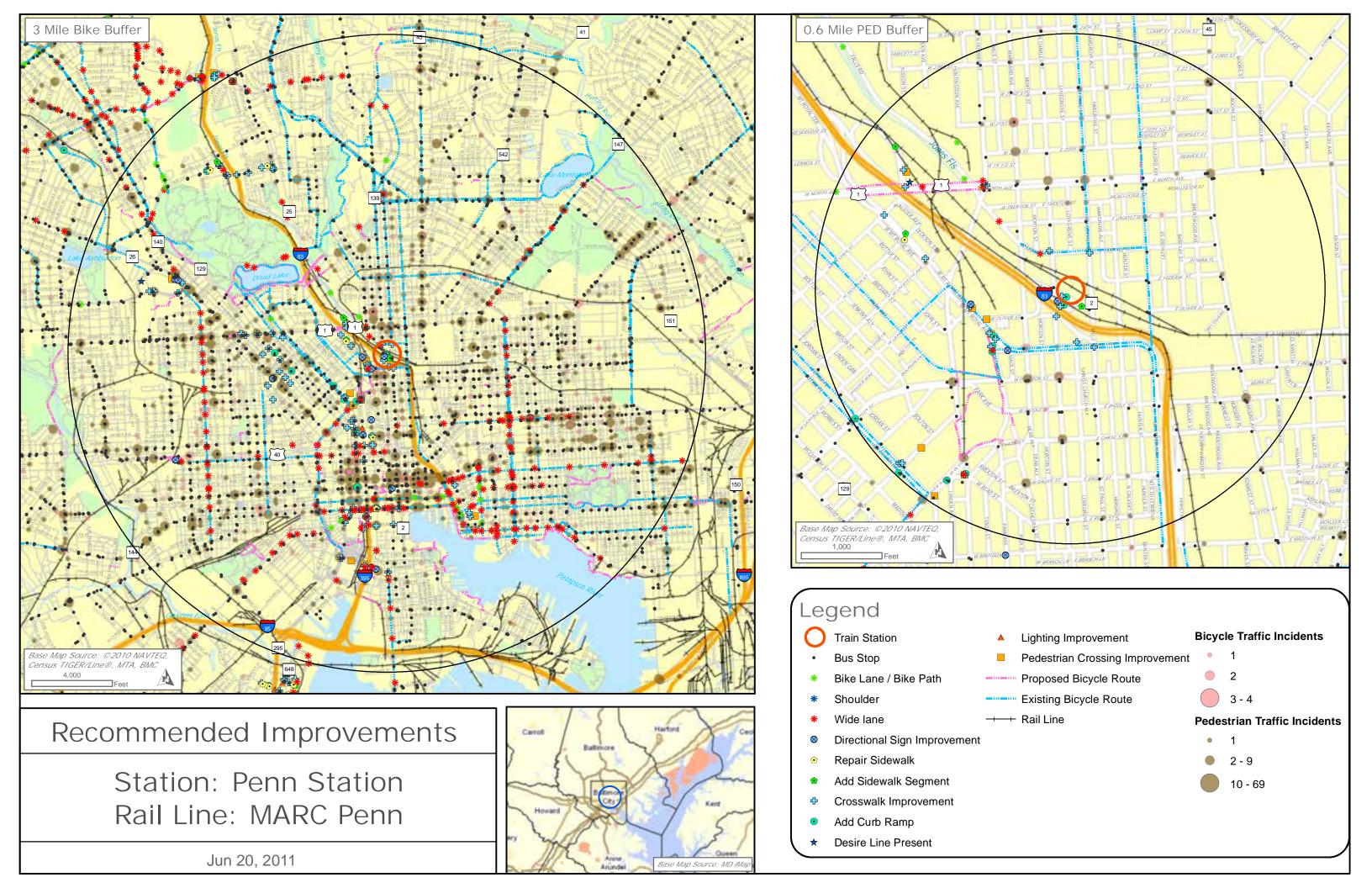
## **BIKE ROUTE DEFICIENCIES**

- For the shared use lane on Falls Road Share the Road Sign and marking is recommended between Chestnut Ave and Charles Street.
- Station wayfinding signage is recommended on N Charles Street for the Light Rail Station and MARC stations.
- Additional bicycle storage racks may be needed.

For more details refer to the project database.

Note: Weekday ridership corrected 10-4-2011





## **PENN STATION - MARC**

## Station No. 28b

| Penn Statio  | n MARC   | Baltimore City                                    | 1500 N Charles Street                        |   |           |                     |                         |  |                  |
|--------------|--|---|--|---|-----------|---------------------|-------------------------|--|------------------|
| acility Type | Recommendation Type                                  | Roadway<br>Intersection                           | Roadway<br>Name                              | From  | To        | 1                   | Roadway<br>Jurisdiction | Recommended<br>Improvement   | Distance<br>(Mi) |
| , . , p =    |  |   |  |   |           |                     |                         |  | (,               |
|              | SIDEWALK SEGMENT MISSING                             |   | AT PENN STATION MARC                         | ACROSS FROM TAXI PICK-<br>UP/DROP-OFF POINT |           |                     | STATE                   | INSTALL 150'X5' OF SIDEWALK  |                  |
|              | DIRECTIONAL SIGNING STATION MISSING                  |   | N. CHARLES ST.                               |   |           |                     | CITY                    | INSTALL LIGHT RAIL/MARC SIGN AT NORTH CHARLES ST. FOR PENN STATION   |                  |
|              | DESIRED LINE PRESENT                                 |   | CHARLES ST.                                  | CHARLES ST.                                 | ST.       | ATION               | CITY                    | INSTALL 2 CURB RAMPS   |                  |
|              | CURB RAMP MISSING                                    | FROM CHARLES STREET TO THE CIRCLE AT PENN STATION |  |   |           |                     | CITY                    | INSTALL 2-CURB RAMPS AND CROSSWALKS-TOTAL OF 280' OF P.M.            |                  |
|              | CURB RAMP MISSING                                    | PENN STATION ENTRANCE                             |  |   |           |                     | STATE                   | INSTALL 2- CURB RAMPS AT THIS LOCATION                               |                  |
| PEDESTRIAN   | CROSSWALK MISSING                                    |   |  |   |           |                     | STATE                   | INSTALL 420' XWALK ON ALL LEGS                                       |                  |
|              | CROSSWALK MISSING                                    |   | CHARLES ST AT STATION ACCESS                 |   |           |                     | CITY                    | INSTALL 130' XWALK, 2-PED SIGNS, 30' S.B.                            |                  |
|              | CROSSWALK MISSING                                    |   | PENN STATION ON 3 MINUTE<br>LOAD/UNLOAD AREA |   |           |                     | STATE                   | INSTALL 130' XWALK, 2-PED SIGNS, 2-CR                                |                  |
|              | CROSSWALK MISSING                                    | CHARLWS ST AND ACADEMIC CENTER                    | LOAD) ONLOAD AILLA                           |   |           |                     | CITY                    | INSTALL 320' XWALK, 50' STOP BAR, 2RAMPS                             |                  |
|              | CROSSWALK MISSING                                    | OFF-RAMP FROM I-83 TO W.MT ROYAL<br>AVE.          |  |   |           |                     | CITY                    | INSTALL 280' XWALK,2-PED SIGNS,ADV.PED SIGN,2RAMPS                   |                  |
|              | CROSSWALK FADED                                      | N CHARLES ST AND E LANVALE ST                     |  |   |           |                     | STATE                   | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 400' OF PAVEMENT MARKINGS |                  |
|              | CROSSWALK FADED                                      | ST. PAUL ST. AND E. MT. ROYAL AVE.                |  |   |           |                     | STATE                   | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 500' OF PAVEMENT MARKINGS |                  |
|              | WIDE LANE  |   | FALLS ROAD                                   | CHESTNUT AVENUE                             |           | ARYLAND AVENUE      | STATE                   | ROUTE, SIGNING, MARKING  | 0.1306           |
| 55           | WIDE LANE  |   | FALLS ROAD                                   | CHESTNOT AVENUE                             | IVI       | ARTLAND AVENUE      | SIAIE                   | ROUTE, SIGNING, MARKING  | 0.1300           |
| BIKE         | WIDE LANE  |   | FALLS ROAD                                   | MARYLAND AVENUE                             | NC        | ORTH CHARLES STREET | STATE                   | SIGNING, MARKING   | 0.0691           |
|              |  |   |  |   |           |                     |                         |  |                  |
|              | RC) Station is adjacent to Penn<br>Station No. 28b). | Total Cost Station (\$)                           | Total Cost per Jurisdiction                  | Total Cost By Responsibility                |           |                     |                         |  |                  |
|              |  | 4000 070  | Anne Arundel County                          | \$0   | 4440.605  |                     |                         |  |                  |
|              |  | \$202,870   | Baltimore City                               | \$202,870 State Roads/Stations              | \$110,635 |                     |                         |  |                  |
|              |  |   | Baltimore County                             | \$0 County Roads                            | \$0       |                     |                         |  |                  |
|              |  |   | Harford County                               | \$0 City Roads                              | \$92,240  |                     |                         |  |                  |
|              |  |   | Howard County                                | \$0   |           |                     |                         |  |                  |
|              |  |   | 1  |   |           |                     |                         |  |                  |

\$0

Prince George's County

RAIL LINE: MARC Penn

STATION PROFILE: West Baltimore

## **CHARACTER:**

The station is located along US 40 which is heavily travelled by motorists. The area is a mix of medium density residential, schools, commercial and industrial properties. An industrial building adjacent to the station has been vacant for the last decade. In the 1970's an interstate highway from downtown to I -70 was partially built and was terminated in the vicinity of the station in West Baltimore. The wide expanse of highway (now US 40) bisects the residential community and is thought to have contributed to neighborhood deterioration. The City is in the process of revitalizing the area including removal of the unused portion of the highway and provision of increased commuter parking. The City has recently developed a concept for a linear park featuring a landscaped pedestrian loop that would improve connections between the communities on the north and south side of the highway.

## LAND USE CONTEXT:

The West Baltimore Station area has a mix of land uses surrounding it including medium density residential, Industrial, Low Intensity Commercial and Public Institutional Facilities/City. Row houses are the typical type of housing in the area.

The MTA's planned Red Line would operate along the US 40 corridor in this area with a major hub at the West Baltimore MARC station. The Baltimore City Comprehensive Plan designates the West Baltimore Station as a top priority for a TOD Pilot Project. MDOT and Baltimore City have worked with the community on the West Baltimore MARC Station Master Plan for redevelopment of the West area into a Transit Centered Community Development. Among the goals for the mixed use development is to improve the area but maintain affordability for existing residents.

| Year 2000 Population within 3 mile radius - | 263,107                               |
|---|---------------------------------------|
| Weekday Station Ridership                   | 745                                   |
| Saturday Station Ridership:                 | N/A                                   |
| Transit Connections:                        | MTA Routes 15, 23, 40, 51             |
|   | Coppin State University Eagle Shuttle |

## **PARKING:**

A surface lot with 327 spaces of free parking is provided. An occupancy rate of 100% was observed.

The MTA has sought to expand available parking to meet demand at the station for several years. The MTA plans to build 645 additional spaces at the station between Smallwood and Street and North Monroe Street. This parking will function for both existing MARC and future Red Line customers. Once parking is expanded, this may be a suitable location for an electric vehicle charging station since it intercepts commuters from the west who are destined for downtown. As the TOD occurs there may also be demand for vehicle charging at night by residents of the new development.

Parking lots could be utilized on weekends for other purposes. Within the last year, a weekend community farmers market has been established at the site.

### PEDESTRIAN ENVIRONMENT:

In order to get to the station, pedestrians must cross busy roadways that lack pedestrian signals. The station is basically situated in the median of US 40 and is isolated from the pedestrian network.

#### **BICYCLING ENVIRONMENT:**

The bicycling environment is currently inadequate and could be improved. There are plans for bike routes in the surrounding area of the station but they do not exist at this time.

The West Baltimore Community Development strategy includes making biking and walking safer, more convenient and more inviting. Traffic calming is anticipated as a strategy to promote a safer pedestrian environment in the long term implementation of the plan.

Websites for regional trails are listed in the Appendix.

## 2007-2008 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 40 Number of Bicycle Crashes within 3 miles 32

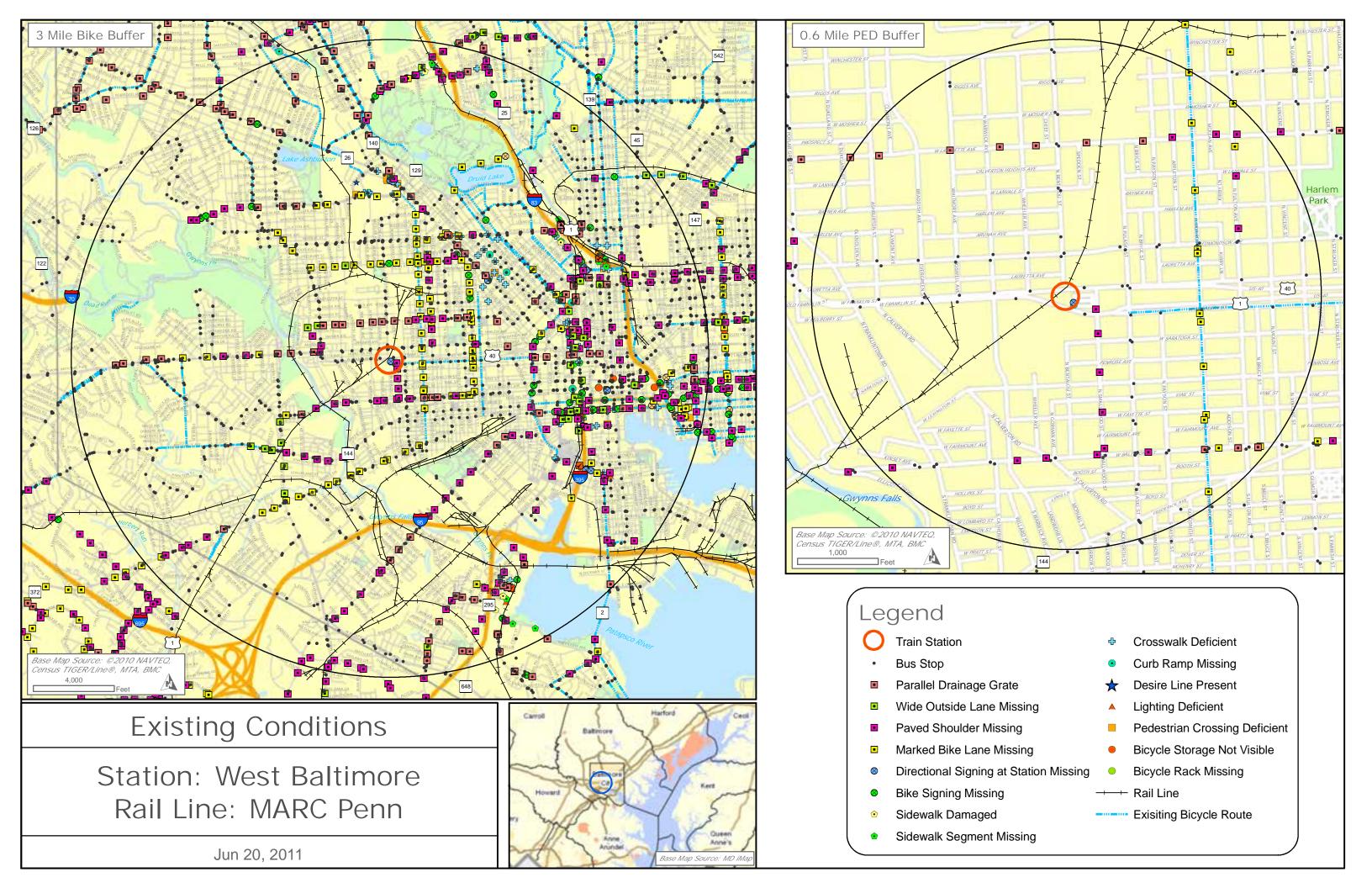
## **HIGHLIGHTS FROM FINDINGS**

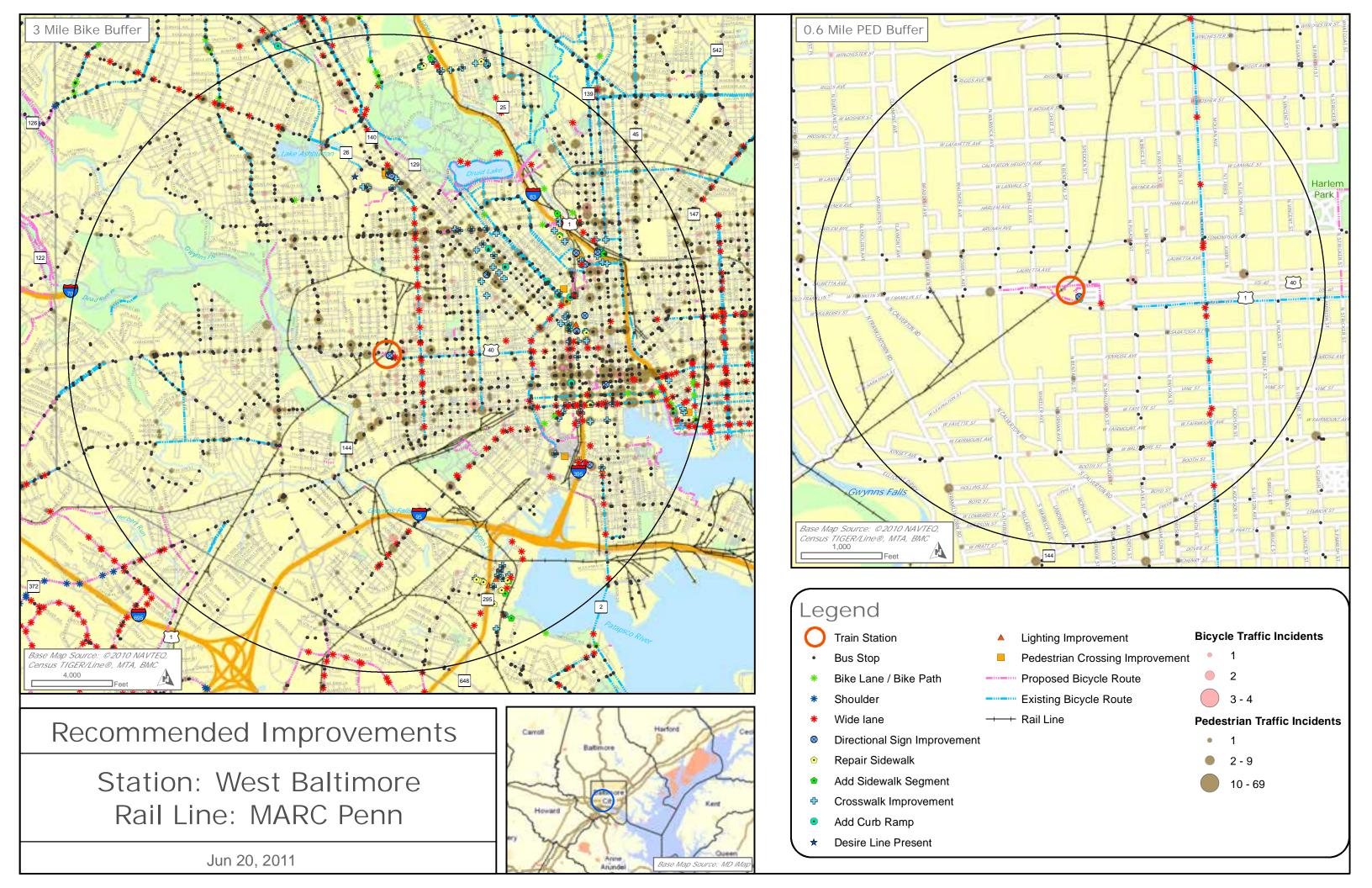
## **PEDESTRIAN DEFICIENCIES**

- The unused highway has served as a physical barrier between communities. It's removal and the City's provision of a landscaped pedestrian loop will greatly improve the pedestrian environment.
- A curb ramp and pedestrian crossing signs are recommended at the station.
- The 2012 TIP includes a street rehabilitation and pedestrian improvement project on Edmonson Ave between Bentalou and Pulaski.

#### BIKE ROUTE DEFICIENCIES

- To support shared use lanes on MD 144, Carey Street, Monroe Street, Smallwood and Baltimore Streets, share the road signs and marking are recommended.
- Bicycle compatible drainage is recommended for a portion of West Baltimore Street from South Payson to South Monroe Street.
- The bike rack at the station is not highly visible. There are no bike lockers provided at the station.





# RECOMMENDED IMPROVEMENTS WEST BALTIMORE - MARC PENN

## Station No. 51

| West Baltin   | nore MARC Penn                      | <b>Baltimore City</b>   | 401 Smallwood St.             |                              |                       |                         |   |                  |
|---------------|-------------------------------------|-------------------------|-------------------------------|------------------------------|-----------------------|-------------------------|---|------------------|
| Facility Type | Recommendation Type                 | Roadway<br>Intersection | Roadway<br>Name               | From                         | То                    | Roadway<br>Jurisdiction | Recommended<br>Improvement  | Distance<br>(Mi) |
| PEDESTRIAN    | DIRECTIONAL SIGNING STATION MISSING | N                       | INSIDE WEST BALTIMORE STATION |                              |                       | STATE                   | INSTALL "MARC" SIGN ON WEST FRANKLIN ST. FOR WEST<br>BALTIMORE STATION            |                  |
| FLULSTRIAN    | CURB RAMP MISSING                   | WEST BALTIMORE STATION  |                               |                              |                       | STATE                   | INSTALL 1-CURB RAMP,100'XWALK,2-PED SIGNS FROM<br>HANDICAP PARKING TO THE STATION |                  |
|               | WIDE LANE                           |                         | MD 144                        | I-695 (UNDERPASS)            | CHERRYDELL ROAD       | STATE                   | ROUTE, SIGNING, MARKING   | 0.18655          |
|               | WIDE LANE                           |                         | NORTH CAREY STREET            | WEST MULBERRY STREET         | WEST FRANKLIN STREET  | CITY                    | ROUTE, SIGNING, MARKING   | 0.06155          |
| D.1//5        | WIDE LANE                           |                         | NORTH MONROE STREET           | WEST BALTIMORE STREET        | GWYNNS FALLS PARKWAY  | STATE                   | ROUTE, SIGNING, MARKING   | 0.10416          |
| BIKE          | WIDE LANE                           |                         | NORTH SMALLWOOD STREET        | WEST MULBERRY STREET         | WEST BALTIMORE STREET | CITY                    | ROUTE, SIGNING, MARKING   | 0.06534          |
|               | WIDE LANE                           |                         | SOUTH MONROE STREET           | WILKENS AVENUE               | FREDERICK AVENUE      | STATE                   | ROUTE, SIGNING, MARKING   | 0.158144         |
|               | WIDE LANE                           |                         | WEST BALTIMORE STREET         | SOUTH PAYSON STREET          | SOUTH MONROE STREET   | CITY                    | ROUTE, DRAINAGE   | 0.085227         |
|               |                                     |                         |                               |                              |                       |                         |   |                  |
|               |                                     | Total Cost Station (\$) | Total Cost per Jurisdiction   | Total Cost By Responsibility |                       |                         |   |                  |

| Total Cost Station (\$) | Total Cost per Jurisdiction |           | <b>Total Cost By Responsibil</b> | ity       |
|-------------------------|-----------------------------|-----------|----------------------------------|-----------|
|                         | Anne Arundel County         | \$0       |                                  |           |
| \$176,525               | Baltimore City              | \$123,570 | State Roads/Stations             | \$146,945 |
|                         | Baltimore County            | \$52,955  | County Roads                     | \$0       |
|                         | Harford County              | \$0       | City Roads                       | \$29,575  |
|                         | Howard County               | \$0       |                                  |           |
|                         | Prince George's County      | \$0       |                                  |           |

RAIL LINE: MARC Penn

STATION PROFILE: Halethorpe

#### CHARACTER:

The area is residential with small commercial properties close to the station.

## LAND USE CONTEXT:

The Halethorpe Station area has a mix of land uses surrounding it including sub-urban, general urban and urban core. The area is built out and is not designated as a TOD.

| Year 2000 Population within 3 mile radius - | 80,849       |
|---|--------------|
| Weekday Station Ridership                   | 1,047        |
| Saturday Station Ridership:                 | N/A          |
| Transit Connections:                        | UMBC Shuttle |

## **PARKING:**

Surface lots provide 928 spaces. An occupancy rate of 75% was observed.

The station parking could be used for other purposes during off peak times but there are limited other facilities nearby that would require shared parking.

## **PEDESTRIAN ENVIRONMENT:**

The pedestrian access to the station is adequate. There are steps leading from the residential areas to the station platform. There are sidewalks and crosswalks providing pedestrian access to these stairs.

## **BICYCLING ENVIRONMENT:**

The bicycling environment is adequate with roadways that are generally wide enough to accommodate bicycles. There are few proposed bicycle routes in the immediate area. A bike rack and bike lockers are provided at the station and they are utilized. No offroad trails were observed.

## 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 0 Number of Bicycle Crashes within 3 miles 13

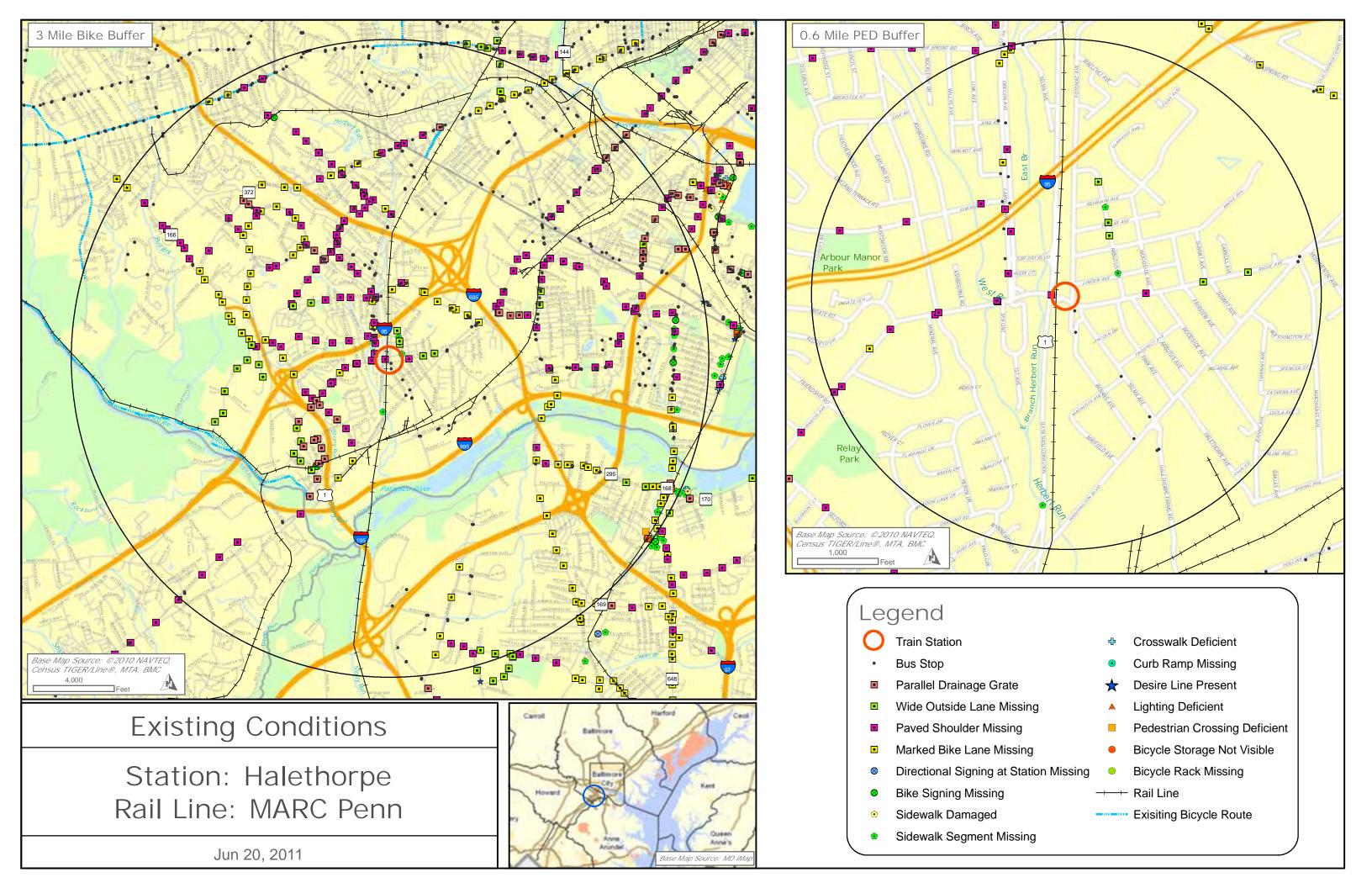
## **HIGHLIGHTS FROM FINDINGS**

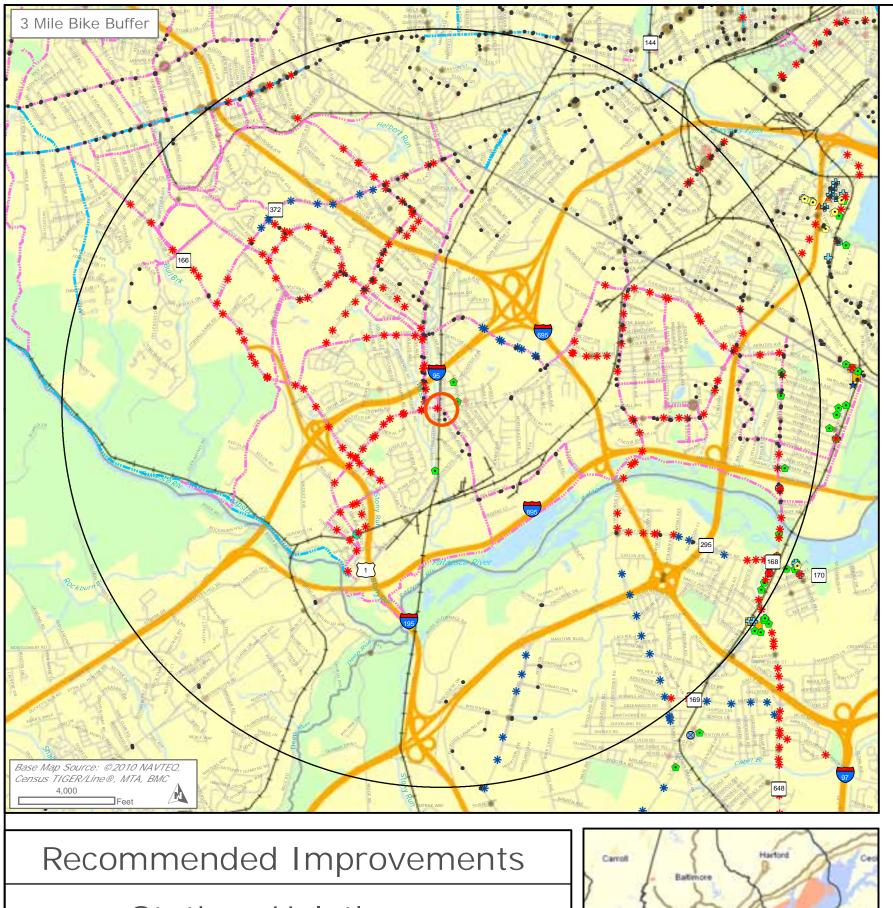
## **PEDESTRIAN DEFICIENCIES**

• There are segments of sidewalk missing along Arbutus Avenue and Southwestern Boulevard that should be installed.

## **BIKE ROUTE DEFICIENCIES**

- To support shared use lanes on Maiden Choice Lane some widening, restriping, marking and signage is recommended.
- To support shared use lanes on several other roads (Hilltop Road, Maple Ave, Oregon Ave, Wilkens Avenue) segments of signage and marking are recommended.
- Some roadways will need to have bicycle compatible drainage installed including Shelbourne Road, Sulphur Spring Road and Wilkens Avenue.

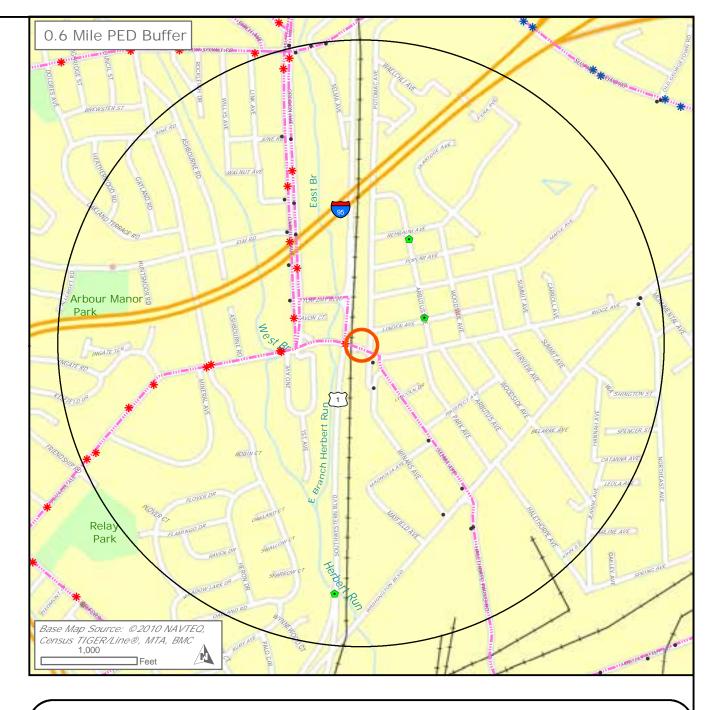




Station: Halethorpe Rail Line: MARC Penn

Jun 20, 2011





Lighting Improvement

Proposed Bicycle Route

Existing Bicycle Route

----- Rail Line

Pedestrian Crossing Improvement



- Train Station
- Bus Stop
- Bike Lane / Bike Path Shoulder
- Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

## **Bicycle Traffic Incidents**

**2** 

3 - 4

**Pedestrian Traffic Incidents** 

## **HALETHORPE - MARC PENN**

Station No. 52

| lalethorpe   | MARC Penn                | Baltimore County        | 5833 Southwestern Blvd. |                       |                         | Dandurau                | Decomposed                          | Distance         |
|--------------|--------------------------|-------------------------|-------------------------|-----------------------|-------------------------|-------------------------|-------------------------------------|------------------|
| acility Type | Recommendation Type      | Roadway<br>Intersection | Roadway<br>Name         | From                  | То                      | Roadway<br>Jurisdiction | Recommended<br>Improvement          | Distance<br>(Mi) |
|              | SIDEWALK SEGMENT MISSING |                         | ARBUTUS AVE.            | MAPLE AVE.            | POTOMAC AVE             | COUNTY                  | INSTALL 1200'X5' OF SIDEWALK        |                  |
| PEDESTRIAN   | SIDEWALK SEGMENT MISSING |                         | ARBUTUS AVE.            |                       | POTOMAC AVE.            | COUNTY                  | INSTALL 1300'X5' OF SIDEWALK        |                  |
|              | SIDEWALK SEGMENT MISSING |                         | SOUTHWESTERN BOULEVARD  | WASHINGTON BOULEVARD  | RIDGE AVE.              | STATE                   | INSTALL 900'X5' OF SIDEWALK         |                  |
|              | WIDE LANE                |                         | CARVILLE AVENUE         | FRANCIS AVENUE        | SULPHUR SPRING ROAD     | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.0719           |
|              | WIDE LANE                |                         | CARVILLE AVENUE         | FRANCIS AVENUE        | SULPHUR SPRING ROAD     | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.0719           |
|              | WIDE LANE                |                         | FRANCIS AVENUE          | SOUTH ROLLING ROAD    | CARVILLE AVENUE         | COUNTY                  | ROUTE, DRAINAGE                     | 0.08996          |
|              | WIDE LANE                |                         | FRANCIS AVENUE          | SOUTH ROLLING ROAD    | CARVILLE AVENUE         | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.08996          |
|              | WIDE LANE                |                         | HILLTOP CIRCLE          |                       |                         | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.12405          |
|              | WIDE LANE                |                         | HILLTOP ROAD            | WILKENS AVENUE        | HILLTOP CIRCLE          | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.17045          |
|              | WIDE LANE                |                         | MAIDEN CHOICE LANE      | INTERMEDIATE          | HIGHVIEW AVENUE         | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.11647          |
|              | WIDE LANE                |                         | MAIDEN CHOICE LANE      | KENWOOD AVENUE        | INTERMEDIATE            | COUNTY                  | ROUTE, WIDENING, SIGNING, MARKING   | 0.14678          |
|              | WIDE LANE                |                         | MAIDEN CHOICE LANE      | SOUTH PARADISE AVENUE | KENWOOD AVENUE          | COUNTY                  | SIGNING, MARKING                    | 0.287879         |
|              | WIDE LANE                |                         | MAIDEN CHOICE LANE      | WESTLAND BOULEVARD    | LEEDS AVENUE            | COUNTY                  | ROUTE, RESTRIPING, SIGNING, MARKING | 0.105114         |
|              | WIDE LANE                |                         | MAPLE AVENUE            | SHELBOURNE ROAD       | HIGHVIEW ROAD           | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.080492         |
|              | WIDE LANE                |                         | OREGON AVENUE           | FRANCIS AVENUE        | SULPHUR SPRING ROAD     | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.09659          |
|              | WIDE LANE                |                         | POPLAR AVENUE           | HILLTOP CIRCLE        | EAST DRIVE              | COUNTY                  | ROUTE, DRAINAGE                     | 0.26515          |
| BIKE         | WIDE LANE                |                         | POPLAR AVENUE           | HILLTOP CIRCLE        | EAST DRIVE              | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.26515          |
|              | WIDE LANE                |                         | RIDGE AVENUE            | OREGON AVENUE         | ARBUTUS AVENUE          | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.26231          |
|              | WIDE LANE                |                         | SHELBOURNE ROAD         | SULPHUR SPRING ROAD   | MAPLE AVENUE            | COUNTY                  | ROUTE, DRAINAGE                     | 0.064394         |
|              | WIDE LANE                |                         | SHELBOURNE ROAD         | SULPHUR SPRING ROAD   | MAPLE AVENUE            | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.064394         |
|              | WIDE LANE                |                         | SULPHUR SPRING ROAD     | DOLORES AVENUE        | CARVILLE AVENUE         | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.12026          |
|              | WIDE LANE                |                         | SULPHUR SPRING ROAD     | VICTORY DRIVE         | RR TRACKS               | COUNTY                  | DRAINAGE                            | 0.082386         |
|              | WIDE LANE                |                         | SULPHUR SPRING ROAD     | VICTORY DRIVE         | RR TRACKS               | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.08238          |
|              | WIDE LANE                |                         | SULPHUR SPRING ROAD     | VICTORY DRIVE         | RR TRACKS               | COUNTY                  | SIGNING, MARKING                    | 0.08238          |
|              | WIDE LANE                |                         | US 1                    | CLARK BOULEVARD       | COUNTY LINE             | STATE                   | ROUTE, SIGNING, MARKING             | 0.70265          |
|              | WIDE LANE                |                         | WALKER AVENUE           | WILKENS AVENUE        | HILLTOP CIRCLE          | COUNTY                  | ROUTE, DRAINAGE                     | 0.08522          |
|              | WIDE LANE                |                         | WALKER AVENUE           | WILKENS AVENUE        | HILLTOP CIRCLE          | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.08522          |
|              | WIDE LANE                |                         | WESTLAND BOULEVARD      | LINDEN AVENUE         | MAIDEN CHOICE LANE      | COUNTY                  | ROUTE, SIGNING, MARKING             | 0.10227          |
|              | WIDE LANE                |                         | WILKENS AVENUE          | MAIDEN CHOICE LANE    | SOUTH BEECHFIELD AVENUE | STATE                   | ROUTE, SIGNING, MARKING             | 0.12784          |

| Facility Type | Recommendation Type | Roadway<br>Intersection | Roadway<br>Name     | From                | То                      | =      | Recommended<br>Improvement | Distance<br>(Mi) |
|---------------|---------------------|-------------------------|---------------------|---------------------|-------------------------|--------|----------------------------|------------------|
|               | WIDE LANE           |                         | WILKENS AVENUE      | SOUTH ROLLING ROAD  | HIDDEN BLUFF CIRCLE     | STATE  | ROUTE, SIGNING, MARKING    | 0.21875          |
| DIVE          | SHOULDER            |                         | SULPHUR SPRING ROAD | BENSON AVENUE       | OLD SULPHUR SPRING ROAD | COUNTY | ROUTE, SIGNING             | 0.085227         |
| BIKE          | SHOULDER            |                         | WILKENS AVENUE      | HIDDEN BLUFF CIRCLE | MAIDEN CHOICE LANE      | STATE  | ROUTE, DRAINAGE            | 0.143939         |
|               | SHOULDER            |                         | WILKENS AVENUE      | HIDDEN BLUFF CIRCLE | MAIDEN CHOICE LANE      | STATE  | ROUTE, SIGNING             | 0.143939         |
|               |                     |                         |                     |                     |                         |        |                            |                  |

| Total Cost Station (\$) | <b>Total Cost per Jurisdiction</b> |             | <b>Total Cost By Responsib</b> | ility       |
|-------------------------|------------------------------------|-------------|--------------------------------|-------------|
|                         | Anne Arundel County                | \$0         |                                |             |
| \$2,333,465             | Baltimore City                     | \$0         | State Roads/Stations           | \$498,340   |
| -                       | Baltimore County                   | \$2,333,465 | County Roads                   | \$1,835,130 |
|                         | Harford County                     | \$0         | City Roads                     | \$0         |
|                         | <b>Howard County</b>               | \$0         |                                |             |
|                         | Prince George's County             | \$0         |                                |             |

RAIL LINE: MARC Penn Line/Amtrak

STATION PROFILE: BWI Marshall

### **CHARACTER:**

The station includes a building that is staffed for ticketing, an indoor waiting area and several parking garages. The immediate surrounding area is wooded and in a natural state. The BWI Airport is the main land use in the area. Parking lots for the airport and industrial buildings are within proximity but not connected to the station.

## LAND USE CONTEXT:

The BWI Station is surrounded by industrial and natural features land uses. This area of Anne Arundel County is designated as the BWI Business District which is a business growth area. The BWI Airport is the main use in the area. Airport related land uses include parking, hotels and office buildings. There are restrictions on the type and height of development that can occur within the designated Airport Zone. The area is not planned as a transit oriented development.

| Year 2000 Population within 3 mile radius - | 27,887   |
|---|--|
| Weekday Station Ridership                   | 1,660 (MARC only)  |
| Saturday Station Ridership:                 | No MARC Service on weekends  |
| Transit Connections:                        | BWI Airport Shuttle, MTA Route 17 Howard Transit Red Express C60 (WMATA) |
|   | Spirit Shuttle<br>Amtrak Rail Service                                    |

## **PARKING:**

Two parking structures provide 3,187 parking spaces. A fee is charged. An 80% occupancy rate was observed.

MARC, Amtrak and airport customers can park here. Parking demand can exceed availability at this location since airport customers may park here and take the BWI shuttle to the terminal.

## PEDESTRIAN ENVIRONMENT:

The pedestrian accommodations are not extensive. The station is isolated and not proximate to other activities. An off-road improved trail/board walk through a wooded area connects the station to a nearby business park on Corporate Center Drive where MDOT headquarters is located. The trail has benches and lighting.

## **BICYCLING ENVIRONMENT:**

There are 16 bike lockers provided at this station and most are rented. No bike racks are provided. The BWI Trail (an improved off-road recreational loop around the airport) intersects with the access road to the MARC station. Bicyclists from communities east of Aviation Boulevard and south of Dorsey Road can reach the station using the trail. Websites for regional trails are listed in the Appendix.

## 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within.6 miles Number of Bicycle Crashes within 3 miles

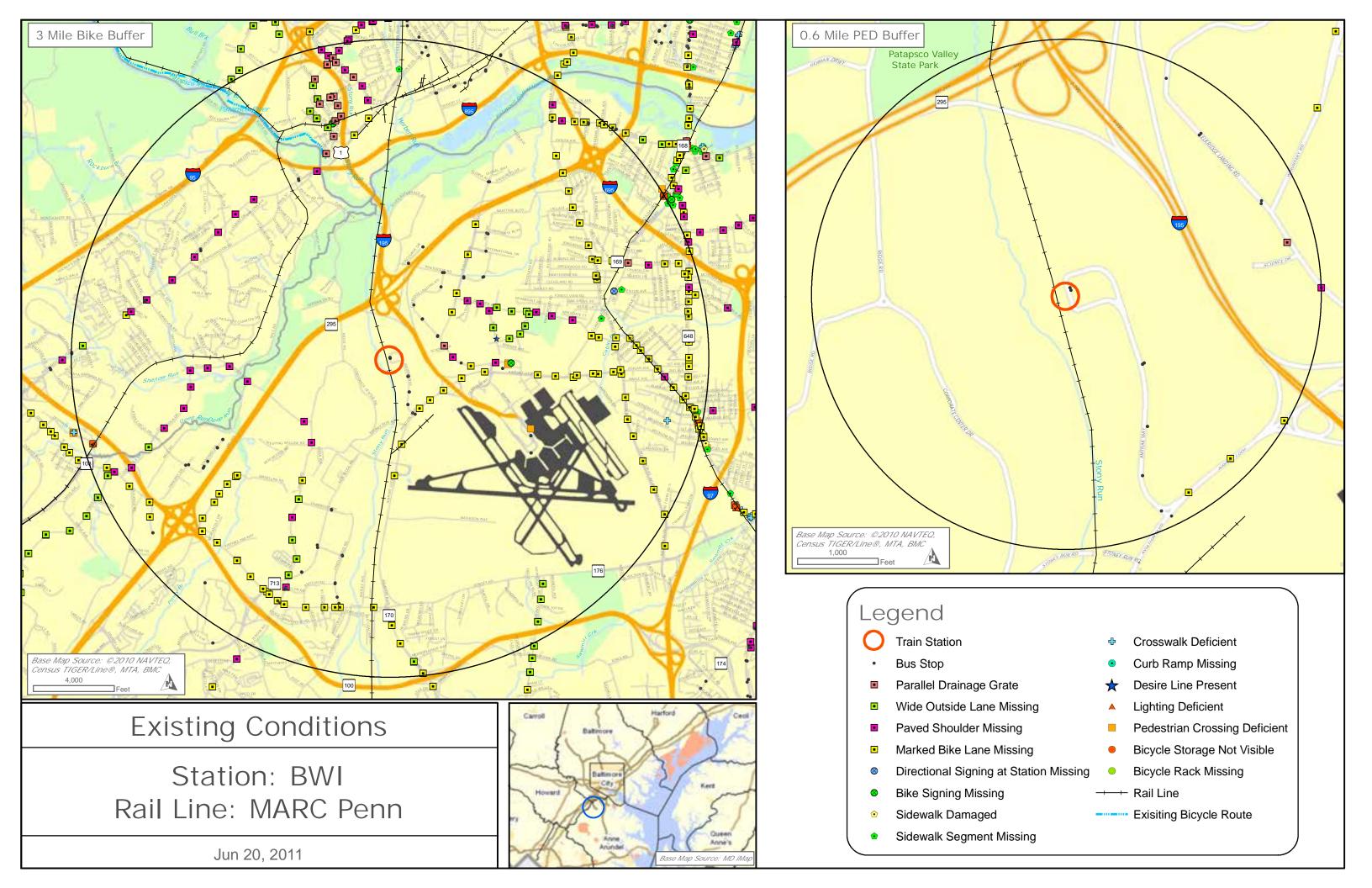
## **HIGHLIGHTS FROM FINDINGS**

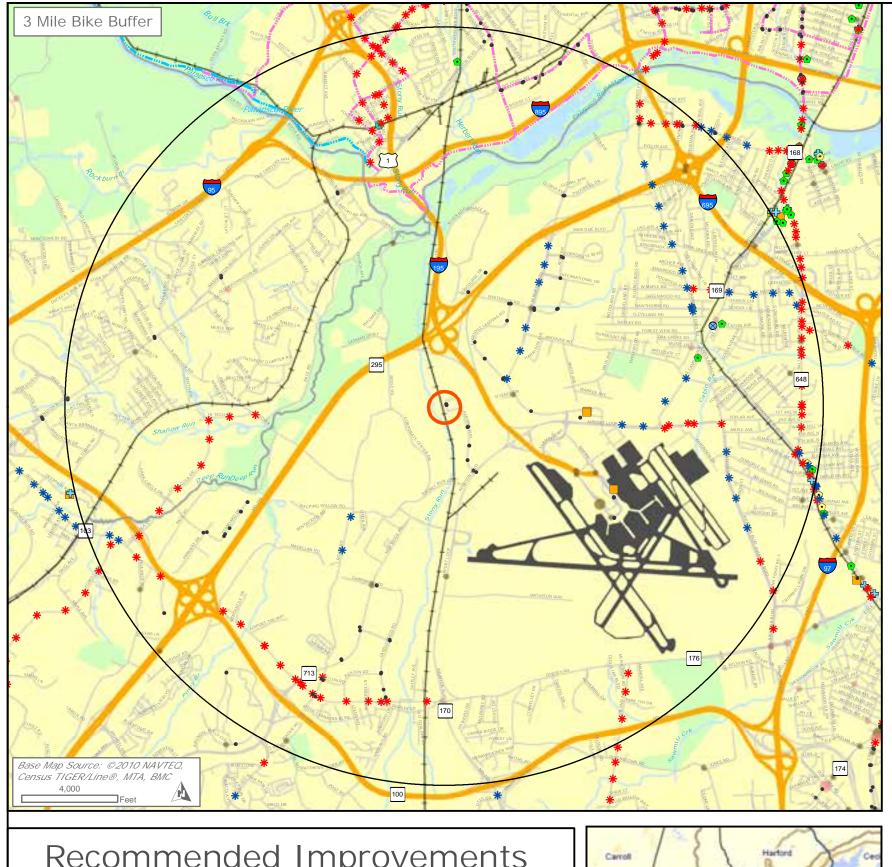
## **PEDESTRIAN DEFICIENCIES**

• Pedestrian accommodations within the station property are adequate. There are few origins for pedestrians within walking distance. Employees from the business park can reach the station using the improved trail.

## **BIKE DEFICIENCIES**

• To support shoulder use of MD 170 for bicycling, bike route signage is recommended from Minnetonka Road to MD 100.

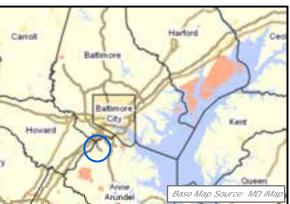


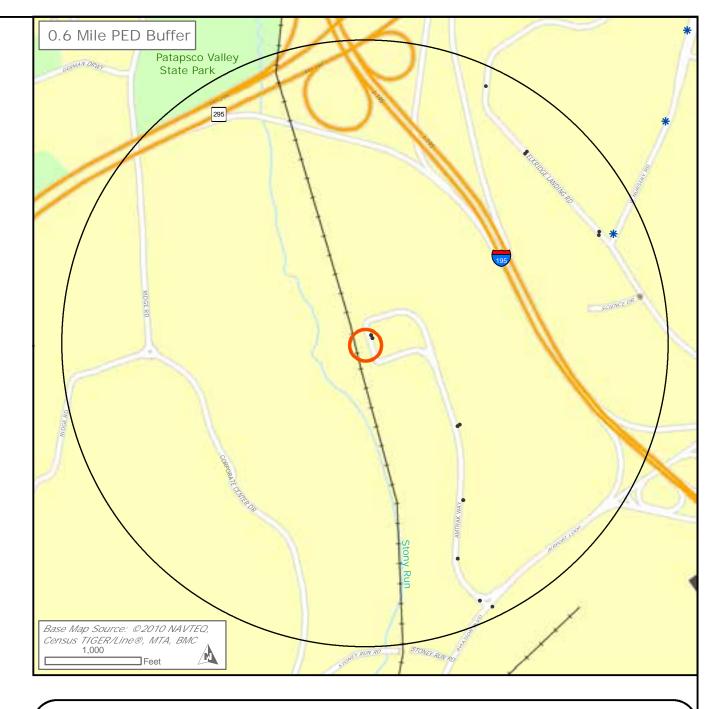




Station: BWI Rail Line: MARC Penn

Jun 20, 2011





▲ Lighting Improvement

----- Rail Line

Proposed Bicycle Route

Existing Bicycle Route

Pedestrian Crossing Improvement

## Legend

- Train Station
- Bus Stop
- Bike Lane / Bike Path
- Shoulder
- Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

## **Bicycle Traffic Incidents**

2

3 - 4

**Pedestrian Traffic Incidents** 

## **BWI - MARC PENN/AMTRAK**

## Station No. 53

| BWI MARC Penn/Amtrak |                     | Anne Arundel County     | 2 Amtrak Way                |                              |          |       |                            |                  |
|----------------------|---------------------|-------------------------|-----------------------------|------------------------------|----------|-------|----------------------------|------------------|
| Facility Type        | Recommendation Type | Roadway<br>Intersection | Roadway<br>Name             | From                         | То       | =     | Recommended<br>Improvement | Distance<br>(Mi) |
| BIKE                 | SHOULDER            |                         | MD 170                      | MINNETONKA ROAD              | MD 100   | STATE | ROUTE, SIGNING             | 0.19318          |
|                      |                     | Total Cost Station (\$) | Total Cost per Jurisdiction | Total Cost By Responsibility | ,        |       |                            |                  |
|                      |                     |                         | Anne Arundel County         | \$13,100                     |          |       |                            |                  |
|                      |                     | \$13,100                | Baltimore City              | \$0 State Roads/Stations     | \$13,100 |       |                            |                  |
|                      |                     |                         | Baltimore County            | \$0 County Roads             | \$0      |       |                            |                  |
|                      |                     |                         | Harford County              | \$0 City Roads               | \$0      |       |                            |                  |
|                      |                     |                         | Howard County               | \$0                          |          |       |                            |                  |
|                      |                     |                         | Prince George's County      | \$0                          |          |       |                            |                  |
|                      |                     |                         | Howard County               | \$0                          | \$0      |       |                            |                  |

RAIL LINE: MARC Penn

STATION PROFILE: Odenton

#### **CHARACTER:**

The area around the station is predominately residential with a few commercial properties nearby. The Odenton Town Square is a mixed use transit oriented development project underway on State and County owned land. When complete, the development will consist of a hotel, restaurants, commercial development, condominiums, townhomes and single family dwellings. The project will also provide additional parking for MARC riders (increase to 5,000 spaces.)

#### LAND USE CONTEXT:

The Odenton Station is surrounded by designated Town Center and Residential Medium Density land uses. The parking lots are to be developed as part of the Odenton Town Center TOD project. The mixed use development is planned to have walk able connections to the station.

| Year 2000 Population within 3 mile radius - | 39,235                 |
|---|------------------------|
| Weekday Station Ridership                   | 2,191                  |
| Saturday Station Ridership:                 | N/A                    |
| Transit Connections:                        | Connect a Ride K Route |

#### **PARKING:**

2,000 parking spaces are provided. A 100% occupancy rate was observed.

The existing parking serves only MARC riders. Shared parking will result with future development. As the TOD is built out, this may be a suitable location for an electric vehicle charging station.

#### PEDESTRIAN ENVIRONMENT:

There are adequate pedestrian conditions at the station but some improvements are recommended as it transforms into a mixed use area. Sidewalks exist on only certain roadways and there are limited pedestrian crossings and signage.

#### **BICYCLING ENVIRONMENT:**

There are bike racks and 10 bicycle lockers at the station and they are utilized. The bicycling environment is limited at this time. There is a short trail from the station to the adjacent neighborhood on the east that connects to the local roadway network. No off road trails were identified, but the County has intent to investigate provision of an off-road trail in the area.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 3

Number of Bicycle Crashes within 3 miles 15

#### **HIGHLIGHTS FROM FINDINGS**

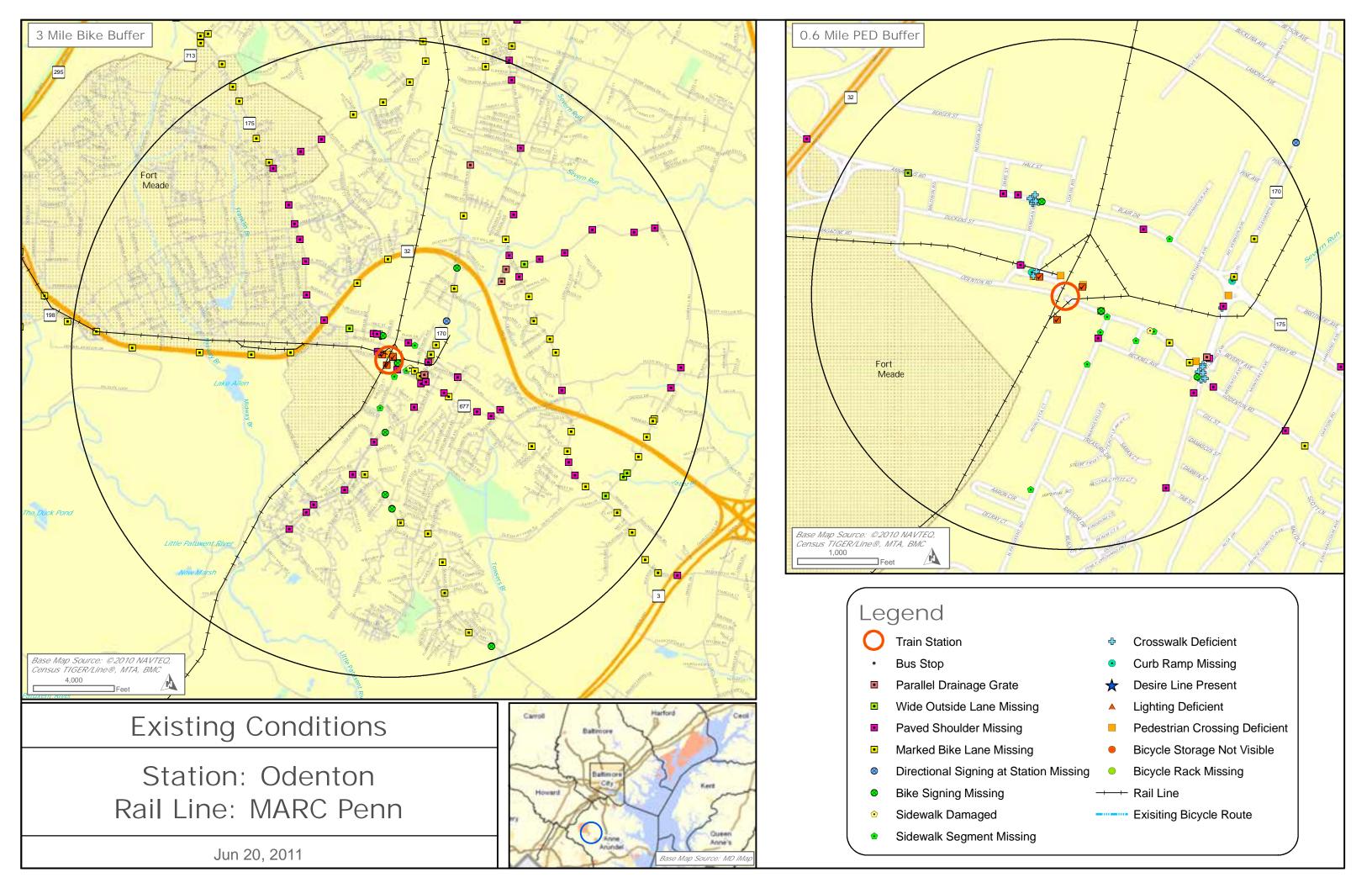
#### PEDESTRIAN DEFICIENCIES

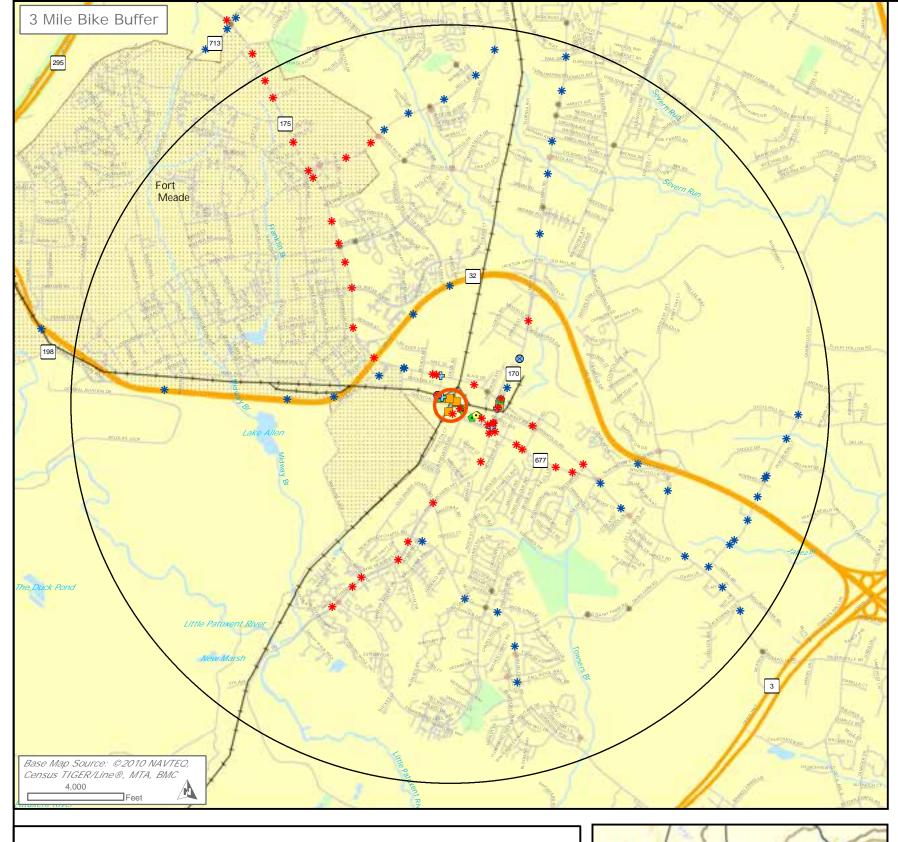
• Some improvements that would have been recommended at the station area are expected to occur as part of the TOD project. The pedestrian character of the area is expected to improve as the town center development project is completed.

#### **BIKE DEFICIENCIES**

- Share the Road signage, marking and in some locations compatible drainage, is recommended to support shared use lanes for segments of MD 170, MD 175, MD 174, and Odenton Road.
- To support shoulder use by bicycles, signage and some marking is recommended along Gambrills Road, MD 170 and MD 32.

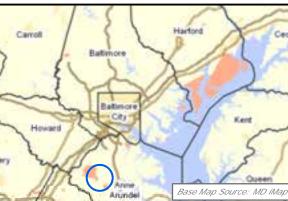
For more details refer to the project database.

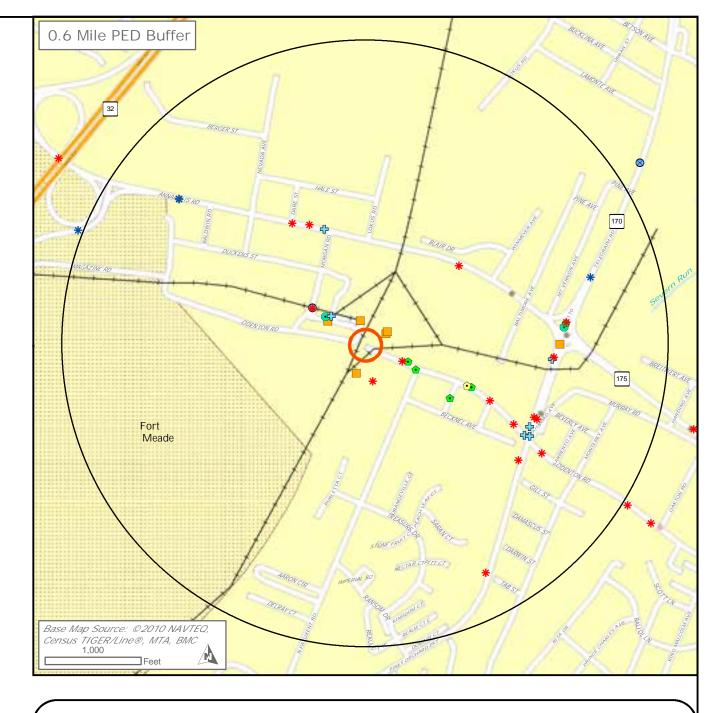




Station: Odenton Rail Line: MARC Penn

Jun 20, 2011





Lighting Improvement

Proposed Bicycle Route

Existing Bicycle Route

----- Rail Line

Pedestrian Crossing Improvement



Train Station

- Bus Stop
- Bike Lane / Bike Path
- Shoulder
- Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

# **Bicycle Traffic Incidents**

**2** 

3 - 4

**Pedestrian Traffic Incidents** 

## **ODENTON - MARC PENN**

Station No. 54

| Odenton MA    | ARC Penn                             | Anne Arundel County                                  | 1400 Odenton Road               |                       |                   |                         |  |                  |
|---------------|--------------------------------------|--|---------------------------------|-----------------------|-------------------|-------------------------|--|------------------|
| Facility Type | Recommendation Type                  | Roadway<br>Intersection                              | Roadway<br>Name                 | From                  | То                | Roadway<br>Jurisdiction | Recommended<br>Improvement   | Distance<br>(Mi) |
|               | SIDEWALK SEGMENT MISSING             |  | N. PATUXENT ROAD                | ODENTON ROAD          | WAUGH CHAPEL ROAD | COUNTY                  | INSTALL 3000'X5' OF NEW SIDEWALK WEST OF ROAD  |                  |
|               | SIDEWALK SEGMENT MISSING             |  | ODENTON ROAD                    | ODENTON STATION       | N PATUXENT ROAD   | COUNTY                  | INSTALL 1500'X5' OF SIDEWALK   |                  |
|               | SIDEWALK SEGMENT MISSING             |  | ODENTON ROAD                    | PINEY ORCHARD PKWY    | N. PATUXENT ROAD  | COUNTY                  | INSTALL 1500'X5' OF SIDEWALK ON NORTH SIDE   |                  |
|               | SIDEWALK SEGMENT MISSING             |  | SKYLINE AVE.                    | ODENTON ROAD          | BECKNEL AVE.      | COUNTY                  | INSTALL 400'X5' OF SIDEWALK  |                  |
|               | SIDEWALK SEGMENT MISSING             |  | TELEGRAPH ROAD                  | ANNAPOLIS ROAD        | TO 1500' SOUTH    | STATE                   | INSTALL 1500'X5' OF SIDEWALK ON THE WEST SIDE  |                  |
|               | SIDEWALK DAMAGED                     |  | ODENTON ROAD                    | MD 170                | 1500' TO THE WEST | COUNTY                  | MINOR ARTERIAL, CONSTRUCT 1500'X4' OF SIDEWALK.  |                  |
|               | PEDESTRIAN CROSSING SIGNS MISSING    |  | AT ODENTON STATION              |                       |                   | STATE                   | INSTALL 2 PED CROSSING SIGNS FROM PARKING TO PLATFORM AREA                               |                  |
|               | PEDESTRIAN CROSSING SIGNS<br>MISSING |  | AT ODENTON STATION              |                       |                   |                         | INSTALL 2-PED CROSSING SIGNS INSIDE THE PARKING LOT<br>AT ODENTON STATION                |                  |
|               | PEDESTRIAN CROSSING SIGNS<br>MISSING |  | ODENTON STATION PARKING LOT     |                       |                   | STATE                   | INSTALL 2 PED SIGNS AND 2-ADV. PED SIGNS FOR THE CROSSWALK                               |                  |
|               | PEDESTRIAN CROSSING SIGNS<br>MISSING | TELEGRAPH ROAD AND ANNAPOLIS ROAD                    |                                 |                       |                   | STATE                   | FULL INTERSECTION SIGNAL MODIFICATION RECOMMENDED WITH PED SIGNALS AND RAMPS             |                  |
| PEDESTRIAN    | PEDESTRIAN CROSSING MISSING          |  | AT ODENTON TRAIN STAION         |                       |                   | STATE                   | INSTALL 140' CROSSWALK, 2-PED XING SIGNS   |                  |
| LEGIMAN       | PEDESTRIAN CROSSING MISSING          |  | ODENTON ROAD AT ODENTON STATION |                       |                   | STATE                   | INSTALL 180' CROSSWALK, 2-PED SIGNS ON ODENTON<br>ROAD BETWEEN THE TWO PAKING LOTS       |                  |
|               | DIRECTIONAL SIGNING STATION MISSING  |  | TELEGRAPH ROAD                  |                       |                   | STATE                   | INSTALL "MARC" SIGN FOR ODENTON STATION ON TELEGRAPH ROAD                                |                  |
|               | DIRECTIONAL SIGNING STATION MISSING  |  | TOWN CENTER BLVD.               |                       |                   | COUNTY                  | INSTALL "MARC" SIGN FOR ODENTON MARC PENN<br>STATIONON ON TOWN CETER BLVD. JUST SOUTH OF |                  |
|               | CURB RAMP MISSING                    | TELEGRAPH RD. AND ANNAPOLIS RD.                      |                                 |                       |                   | STATE                   | INSTALL 8 PED SIGNALS AND CROSSWALKS AT THIS INTERSECTION. THERE ARE EXISTING CURB RAMPS |                  |
|               | CURB RAMP MISSING                    | TOWN CENTER BLVD. AND ENTRANCE TO ODENTON STATION    |                                 |                       |                   | COUNTY                  | INSTALL 2-CURB RAMP, 130' CROSSWALK, PED CROSSING<br>SIGNS                               |                  |
|               | CROSSWALK MISSING                    |  | ODENTON STATION PARKING LOT     |                       |                   | STATE                   | INSTALL 180' XWALK, 2-PED SIGNS,2-CURBRAMPS  |                  |
|               | CROSSWALK MISSING                    |  | TELEGRAPH ROAD                  |                       |                   | COUNTY                  | INSTALL PED SIGNALS AND RAMPS AT THIS INTERSECTION                                       |                  |
|               | CROSSWALK MISSING                    | PINEY ORCHARD PKWY AND ODENTON ROAD                  |                                 |                       |                   | COUNTY                  | INSTALL 200' XWALK, 2 RAMPS, 2-PED SIGNALS   |                  |
|               | CROSSWALK MISSING                    | PINEY ORCHARD PKWY AND ODENTON<br>ROAD, ACCESS ON NW |                                 |                       |                   | COUNTY                  | INSTALL 140' XWALK   |                  |
|               | CROSSWALK MISSING                    | TOWN CENTER BLVD. AND ANNAPOLIS POAD                 |                                 |                       |                   | STATE                   | INSTALL 300' XWALK, 4-PED SIGNAL,4-RAMPS   |                  |
|               | CROSSWALK FADED                      | PINEY ORCHARD PARKWAY AND ODENTON ROAD               |                                 |                       |                   | COUNTY                  | REPAINT SIDEWALKS ON N, S, AND E LEG -TOTAL OF 1200'<br>OF P.M.                          |                  |
|               | WIDE LANE                            |  | MD 170                          | CROSSROADS DRIVE      | MD 32             | STATE                   | ROUTE, SIGNING   | 0.35795          |
|               | WIDE LANE                            |  | MD 170                          | RIVERSCAPE DRIVE      | ANNAPOLIS ROAD    | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.21306          |
|               | WIDE LANE                            |  | MD 170                          | RIVERSCAPE DRIVE      | ANNAPOLIS ROAD    | COUNTY                  | ROUTE, SIGNING, MARKING, DRAINAGE  | 0.21306          |
| BIKE          | WIDE LANE                            |  | MD 174                          | JACOBS RD W           | ANNAPOLIS RD      | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.31723          |
|               | WIDE LANE                            |  | MD 175                          | SAPPINGTON STATION RD | BALDWIN RD        | STATE                   | ROUTE, SIGNING, MARKING  | 0.28977          |
|               | WIDE LANE                            |  | MORGAN ROAD                     | ODENTON RD            | ANNAPOLIS RD      | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.21969          |
|               | WIDE LANE                            |  | ODENTON ROAD                    | ANNAPOLIS RD          | ODENTON STATION   | COUNTY                  | ROUTE, SIGNING, MARKING  | 0.14393          |

| Facility Type | Recommendation Type | Roadway<br>Intersection | Roadway<br>Name         | From              | То                      | Roadway<br>Jurisdiction | Recommended<br>Improvement | Distance<br>(Mi) |
|---------------|---------------------|-------------------------|-------------------------|-------------------|-------------------------|-------------------------|----------------------------|------------------|
|               | WIDE LANE           |                         | ODENTON ROAD            | ANNAPOLIS RD      | ODENTON STATION         | COUNTY                  | SIGNING, MARKING           | 0.143939         |
|               | SHOULDER            |                         | BURNS CROSSING ROAD     | BLUEGRASS WAY     | SAPPINGTON STATION ROAD | COUNTY                  | ROUTE, SIGNING, MARKING    | 0.408144         |
|               | SHOULDER            |                         | GAMBRILLS ROAD          | ANNAPOLIS ROAD    | SLEEPY HOLLOW ROAD      | COUNTY                  | ROUTE, SIGNING             | 0.190341         |
|               | SHOULDER            |                         | MD 170                  | ANNAPOLIS ROAD    | CROSSROADS DRIVE        | STATE                   | ROUTE, SIGNING             | 0.600379         |
|               | SHOULDER            |                         | MD 170                  | MD 32             | 2ND STREET              | STATE                   | ROUTE, SIGNING             | 0.375            |
| BIKE          | SHOULDER            |                         | MD 170                  | MD 32             | 2ND STREET              | STATE                   | ROUTE, SIGNING, DRAINAGE   | 0.375            |
|               | SHOULDER            |                         | MD 174                  | NEW DISNEY RD     | JACOBS RD W             | STATE                   | ROUTE, SIGNING             | 0.280303         |
|               | SHOULDER            |                         | MD 175                  | CRAIN HWY         | SAPPINGTON STATION RD   | STATE                   | ROUTE, SIGNING             | 0.42803          |
|               | SHOULDER            |                         | MD 32                   | MD-170            | COUNTY LINE             | STATE                   | ROUTE, SIGNING             | 0.532197         |
|               | SHOULDER            |                         | SAPPINGTON STATION ROAD | BURNS CROSSING RD | STEHLIK DR              | STATE                   | ROUTE, SIGNING             | 0.367424         |
|               | SHOULDER            |                         | WAUGH CHAPEL ROAD       | PINEY ORCHARD PKY | END OF BIKE BUFFER      | COUNTY                  | ROUTE, SIGNING             | 0.501894         |

| Total Cost Station (\$) | Total Cost per Jurisdiction |             | Total Cost By Responsibil | ity         |
|-------------------------|-----------------------------|-------------|---------------------------|-------------|
|                         | Anne Arundel County         | \$3,312,380 |                           |             |
| \$3,312,380             | Baltimore City              | \$0         | State Roads/Stations      | \$1,098,840 |
|                         | Baltimore County            | \$0         | County Roads              | \$2,213,545 |
|                         | Harford County              | \$0         | City Roads                | \$0         |
|                         | Howard County               | \$0         |                           |             |
|                         | Prince George's County      | \$0         |                           |             |

RAIL LINE: MARC Camden Line

STATION PROFILE: Camden

#### **CHARACTER:**

This location has both a MARC station and an LRT station. The site is easily accessed from I-395. The stations are adjacent to the Oriole Park at Camden Yards stadium, across from the Convention Center and near the M&T Bank Stadium, and residential areas. A new hotel recently opened north of the station. Camden Yards stadium was built as a redevelopment project and incorporates the re-use of an historic warehouse building.

#### LAND USE CONTEXT:

The Camden Yards Rail station is surrounded by urban land uses: comprised of Public Institutional Facilities/ Non-City, and Medium Density Residential. The B&O Warehouse Building (which forms the "famous" wall of the Oriole Park at Camden Yards stadium) is designated as a "Monument/Memorial."

The Rail Station is located within the boundaries of the Camden Station Area Urban Renewal Plan. The plan is administered by the Baltimore Development Corporation (BDC).

| Year 2000 Population within 3 mile radius - | 280,218                                    |
|---|--|
| Weekday MARC Station Ridership              | 468  |
| Saturday Station Ridership:                 | N/A  |
| Transit Connections:                        | S  |
|   | MTA Routes: 3, 27, 120, 160, 320, 411, 420 |

#### **PARKING:**

There is a surface parking lot with 1,004 spaces used mainly by MARC customers during the week and by visitors to the stadium when there are sports events. The lot is owned by the MD Stadium Authority. An 8% occupancy rate was observed.

The parking at the Camden Station can be used by those visiting the area attractions in the Inner Harbor area.

#### PEDESTRIAN ENVIRONMENT:

The Camden Yards rail station area has an adequate pedestrian environment. This is important when there are baseball games since large volumes of pedestrians access the stadium by rail. The majority of streets have sidewalks on both sides in good condition. Major intersections on Howard Street, W Conway Street and W Pratt Streets have signalized pedestrian crossings.

#### **BICYCLING ENVIRONMENT:**

Bicycle lockers are not provided at this station, although there are bicycle racks near the ticket vending area. Bikes were locked to fences. Pratt Street has a lane designated for shared use by busses and bikes (the lane is temporarily eliminated during construction) There were no other marked bicycle routes or signed bicycle routes observed in the immediate area. The City has a program to install bicycle accommodations in various areas. The majority of streets around the station are wide enough to accommodate bicycles.

The Jones Falls Trail is located approximately 0.3 miles east of the station and 0.3 miles south of the station is the Gwynn's Falls Trail. Websites for regional trails are listed in the Appendix.

#### 2007-2008 CRASH DATA:

Number of Pedestrian Crashes within .6 miles Number of Bicycle Crashes within 3 miles

#### **HIGHLIGHTS FROM FINDINGS**

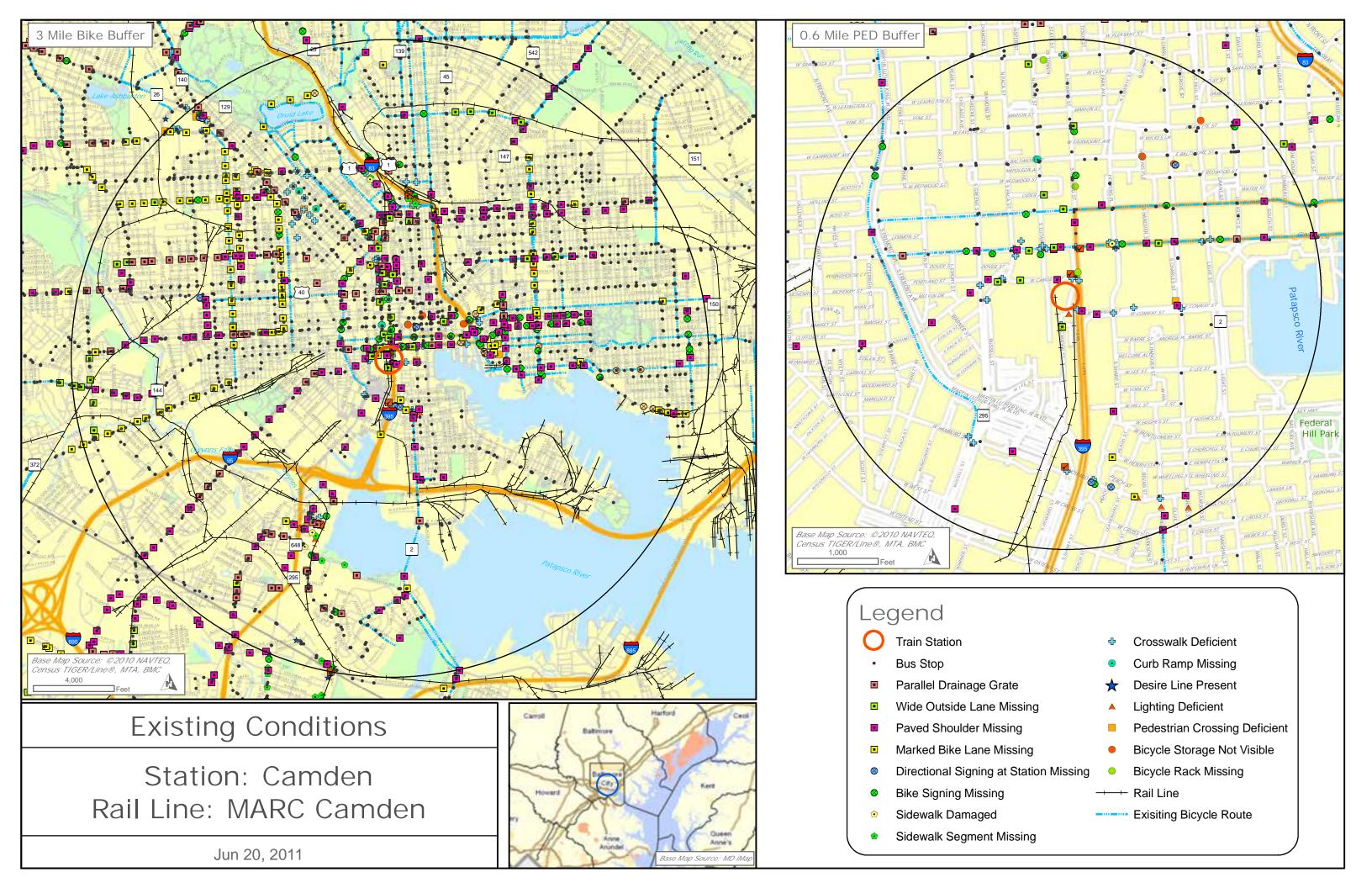
#### PEDESTRIAN DEFICIENCIES

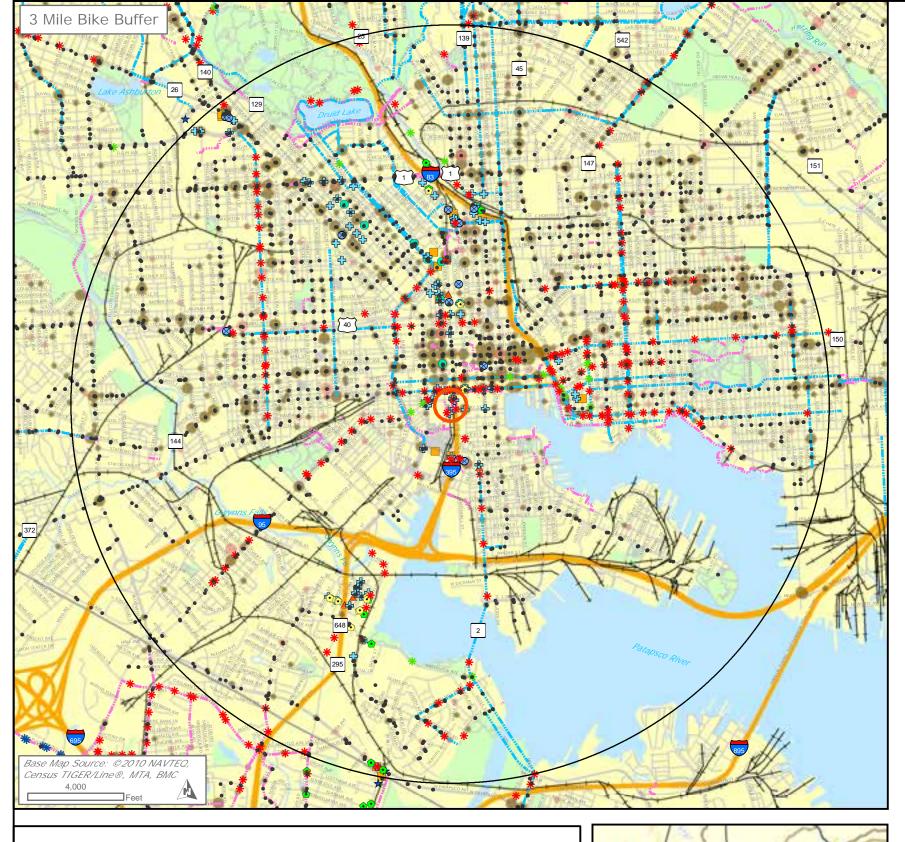
- Crosswalks are missing or faded in several locations and should be provided: Russell St @ Washington Boulevard; Paca St @ Russell; Conway @ Charles Conway @ Sharp; Russell @ Washington Boulevard. (Note: some roadway work currently underway may be addressing some of these deficiencies.)
- Curb ramps and crosswalk replacement is recommended for the intersection of Camden Street @ Howard Street.

#### **BIKE DEFICIENCIES**

- Several roadways in the vicinity are intended for shared outside lane use and portions should be improved with Share the Road signage, marking/striping. This includes portions of US 1 and Camden Street.
- To support the bike lane on US 1 from MLK Boulevard to Baltimore Washington Parkway, restriping, marking and signage is recommended.

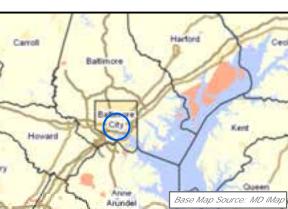
For more details refer to the project database.

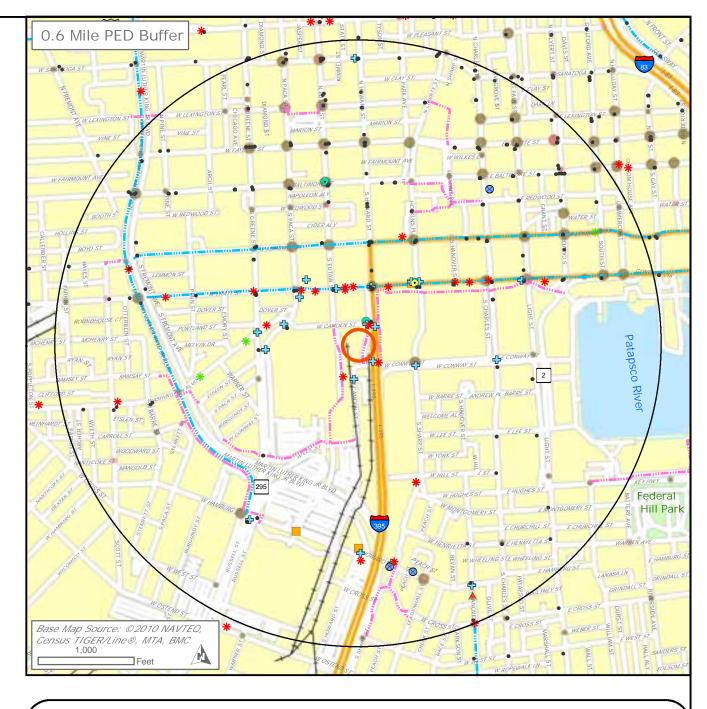




Station: Camden Rail Line: MARC Camden

Jun 20, 2011





Lighting Improvement

Existing Bicycle Route

----- Rail Line

# Legend

- Train Station
- Bus Stop
- Bike Lane / Bike Path
- Shoulder
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

### **Bicycle Traffic Incidents**

Pedestrian Crossing Improvement **2** Proposed Bicycle Route

3 - 4

## **Pedestrian Traffic Incidents**

# RECOMMENDED IMPROVEMENTS CAMDEN YARDS -MARC CAMDEN

Station No. 55

| amden Yar       | ds MARC Camden                   | Baltimore City                         | 301 Wesr Camden Street      |     |                              |           |                               |              |   |          |
|-----------------|----------------------------------|--|-----------------------------|-----|------------------------------|-----------|-------------------------------|--------------|---|----------|
|                 |                                  | Roadway                                | Roadway                     |     |                              |           |                               | Roadway      | Recommended   | Distance |
| acility Type    | Recommendation Type              | Intersection                           | Name                        |     | From                         |           | То                            | Jurisdiction | Improvement   | (Mi)     |
|                 | CURB RAMP MISSING                | CAMDEN ST AND HOWARD ST                |                             |     |                              |           |                               | CITY         | INSTALL 2- CURB RAMPS ON THE WEST LEG OF THE INTERSECTION                             |          |
|                 | CROSSWALK MISSING                |  | CAMDEN TRAIN STATION        |     |                              |           |                               | STATE        | INSTALL 2-PED XING SIGNS, 2-ADV. PED XING SINGS                                       |          |
|                 | CROSSWALK MISSING                | RUSSELL ST AND WASH BLVD               |                             |     |                              |           |                               | STATE        | INSTALL 450' XWALK ON THE N. LEG  |          |
|                 | CROSSWALK MISSING                | S PACA ST AND RUSSELL ST               |                             |     |                              |           |                               | STATE        | INSTALL 2-PED XING SIGNS, 2-ADV.PEDXING SIGNS   |          |
|                 | CROSSWALK MISSING                | S PACA ST AND W CAMDEN ST/WASH<br>BLVD |                             |     |                              |           |                               | CITY         | INSTALL 300' XWALK, EXISTING PED SIGNAL   |          |
|                 | CROSSWALK FADED                  | CAMDEN ST AND HOWARD ST                |                             |     |                              |           |                               | CITY         | REPAINT CROSSWALK ON S LEG OF THE INTERSECTION-<br>TOTAL OF 850' OF P.M.              |          |
| PEDESTRIAN      | CROSSWALK FADED                  |  |                             |     |                              |           |                               |              | REPAINT CROSSWALK ON THE W LEG OF INTERSECTION-<br>TOTAL OF 210' OF P.M.              |          |
|                 | CROSSWALK FADED                  | CONWAY ST AND CHARLES ST               |                             |     |                              |           |                               | CITY         | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 1700'<br>OF PAVEMENT MARKINGS              |          |
|                 | CROSSWALK FADED                  | CONWAY ST AND S SHARP ST               |                             |     |                              |           |                               | CITY         | REPAINT CROSSWALKS ON ALL 4 SIDES-TOTAL OF 1950' OF PAVEMENT MARKINGS                 |          |
|                 | CROSSWALK FADED                  | EISLEN ST. AND W. CONWAY ST.           |                             |     |                              |           |                               | STATE        | REPAINT MIDBLOCK CROSSING ON EISLEN STREET AND WEST CONVEY STREET -TOTAL OF 800' P.M. |          |
|                 | CROSSWALK FADED                  | RUSSELL ST AND WASHINGTON BLVD         |                             |     |                              |           |                               | STATE        | REPAINT CROSSWALKS ON THE N LEG-TOTAL OF 460' OF P.M.                                 |          |
|                 | CROSSWALK FADED                  | W CONWAY ST AND HOWARD ST              |                             |     |                              |           |                               | CITY         | REPAINT CROSSWALK ON N LEG-TOTAL OF 1300' OF P.M.                                     |          |
|                 | WIDE LANE                        |  | US 1                        |     | BALTIMORE-WASHINGTON         |           | SOUTH PACA STREET             | CITY         | RESTRIPING, SIGNING, MARKING  | 0.05681  |
|                 | WIDE LANE                        |  | US 1                        |     | PARKWAY<br>COUNTY LINE       |           | LETITIA AVENUE                | STATE        | ROUTE, SIGNING, MARKING   | 0.20170  |
|                 | WIDE LANE                        |  | US 1                        |     | HOLLINS FERRY ROAD           |           | SOUTH MONROE STREET           | STATE        | ROUTE, SIGNING, MARKING   | 0.16477  |
|                 | WIDE LANE                        |  | US 1                        |     | LETITIA AVENUE               |           | HOLLINS FERRY ROAD            | CITY         | SIGNING, MARKING  | 0.11363  |
|                 | WIDE LANE                        |  | US 1                        |     | LETITIA AVENUE               |           | HOLLINS FERRY ROAD            | CITY         | SIGNING, MARKING, DRAINAGE  | 0.11363  |
| BIKE            | WIDE LANE                        |  | US 1                        |     | SOUTH MONROE STREET          |           | WEST CROSS STREET             | CITY         | ROUTE, SIGNING, MARKING   | 0.12215  |
| DIKE            | WIDE LANE                        |  | US 1                        |     | SOUTH MONROE STREET          |           | WEST CROSS STREET             | CITY         | SIGNING, MARKING  | 0.12215  |
|                 | WIDE LANE                        |  | US 1                        |     | SOUTH MONROE STREET          |           | WEST CROSS STREET             | CITY         | SIGNING, MARKING, DRAINAGE  | 0.12215  |
|                 | WIDE LANE                        |  | US 1                        |     | WEST CROSS STREET            |           | SOUTH MARTIN LUTHER KING JI   | R CITY       | SIGNING, MARKING  | 0.16003  |
|                 | WIDE LANE                        |  | WEST CAMDEN STREET          |     | RUSSELL STREET               |           | BOULEVARD SOUTH HOWARD STREET | CITY         | ROUTE, SIGNING, MARKING   | 0.35132  |
|                 | BIKE LANE                        |  | US 1                        |     | SOUTH MARTIN LUTHER KING JR  |           | BALTIMORE-WASHINGTON          | CITY         | RESTRIPING, SIGNING, MARKING  | 0.09280  |
|                 |                                  |  |                             |     | BOULEVARD                    |           | PARKWAY                       |              |   |          |
|                 | MARC) Station is adjacent to     | Total Cost Station (\$)                | Total Cost per Jurisdiction |     | Total Cost By Responsibility | 1         | 7                             |              |   |          |
| amden Yards (Li | RT) Station (or Station No. 35). |  | Anne Arundel County         | \$( |                              |           |                               |              |   |          |
|                 |                                  | \$520,265                              | Baltimore City              |     | State Roads/Stations         | \$126,365 |                               |              |   |          |
|                 |                                  | 7-20,200                               | Baltimore County            |     | County Roads                 | _         |                               |              |   |          |
|                 |                                  |  | •                           |     |                              | \$0       |                               |              |   |          |
|                 |                                  |  | Harford County              |     | City Roads                   | \$393,905 |                               |              |   |          |
|                 |                                  |  | Howard County               | \$( | P <u></u>                    |           |                               |              |   |          |
|                 |                                  |  | Prince George's County      | Ś   | )                            |           | _                             |              |   |          |
|                 |                                  |  | Prince George's County      | \$( | ט                            |           |                               |              |   |          |

RAIL LINE: MARC Camden

STATION PROFILE: St. Denis

#### **CHARACTER:**

The station is located at the end of a residential street in an historic community. The single family suburban houses to the west have walk up access to this small station. Across the tracks is a commercial business. The station area is bounded by I-195 on the east which separates the station and community from communities to the east.

#### LAND USE CONTEXT:

The St Denis Station is surrounded mainly by suburban density single family residential land uses, and forested/natural areas.

| Year 2000 Population within 3 mile rad | ius - 50,841 |
|--|--------------|
| Weekday Station Rider                  | ship 8       |
| Saturday Station Riders                | hip: N/A     |
| Transit Connecti                       | ons: None    |

#### **PARKING:**

A linear surface lot provides 55 spaces. An occupancy rate of 20% was observed.

#### PEDESTRIAN ENVIRONMENT:

There are sidewalks leading from the nearby historic community to the west of the station and there is very little traffic. Pedestrian access from the north/east is cut off by I -195.

#### **BICYCLING ENVIRONMENT:**

There are no current designated bicycle routes in the area however, there are a few planned in the vicinity. Bicyclists could easily ride along existing local roads due to low traffic volumes.

Websites for regional trails are listed in the Appendix.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 2 Number of Bicycle Crashes within 3 miles 3

#### **HIGHLIGHTS FROM FINDINGS**

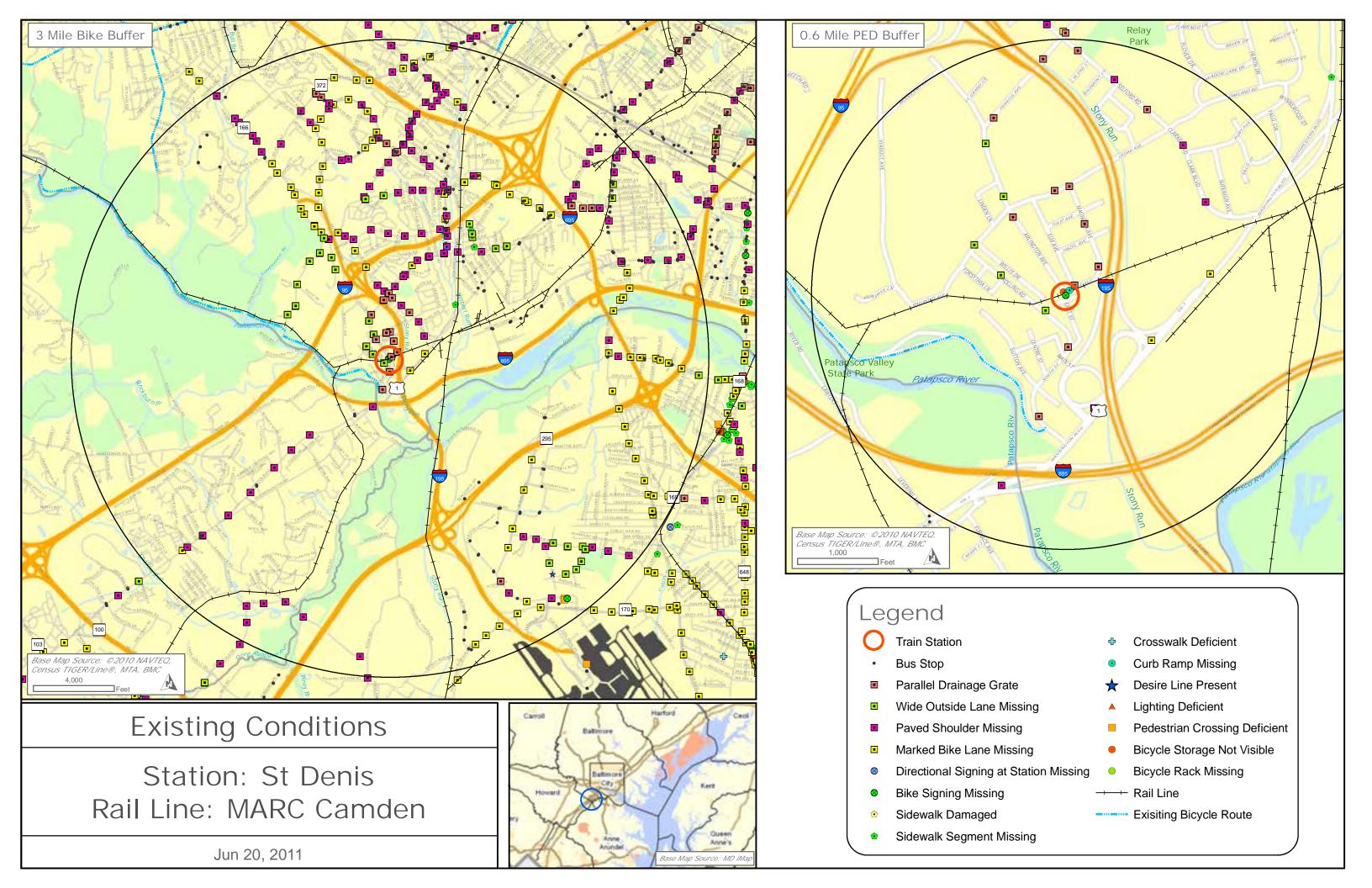
#### PEDESTRIAN DEFICIENCIES

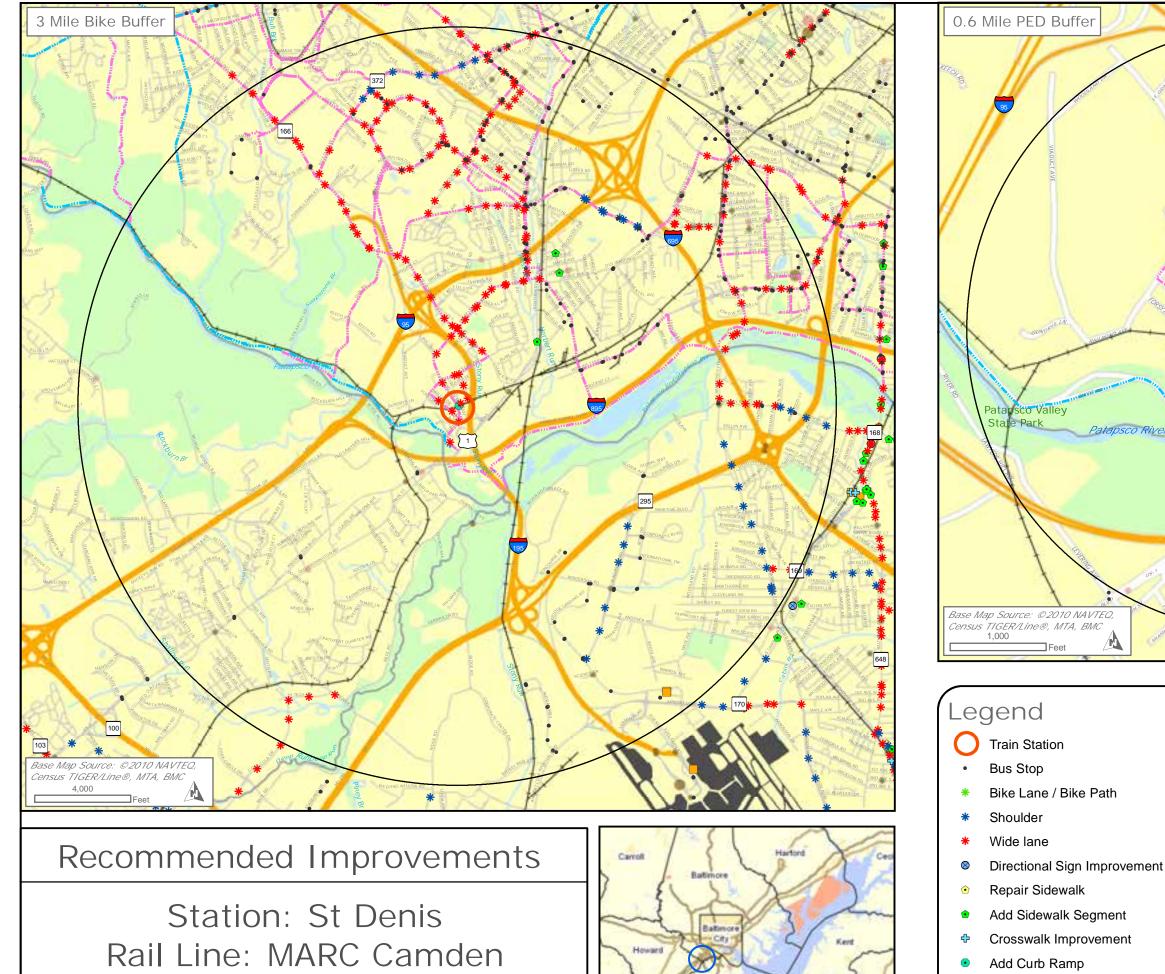
- A curb ramp is recommended for the transition from the parking to the platform.
- Street lighting is recommended for the station parking area.

#### **BIKE DEFICIENCIES**

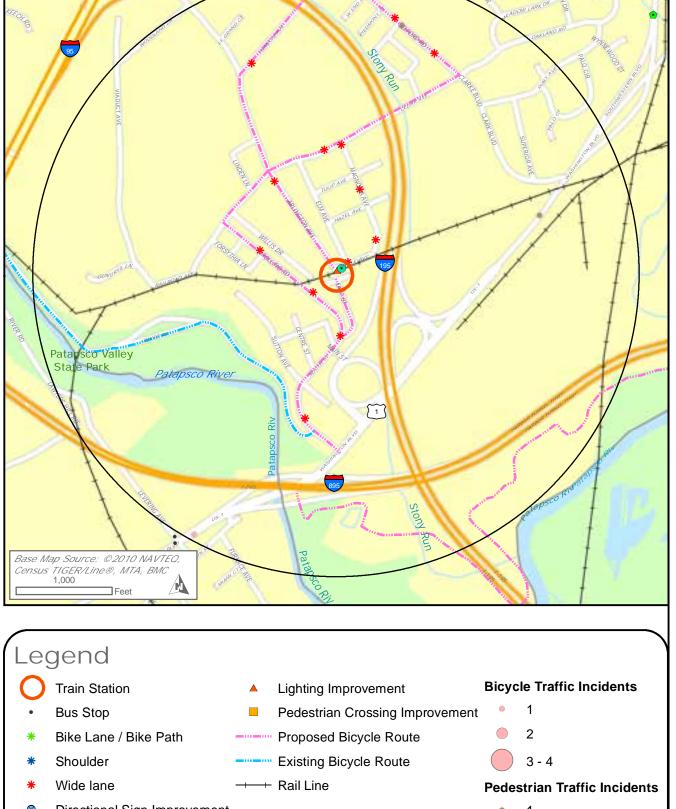
- To support shared use lanes on several of the surrounding streets (Arlington, Cedar, Francis) bicycle compatible drainage and Share the Road signage is recommended.
- Segments of US 1 where shared use lanes are proposed would require signage and marking.
- Portions of South Rolling Road would require widening, signage and marking to accommodate shared use lanes. Other portions of South Rolling where shoulder use is possible would only need signage.

For more detailed information refer to the project database.





Jun 20, 2011



Desire Line Present

# ST. DENIS - MARC CAMDEN

#### Station No. 56

| St. Denis MARC Camden |                        | Baltimore County        | 1734 Arlington Ave.    |                      |                     |                         |  |                  |
|-----------------------|------------------------|-------------------------|------------------------|----------------------|---------------------|-------------------------|--|------------------|
| acility Type          | Recommendation Type    | Roadway<br>Intersection | Roadway<br>Name        | From                 | То                  | Roadway<br>Jurisdiction | Recommended<br>Improvement                             | Distance<br>(Mi) |
|                       | LIGHTING ALONG ROADWAY |                         | ST. DENIS MARC STATION |                      |                     | STATE                   | INSTALL 1- LIGHT POLE AT ST. DENIS STATION PARKING LOT |                  |
| PEDESTRIAN            | CURB RAMP MISSING      | ST. DENIS STATION       |                        |                      |                     | STATE                   | INSTALL 1-CURB RAMP FROM PARKING LOT TO PLATFORM       |                  |
|                       | WIDE LANE              |                         | ARLINGTON AVENUE       | SOUTH ROLLING ROAD   | MAPLE AVENUE        | COUNTY                  | ROUTE, DRAINAGE  | 0.232008         |
|                       | WIDE LANE              |                         | CEDAR AVENUE           | SOUTH ROLLING ROAD   | SELFORD ROAD        | COUNTY                  | ROUTE, DRAINAGE  | 0.416667         |
|                       | WIDE LANE              |                         | FRANCIS AVENUE         | SOUTH ROLLING ROAD   | CARVILLE AVENUE     | COUNTY                  | ROUTE, DRAINAGE  | 0.089962         |
|                       | WIDE LANE              |                         | MAGNOLIA AVENUE        | MAPLE AVENUE         | CEDAR AVENUE        | COUNTY                  | ROUTE, DRAINAGE  | 0.076705         |
|                       | WIDE LANE              |                         | MAPLE AVENUE           | ARLINGTON AVENUE     | MAGNOLIA AVENUE     | COUNTY                  | ROUTE, DRAINAGE  | 0.078598         |
|                       | WIDE LANE              |                         | SELFORD ROAD           | SOUTH ROLLING ROAD   | CEDAR AVENUE        | COUNTY                  | ROUTE, DRAINAGE  | 0.138258         |
|                       | WIDE LANE              |                         | SELFORD ROAD           | SOUTH ROLLING ROAD   | CEDAR AVENUE        | COUNTY                  | ROUTE, SIGNING, MARKING                                | 0.138258         |
|                       | WIDE LANE              |                         | SOUTH ROLLING ROAD     | BIKE BUFFER          | MD 166 (UNDERPASS)  | STATE                   | ROUTE, SIGNING, MARKING                                | 0.142045         |
| BIKE                  | WIDE LANE              |                         | SOUTH ROLLING ROAD     | FRANCIS AVENUE       | VIADUCT AVENUE      | COUNTY                  | ROUTE, WIDENING, SIGNING, MARKING                      | 0.113636         |
|                       | WIDE LANE              |                         | SOUTH ROLLING ROAD     | SOUTH ROLLING ROAD   | SOUTH STREET        | COUNTY                  | ROUTE, WIDENING, SIGNING                               | 0.170455         |
|                       | WIDE LANE              |                         | SOUTH STREET           | WASHINGTON BOULEVARD | EAST STREET         | COUNTY                  | ROUTE, DRAINAGE  | 0.142045         |
|                       | WIDE LANE              |                         | US 1                   | AMBERTON DRIVE       | COUNTY LINE         | STATE                   | ROUTE, SIGNING   | 0.254735         |
|                       | WIDE LANE              |                         | US 1                   | AMBERTON DRIVE       | COUNTY LINE         | STATE                   | ROUTE, SIGNING, MARKING                                | 0.44697          |
|                       | WIDE LANE              |                         | US 1                   | COUNTY LINE          | CLARK BOULEVARD     | STATE                   | ROUTE, SIGNING, MARKING                                | 0.292614         |
|                       | WIDE LANE              |                         | WILKENS AVENUE         | SOUTH ROLLING ROAD   | HIDDEN BLUFF CIRCLE | STATE                   | ROUTE, SIGNING, MARKING                                | 0.2187           |
|                       | SHOULDER               |                         | SOUTH ROLLING ROAD     | SELFORD ROAD         | GUN ROAD            | COUNTY                  | ROUTE, SIGNING   | 0.07575          |

|   | Total Cost Station (\$) | Total Cost per Jurisdiction |             | Total Cost By Responsibil | ity         |
|---|-------------------------|-----------------------------|-------------|---------------------------|-------------|
| l |                         | Anne Arundel County         | \$0         |                           |             |
| l | \$2,031,935             | Baltimore City              | \$0         | State Roads/Stations      | \$321,680   |
|   |                         | Baltimore County            | \$1,956,985 | County Roads              | \$1,710,250 |
| l |                         | Harford County              | \$0         | City Roads                | \$0         |
|   |                         | Howard County               | \$74,950    |                           |             |
|   |                         | Prince George's County      | \$0         |                           |             |

RAIL LINE: MARC Camden STATION PROFILE: Dorsey

#### CHARACTER:

The station is located along MD Route 100 which is an access controlled highway providing quick access to the I-95 and US Route 1 highways. MD 100 is a business corridor and there are large suburban campus style office buildings, surrounded by parking, located immediately south of the station within walking distance. Columbia's large residential communities are located within short drive of the station.

#### LAND USE CONTEXT:

The Dorsey Station is surrounded by industrial/commercial uses and low density residential land uses. Howard County designates the border with Anne Arundel as the Route 1 Redevelopment Corridor and the rail line as a transit HOV corridor. Planned development north of MD 100 will likely prompt consideration of how to improve pedestrian and bicycle access to the station.

| Year 2000 Population within 3 mile radius - | 35,249  |
|---|---|
| Weekday Station Ridership                   | 606   |
| Saturday Station Ridership:                 | N/A   |
| Transit Connections:                        | Howard Transit Purple Route and Silver Routes |

#### **PARKING:**

There are 750 parking spaces provided in surface lots. A 79% occupancy was observed.

#### **PEDESTRIAN ENVIRONMENT:**

The environment is highway oriented. There are sidewalks leading from the large parking area to the station building. The land uses nearby do not generate significant pedestrian activity. As new development occurs, access across MD 100 will be of concern.

#### **BICYCLING ENVIRONMENT:**

There are 10 bike lockers at this station that have low utilization. There are no designated bicycle routes in the area however, but some are planned. No off-road trails were observed in field.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles

Number of Bicycle Crashes within 3 miles

#### **HIGHLIGHTS FROM FINDINGS**

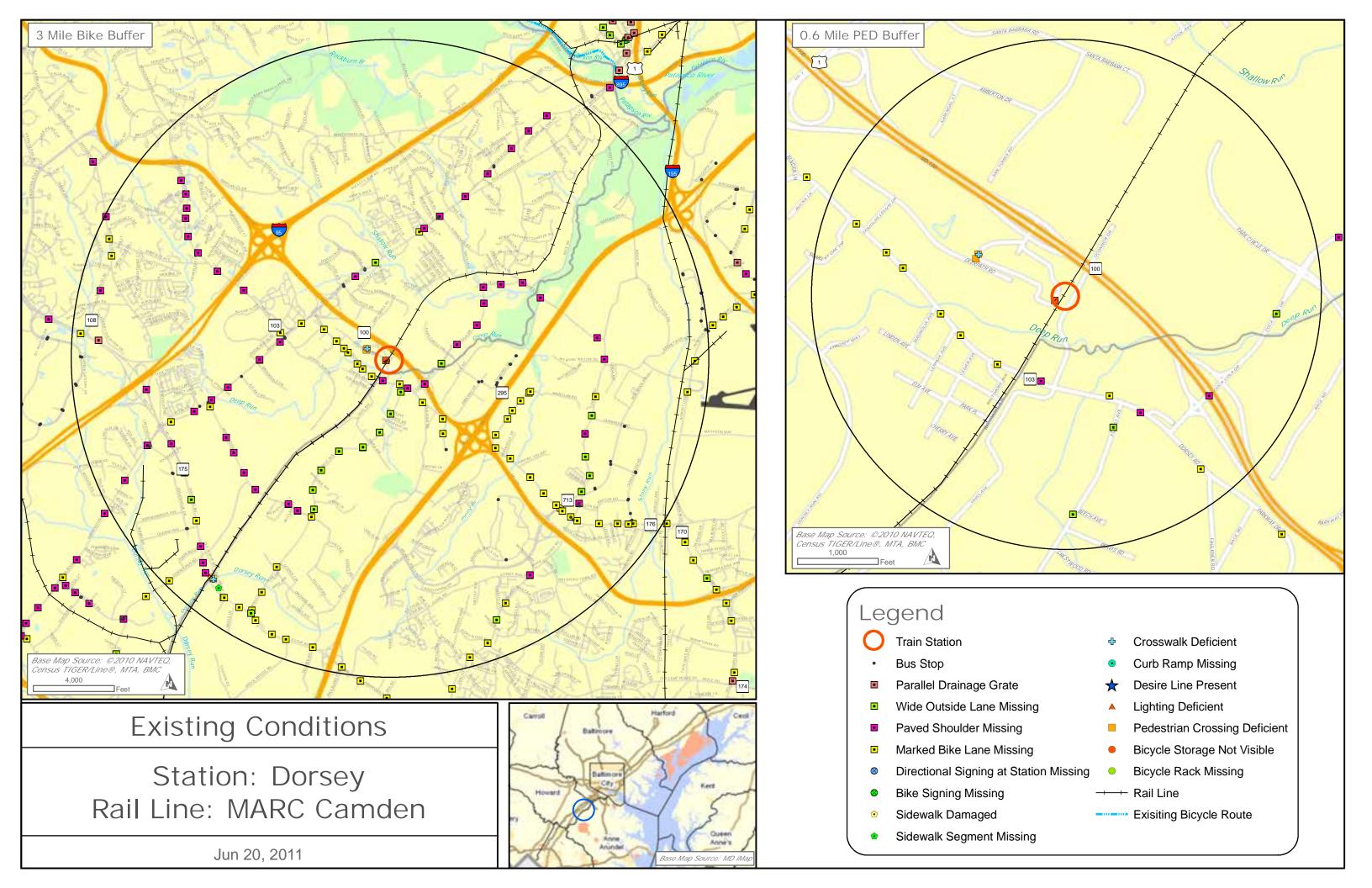
#### PEDESTRIAN DEFICIENCIES

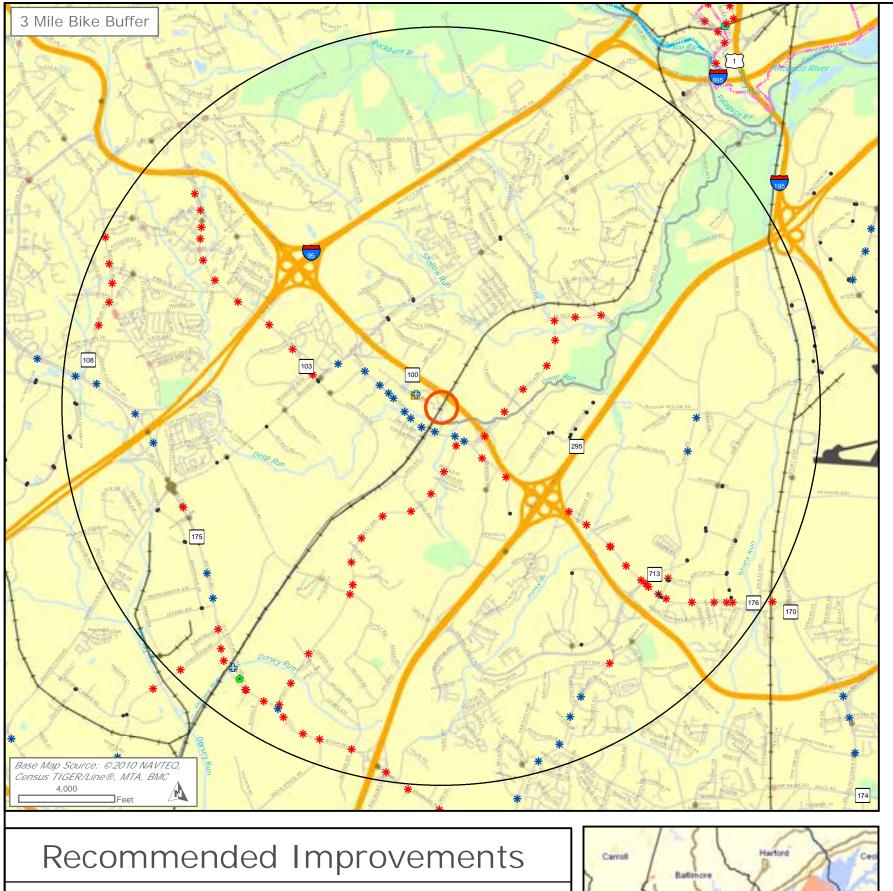
• A crosswalk and pedestrian crossing signs are recommended within the station parking lot.

#### **BIKE ROUTE DEFICIENCIES**

- To support shared use lanes on Coca Cola Drive, Hanover Road, Ridge Road and Forest Ave widening, signage and marking would be needed. This would include a bridge widening on Coca Cola Drive.
- To support shared use lanes on MD 103, MD 176, and US 1, share the road signage and marking are recommended.

For more detailed information refer to the project database.

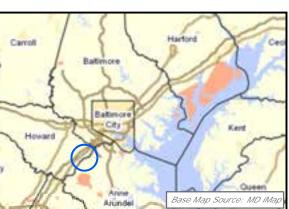


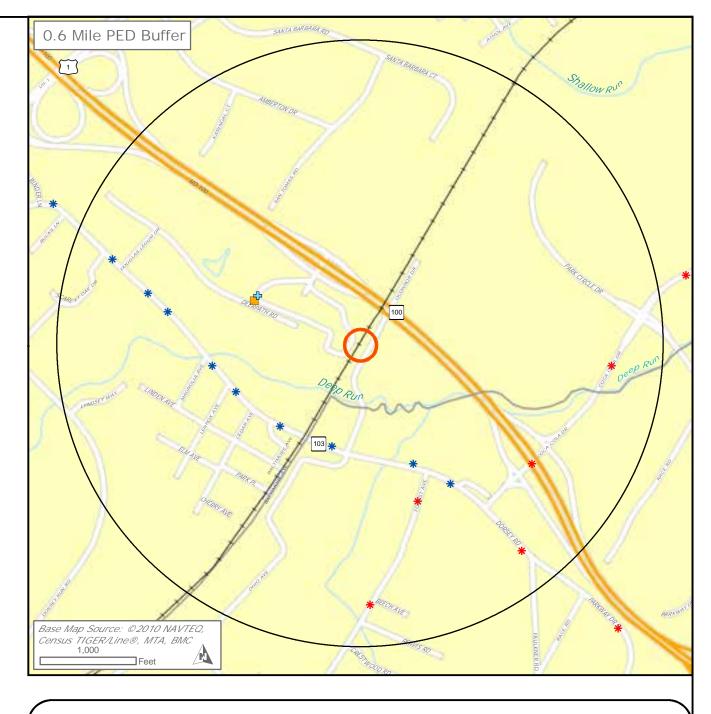


Station: Dorsey

Rail Line: MARC Camden

Jun 20, 2011





Lighting Improvement

Proposed Bicycle Route

**Existing Bicycle Route** 

----- Rail Line

Pedestrian Crossing Improvement

# Legend

- Train Station
- Bus Stop
- Bike Lane / Bike Path
- Shoulder
- Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

## **Bicycle Traffic Incidents**

**2** 

3 - 4

**Pedestrian Traffic Incidents** 

## **DORSEY - MARC CAMDEN**

Station No. 57

| acility Type | Recommendation Type                  | Roadway<br>Intersection | Roadway<br>Name                              | From                   | т            | o               | Roadway<br>Jurisdiction | Recommended<br>Improvement                              | Distance<br>(Mi) |
|--------------|--------------------------------------|-------------------------|--|------------------------|--------------|-----------------|-------------------------|---|------------------|
|              | PEDESTRIAN CROSSING SIGNS<br>MISSING |                         | AT DORSEY STATION                            |                        |              |                 | STATE                   | INSTALL 2- PED CROSSING SIGNS ON DORSEY STATION PARKING |                  |
| PEDESTRIAN   | CROSSWALK MISSING                    |                         | DORSEY STATION BETWEEN THE 2<br>PARKING LOTS |                        |              |                 | STATE                   | INSTALL 210' CROSSWALK AND 2-PED XING SIGNS             |                  |
|              | WIDE LANE                            |                         | COCA COLA DRIVE                              | COUNTY LINE            | Н            | I TECH DR       | COUNTY                  | ROUTE, WIDENING, SIGNING, MARKING                       | 0.32             |
|              | WIDE LANE                            |                         | COCA COLA DRIVE                              |                        |              |                 | STATE                   | ROUTE, BRIDGE WIDENING, SIGNING, MARKING                | 0.321            |
|              | WIDE LANE                            |                         | COCA COLA DRIVE                              | DORSEY ROAD            | C            | OUNTY LINE      | STATE                   | ROUTE, BRIDGE WIDENING, SIGNING, MARKING                | 0.32             |
|              | WIDE LANE                            |                         | FOREST AVENUE                                | MONTEVIDEO ROAD        | D            | ORSEY ROAD      | COUNTY                  | ROUTE, WIDENING, SIGNING                                | 0.2064           |
|              | WIDE LANE                            |                         | HANOVER ROAD                                 | ANDERSON AVE           | C            | OUNTY LINE      | COUNTY                  | ROUTE, SIGNING, MARKING                                 | 0.321            |
|              | WIDE LANE                            |                         | HANOVER ROAD                                 | COUNTY LINE            | R            | IDGE ROAD       | COUNTY                  | ROUTE, WIDENING, SIGNING, MARKING                       | 0.3929           |
|              | WIDE LANE                            |                         | HIGH TECH DRIVE                              | HANOVER RD             | C            | OCA COLA DR     | COUNTY                  | ROUTE, SIGNING, MARKING                                 | 0.3598           |
|              | WIDE LANE                            |                         | MD 103                                       | COCA-COLA DR           | C            | UL-DE-SAC       | STATE                   | ROUTE, SIGNING, MARKING                                 | 0.2272           |
|              | WIDE LANE                            |                         | MD 103                                       | MD 100                 | V            | VASHINGTON BLVD | STATE                   | ROUTE, SIGNING  | 0.2462           |
| BIKE         | WIDE LANE                            |                         | MD 176                                       | AVIATION BLVD          | N            | 1AGELLAN RD     | STATE                   | ROUTE, SIGNING, MARKING                                 | 0.1799           |
|              | WIDE LANE                            |                         | RIDGE ROAD                                   | DORSEY ROAD            | N            | 1D 713          | COUNTY                  | ROUTE, SIGNING  | 0.2509           |
|              | WIDE LANE                            |                         | US 1   | AMBERTON DRIVE         | С            | OUNTY LINE      | STATE                   | ROUTE, SIGNING  | 0.2547           |
|              | WIDE LANE                            |                         | US 1   | EXIT 12A               | D            | ORSEY ROAD      | STATE                   | ROUTE, SIGNING  | 0.2604           |
|              | SHOULDER                             |                         | MD 103                                       | COUNTY LINE            | C            | OCA-COLA DR     | STATE                   | ROUTE, SIGNING  | 0.1268           |
|              | SHOULDER                             |                         | MD 103                                       | WASHINGTON BLVD        | C            | OUNTY LINE      | STATE                   | ROUTE, SIGNING  | 0.1676           |
|              | SHOULDER                             |                         | RIDGE ROAD                                   | MD 713                 | S            | MITHS FARM ROAD | COUNTY                  | ROUTE, WIDENING, SIGNING                                | 0.1837           |
|              | SHOULDER                             |                         | RIDGE ROAD                                   |                        |              |                 | STATE                   | ROUTE, WIDENING, SIGNING                                | 0.1837           |
|              | SHOULDER                             |                         | RIDGE ROAD                                   |                        | S            | TONEY RUN ROAD  | COUNTY                  | ROUTE, WIDENING, SIGNING                                | 0.1837           |
|              | SHOULDER                             |                         | US 1   | DORSEY ROAD            | А            | MBERTON DRIVE   | STATE                   | ROUTE, SIGNING  | 0.7357           |
|              |                                      | Total Cost Station (\$) | Total Cost per Jurisdiction                  | Total Cost By Resp     | onsibility   |                 |                         |   |                  |
|              |                                      | Total Cost Station (5)  | Anne Arundel County                          | \$13,252,210           | onsibility   |                 |                         |   |                  |
|              |                                      | \$20,855,000            | Baltimore City                               | \$0 State Roads/Statio |              |                 |                         |   |                  |
|              |                                      |                         | Baltimore County                             | \$0 County Roads       | \$11,363,625 |                 |                         |   |                  |
|              |                                      |                         | Harford County                               | \$0 City Roads         | \$0          |                 |                         |   |                  |
|              |                                      |                         | Howard County Prince George's County         | \$7,602,790            |              |                 |                         |   |                  |

RAIL LINE: MARC Camden Line

STATION PROFILE: Jessup

#### **CHARACTER:**

The station is located in an area of industrial and undeveloped land. The Jessup House of Correction is a major activity center located nearby. There are no plans for transit oriented development but the area seems to have potential for redevelopment.

#### LAND USE CONTEXT:

The Jessup Station is located in an area of low density uses: industrial, institutional and some residential.

| Year 2000 Population within 3 mile radius - | 37,184 |
|---|--------|
| Weekday Station Ridership                   | 2      |
| Saturday Station Ridership:                 | N/A    |
| Transit Connections:                        | None   |

#### **PARKING:**

There are 57 surface parking spaces provided. An occupancy rate of 24% was observed

#### PEDESTRIAN ENVIRONMENT:

The area is not pedestrian friendly. The surrounding pedestrian accommodations are not adequate. There are no sidewalks leading to the station. The parking lot and platform have no lighting.

#### **BICYCLING ENVIRONMENT:**

There are no existing designated bicycle routes in the area. There are no bicycle storage facilities at the station. No off-road trails were observed.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles

Number of Bicycle Crashes within 3 miles

### **HIGHLIGHTS FROM FINDINGS**

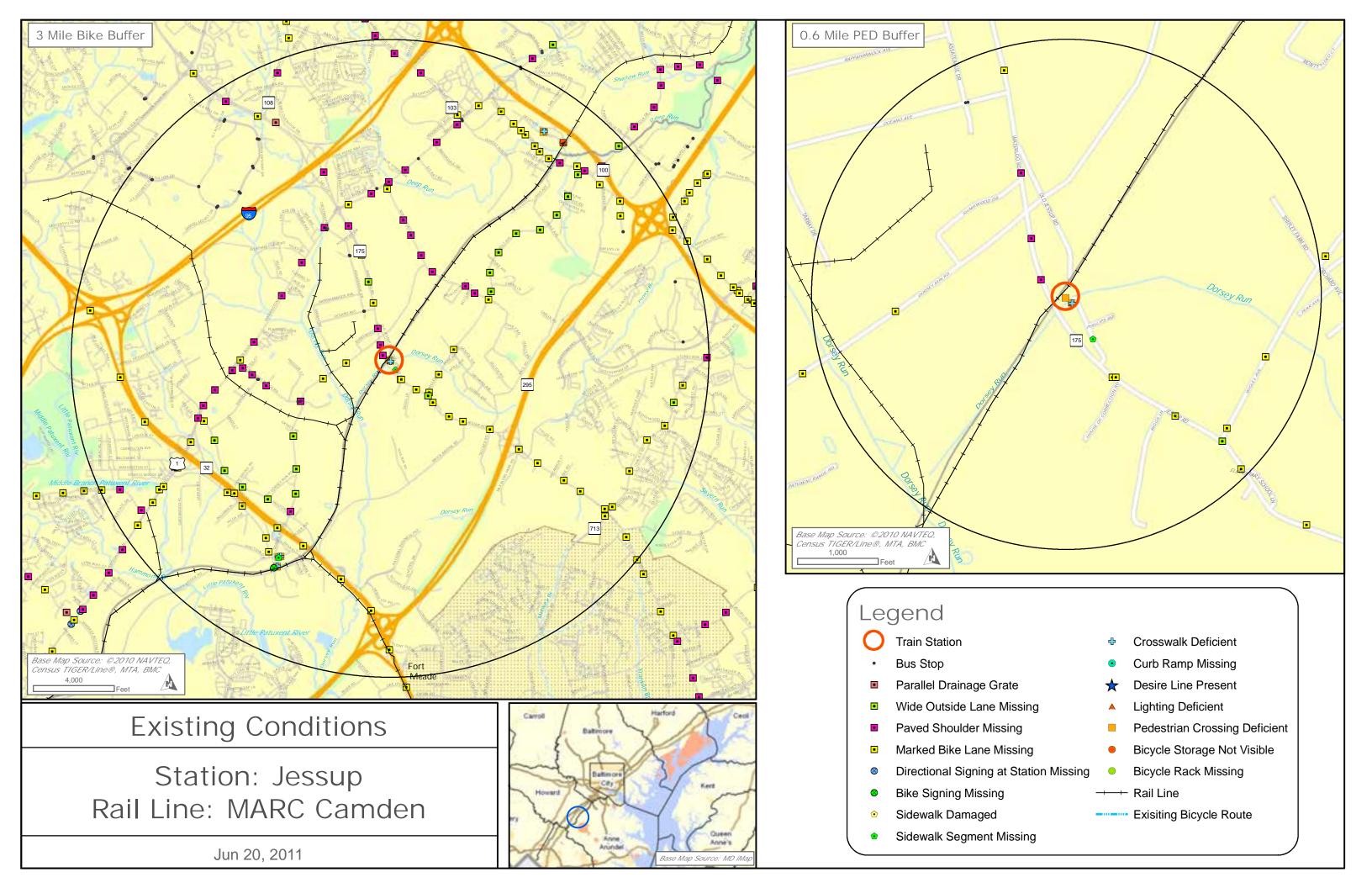
#### PEDESTRIAN DEFICIENCIES

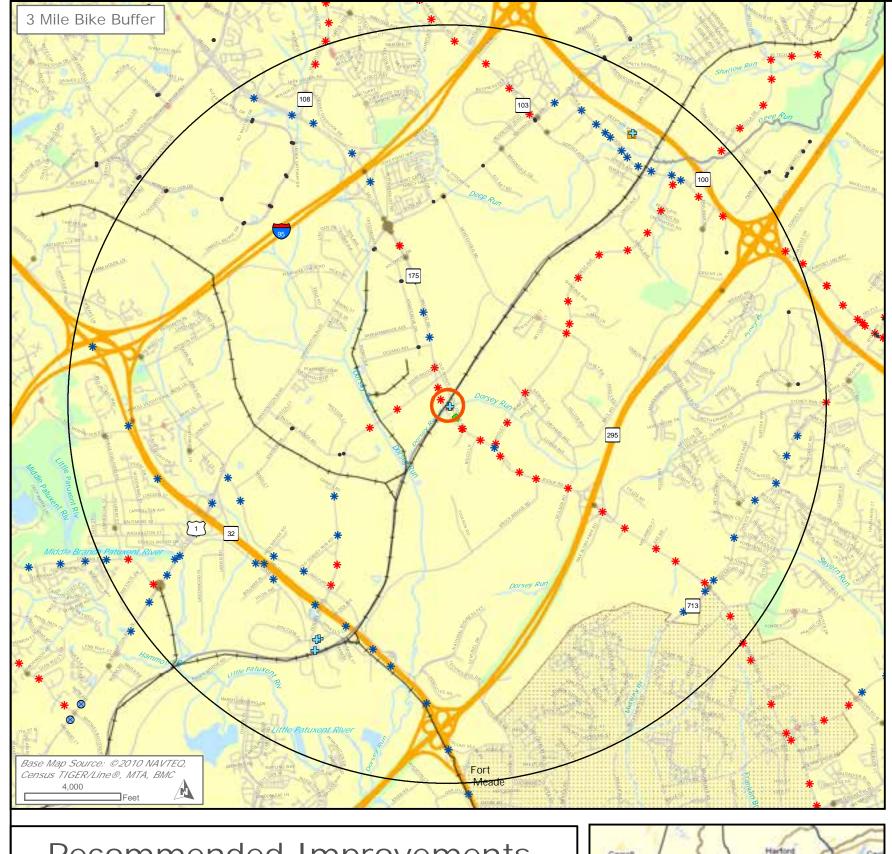
- Sidewalks are missing along Old Jessup Road leading to the station.
- A crosswalk is recommended within the station from the parking lot to the platform.
- Street lighting is recommended at the station.

#### **BIKE ROUTE DEFICIENCIES**

- To support shared use lanes along Dorsey Run, MD 108, MD 175 and US 1, Share the Road signage and marking are recommended.
- Bicycle compatible drainage is also needed along MD 175.

Refer to the project database for more details.

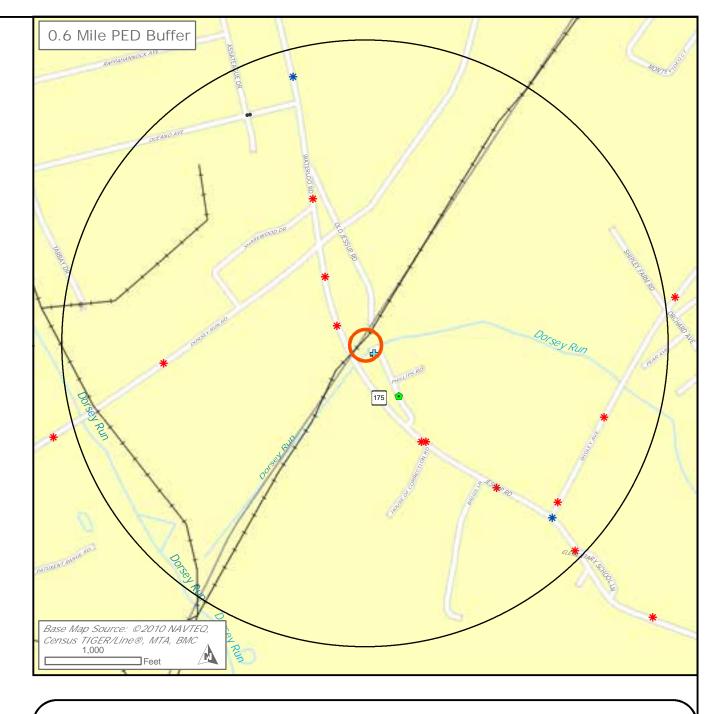




Station: Jessup Rail Line: MARC Camden

Jun 20, 2011





Lighting Improvement

----- Rail Line

# Legend

Train Station

Bus Stop

- Bike Lane / Bike Path
- \* Shoulder
- Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- ★ Desire Line Present

# **Bicycle Traffic Incidents**

- Pedestrian Crossing Improvement
- Proposed Bicycle Route 2
  - 200 210,010 110010
- Existing Bicycle Route 3 4
  - Pedestrian Traffic Incidents
    - 1
    - 2 9
    - 10 6

·

## **JESSUP - MARC CAMDEN**

Station No. 58

| Jessup MAR   | C Camden                 | Howard/Anne Arundel Cour | nty 8 C   | Old Jessup Road            |                         |                         |  |                  |
|--------------|--------------------------|--------------------------|---|----------------------------|-------------------------|-------------------------|--|------------------|
| acility Type | Recommendation Type      | Roadway<br>Intersection  | Roadway<br>Name                                     | From                       | То                      | Roadway<br>Jurisdiction | Recommended<br>Improvement                           | Distance<br>(Mi) |
|              | SIDEWALK SEGMENT MISSING |                          | OLD JESSUP ROAD                                     | JESSUP ROAD                | STATION                 | STATE                   | INSTALL 750'X5' OF NEW SIDEWALK                      |                  |
| PEDESTRIAN   | LIGHTING ALONG ROADWAY   |                          | JESSUP MARC STATION                                 |                            |                         | 0 STATE                 | INSTALL 2- LIGHT POLES AT JESSUP STATION PARKING LOT |                  |
|              | CROSSWALK MISSING        |                          | JESSUP STATION, FROM PARKING LOT<br>TO THE PLATFORM |                            |                         | 0 STATE                 | INSTALL 320' CROSSWALK, 2-PED XING SINGS             |                  |
|              | WIDE LANE                |                          | DORSEY RUN ROAD                                     | PATUXENT RANGE ROAD        | WATERLOO ROAD           | COUNTY                  | ROUTE, SIGNING, MARKING                              | 0.4791           |
|              | WIDE LANE                |                          | DORSEY RUN ROAD                                     |                            | WATERLOO ROAD           | COUNTY                  | ROUTE, SIGNING, MARKING                              | 0.4791           |
|              | WIDE LANE                |                          | MD 108  | MD 175                     | WOODLOO DR              | STATE                   | ROUTE, SIGNING                                       | 0.2301           |
|              | WIDE LANE                |                          | MD 175  | COUNTY LINE                | REECE RD                | STATE                   | ROUTE, SIGNING, MARKING                              | 0.2130           |
|              | WIDE LANE                |                          | MD 175  | OCEANO DRIVE               | COUNTY LINE             | STATE                   | ROUTE, SIGNING, MARKING                              | 0.1789           |
|              | WIDE LANE                |                          | MD 175  | WASHINGTON BOULEVARD       | POCOMOKE DRIVE          | STATE                   | ROUTE, SIGNING, MARKING                              | 0.2840           |
|              | WIDE LANE                |                          | MD 713  | BEAR PAW LANE              | ARUNDEL MILLS BOULEVARD | STATE                   | ROUTE, SIGNING, MARKING                              | 0.3598           |
| BIKE         | WIDE LANE                |                          | PEAR AVENUE   | JESSUP RD                  | MONTEVIDEO RD           | COUNTY                  | ROUTE, SIGNING, MARKING                              | 0.2746           |
|              | WIDE LANE                |                          | US 1  | EXIT 12A                   | DORSEY ROAD             | STATE                   | ROUTE, SIGNING                                       | 0.2604           |
|              | SHOULDER                 |                          | MD 175  | COLUMBIA GATEWAY DRIVE     | WASHINGTON BOULEVARD    | STATE                   | ROUTE, SIGNING                                       | 0.3287           |
|              | SHOULDER                 |                          | MD 175  | COLUMBIA GATEWAY DRIVE     | WASHINGTON BOULEVARD    | STATE                   | ROUTE, SIGNING, DRAINAGE                             | 0.32878          |
|              | SHOULDER                 |                          | MD 175  | COUNTY LINE                | REECE RD                | STATE                   | ROUTE, SIGNING                                       | 0.2130           |
|              | SHOULDER                 |                          | MD 175  | POCOMOKE DRIVE             | OCEANO DRIVE            | STATE                   | ROUTE, SIGNING                                       | 0.2376           |
|              | SHOULDER                 |                          | MD 713  | CLARK ROAD                 | BEAR PAW LANE           | STATE                   | ROUTE, SIGNING                                       | 0.28693          |
|              | _                        |                          |   |                            |                         |                         |  |                  |
|              |                          | Total Cost Station (\$)  | Total Cost per Jurisdiction                         | Total Cost By Responsibili | ty                      |                         |  |                  |

| Total Cost Station (\$) | Total Cost per Jurisdiction |           | Total Cost By Responsibil | ity       |
|-------------------------|-----------------------------|-----------|---------------------------|-----------|
|                         | Anne Arundel County         | \$417,880 |                           |           |
| \$720,105               | Baltimore City              | \$0       | State Roads/Stations      | \$574,155 |
|                         | Baltimore County            | \$0       | County Roads              | \$145,950 |
|                         | Harford County              | \$0       | City Roads                | \$0       |
|                         | <b>Howard County</b>        | \$302,225 |                           |           |
|                         | Prince George's County      | \$0       |                           |           |

RAIL LINE: MARC Camden STATION PROFILE: Savage

#### **CHARACTER:**

The station is located in Howard County's Route 1 Revitalization District. The area includes industrial uses surrounded by natural features.

MDOT and the Howard County have worked together to plan a transit oriented development project for a 12 acre site at the station to be known as Savage Towne Centre. The proposed development is to include a hotel, restaurants, retail space, offices and multifamily housing. The project will also increase parking for MARC riders.

#### LAND USE CONTEXT:

The Savage station is located in an area that currently has industrial land use, but is being transformed into a walk able town center. The Savage TOD project is planned and will develop parking lots into mixed use transit oriented uses with a parking garage for commuters.

| Year 2000 Population within 3 mile radius - | 46,567                      |
|---|-----------------------------|
| Weekday Station Ridership                   | 586                         |
| Saturday Station Ridership:                 | N/A                         |
| Transit Connections:                        | Howard Transit Purple Route |
|   | Spirit Shuttle              |

#### **PARKING:**

There are 978 parking spaces provided. A 35% occupancy was observed

Once the Towne Centre development occurs, there would be opportunities for shared parking among the MARC station and surrounding businesses.

#### PEDESTRIAN ENVIRONMENT:

The surrounding pedestrian accommodations are presently not adequate. There are sidewalks and some pedestrian crossings within the station parking lot and a crosswalk across Brock Bridge Road to the stairs that lead to a sidewalk. However, the sidewalk is blocked and requires that a pedestrian take the bridge to the other side of the tracks.

#### **BICYCLING ENVIRONMENT:**

There are no current bicycle routes leading to the station. There are no bike lockers provided at this station. Area roads are wide enough to accommodate bicycles and there are bike racks at the station. Route 32 does serve as the nearest bicycle route in the area. No off-road trails were observed.

Consideration needs to be given to providing access between the station and new development on Brock Bridge Road. Websites for regional trails are listed in the Appendix.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles 0
Number of Bicycle Crashes within 3 miles 2

#### **HIGHLIGHTS FROM FINDINGS**

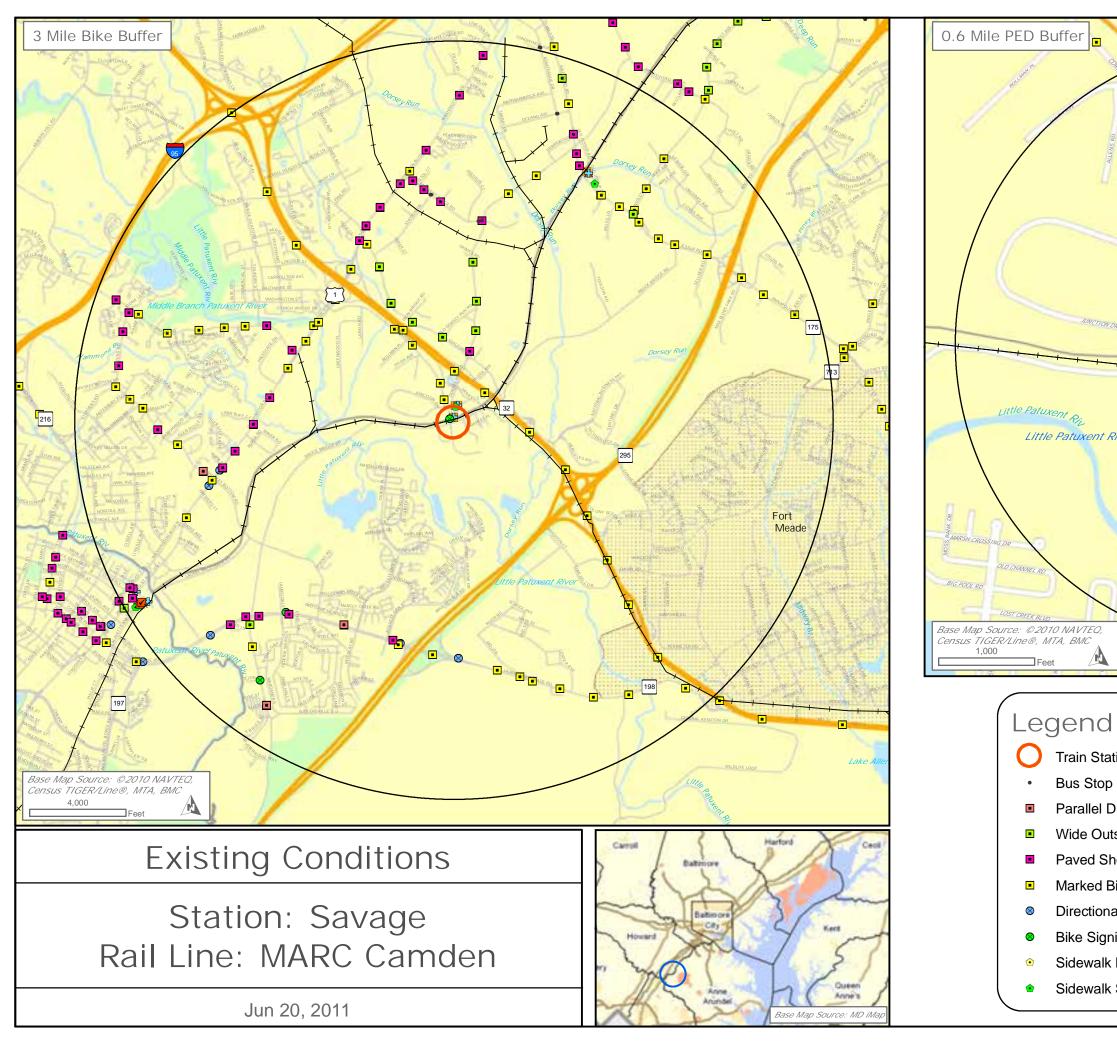
#### **PEDESTRIAN DEFICIENCIES**

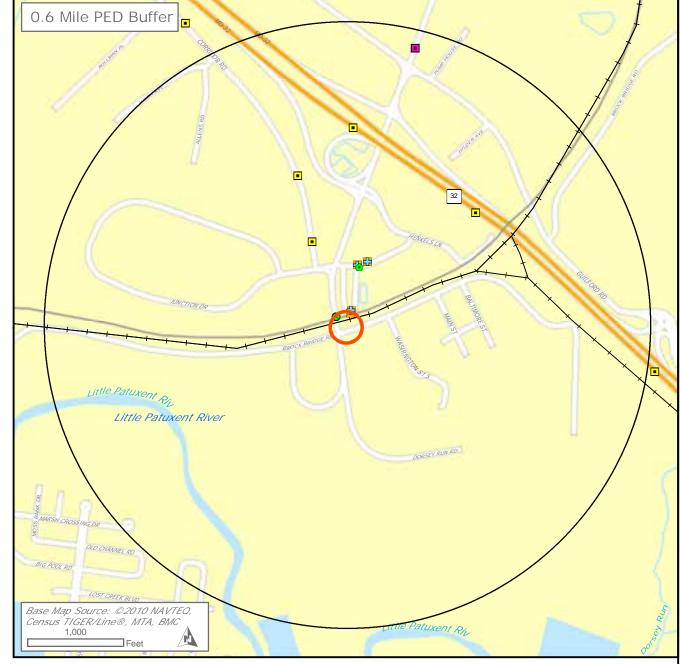
• Some improvements for pedestrians including crosswalks, pedestrian crossing signs and ramps should be provided within the station parking area. (The timing of the parking lot re-development should be considered in determining when and whether to install these improvements.)

#### **BIKE ROUTE DEFICIENCIES**

- To support shared use lanes on segments of Dorsey Run Road, Gorman Road and US 1, Share the Road signage and marking are recommended.
- For segments with shoulder lanes on Corridor Road and Dorsey Run Road, signage and marking in recommended.
- A portion of Guilford Road from Washington Boulevard to Dorsey Run Road would require widening as well as signage and marking to support shoulder bike lanes.

For more details refer to the project database.

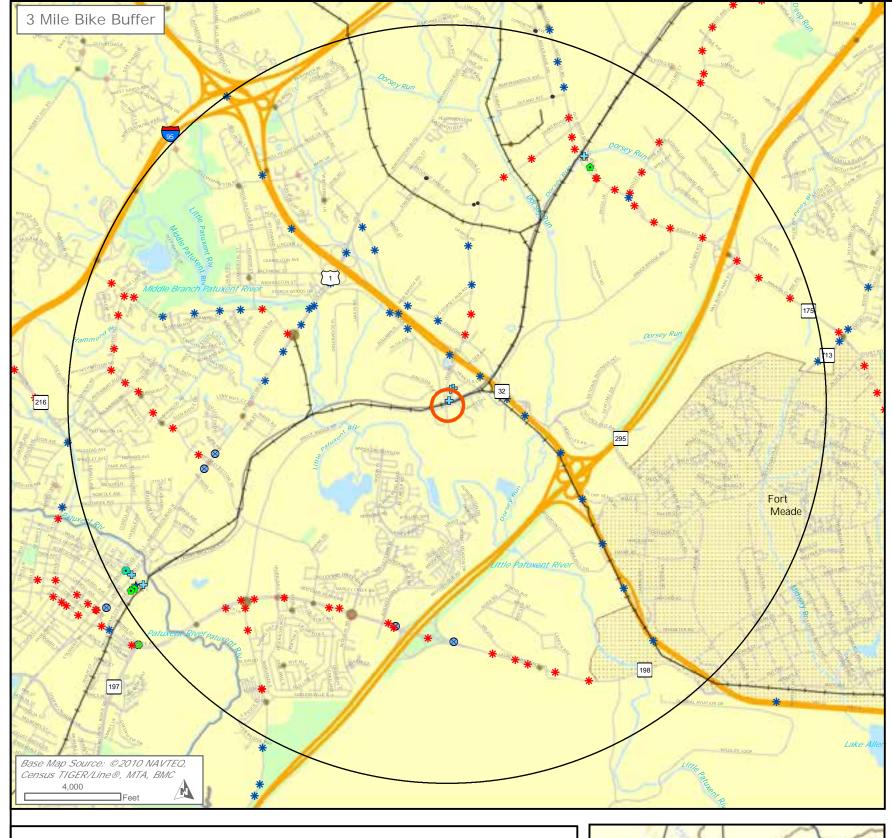




Train Station

- Parallel Drainage Grate
- Wide Outside Lane Missing
- Paved Shoulder Missing
- Marked Bike Lane Missing
- **Directional Signing at Station Missing**
- Bike Signing Missing
- Sidewalk Damaged
- Sidewalk Segment Missing

- Crosswalk Deficient
- **Curb Ramp Missing**
- Desire Line Present
- Lighting Deficient
- Pedestrian Crossing Deficient
- Bicycle Storage Not Visible
- Bicycle Rack Missing
- ----- Rail Line
- **Exisiting Bicycle Route**



Station: Savage Rail Line: MARC Camden

Jun 20, 2011





Lighting Improvement

Proposed Bicycle Route

**Existing Bicycle Route** 

----- Rail Line

Pedestrian Crossing Improvement

# Legend

- Train Station
- Bus Stop
- \* Bike Lane / Bike Path
- \* Shoulder

Wide lane

- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- ★ Desire Line Present

## **Bicycle Traffic Incidents**

• 1

**2** 

\_

3 - 4

**Pedestrian Traffic Incidents** 

• 1

2 - 9

10 -

10 - 69

## **SAVAGE - MARC CAMDEN**

Station No. 59

| Savage MAF   | RC Camden                | Howard/Anne Arundel Co  | ounty  | 9009 Dorsey Ru | n Road                  |             |                     |              |  |          |
|--------------|--------------------------|-------------------------|--|----------------|-------------------------|-------------|---------------------|--------------|--|----------|
|              |                          | Roadway                 | Roadway  |                |                         |             |                     | Roadway      | Recommended  | Distance |
| acility Type | Recommendation Type      | Intersection            | Name   |                | From                    |             | То                  | Jurisdiction | Improvement  | (Mi)     |
|              | CROSSWALK MISSING        |                         | SAVAGE STATION, FROM PARKING                   |                |                         |             |                     | 0 STATE      | INSTALL 245' CROSSWALK, 6-PED XING SIGNS,4-RAMPS       |          |
|              | CD OCCULAL IX A NICCIALO |                         | LOT TO THE PLATFORM                            |                |                         |             |                     | O COLINTY    | INISTALL AGOLS (NA A DANADS 2 DED SIGNIS 201/MANALY/2) |          |
| PEDESTRIAN   | CROSSWALK MISSING        |                         | SAVAGE STATION, ROAD BETWEEN THE 2 PARKING LOT |                |                         |             |                     | 0 COUNTY     | INSTALL 100' S/W,4 RAMPS,2-PED SIGNS,30'XWALK(2)       |          |
|              | CROSSWALK MISSING        |                         | SAVAGE STATION, ROAD BETWEEN                   |                |                         |             |                     |              | INSTALL 160' CROSSWALK, 2 PED XINGS , 2-15' S.B.       |          |
|              |                          |                         | THE 2 PARKING LOT                              |                |                         |             |                     |              |  |          |
|              | WIDE LANE                |                         | DORSEY RUN ROAD                                |                | GUILFORD ROAD           |             | OLD DORSEY RUN ROAD | COUNTY       | ROUTE, SIGNING, MARKING                                | 0.1922   |
|              | WIDE LANE                |                         | DORSEY RUN ROAD                                |                | OLD DORSEY RUN ROAD     |             | PATUXENT RANGE ROAD | COUNTY       | ROUTE, SIGNING, MARKING                                | 0.1922   |
|              | WIDE LANE                |                         | GORMAN ROAD                                    |                | FALLING WATERS CT       |             | GORMAN RD           | COUNTY       | ROUTE, SIGNING, MARKING                                | 0.4261   |
|              | WIDE LANE                |                         | GORMAN ROAD                                    |                | WASHINGTON BLVD N       |             | FOUNDRY ST          | COUNTY       | ROUTE, SIGNING, MARKING                                | 0.1893   |
|              | WIDE LANE                |                         | US 1   |                | EXIT 12A                |             | DORSEY ROAD         | STATE        | ROUTE, SIGNING   | 0.2604   |
|              | SHOULDER                 |                         | CORRIDOR ROAD                                  |                | US 1                    |             | ALLENS ROAD         | COUNTY       | ROUTE, SIGNING   | 0.4356   |
| BIKE         | SHOULDER                 |                         | DORSEY RUN ROAD                                |                | OLD DORSEY RUN ROAD     |             | PATUXENT RANGE ROAD | COUNTY       | ROUTE, SIGNING   | 0.3645   |
|              | SHOULDER                 |                         | GORMAN ROAD                                    |                | FOUNDRY ST              |             | FALLING WATERS CT   | COUNTY       | ROUTE, SIGNING   | 0.2178   |
|              | SHOULDER                 |                         | GUILFORD ROAD                                  |                | WASHINGTON BOULEVARD    |             | DORSEY RUN ROAD     | COUNTY       | ROUTE, WIDENING, MARKING                               | 0.083    |
|              | SHOULDER                 |                         | MD 32  |                | COUNTY LINE             |             | I-95                | STATE        | ROUTE, SIGNING   | 0.5303   |
|              | SHOULDER                 |                         | MD 32  |                | MD-170                  |             | COUNTY LINE         | COUNTY       | ROUTE, SIGNING   | 0.5321   |
|              | SHOULDER                 |                         | MD 32  |                |                         |             |                     | STATE        | ROUTE, SIGNING   | 0.5321   |
|              | SHOULDER                 |                         | US 1   |                | LYNN BUFF COURT         |             | EXIT 12A            | STATE        | ROUTE, SIGNING   | 0.1998   |
|              |                          |                         |  |                |                         |             |                     |              |  |          |
|              |                          | Total Cost Station (\$) | Total Cost per Jurisdiction                    |                | Total Cost By Responsib | ility       | 1                   |              |  |          |
|              |                          |                         | Anne Arundel County                            | \$84,225       | 5                       |             |                     |              |  |          |
|              |                          | \$1,240,615             | Baltimore City                                 | \$0            | State Roads/Stations    | \$223,160   |                     |              |  |          |
|              |                          |                         | Baltimore County                               | \$0            | County Roads            | \$1,017,450 |                     |              |  |          |
|              |                          |                         | Harford County                                 |                | City Roads              | \$(         |                     |              |  |          |
|              |                          |                         | 16   | Ć4 4EC 200     | -                       | 7.          |                     |              |  |          |

\$1,156,390

\$0

Howard County

Prince George's County

RAIL LINE: MARC Camden STATION PROFILE: Laurel Park

#### CHARACTER:

The station is located at the Laurel Park horse racing track, which operates during a limited racing season. The track and station area is bounded by US Route 1, MD 198 and Whiskey Bottom Road. Another MARC station more convenient to local residents is located nearby within the City of Laurel. The area has potential for growth if the racetrack land is redeveloped or intensified. There are no plans for transit oriented development.

#### LAND USE CONTEXT:

The Laurel Park Station is located in an area designated as Government Institutional Land Use.

| Year 2000 Population within 3 mile radius - | 70,736                                 |
|---|--|
| Weekday Station Ridership                   | 14                                     |
| Saturday Station Ridership:                 | N/A                                    |
| Transit Connections:                        | Corridor Transportation Center B Route |

#### **PARKING:**

700 parking spaces are provided in the area for the Laurel Racetrack. A 2% occupancy rate was observed.

#### PEDESTRIAN ENVIRONMENT:

The surrounding pedestrian accommodations are not adequate for people wishing to reach the station from either Route 1 or MD 198. The station is at the Race Track which is separated from other land uses activities.

#### **BICYCLING ENVIRONMENT:**

There are no existing bicycle routes leading to the station. Area roads are wide enough to accommodate bicycle lanes or routes and there are plans for additional bicycle routes in the area. No off-road trails were observed in the field.

Websites for regional trails are listed in the Appendix.

#### 2007-2009 CRASH DATA:

Number of Pedestrian Crashes within .6 miles

Number of Bicycle Crashes within 3 miles

#### **HIGHLIGHTS FROM FINDINGS**

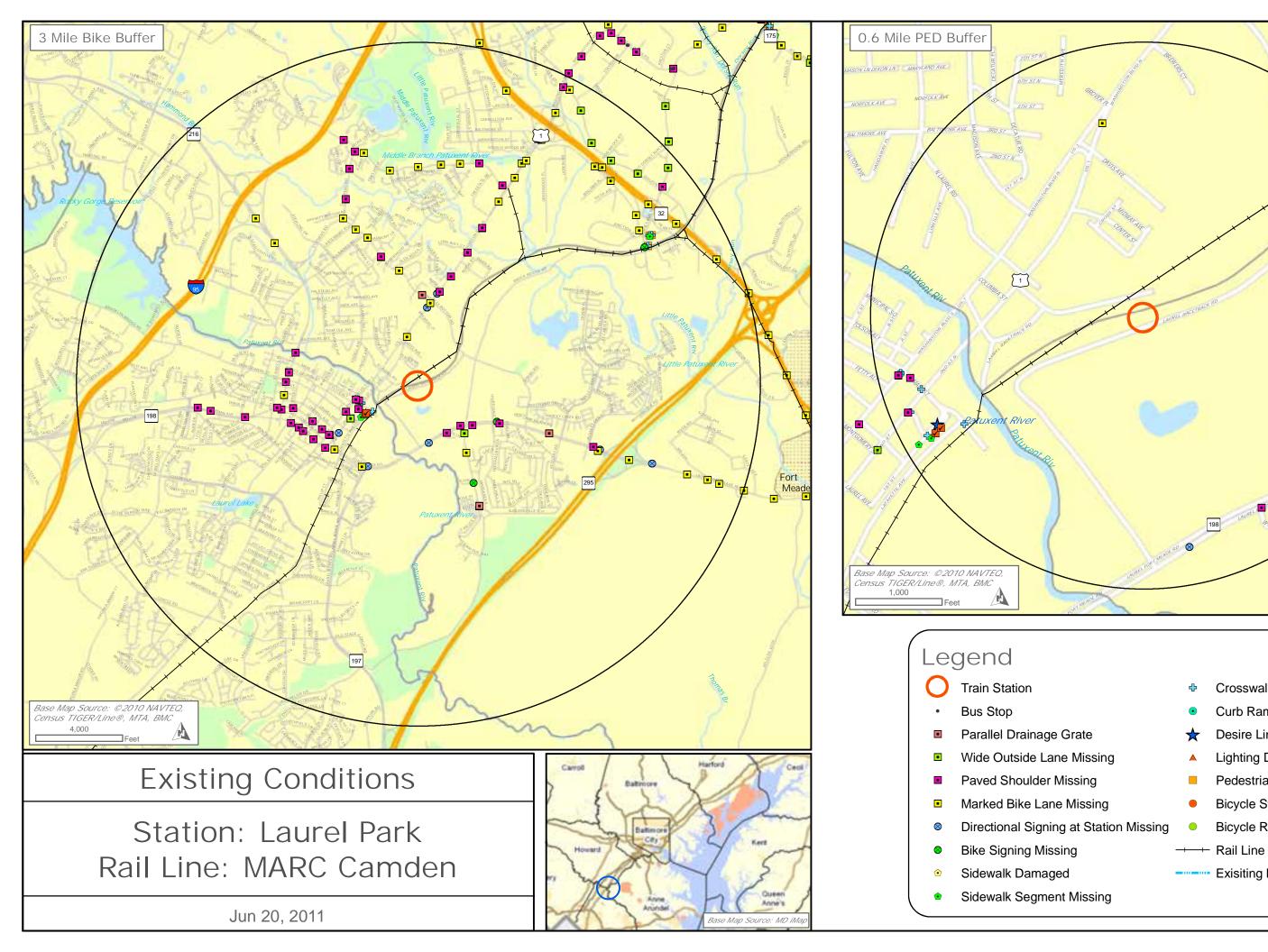
#### PEDESTRIAN DEFICIENCIES

- Segments of sidewalk are missing on 1st Street.
- Crosswalks and some ramps are missing in the vicinity of Main and 1st Street and Main and 2nd Street.
- The station is not easy to find. Station wayfinding signage is recommended along Laurel Fort Meade Road, 2nd Street, Fort Meade Road and Washington Boulevard.
- The FY'11-16 CTP includes funding for a project planning study of US 1 from Prince George's County to Baltimore County. The proposed improvement is to be consistent with the County's vision for improving safety and mobility.

#### **BIKE ROUTE DEFICIENCIES**

- To support shared use lanes many roads in the vicinity of the station need Share the Road signage and marking. Additionally, bicycle compatible drainage is needed on MD 198 and Whiskey Bottom Road.
- To support shoulder bike lanes on Brock Bridge and MD 198, bike route signage is recommended.
- To support the bike lane on MD 198 from the County line to Van Dusen Road, signage and marking is recommended.

Refer to the project database for more details.



Crosswalk Deficient

Curb Ramp Missing

Desire Line Present

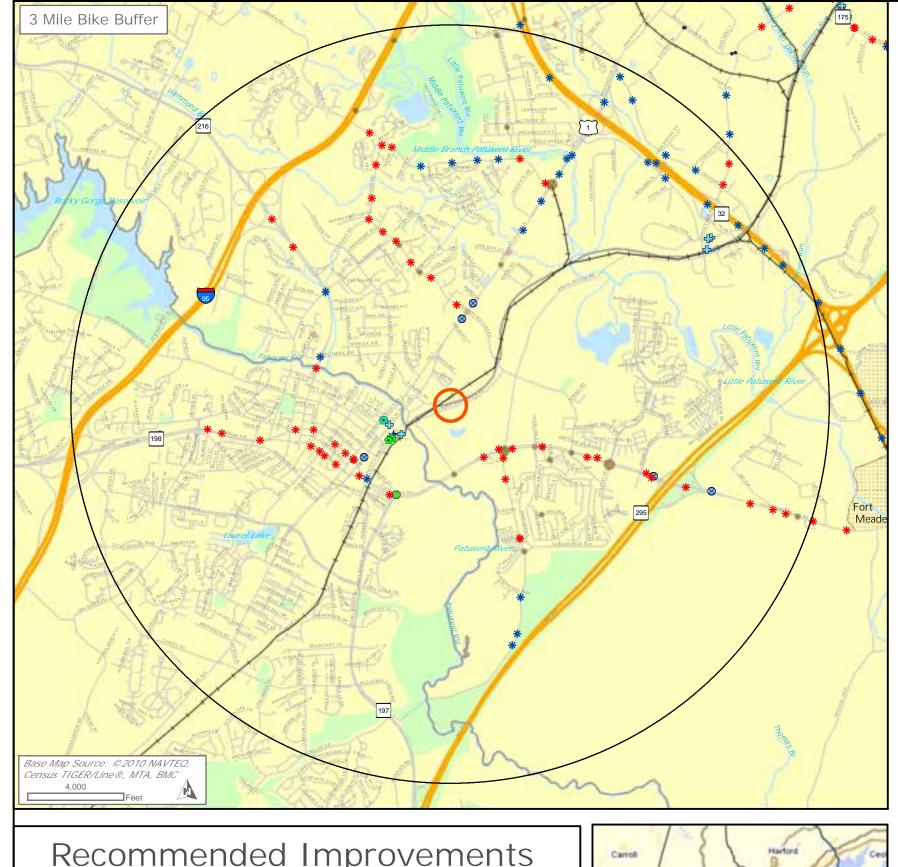
Pedestrian Crossing Deficient

Bicycle Storage Not Visible

Bicycle Rack Missing

**Exisiting Bicycle Route** 

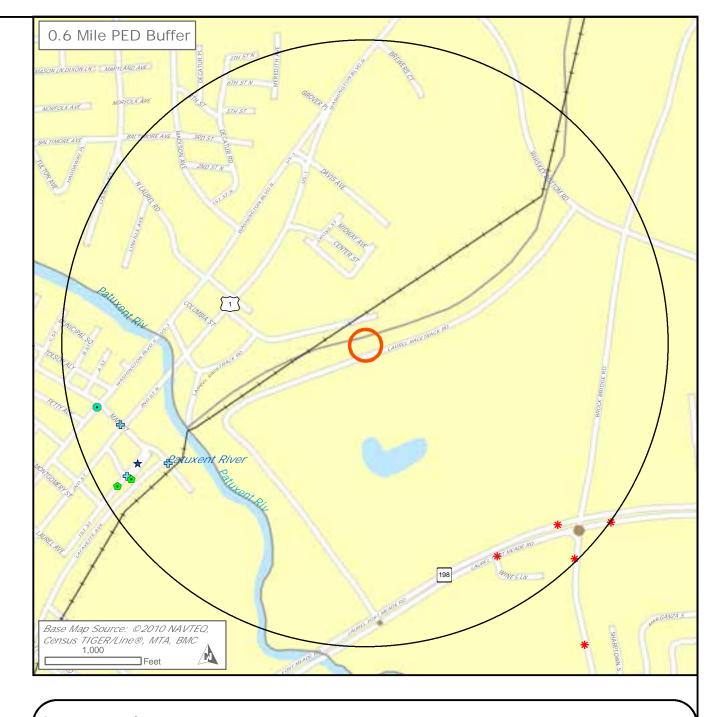
Lighting Deficient



Station: Laurel Park Rail Line: MARC Camden

Jun 20, 2011





Lighting Improvement

----- Rail Line



- Bus Stop
- Bike Lane / Bike Path
- Shoulder Wide lane
- Directional Sign Improvement
- Repair Sidewalk
- Add Sidewalk Segment
- Crosswalk Improvement
- Add Curb Ramp
- Desire Line Present

# **Bicycle Traffic Incidents** Pedestrian Crossing Improvement

- 2 Proposed Bicycle Route
- 3 4 Existing Bicycle Route

# **Pedestrian Traffic Incidents**

# LAUREL PARK - MARC CAMDEN

| Sta | tion | No. | 60 |
|-----|------|-----|----|
|     |      |     |    |

| Laurel Park   | - MARC Camden                       | Howard/Anne Arundel County                      | Y                     | Laurel Racetrack Road |              |                          |                         |   |                  |
|---------------|-------------------------------------|---|-----------------------|-----------------------|--------------|--------------------------|-------------------------|---|------------------|
| Facility Type | Recommendation Type                 | Roadway<br>Intersection                         | Roadway<br>Name       | From                  |              | То                       | Roadway<br>Jurisdiction | Recommended<br>Improvement  | Distance<br>(Mi) |
| racility Type |                                     | intersection                                    |                       |                       |              |                          |                         |   | (IVII)           |
|               | SIDEWALK SEGMENT MISSING            |   | 1ST STREET            | LITTLE MON            | TGOMERY AVE. | LAUREL AVE.              | COUNTY                  | INSTALL 350'X5' OF SIDEWALK   |                  |
|               | SIDEWALK SEGMENT MISSING            |   | 1ST STREET            | MAIN STREI            | T            | LITTLE MONTGOMERY AVENUE | COUNTY                  | INSTALL 125'X5' OF SIDEWALK   |                  |
|               | DIRECTIONAL SIGNING STATION         |   | 2ND STREET            |                       |              |                          | COUNTY                  | INSTALL A "MARK" SIGN ON 2ND STREET (ROUTE 1) NORTH OF FORT   |                  |
|               | MISSING DIRECTIONAL SIGNING STATION |   | FORT MEADE ROAD       |                       |              |                          | STATE                   | MEADE ROAD FOR LAUREL PARK MARC STATION<br>INSTALL A "MARK" SIGN ON LAUREL FORT MEADE ROAD JUST SOUTH |                  |
|               | MISSING DIRECTIONAL SIGNING STATION |   | LAUREL FORT MEADE RD. |                       |              |                          | STATE                   | OFLAUREL BOWIE ROAD FOR LAUREL PARK INSTALL "MARC" SIGN ON LAUREL FORT MEADE RD. WESTBOUND            |                  |
|               | MISSING DIRECTIONAL SIGNING STATION |   | LAUREL FORT MEADE RD. |                       |              |                          |                         | FOR LAUREL PARK STATION INSTALL A "MARK" SIGN ON LAUREL FORT MEADE ROAD FOR LAUREL                    |                  |
|               | MISSING DIRECTIONAL SIGNING STATION |   | WASHINGTON BLVD NORTH |                       |              |                          | STATE                   | PARK STATION INSTALL A "MARK" SIGN ON WASHINGTON BLVD. NB. SOUTH OF                                   |                  |
| PEDESTRIAN    | MISSING DIRECTIONAL SIGNING STATION |   | WASHINGTON BLVD. N.   |                       |              |                          | STATE                   | WHISKEY BOTTOM RD FOR SAVAGE STATION INSTALL A "MARC" SIGN ON WASHINGTON BLVD. SB, NORTH OF           |                  |
|               | MISSING                             |   |                       |                       |              |                          |                         | WHISKEY BOTTOM RD. FOR LAUREL PARK STATION  |                  |
|               | DESIRED LINE PRESENT                |   | 1ST STREET            | 1ST STREET            |              | PARKING                  | COUNTY                  | INSTALL CROSSWALK ACROSS 1ST STREET, PED X-ING SIGNS, STOP<br>BARS AND 2-RAMPS                        |                  |
|               | CURB RAMP MISSING                   | MAIN ST. AND 1                                  |                       |                       |              |                          | STATE                   | INSTALL 2-RAMPS,2-PED SIGNALS,80' CROSSWALK ON W LEG  |                  |
|               | CROSSWALK MISSING                   | 300' SOUTH OF MAIN AND 1ST STREET ON 1ST STREET |                       |                       |              |                          | COUNTY                  | INSTALL 180' XWALK,2-RAMPS  |                  |
|               | CROSSWALK MISSING                   | LAFAYETTE AVE. AND MAIN STREET                  |                       |                       |              |                          | COUNTY                  | INSTALL 300' XWALK,2-PED SIGNS INSIDE THE PARKING   |                  |
|               | CROSSWALK FADED                     | MAIN ST. AND 2ND ST.                            |                       |                       |              |                          | STATE                   | REPAINT CROSSWALKS ON ALL 4-LEGS ON INTERSECTION-TOTAL OF 400' OF P.M.                                |                  |
|               | WIDE LANE                           |   | BROCK BRIDGE ROAD     | LAUREL FOR            | T MEADE ROAD | RIVER BRIDGE WAY         | COUNTY                  | ROUTE, DRAINAGE   | 0.193182         |
|               | WIDE LANE                           |   | BROCK BRIDGE ROAD     | LAUREL FOR            | T MEADE ROAD | RIVER BRIDGE WAY         | COUNTY                  | ROUTE, SIGNING, MARKING   | 0.193182         |
|               | WIDE LANE                           |   | BROCK BRIDGE ROAD     | LAUREL FOR            | T MEADE ROAD | RIVER BRIDGE WAY         | COUNTY                  | SIGNING, MARKING  | 0.193182         |
|               | WIDE LANE                           |   | BROCK BRIDGE ROAD     | LAUREL FOR            | T MEADE ROAD | RIVER BRIDGE WAY         | COUNTY                  | ROUTE, DRAINAGE   | 0.193182         |
|               | WIDE LANE                           |   | MD 198                | 2ND ST                |              | 9TH ST                   | STATE                   | ROUTE, SIGNING, MARKING   | 0.068182         |
|               | WIDE LANE                           |   | MD 198                | BALD EAGLI            | DR           | COUNTY LINE              | STATE                   | ROUTE, SIGNING  | 0.258523         |
|               | WIDE LANE                           |   | MD 198                | BALD EAGLI            | DR           | COUNTY LINE              | STATE                   | ROUTE, SIGNING, MARKING   | 0.258523         |
|               | WIDE LANE                           |   | MD 198                | BALD EAGLI            | DR           | COUNTY LINE              | STATE                   | ROUTE, SIGNING, MARKING, DRAINAGE   | 0.258523         |
| BIKE          | WIDE LANE                           |   | MD 198                | BALD EAGLI            | DRIVE        | AIRFIELD ROAD            | STATE                   | ROUTE, SIGNING, MARKING   | 0.369318         |
|               | WIDE LANE                           |   | MD 198                | COUNTY LIN            | E            | VAN DUSEN RD             | STATE                   | ROUTE, SIGNING, MARKING   | 0.201705         |
|               | WIDE LANE                           |   | MD 198                |                       |              |                          |                         |   | 0.068182         |
|               | WIDE LANE                           |   | MD 216                | I-95                  |              | ALL SAINTS RD            | STATE                   | ROUTE, SIGNING, MARKING   | 0.473485         |
|               | WIDE LANE                           |   | MD 216                | PILGRIM AV            | E            | HOWARD COUNTY LINE       | STATE                   | ROUTE, SIGNING, MARKING   | 0.094697         |
|               | WIDE LANE                           |   | STEPHENS ROAD         | GORMAN R              | )            | WHISKEY BOTTOM RD        | COUNTY                  | ROUTE, SIGNING, MARKING   | 0.214962         |
|               | WIDE LANE                           |   | US 1                  | COUNTY LIN            | E            | DAVIS AVENUE             | STATE                   | ROUTE, SIGNING, MARKING   | 0.464015         |
|               | WIDE LANE                           |   | US 1                  | DAVIS AVEN            | UE           | LYNN BUFF COURT          | STATE                   | ROUTE, SIGNING  | 0.244318         |
|               |                                     |   |                       |                       |              |                          |                         |   |                  |

| Facility Type | Recommendation Type | Roadway<br>Intersection | Roadway<br>Name     | From              | То                | Roadway<br>Jurisdiction | Recommended<br>Improvement | Distance<br>(Mi) |
|---------------|---------------------|-------------------------|---------------------|-------------------|-------------------|-------------------------|----------------------------|------------------|
|               | WIDE LANE           |                         | US 1                | MONTGOMERY STREET | COUNTY LINE       | STATE                   | ROUTE, SIGNING, MARKING    | 0.066288         |
|               | WIDE LANE           |                         | US 1                | MONTGOMERY STREET | COUNTY LINE       | STATE                   | SIGNING, MARKING           | 0.066288         |
|               | WIDE LANE           |                         | WHISKEY BOTTOM ROAD | STEPHENS RD       | WASHINGTON BLVD N | COUNTY                  | ROUTE, DRAINAGE            | 0.1875           |
|               | WIDE LANE           |                         | WHISKEY BOTTOM ROAD | STEPHENS RD       | WASHINGTON BLVD N | COUNTY                  | ROUTE, SIGNING, MARKING    | 0.1875           |
|               | SHOULDER            |                         | BROCK BRIDGE ROAD   | RIVER BRIDGE WAY  | COUNTY LINE       | COUNTY                  | ROUTE, SIGNING             | 0.431818         |
|               | SHOULDER            |                         | BROCK BRIDGE ROAD   | RIVER BRIDGE WAY  | COUNTY LINE       | COUNTY                  | ROUTE, SIGNING             | 0.431818         |
| BIKE          | SHOULDER            |                         | MD 198              | BALD EAGLE DRIVE  | AIRFIELD ROAD     | STATE                   | ROUTE, SIGNING             | 0.369318         |
|               | SHOULDER            |                         | MD 198              | IRVING ST         | 2ND ST            | STATE                   | ROUTE, SIGNING             | 0.068182         |
|               | SHOULDER            |                         | MD 198              | VAN DUSEN RD      | I-95              | STATE                   | ROUTE, SIGNING             | 1.022727         |
|               | SHOULDER            |                         | MD 216              | ALL SAINTS RD     | PILGRIM AVE       | STATE                   | ROUTE, SIGNING             | 0.284091         |
|               | SHOULDER            |                         | US 1                | LYNN BUFF COURT   | EXIT 12A          | STATE                   | ROUTE, SIGNING             | 0.199811         |
|               | BIKE LANE           |                         | MD 198              | COUNTY LINE       | VAN DUSEN RD      | STATE                   | ROUTE, SIGNING, MARKING    | 0.201705         |

| Total Cost Station (\$) | Total Cost per Jurisdiction |           | Total Cost By Responsibility |           |  |
|-------------------------|-----------------------------|-----------|------------------------------|-----------|--|
|                         | Anne Arundel County         | \$480,300 |                              |           |  |
| \$980,445               | Baltimore City              | \$0       | State Roads/Stations         | \$645,465 |  |
| •                       | Baltimore County            | \$0       | County Roads                 | \$334,975 |  |
|                         | Harford County              | \$0       | City Roads                   | \$0       |  |
|                         | <b>Howard County</b>        | \$317,375 |                              |           |  |
|                         | Prince George's County      | \$182,770 |                              |           |  |