Section 5: Conceptual Corridor Plan

As described in Chapter 4, the Pedestrian Improvement Zone and Prioritized Network Plan identifies locations for future pedestrian and bicycle improvements. Seven corridor locations were chosen for more detailed analysis and to serve as examples (illustrative purposes only, found in Appendix A) for bicycle and pedestrian improvements. These areas were chosen based on the following factors (order does not indicate importance).

- **Public Input** – locations that received a high level of public support for pedestrian and bicycle improvements either in the Small Area Plans or during the public outreach efforts organized held for this Plan.

- **Network/transit connectivity** – projects that would eliminate critical gaps in the existing network, with an eye toward achieving a system of facilities that is fully interconnected, both within the study area and to transportation networks in adjacent jurisdictions.

- **Poor conditions/high demand** – locations with poor conditions that exhibit a high level of demand for bicycling and walking based on nearby destinations

- **Ease of implementation** – locations where opportunities exist to develop bicycle and pedestrian facilities at a reasonable cost.

- **Fieldwork**– fieldwork was conducted by the consulting team to verify existing conditions and potential for bicycle and pedestrian improvements.

Each bicycle corridor study includes a description of the corridor, existing roadway conditions and the proposed improvements. A table showing the before and after Bicycle Level of Service score for each corridor is also included. The majority of the proposed bicycle improvements can be implemented in the short term and include restriping and resurfacing of the roadways to provide more space for bicyclists. These improvements should include the appropriate signs and pavement markings (per the MUTCD and AASHTO Guide for Development of Bicycle Facilities). The potential pedestrian improvements identify problem areas within each corridor and recommend design solutions, focusing on a number of typical problems that exist throughout the County. The following roads were identified as corridor plan study areas.

List of Corridor Plan Study Areas:

- **Davidsonville Road (MD 424) – Crofton**

This location was identified in the Crofton SAP, and was verified (through field work) as a needed connection to a variety of destinations.

- **Shadyside Road - Shadyside**

This location was identified in the Deale/Shadyside SAP, and was verified (through field work) as a needed connection to a variety of destinations. This corridor

also provides an example of how to potentially redesign similar semi-rural roads in the South County area.

- **Laurel/Ft. Meade Rd (MD 198) - Jessup/Maryland City**

This location was identified in the Jessup/Maryland City SAP, and was chosen because it shows an example of an opportunity to upgrade pedestrian and bicycle facilities at a relatively low cost. Citizens also showed strong support for this corridor at a public meeting.

- **Roscoe Rowe Blvd. (MD 70) – Annapolis**

This area was chosen through consultation with the City of Annapolis. It provides an opportunity to connect commuter vehicle lots at the Navy Stadium to the downtown area. Fieldwork showed that this corridor was a potential candidate for a cost-efficient restriping project. Currently, the corridor bridges are proposed to be redesigned.

- **Mountain Road (MD 177) – Lake Shore**

This corridor area was chosen after the initial public meeting in Glen Burnie. Citizens supported pedestrian and bicycle improvements in this corridor due to the existing hazardous conditions. The corridor also connects a variety of different land uses.

- **Intersection of Waugh Chapel Rd and MD 3 – Gambrills**

This location was identified in the Crofton SAP. During the Master Plan process, there were numerous public suggestions regarding the potential for redesigning this route to connect the newly developing communities to each other and to the surrounding amenities.

- **Fort Smallwood Road Intersection – Riviera Beach**

The people participating in public meeting about the Plan in Pasadena strongly recommended pedestrian and bicycle improvements in this area. The need for improvements were verified by fieldwork.

See Appendix A for detailed Corridor Plans and Appendix B: for Bicycle Level of Service Descriptions.

5.1 Potential Bicycle Improvements

The following facility types are recommended for on-road routes identified by this Plan.

- ***Shared Lanes***

  Since bicycles have a legal right to use the roadway system (except limited access freeways), all roads have shared lanes. For streets with low traffic volumes and slower motor vehicle speeds, bike lanes may be unnecessary. Shared lanes may adequately serve bicyclists needs on these roadways. Bicycle route signs can be erected if these streets serve as important connectors.

  Policy on "Share the Road" Signs

  "Share the Road" signs are sometimes used on a *temporary basis* in locations where bicyclists should be expected, but where improvements have not yet been

made to accommodate bicycle travel. The County's policy is to use these signs as a temporary device (to be used on a case by case basis) in locations where bicyclists are known to ride in areas with high speed and/or high volumes of motor vehicle traffic on narrow cross sections. The precedent and purpose of these signs is established in the Manual on Uniform Traffic Control Devices.

- ***Wide Outside Lanes***
  Curb lanes that are 14' wide (exclusive of the gutter pan) can provide more space for motorists to share the road with bicyclists. Since a standard travel lane is 12' wide, the wide outside lane provides an extra 2' of maneuverable space. Wide curb lanes typically serve the needs of advanced cyclists on urban roadways, but may also have a detrimental effect of higher motor vehicle speeds due to added lane width.

- ***Paved Shoulders***
  Like bike lanes, paved shoulders for bicycle use should also be located on both sides of the road. Paved shoulders serve bicyclists of all skill levels, and in rural areas they can also provide a place for pedestrian travel. In urban areas, paved shoulders can serve as an interim facility in places where there is not enough space for a standard bike lane. There is no minimum width for paved shoulders, however a width of at least 4' is required if the facility is publicized as a bike lane and road construction is required.

- ***Bike Lanes***
  A bike lane is a portion of the roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes in urban areas are intended to meet the needs of basic bicyclists by providing them with adequate riding space and a higher level of comfort. Bike lanes are always located on both sides of the road (except one way streets), and carry bicyclists in the same direction as adjacent motor vehicle traffic. The minimum width for a bicycle lane is 4' excluding the gutter.

- ***Multi-Use Trails***
  Multi-use trails are an important component of a bicycle and pedestrian transportation system, because they can provide a high quality walking and bicycling experience in a more protected environment that is separated from traffic. Trails can encourage people to begin using their bicycles for transportation. After gaining some experience, they may become more confident in their ability to use on-road bikeways. Trails also can provide connections to the existing on-road bicycle network and create new opportunities for bicycle and pedestrian travel where they did not exist before.

Design standards and guidelines for bicycle and pedestrian facilities are available from a variety of sources. Designers should consult these following documents when planning and designing bicycle and pedestrian facilities.

- *A Policy on Geometric Design of Highways and Streets, AASHTO*

- *Guide for the Development of Bicycle Facilities, AASHTO*

- *Manual on Uniform Traffic Control Devices for Streets and Highways, USDOT, Federal Highway Administration*

5.2 Potential Pedestrian Improvements

The following pedestrian facilities are recommended within this Plan.

- ***Sidewalks***
  While many of the older communities within Anne Arundel County have sidewalks (such as Downtown Annapolis), many other communities were built without them. Sidewalks (5' minimum width recommended) are essential in order to provide connections throughout the community.

- ***Intersection Improvements***
  Street intersections are perhaps the greatest barrier that pedestrians face in Anne Arundel County. The lack of pedestrian safety at intersections inhibits walking. Improvements such as high visibility crosswalks, wheelchair ramps, curb extensions, and center median refuge areas will be needed to better accommodate people on foot.

- ***Traffic Calming***
  Perceived high-speed traffic on residential and local streets creates apprehension and anxiety for both pedestrians and bicyclists. Slower motor vehicle speeds enhance safety, and should therefore be encouraged in areas that attract pedestrians and bicyclists, such as near schools, shopping areas and residential areas. Traffic calming is a form of roadway engineering that is gaining in acceptance throughout the United States. Traffic calming uses a variety of roadway design techniques to slow traffic, including interrupted sight lines, narrower traffic lanes, changes in street surface, speed tables, curb extensions and traffic circles.

5.3 Facility Maintenance Program

Maintenance of bicycle and pedestrian facilities is a major concern for Anne Arundel County. As more facilities are built, the burden of maintaining these facilities will become greater. However, just as roadways are maintained for motorist safety, facilities for non-motorized transportation must be maintained as well. Fortunately, Anne Arundel County Parks and Recreation already has a comprehensive maintenance program in place for it's County trails and the Public Works Department currently sweeps all curbed County roadways. Appendix D contains more information on bicycle and pedestrian maintenance issues and recommendations for future roadway corridor maintenance as the Bicycle and Pedestrian Network grows.