## TRANSPORTATION PLAN

### Goal:

Provide a comprehensive network of roads, transit, and non-motorized access that serves the needs of existing and planned land use in and around Olney, protects environmental resources in the area, and respects the character of local neighborhoods.

### INTRODUCTION

Olney's location in the northeastern part of the County defines its land use and its transportation role in the County. The two major roads, Georgia Avenue and MD 108, connect Olney to the rest of the County and the region. Georgia Avenue is one of the few north-south roads in the County and the only major north-south through-travel route in the Master Plan area. It provides the most direct access to the District of Columbia for communities along its entire stretch as well as those in Howard and Carroll counties and beyond. Similarly, MD 108, called Olney-Laytonsville Road west of Georgia Avenue and Olney-Sandy Spring Road east of Georgia Avenue, is the major east-west local as well a regional route to Baltimore-Washington International (BWI) Airport in the east and a partial route to the employment corridor of I-270 to the west.

The Transportation Plan balances several important goals of the Master Plan. The accommodation of through traffic versus the desire to create safe, pedestrian-oriented, and attractive streets necessitates a compromise to achieve both goals in the best way feasible. Such a compromise also extends to the conflicting goals of providing a well-connected road system while minimizing the adverse environmental impacts of additional pavement, crossing of streams and related damage to other sensitive resources.

The Transportation Plan assumes that some traffic congestion may have to be tolerated to avoid the excessive costs and negative environmental and community impacts of creating more road capacity through bigger and wider roads. In an informal survey conducted for this planning effort, a majority of respondents indicated that they are willing to live with some level of congestion to maintain their suburban, semi-rural quality of life.

Although projected local growth is not significant, the infrastructure needs of the current and future growth outside the Master Plan area will continue to affect the transportation network in Olney. Decisions regarding some Countywide improvements, such as the ICC, will be made in a larger context even though the Olney area will be impacted by those decisions.

## TRAVEL FORECASTING

Travel demand is a function of the amount and type of activity generated by land uses and the available facilities and services that connect those land uses. Travel forecasting is used to determine the needed infrastructure to adequately serve the projected land use. It is also used to determine the degree of balance between land use and transportation recommendations in master plans by comparing the forecast Average Congestion Index (ACI) to Annual Growth Policy (AGP) standards for policy area transportation review. As of January 2005, the Olney Master Plan Area has approximately 12,700 housing units with another 384 in the pipeline, and 7,500 jobs. Most of the current and future jobs are located in either the Olney Town Center or on the Montgomery General Hospital campus. The land use and zoning recommendations of this Plan anticipate an estimated 15,500 dwelling units by 2025. The 2025 job forecast is for approximately 7,800 jobs in the Master Plan area, which could reach 8,100 jobs by 2050.

The Olney Master Plan Area includes two policy areas. The Olney Policy Area corresponds to the portion of the Master Plan area generally south of Brookeville Road. The northern portion is part of the Patuxent Policy Area, one of the County's five rural policy areas. The AGP does not specify ACI indices for rural policy areas, as land use in these areas is controlled by zoning, and water and sewer constraints. It assigns an ACI standard of 0.55 to the Olney Policy Area. The travel forecasting performed for the potential growth in the Master Plan indicates that the Olney Policy Area would slightly exceed an ACI of 0.55 in 2025. With the implementation of the transportation facilities and programs in this Plan, up to 15,235 dwelling units can be accommodated within this ACI standard. Therefore, this Plan initially caps housing in the Olney Master Plan Area to 15,235 dwelling units. The potential for housing to exceed this cap is described in the Staging section of the chapter on Implementation.

### **ROAD NETWORK**

The recommendations below address present and future traffic congestion problems in the Olney Master Plan area. Recommendations consist of road improvements and classification changes to reflect the role each road will play in the future network. The classification changes will also allow improved streetscape character of major roadways when development occurs or road improvements are made. Where possible, improvements will help the movement of pedestrians and bicycles as well as motorized vehicles.

The Roadway Network figure identifies the Olney Master Plan roadways on the Master Plan of Highways and the Roadway Classifications table lists their classifications with minimum rights-of-way. The classification of roadways is a way of indicating the degree to which access to properties is balanced with the ability to handle through traffic. The system ranges from Freeways with an emphasis on t hrough traffic capacity and little or no direct property access down to the Primary Residential Street which emphasizes access functions, which may affect the efficiency of through traffic movement. Secondary Residential Streets are not shown on the Master Plan of Highways. The roadway classes are detailed in the following list:

| Freeways                                     | Provide for movement of vehicles at high speed over significant distances. Access is limited to grade-separated interchanges.  |
|--|--|
| Major Highways                               | Provide less speed and mobility, but more access at intersections.   |
| Arterial Roads                               | Connect major highways and provide more access points<br>while moving traffic at lower speeds. Typically, more than<br>half of the traffic on an arterial is "through" traffic.                        |
| Commercial Business                          | Are restricted to commercial areas, provide on-street  |
| District Streets                             | parking, more pedestrian space, and more access points to stores and offices.  |
| Primary Residential<br>Streets               | May carry some through traffic but their main purpose is to provide access for 200 or more households and to connect to arterial roads.  |
| Secondary or Tertiary<br>Residential Streets | Provide direct access to homes and allow for greater<br>application of traffic management measures to discourage<br>through traffic movements and speeding. (These are not<br>listed in master plans.) |

### MAJOR HIGHWAYS AND ARTERIAL ROADWAYS

### Intercounty Connector/Western Connector

The Intercounty Connector (ICC) is a master planned, 18-mile long freeway connecting Interstate 270 to I-95 and US 1 in Prince George's County. The facility is designated as F-9 in the Montgomery County Master Plan of Highways, with a 300-foot wide right-of-way. Access to the ICC within Montgomery County is envisioned only at six locations: I-370, Midcounty Highway Extended (M-83), Georgia Avenue (MD 97), Layhill Road (MD 182), New Hampshire Avenue (MD 650) and Columbia Pike (US 29). Within the Olney Plan area, the ICC right-of-way extends approximately two-and-a-half miles from the North Branch of Rock Creek to Norbeck Road (MD 28) and includes an interchange at Georgia Avenue.

In this Plan, the term "Western Connector" refers to a range of east-west roadway options in the vicinity of Muncaster Mill Road generally between Georgia Avenue/Norbeck Road in the east and the termini of Mid-County Highway and I-370 at Shady Grove in the west, including the ICC right-of-way in this area. Three separate studies have been undertaken within the past five years to examine east-west transportation needs in this corridor. These studies, in chronological order are:

 The Intercounty Connector Draft Environmental Impact Statement, published in 1997, examined a Master Plan Alignment Alternative of the Intercounty Connector and three other build alternates: the Northern Alignment Alternative, the Mid-County Highway/MD 198 Alignment Alternative, and the Upgrade Existing Roads Alternative. Governor Glendening placed the study on hold after the DEIS was published in 1997.

- 2. The Muncaster Mill Road Corridor Study by the M-NCPPC was designed to determine a preferred alternate for increasing roadway capacity either along existing Muncaster Mill Road or along the Midcounty Highway Extended (M-83) alignment. The County Council placed the study on hold in March 2001, based primarily on concerns that it would adversely affect the planning process for both the Upper Rock Creek Master Plan and the Transportation Policy Report, then underway.
- The Transportation Policy Report (TPR) was an M-NCPPC study designed to examine and prioritize transportation needs Countywide. The TPR process included a 35-member Task Force and culminated in two separate documents: the Montgomery County Planning Board's Transportation Policy Report, and the Task Force Report, both published in January 2002.

Each of these three studies is relevant to the Olney Master Plan. The Transportation Policy Report confirmed the findings of prior studies that additional transportation capacity is needed between the I-270 and I-95 corridors. It recommended that SHA complete the ICC Final Environmental Impact Statement, and that regardless of the ultimate decision on the full ICC, highway facilities to address some of the east-west travel needs, including facilities that traverse Olney, should be implemented. In the western portion of the ICC corridor, between Norbeck Road and I-270, the TPR recommended four options for new or improved roadway connections. The full text of the TPR as related to these east-west roadway connections and the schematic representation of the four options as described in the TPR and are included in the technical appendix to this Plan.

Decisions regarding the full ICC and the Western Connector will be made in the Countywide context. In the Olney Master Plan area, the ICC should be constructed along the Master Plan alignment, consistent with the Master Plan of Highways. Muncaster Mill Road should not be widened to four lanes. If a Western Connector is built in the ICC right-of-way within the Olney Master Plan Area an interchange at MD 97 may be needed since the 2025 forecast volumes for the Olney Master Plan indicate that an at grade Western Connector intersection with Georgia Avenue would operate at the forecast AM and PM Critical Lane Volume (CLV) of 1765 and 1522, respectively, well above the CLV standard for the Olney Policy Area of 1525. When the ICC is designed, bikeway access to all local parks and other facilities adjacent to and near the right-of-way should be explored.

## **Recommendations:**

- 1. Maintain the Master Plan functional classification and recommended right-ofway, and two through lanes for Muncaster Mill Road (A-93).
- 2. Maintain the Master Plan functional classification, recommended right-of-way and number of lanes for the Intercounty Connector (F-9).
- 3. Complete the federal Environmental Impact Statement (EIS) process to implement the ICC. If the Final EIS concludes that the full ICC cannot be built as envisioned in the Master Plan, then alternative east-west transportation options will be considered, including those described as Transportation Policy Report Option 1 and Option 2.

- 4. If a Western Connector interchange at MD 97 is determined to be more desirable than an at-grade intersection, the following design guidelines should be considered:
  - a. Allow limited grade separation of some through and/or turning movements.
  - b. Avoid designs containing high-speed merging maneuvers (control via signalization), particularly on MD 97.
  - c. Preserve two or three quadrants as open space (pending completion of ICC EIS).
  - d. Accommodate Georgia Avenue Busway design and facilitate busway movements between the southern and western approaches.
  - e. Seek features that enhance the "rural gateway" concept for southern Georgia Avenue approaching Olney.
  - f. The Western Connector termini at Norbeck Road near Wintergate Drive should be designed to prohibit through access between Wintergate Drive and the Western Connector to reduce cut-through traffic in the Longmead community in Aspen Hill. This design treatment would be similar to the treatment on Rockville Pike at Edson Lane opposite the entrance to White Flint Mall.

## Georgia Avenue Interchange with Norbeck Road

The Maryland State Highway Administration (SHA) has conducted a project planning study of alternatives for a grade-separated interchange at the intersection of Georgia Avenue and Norbeck Road. This study is summarized in a November 2002 Environmental Assessment.

The 1994 Aspen Hill Master Plan recommended that this intersection remain at-grade, but indicated that transportation recommendations might be revisited pending policy decisions after the environmental impact study for the ICC was completed. The 1997 ICC DEIS documented that, with or without an ICC facility, many intersections in the study area, including Georgia Avenue and Norbeck Road, would be severely congested. The analyses performed for this Master Plan amendment confirms this finding. Therefore, an interchange at Georgia Avenue and Norbeck Road should be constructed. During spring 2003, the Planning Board and County Council stated their support for the selection of Alternate 7 Enhanced, a grade-separated interchange that relocates MD 28 and depresses it below Georgia Avenue several hundred feet to the north.

## **Recommendations:**

- 1. Construct a grade-separated interchange at the intersection of Georgia Avenue and Norbeck Road.
- 2. Preserve the existing Georgia Avenue median for future Georgia Avenue Busway implementation.

3. Facilitate pedestrian circulation across the intersection. Particularly maintain pedestrian-friendly access between the commercial uses in the Northwest Quadrant and the other three quadrants.

## Norbeck Road

The 1994 Aspen Hill Master Plan envisioned an improved Norbeck Road between Georgia Avenue and Layhill Road as a four-lane divided highway within the 150-foot master planned right-of-way. The State Highway Administration is currently conducting the MD 28/MD 198 Corridor Study, a project planning study, which incorporates this section of roadway. This Plan supports the 1994 Aspen Hill Plan's vision for this roadway as a "green corridor" with control of access maintained by the use of service roads where feasible. A shared-use path should also be constructed along the north side of Norbeck Road to complete path connectivity and provide access to East Norbeck Local Park. Service roads, where feasible along the north side of Norbeck Road, can also function as a shared-use path.

### **Brookeville Bypass**

Georgia Avenue passes through the Town of Brookeville and, as the major north-south highway, carries large volumes of traffic. The Average Daily Traffic (ADT) volume is expected to increase from 9,000 vehicles per day south of Brookeville in 1995 to 18,000 vehicles per day in 2020. The proposed Brookeville Bypass extends approximately 2.5 miles along MD 97, Georgia Avenue, from Gold Mine Road to north of Holiday Drive. The bypass is intended to remove the north-south through traffic from the Town of Brookeville, improve traffic operations safety along MD 97, and preserve the historic character of the town.

The project is included in the Development and Evaluation Program of the FY 2001-2006 Maryland Department of Transportation's Consolidated Transportation Program for Project Planning. The State Highway Administration is currently in the process of developing a final alternative for the proposed Bypass. It completed the Draft Environmental Impact Statement for the MD 97 Brookeville transportation study in November 2001. During autumn 2002, the Planning Board and County Council stated their support for selection of Alternate 7 Modified, a western bypass of Brookeville consistent with the 1980 Olney Plan. This alternate is consistent with the land use and transportation goals of this Master Plan.

The State Highway Administration plans to provide funding for the Brookeville Bypass conditional upon Montgomery County's commitment to limit development outside Priority Funding Areas. This commitment has been expressed in the County's Annual Growth Policy and is reinforced by the recommendation in this Plan to reduce the ultimate capacity of Georgia Avenue to two through travel lanes and the planned right-of-way to 80 feet in width.

### **Recommendation:**

Classify Brookeville Bypass as a Major Highway (M-8) with an 80-foot right-of-way and a maximum of two lanes for through travel, as well as the adjacent portions of Georgia Avenue south to Prince Philip Drive and north to Howard County.

## Laytonsville Bypass

MD 108 passes through the Town of Laytonsville and carries a substantial amount of traffic. The Town, which has independent planning and zoning authority, has planned a relocation of MD 108 near its western boundary that would bypass its central business area. The route is similar to the concept displayed in the Olney Master Plan adopted in 1980.

## Old Baltimore Road

Old Baltimore Road north and east of Georgia Avenue is classified as a primary residential street from Georgia Avenue to MD 108, and from there north to Gold Mine Road. While it is continuous and is called by a common name, these two segments are different in how they are used. The northern segment from MD 108 and Gold Mine Road (P-13) serves as a north-south collector road for the neighborhoods of far northeast Olney: Lake Hallowell, Christie Estates, James Creek, and Gold Mine Crossing. It is properly classified as a primary residential street, which means while it can accept some through traffic between MD 108 and Gold Mine Road, its primary purpose is to bring traffic into and out of these neighborhoods.

This cannot be said of the segment between Georgia Avenue and MD 108, which serves almost entirely as a through route for traffic coming from south of Olney to Sandy Spring, Ashton, and points northeast into Howard County. The average daily traffic (ADT) is above 9,000 today and will exceed 10,000 in 2025. Most of the major development along this segment of Old Baltimore Road—Hallowell—backs up to the road rather than fronting onto it.

## **Recommendation:**

### Classify Old Baltimore Road between Georgia Avenue and MD 108 as an arterial. However, retain the 70' minimum right-of-way and two through lanes.

## **Bowie Mill Road**

Bowie Mill Road is a two-lane roadway that runs between MD 108 and Muncaster Mill Road. In much of the segment between MD 108 and Cashell Road, the homes fronting Bowie Mill Road are closer to the roadway, and speeding traffic is often observed. To be eligible for the installation of speed humps, this segment of Bowie Mill Road should be classified as a Primary Residential Street. However, this segment retains a significant through traffic function, and so the potential for through-traffic restrictions and truck prohibitions—which can generally apply to Primary Residential Streets—should not apply for this segment of Bowie Mill Road. Recommendation:

Classify Bowie Mill Road as a Primary Residential Street between MD 108 and Cashell Road. However, the regulation on through traffic in residential neighborhoods and the administrative practice allowing truck prohibitions should not apply for this segment of Bowie Mill Road.

## Cashell Road

Cashell Road is a two-lane roadway approximately 2.2 miles in length, connecting Bowie Mill Road and Emory Lane. It was classified as an arterial roadway (A-44) in the 1980 Olney Plan. Civic groups along the southern part of Cashell Road are interested in pursuing traffic calming devices appropriate for primary residential roadways and have sought reclassification of Cashell Road as a primary residential road.

The designation of Cashell Road as either an arterial roadway or a primary residential roadway would be consistent with County Code guidelines for roadway designation. No commercial zoning abuts Cashell Road, nor are there existing or proposed land uses that either by law or tradition are located on arterial roads. The northern portion of Cashell Road should be retained as an arterial connection between Georgia Avenue and Bowie Mill Road (via Hines Road) while the southern portion of Cashell Road should be changed to a primary designation.

## **Recommendation:**

# Designate Cashell Road as a primary residential road between Hines Road and Emory Lane.

## Heritage Hills Drive

Heritage Hills Drive is a two-lane roadway approximately 1.3 miles in length connecting Georgia Avenue (MD 97) and MD 108 in the northwest quadrant of Olney. It was classified as an arterial roadway (A-45) in the 1980 Olney Plan. Queen Elizabeth Drive is a similarly designed two-lane roadway approximately 0.8 miles in length that also connects Georgia Avenue and MD 108 in northwest quadrant, intersecting Heritage Hills Drive at roughly the midpoint of both roads. Queen Elizabeth Drive was classified as a primary residential roadway (P-21) in the 1980 Olney Plan. Civic groups along Heritage Hills Drive expressed concern regarding traffic operations and safety on both roadways and sought reclassification of Heritage Hills Drive as a primary residential roadway.

The designation of Heritage Hills Drive as either an arterial roadway or a primary residential roadway would be generally consistent with County practices for roadway designation. No commercial zoning abuts Heritage Hills Drive, nor are there existing or proposed land uses that either by law or tradition are located on arterial roads. Heritage Hills Drive should be classified as a primary residential roadway.

### Recommendations:

- 1. Designate Heritage Hills Drive as a primary residential road.
- 2. Perform a study of traffic operations and safety on Heritage Hills Drive and Queen Elizabeth Road, including pedestrian access to Greenwood Elementary School.

### Two-Lane Road Policy

A network of two-lane roadways serves Northern Olney. One of the goals of the Olney Master Plan is to preserve and enhance the rural and agricultural character of the area. All roadways in the rural area should be limited to a maximum of two through travel lanes, as indicated in the tabulation of street and highway classifications. The limitation on through travel lanes is not intended to preclude the implementation of spot safety and operational improvements such as turning lanes or acceleration/deceleration lanes.

### **RESIDENTIAL STREETS**

### Cherry Valley Drive Extended

Existing Cherry Valley Drive is designated as P-8 in the Olney Master Plan and P-10, Cherry Valley Drive Extended, in the 1985 Upper Rock Creek Master Plan. Travel demand analyses performed in 2001 for the Upper Rock Creek Master Plan amendment indicated that Cherry Valley Drive Extended would ultimately carry between 13,000 and 16,000 vehicles per day across the North Branch, depending upon the assumptions for roadway facilities in the ICC right-of-way. These volumes would approach or exceed the estimated roadway capacity of approximately 14,000 vehicles per day. If built, Cherry Valley Drive would be serving as an arterial roadway, not a primary residential roadway. This connection would also result in increased cut-through traffic on the residential streets in the adjoining communities.

The environmental impacts associated with the Cherry Valley Drive extension are also substantial, especially on the North Branch Biodiversity Area and the North Branch Stream. Given the environmental and community impacts it is not desirable to extend Cherry Valley Drive across the North Branch of Rock Creek.

### **Recommendations:**

Remove Cherry Valley Drive Extended (P-8) from the Olney Master Plan street and highway network. Define the end of current pavement, approximately 4,000 feet west of Cashell Road, as the terminus of P-8.

### TOWN CENTER ROADS

The Olney Town Center is a commercial area served by a network of roadways that are classified to accommodate employees, customers, and delivery traffic. Two major highways, Georgia Avenue and MD 108, serve as the primary access to and through the Town Center and as local roadways for circulation within the Town Center. Additional recommendations on integrating land use and transportation are provided in the Town Center Chapter of the Plan. This section describes the classification of Master Planned roadways in the Town Center.

### Appomattox Avenue

The 1980 Plan classified Appomattox Avenue as a business district street between Spartan Road and Georgia Avenue. Appomattox Avenue is currently built between Spartan Road and Marksman Circle and the right-of-way has been dedicated between Marksman Circle and James Creek to the west. The desire of the adjoining community of Townes at Environ not to build the rest of this street and the goal of avoiding environmental impacts should be balanced with the need for an appropriate network of vehicular and pedestrian paths to serve the future land use of the Town Center and Olney in general. If Appomattox Avenue is connected to Georgia Avenue, it would have some negative impacts such as crossing James Creek, a Hawlings River tributary, increased noise and activity along the southern edge of the Environs community, and relatively higher cost due to the topography of the stream crossing. However, without appropriate connectivity and flexibility in the street layout of the Town Center's Northeast Quadrant, further development would exacerbate the local traffic load on the intersection of Georgia Avenue and MD 108 (already at capacity), which would be contrary to the goals of creating an attractive, pedestrian-oriented Town Center.

An alternate alignment of Appomattox Avenue would be to connect Marksman Circle with Hillcrest Avenue. Dedication and construction of the new alignment would depend upon a major addition/renovation or redevelopment of the northern part of the shopping center property. The existing alignment of Appomattox Avenue between Marksman Circle and Georgia Avenue should be deleted.

### **Recommendations:**

- 1. Delete Appomattox Avenue as a Master Plan roadway between Marksman Circle and Georgia Avenue.
- 2. Create a new alignment of Appomattox Avenue between Marksman Circle and Hillcrest Avenue as a business district street.
- 3. Determine the exact alignment of the new roadway at the time of redevelopment of the shopping center property.

## **Buehler Road**

The 1980 Olney Plan classified Buehler Road as an arterial road with 48 feet of paving between Prince Philip Drive and Spartan Road. The roadway has been built to arterial standards, except for an unbuilt segment approximately 160 feet in length adjacent to Saint Peter's Catholic Church. The southern section of Buehler Road provides access to a neighborhood of approximately 300 homes and Southeast Olney Local Park. To the south of King William Drive, the roadway provides the sole means of access to 21 individual houses. The northern section of Buehler Road provides access to the Camelback Village apartment complex, Saint Peter's Catholic Church, and the WSSC standpipe.

The Buehler Road connection is a critical part of the roadway system in and out of the Town Center. The unbuilt portion of Buehler Road should be used for local vehicular traffic. Where the road is 48 feet wide, the pavement width should be reduced to a size generally consistent with that of a Primary Residential Street. Buehler Road also provides a valuable Town Center connection for pedestrians and bicycles from the adjoining residential communities. The road classification should be changed from an arterial (A-47) to a Primary Residential Street (P-24).

The 1980 Olney Plan also designated an unnamed southerly extension of Buehler Road as a primary residential roadway (P-17) between Prince Philip Drive and Old Baltimore Road. This roadway segment has subsequently been precluded by the Hallowell subdivision and is not needed for connectivity. This segment should therefore be removed from the Olney Plan.

## **Recommendations:**

- 1. Designate Buehler Road as a primary residential roadway with a 70-foot rightof-way between Prince Philip Drive and Spartan Road.
- 2. Complete the unbuilt portion of Buehler Road north of King William Drive and reduce the pavement width for the 48-foot-wide section to a size generally consistent with a Primary Residential Street
- 3. Remove the unbuilt portion of Buehler Road south of Prince Philip Drive from the Master Plan.

## Spartan Road

The 1980 Plan designated Spartan Road as an arterial road between Georgia Avenue and MD 108 and as a business district roadway between MD 108 and Appomattox Avenue. Currently, in both segments, Spartan Road performs as a road to distribute commercial traffic within the Town Center. Both segments have an 80-foot right-of-way and there is no need for more than two through travel lanes, although the full pavement width is needed for turning lanes at the intersections with Georgia Avenue and MD 108. Spartan Road should be reclassified between Georgia Avenue and MD 108 from arterial to business district street, which will facilitate application of consistent treatments regarding streetscaping and on-street parking where feasible.

### **Recommendation:**

# Designate Spartan Road as a business district street with an 80-foot right-of-way between Georgia Avenue and MD 108.

#### Hillcrest Avenue

Hillcrest Avenue is designated as a business district street (B-3) with a 70-foot right-of-way. Currently, Hillcrest Avenue serves the Northeast Quadrant of the Town Center, connecting to both Georgia Avenue and MD 108.

No change is recommended for Hillcrest Avenue, but the unbuilt portion of Appomattox Avenue should be realigned to connect Marksman Circle with Hillcrest Avenue as shown in the Town Center Chapter maps and as discussed in the Appomattox Avenue section of this chapter.

### **Recommendation:**

## Connect Hillcrest Avenue with a realigned Appomattox Avenue through the Village Mart Shopping Center property.

### North High Street

The 1980 Plan classified portions of Third Avenue and North High Street as business district roadways from Georgia Avenue to the limit of commercial zoning, a length of approximately 400 feet. The public right-of-way exists for a North High Street connection to Morningwood Drive.

The Town Center Chapter describes a framework of streets to serve the current and future land use in the Town Center. It includes North High Street between Georgia Avenue and Morningwood Drive as an essential connection for providing vehicular and pedestrian connectivity between the Town Center and the adjoining residential community.

### **Recommendation:**

## Extend North High Street to Morningwood Drive as a business district street with a 70-foot right-of-way.

### SOUTHEAST QUADRANT ROADWAY NETWORK

The area bounded by Georgia Avenue, Norbeck Road, Layhill Road, Doctor Bird Road, Olney-Sandy Spring Road, and Old Baltimore Road is primarily a low-density residential area referred to as the "Southeast Quadrant." The 1980 Olney Master Plan recommended a network of primary residential streets to serve anticipated development in this area.

The Southeast Quadrant had 347 houses in the 2000 Census. This Plan's recommendations for land use, zoning, and water and sewer service in the Southeast Quadrant, except for the Golden Bear area, reduce the overall growth potential as recommended in the 1980 Plan. The Southeast Quadrant contains the headwaters of the Northwest Branch and the preservation of the rural and environmental resources in the Southeast Quadrant is a major component of this Plan. Batchellors Forest Road is recommended for a Rustic Road designation. Several residential roadway extensions or realignments described in the 1980 Plan, if built, would negatively impact the existing communities and natural resources in the area. Since the proposed level of growth is lower than the potential housing yield of the 1980 Plan in the Southeast Quadrant, these unbuilt roadway alignments should be removed from the Master Plan.

## **Recommendations:**

- 1. Remove the extension of Emory Lane east of Olney Manor Park. Provide local pedestrian and bicycle access to the park from adjacent development.
- 2. Remove the extension of Barn Ridge Drive across Batchellors Forest tributary.
- 3. Remove the relocation of Batchellors Forest Road in the vicinity of the Batchellors Forest tributary.
- 4. Designate the entire length of Batchellors Forest Road as a rustic road (see more discussion in rustic roads section).
- 5. Revise the proposed realignment of Batchellors Forest Road north of Farquhar Middle School (described in this Plan as P-16 or "Old Vic Boulevard Extended") to terminate at Batchellors Forest Road opposite one of the Farquhar Middle School driveway entrances.

## **RUSTIC ROADS**

Montgomery County's Rustic Roads Program preserves historic and scenic roads that reflect the County's agricultural character and rural origins. The Program defines two categories for rustic roads—rustic, and exceptional rustic—and two country road classifications—country road, and country arterial. Rustic roads generally carry local traffic and are designated based on surrounding land uses and natural features, historic value, and road characteristics. Country road and country arterial are used to classify roadways that have unique rural features but are not intended primarily for local use.

The Rustic Roads Functional Master Plan (December 1996) designates eleven roadway segments within the Olney Master Plan Area. Damascus Road (MD 650) and Sundown Road are classified as country arterials. Griffith Road and portions of Zion Road are classified as country roads. Brookeville Road, Elton Farm Road, Hipsley Mill Road, Howard Chapel Road, and portions of Gregg Road, Riggs Road, and Zion Road are classified as rustic roads.

Appendix A of the Rustic Roads Functional Master Plan also identifies certain roadways as part of the "interim rustic roads program." These roadways were placed in the interim status pending a full analysis and recommendation at the time of the relevant master plan update. Three roadways in the Olney Plan area, Batchellors Forest Road, Brighton Dam Road, and Triadelphia Lake Road, are described in the following paragraphs.

## **Batchellors Forest Road**

Batchellors Forest Road is a narrow, two-lane road, approximately 2.6 miles long, connecting Georgia Avenue (MD 97) to Doctor Bird Road (MD 108). Westminster Drive is the only public road currently connecting to Batchellors Forest Road. Emory Church Road right-of-way as a public road exists between Georgia Avenue and Batchellors Forest Road, but it is unimproved east of Norbrook Drive. Batchellors Forest Road provides the sole access to William H. Farquhar Middle School and Trotters Glen Golf Course. The average daily traffic volume observed during spring 2002 south of William H. Farquhar Middle School was 630 vehicles, primarily local traffic. During the five-year period 1997-2001, there were seven recorded accidents not related to driving under the influence of alcohol or drugs.

William H. Farquhar Middle School is located approximately 3,500 feet south of MD 108 and therefore most of the public access to and from the school is via MD 108. The 1980 Olney Master Plan recommended a realignment of the northern portion of Batchellors Forest Road. A portion of the proposed realignment at MD 108 has been constructed by developers.

Based on this Plan's recommended RNC zoning for vacant and redevelopable properties, the land use pattern in the Southeast Quadrant will remain fairly low-density in nature. The removal of three primary residential roadway extensions or realignments, as described in greater detail in the prior discussion on the Southeast Quadrant, will further protect and enhance the low-density character of this quadrant. Therefore, the designation of most of Batchellors Forest Road as a rustic road would be appropriate. The westernmost section, from Georgia Avenue to a point 1,200 feet east, carries non-local traffic to Olney Manor Recreational Park and should therefore not be classified as rustic. The same consideration for accommodating non-local traffic should be extended 500 feet further to the east if an institutional use is located on the Gandel property.

The realignment of the northern portion of Batchellors Forest Road as proposed in the 1980 Plan would negatively impact the existing character of Batchellors Forest Road at its junction with that road near Farquhar Middle School since it would require improvements to a much longer section of Batchellors Forest Road. The 1980 Plan's realignment of Batchellors Forest Road (P-16) should be modified so that it would extend from its current termini to meet Batchellors Forest Road in a right-angle configuration opposite one of the school driveway entrances. This new alignment of P-16 is henceforth called "Old Vic Boulevard Extended." Recommendations:

- 1. Designate Batchellors Forest Road as a rustic road between 1,200 feet east of Georgia Avenue and Dr. Bird Road. If an institutional use is located on the Gandel property, the rustic road designation should be removed from the portion of Batchellors Forest Road approximately 1,700 feet east of Georgia Avenue.
- 2. Extend the primary residential roadway, Old Vic Boulevard Extended, designated as P-16 in this Plan, to terminate at Batchellors Forest Road opposite one of the Farquhar Middle School entrances.

## Brighton Dam Road

Brighton Dam Road is a narrow, two-lane road connecting the Town of Brookeville to Howard County at the Brighton Dam on the Patuxent River. To the east of New Hampshire Avenue, Brighton Dam Road is classified as an arterial roadway. It is used by both local and through traffic. The average daily traffic volume south of Bordly Drive during spring 2002 was 2,650 vehicles.

The designation of Brighton Dam Road as a primary residential roadway, P-23, was shifted to Bordly Drive as part of the Abrams subdivision in 1993. Hence, P-23 follows Bordly Drive between Georgia Avenue and Brighton Dam Road and then Brighton Dam Road between Bordly Drive and New Hampshire Avenue.

The two segments of Brighton Dam Road on either side of Bordly Drive were considered independently for rustic road designation. To the east of Bordly Drive, the roadway, currently classified as a primary residential roadway, is an integral part of the transportation network and is not intended solely for local use. The natural features and vistas along the eastern segment do not warrant rustic road classification.

The outstanding natural features and vistas occur in the portion of Brighton Dam Road to the south of Bordly Drive. Now that Bordly Drive is extended to Georgia Avenue this portion of Brighton Dam Road is for local use.

## Recommendation:

Designate Brighton Dam Road as a rustic road between the Town of Brookeville and Bordly Drive, and as a country road between Bordly Drive and New Hampshire Avenue.

#### Triadelphia Lake Road

Triadelphia Lake Road is a narrow, two-lane road approximately 0.8 miles long connecting Georgia Avenue to the Triadelphia watershed recreation area owned by the Washington Suburban Sanitary Commission (WSSC). Triadelphia Lake Road is not currently designated in the Olney Master Plan. Fewer than ten privately owned parcels gain access to the westernmost portion of the roadway. The roadway connects only to Georgia Avenue and is therefore used exclusively by local traffic. The average daily traffic volume is less than 100 vehicles per day and no accidents have been recorded during the five-year period 1997-2001.

In 2001, the WSSC petitioned Montgomery County to abandon the portion of Triadelphia Lake Road abutting WSSC property. The petition was designed to allow WSSC to limit public access to certain times of day to reduce illegal dumping on its property. The Planning Board supported the petition but the abandonment process was not completed. The designation of Triadelphia Lake Road as a rustic road should not restrict the desirability of the pending or future abandonment case, provided that public access to the Triadelphia watershed recreation area is maintained.

#### **Recommendation:**

#### Designate Triadelphia Lake Road as a rustic road.

|  | Batchellors<br>Forest Road<br>between<br>Georgia<br>Avenue & Dr.<br>Bird Road | Brighton Dam<br>Road between<br>Bordly<br>Drive & Town<br>of Brookeville | Brighton Dam<br>Road between<br>Bordly Drive &<br>New<br>Hampshire<br>Avenue | Triadelphia<br>Lake Road |
|--|---|--|--|--------------------------|
| Compatible<br>Planned Land                                   | $\checkmark$  | $\checkmark$   | $\checkmark$   |                          |
| Use  |   |  |  |                          |
| Narrow,<br>Intended for<br>Local Use                         | V   | V  |  | Ń                        |
| Traffic Volume<br>Consistent with<br>Rustic Status           | V   | V  | N.   | Ń                        |
| Accident History<br>Does Not<br>Suggest Unsafe<br>Conditions | V   |  | $\checkmark$   |                          |
| Outstanding<br>Natural<br>Features                           | V   | V  |  | Ń                        |
| Outstanding<br>Vistas of Rural<br>Landscape                  | V   | V  |  | N                        |
| Follows Historic<br>Alignments                               |   | √<br>  | $\overline{\gamma}$  |                          |

### **Evaluation of Interim Rustic Roads**

OLNEY MASTER PLAN

## LOCAL INTERSECTION IMPROVEMENTS

From a policy area perspective, based on current area-wide congestion standards specified in the Annual Growth Policy for Olney, the planned transportation system is projected to be adequate. Localized congestion is still forecast to occur, particularly along the southern portion of Georgia Avenue. The forecast 2025 CLV is more than 1800 at some locations, much higher than 1475, the congestion standard for the Olney Policy Area as of July 2004. Local intersection improvements, therefore, are essential to bring the congestion to acceptable levels. These local improvements should be considered on a case-by-case basis as part of the development process, and should be done in a way that protects adjacent communities and the open character of the major roads in the area.

The following intersection improvements are representative of those that could be considered in the future:

- Adding a northbound right-turn lane to Georgia Avenue at Spartan Road
- Adding a southbound left-turn lane to Georgia Avenue at New Hampshire Avenue
- Adding a third approach lane to Old Baltimore Road and Hines Road at Georgia Avenue
- Adding a fourth approach lane to Emory Lane at Georgia Avenue

## PUBLIC TRANSPORTATION

Greater emphasis on public transit is necessary to increase the efficient use of roads and help reduce congestion. Transit is generally an attractive option where development densities generate higher volumes of travelers in concentrated locations and shared destination points. This opportunity exists along Georgia Avenue. The 1997 Census update survey indicates that approximately 17 percent of employed Olney residents work in the District of Columbia. The long commuting distance and workplace parking costs help define a market of users for whom public transit is a preferable commuting option, if made sufficiently attractive. In addition to using the current road network for transit, two major improvements would increase the use of transit in Olney. They are the ICC right-of-way and the Georgia Avenue Busway.

The 1994 Aspen Hill Master Plan recommended that the Intercounty Connector (ICC) incorporate a transitway. The 1997 Draft Environmental Impact Statement included a concurrent-flow lane reserved for buses and carpools in the Master Plan Alignment alternative for a limited-access roadway. Exclusive ramps for transit vehicles were also included at selected interchanges including at Georgia Avenue. This Plan endorses the Aspen Hill Master Plan's recommendation for evaluating transit potential of the ICC.

## Georgia Avenue Busway

The Georgia Avenue Busway is a proposed express busway in the median of Georgia Avenue to connect communities generally in the Aspen Hill and Olney areas with the Glenmont Metro Station. The Georgia Avenue Busway study, completed by the Montgomery County Department of Park and Planning in 1998, recommended that a twolane, bi-directional, bus-only roadway be constructed within the Georgia Avenue median for approximately seven miles between the Glenmont Metrorail Station and the vicinity of Spartan Road south of MD 108 in Olney. The recommended busway concept includes accommodating existing local bus service as well as introducing express bus service.

The bus network should be supported by two ancillary facilities in the Olney Planning Area, the Longwood Recreation Center park-and-ride lot and improved access to the Norbeck Road park-and-ride lot. The 2002 Regional Bus Study conducted by the Washington Metropolitan Area Transit Authority (WMATA) has identified the Montgomery General Hospital campus as a logical site for both increased transit service and for potential park-and-ride facilities.

The Maryland Transit Administration (MTA) has contracted with WMATA to perform a lineand-grade study of the Georgia Avenue Busway. This study would provide the background information required to scope a subsequent environmental impact study, necessary to apply for federal implementation funding. The 1998 Georgia Avenue Busway study should be used as background material for the subsequent detailed planning studies.

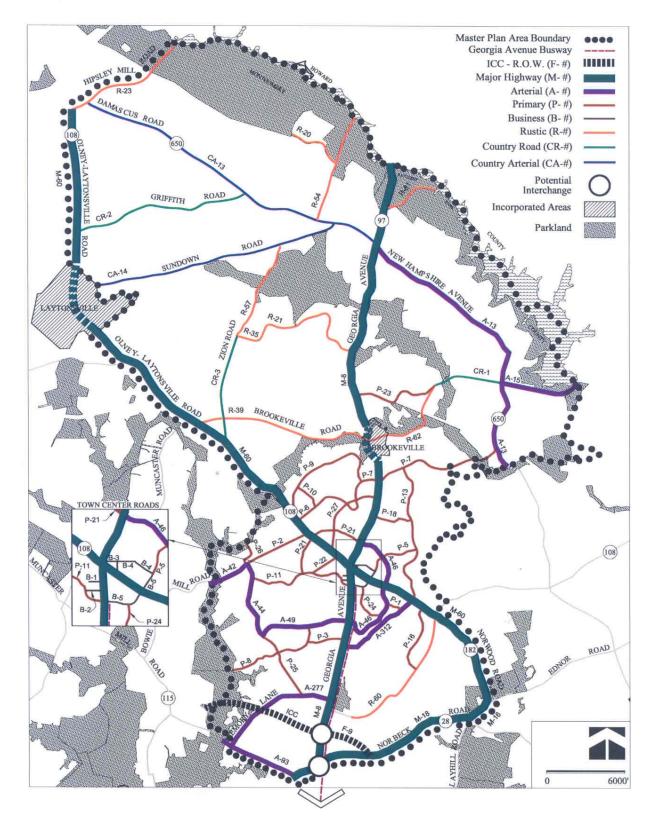
## **Recommendations:**

- 1. Explore opportunities to expand public and private transit and paratransit services in Olney.
- 2. Further evaluation of the Master Plan Alignment alternative for the ICC should continue to evaluate transit and carpool priority treatments.
- 3. Construct the Georgia Avenue Busway as a two-lane, bi-directional busway within the Georgia Avenue median between Norbeck Road and the vicinity of Spartan Road.
- 4. Support further study of transit operations, including passenger transfer and bus layover needs, to optimize busway use through feeder bus service. Explore future park-and-ride options including the existing lot east of the Longwood Community Center, the Montgomery General Hospital campus, or shared parking agreements with commercial development within the Olney Town Center.

## **ROADWAY NETWORK AND FUNCTIONAL CLASSIFICATION**

The County's road classifications identify road function, service, and right-of-way width to create a rational road hierarchy and ensure room for roadway, streetscape, sidewalks, and bikeways. These recommendations are used as a guide to right-of-way dedication and other elements such as sidewalks and streetscape during the development review process. The following Street and Highway Classification Table identifies minimum right-of-way width and number of lanes for specific roads in the Olney Master Plan Area.

## **Roadway Network**



## **Roadway Classifications**

| Roadwa   |                                      | Limits   | Minimum<br>ROW<br>Width<br>(feet) | Number<br>of Travel<br>Lanes <sup>1</sup> |
|----------|--------------------------------------|--|-----------------------------------|---|
| Freeway  | ys<br>Intercounty                    | North Branch Rock Creek  | 300                               | 6, divided                                |
| 1-5      | Connector                            | to MD 28   | 500                               | o, ulvided                                |
| Major H  | lighways                             |  |                                   |   |
| M-8      | MD 97 – Georgia<br>Avenue            | MD 28 to Emory Lane  | 150                               | 6, divided                                |
| M-8      | MD 97 – Georgia<br>Avenue            | Emory Lane to Spartan<br>Road                                      | 150                               | 4, divided                                |
| M-8      | MD 97 – Georgia<br>Avenue            | Spartan Road to Prince<br>Philip Road (northern<br>junction)       | 120                               | 4, divided                                |
| M-8      | MD 97 – Georgia<br>Avenue            | Prince Philip Road<br>(northern junction) to<br>Howard County Line | 80                                | 2   |
| M-16     | MD 182 – Layhill<br>Road             | Ednor Road to MD 28  | 150                               | 4   |
| M-18     | MD 28 – Norbeck<br>Road              | MD 115 to MD 182   | 150                               | 4, divided                                |
| M-60     | MD 108 – Olney-<br>Laytonsville Road | Hipsley Mill Road to<br>Laytonsville                               | 120                               | 2   |
| M-60     | MD 108 – Olney-<br>Laytonsville Road | Laytonsville southern boundary to MD 182                           | 150                               | 4, divided                                |
| M-60     | MD 182 – Dr. Bird<br>Road            | MD 108 to Norwood Road   | 120                               | 2   |
| M-60     | MD 182 – Norwood<br>Road             | Dr. Bird Road (MD 182) to<br>Ednor Road                            | 120                               | 2   |
| Arterial | S                                    |  |                                   |   |
| A-13     | MD 650 – New<br>Hampshire Avenue     | Hawlings River to MD 97  | 80                                | 2   |
| A-15     | Brighton Dam Road                    | MD 650 to Howard County<br>Line                                    | 80                                | 2   |
| A-42     | Bowie Mill Road                      | North Branch Rock Creek<br>to Cashell Road                         | 80                                | 2   |

<sup>1</sup> These are the number of planned through lanes for each segment, not including lanes for turning, parking, acceleration, deceleration, or other purposes auxiliary to through travel. Georgia Avenue between MD 108 and Norbeck Road includes the proposed Busway in addition to the number of lanes in this table.

| Roadwa | Y                               | Limits   | Minimum<br>ROW<br>Width<br>(feet) | Number<br>of Travel<br>Lanes <sup>1</sup> |
|--------|---------------------------------|--|-----------------------------------|---|
| A-46   | Prince Philip Drive             | MD 97 (northern junction)<br>to MD 108             | 80                                | 4   |
| A-46   | Prince Philip Drive             | MD 97 (southern junction)<br>to MD 108             | 80                                | 2   |
| A-49   | Hines Road                      | Cashell Road to MD 97                              | 80                                | 2   |
| A-93   | MD 115 – Muncaster<br>Mill Road | North Branch to MD 28                              | 80                                | 2   |
| A-277  | Emory Lane                      | MD 115 to MD 97                                    | 80                                | 2   |
| A-312  | Old Baltimore Road              | MD 97 to MD 108                                    | 70                                | 2   |
| -      | Residential                     |  |                                   |   |
| P-1    | Brimstone Academy<br>Drive      | Prince Philip Drive to Old<br>Baltimore Road       | 70                                | 2   |
| P-2    | Bowie Mill Road                 | Cashell Road to MD 108                             | 80                                | 2   |
| P-3    | Cherry Valley Drive             | MD 97 to Wellfleet Drive                           | 70                                | 2   |
| P-5    | Spartan Road                    | Appomattox Avenue to Old Baltimore Road            | 70                                | 2   |
| P-6    | Briars Road                     | MD 108 to Heritage Hills<br>Drive                  | 70                                | 2   |
| P-7    | Gold Mine Road                  | Heritage Hills Drive to MD<br>650                  | 70                                | 2   |
| P-8    | Cherry Valley Drive             | Wellfleet Drive to 4,000 feet west of Cashell Road | 70                                | 2   |
| P-8    | Wellfleet Drive                 | Hines Road to Cherry<br>Valley Drive               | 70                                | 2   |
| P-9    | Olney Mill Road                 | MD 108 to Gold Mine Road                           | 70                                | 2   |
| P-10   | Bloomfield Road                 | Olney Mill Road to Briars<br>Road                  | 70                                | 2   |
| P-11   | Morningwood Drive               | MD 97 to Cashell Road                              | 70                                | 2   |
| P-13   | Old Baltimore Road              | Gold Mine Road to MD 108                           | 70                                | 2   |
| P-16   | Old Vic Boulevard<br>Extended   | MD 108 to Batchellors<br>Forest Road               | 70                                | 2   |
| P-18   | Owens Road                      | MD 97 to Old Baltimore<br>Road                     | 70                                | 2   |
| P-21   | Queen Elizabeth<br>Drive        | MD 97 to Morningwood<br>Drive                      | 70                                | 2   |
| P-22   | Headwaters Drive                | MD 108 to Morningwood                              | 70                                | 2   |

| Roadwa   | Ŋ                             | Limits                                 | Minimum<br>ROW<br>Width<br>(feet) | Number<br>of Travel<br>Lanes <sup>1</sup> |
|----------|-------------------------------|--|-----------------------------------|---|
|          |                               | Drive Extended                         |                                   |   |
| P-23     | Bordly Drive                  | MD 97 to Brighton Dam<br>Road          | 70                                | 2   |
| P-24     | Buehler Road                  | Prince Philip Drive to<br>Spartan Road | 70                                | 2   |
| P-25     | Cashell Road                  | Emory Lane to Hines Road               | 70                                | 2   |
| P-26     | Wickham<br>Drive/Wickham Road | Bowie Mill Road to Plan<br>Boundary    | 70                                | 2   |
| P-27     | Heritage Hills Drive          | MD 97 to MD 108                        | 70                                | 2   |
| Rustic F | Roads                         |  |                                   |   |
| R-20     | Elton Farm Road               | Howard Chapel Road to<br>End of Road   | 70                                | 2   |
| R-21     | Gregg Road                    | Riggs Road to MD 97                    | 70                                | 2   |
| R-23     | Hipsley Mill Road             | MD 108 to Howard County Line           | 70                                | 2   |
| R-35     | Riggs Road                    | Zion Road to Gregg Road                | 70                                | 2   |
| R-39     | Brookeville Road              | MD 108 to MD 97                        | 70                                | 2   |
| R-54     | Howard Chapel Road            | MD 650 to Howard County Line           | 70                                | 2   |
| R-57     | Zion Road                     | Riggs Road to Sundown<br>Road          | 70                                | 2   |
| R-60     | Batchellors Forest<br>Road    | MD 97 to MD 108                        | 70                                | 2   |
| R-61     | Triadelphia Lake<br>Road      | MD 97 to End of Road                   | 70                                | 2   |
| R-62     | Brighton Dam Road             | Town of Brookeville to<br>Bordly Drive | 70                                | 2   |
| Country  | Arterials                     |  |                                   |   |
| CA-13    | MD 650 – Damascus<br>Road     | MD 97 to Hipsley Mill Road             | 80                                | 2   |
| CA-14    | Sundown Road                  | Town of Laytonsville to MD<br>650      | 80                                | 2   |
| Country  | Roads                         | •                                      | •                                 |   |
|          |                               |  |                                   |   |

| Roadway  | 1                 | Limits                              | Minimum<br>ROW<br>Width<br>(feet) | Number<br>of Travel<br>Lanes <sup>1</sup> |
|----------|-------------------|-------------------------------------|-----------------------------------|---|
| CR-1     | Brighton Dam Road | Bordly Drive to MD 650              | 70                                | 2   |
| CR-2     | Griffith Road     | MD 108 to MD 650                    | 70                                | 2   |
| CR-3     | Zion Road         | MD 108 to Riggs Road                | 70                                | 2   |
| Business | District Roads    |                                     | -                                 |   |
| B-1      | Third Avenue      | MD 97 to 400 feet west of<br>MD 97  | 70                                | 2   |
| B-2      | North High Street | MD 97 to Morningwood<br>Drive       | 70                                | 2   |
| B-3      | Hillcrest Avenue  | MD 108 to MD 97                     | 70                                | 2   |
| B-4      | Appomattox Avenue | Spartan Road to Hillcrest<br>Avenue | 70                                | 2   |
| B-5      | Spartan Road      | MD 97 to Appomattox<br>Avenue       | 80                                | 2   |

### **BIKEWAY NETWORK**

Bicycling is an important recreation activity and occasional commuting option in Olney. The Plan proposes a comprehensive bikeway network that expands the existing facilities to make sure that all significant destinations are accessible to local residents. It is based on the assumption that all roads should be bike and pedestrian friendly. It focuses on connecting the communities with the areas of high pedestrian and local activity, such as the Town Center, schools, libraries, playgrounds and recreational opportunities in the park system.

The proposed shared use path on a portion of Muncaster Mill Road provides a critical link in the park trails network in the North Branch of Rock Creek (see Trail Corridors in the Parks and Recreation Chapter). Any future road projects in this area should incorporate a safe and attractive bikeway for the portion of Muncaster Mill Road between Emory Lane and Meadowside Lane.

The recommended bikeway network will be implemented though public improvements (CIP) and through the subdivision process. All new developments within close proximity to the proposed network should be connected to it whenever possible.

The proposed bikeway plan is guided by the following objectives:

1. Connect the neighborhoods to the community facilities such as schools, the library, ball fields, parks, and other recreational facilities.

- 2. Connect the surrounding neighborhoods to the Town Center.
- 3. Connect the local bikeways to those in the surrounding areas of Aspen Hill, Sandy Spring/Ashton, Damascus, and Upper Rock Creek through connections to the Countywide Bikeways Functional Master Plan network.

The proposed bikeway network is designed for various types of users who differ in their needs and desires as far as safety and destinations are concerned. Riders may fit into more than one group, depending on their purpose on any given ride. This Plan recommends the expansion of the existing bikeway system to better serve the following user groups based on the 1999 AASHTO *Guide for the Development of Bicycle Facilities*.

**Children or adolescent cyclists** require access to key destinations such as schools, community centers, recreational facilities, libraries and convenience stores. They typically ride on their own or with adults through neighborhood streets with low traffic volumes and speeds or shared use paths.

**Basic cyclists** are casual and less experienced adult riders who also may be using their bicycle for transportation but avoid using roads with fast or busy motor vehicle traffic unless there is ample designated operating space. They should ride along neighborhood streets, shared use paths and well designed bicycle lanes.

Advanced or experienced cyclists are generally using their bicycle for longer distances than the other two groups. They generally travel at higher speeds and can operate under most traffic conditions. They are comfortable riding with motor vehicle traffic, prefer to ride along roads that feature few delays (i.e., traffic signals or driveway interruptions) and that provide direct access to destinations.

## **Bikeway Types**

The recommended bikeway plan includes three types of facilities:

**Bike paths, or shared use paths** are off-street paths typically with an asphalt surface separated from the road pavement by a planting strip. These paths are generally between eight and ten feet wide and accommodate two-way bicycle traffic as well as pedestrian traffic. The buffer between the roadway and bike path should be at least five feet, although a larger buffer is preferred. When properly designed, these bikeways greatly minimize conflicts with motor vehicles.

**Bike lanes** are defined as a portion of a roadway that has been designated by signs, striping, or pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are generally located on both sides of a street. They are used where off-road bike paths are not feasible because of limited space or too many driveways, but the roadway is wide enough to provide shoulder area and traffic volumes are not too heavy or fast.

**Shared roadways** are streets designated for bicycle use through the installation of directional and informational signs for shared use of curb lanes for vehicles and bikes.

Generally, these are streets with very limited right-of-way and low traffic volumes and speeds.

**Dual Bikeway** is a roadway that features two types of bikeways: 1) shared use path and bikeway lanes; or 2) shared use path and shared roadway. The roadway corridor accommodates both on-road and off-road bicycling.

### **Recommendations:**

The following table includes recommended bike paths for the Olney Master Plan Area. In addition, all future developments adjacent to these bike paths should provide appropriate connections from new developments to this network.

### **Proposed Bikeways**

| #     | Bikeway   | Location  | Туре               |
|-------|---|---|--------------------|
|       | Countywide Bikeways                               |   |                    |
| BL-20 | Bowie Mill Road                                   | MD 108 to North Branch Rock<br>Creek  | Bike Lanes         |
| SR-44 | Damascus Road/New<br>Hampshire Avenue (MD<br>650) | Hipsley Mill Road to eastern edge of the Master Plan boundary                       | Shared Road        |
| SP-38 | Dr. Bird Road/Norwood<br>Road (MD 182)            | MD 108 to Layhill Road  | Shared Use<br>Path |
| SP-32 | Emory Lane  | MD 97 to Muncaster Mill Road  | Shared Use<br>Path |
| BL-22 | Georgia Avenue (MD<br>97)                         | County Line to southern end of<br>Brookeville Bypass                                | Bike Lanes         |
| SP-39 | Georgia Avenue (MD<br>97)                         | Southern end of Brookeville<br>Bypass to MD 108                                     | Shared Use<br>Path |
| SP-29 | Georgia Avenue (MD<br>97)                         | MD 108 to Norbeck Road (MD 28)  | Shared Use<br>Path |
| BL-19 | Hines Road  | Cashell Road to Georgia Avenue  | Bike Lanes         |
| SP-33 | Hines Road/North<br>Branch Connector              | Hines Road to North Branch Rock<br>Creek (through Norbeck Country<br>Club property) | Shared Use<br>Path |
| SP-40 | ICC Bikeway                                       | Along the entire ICC ROW  | Shared Use<br>Path |
| SP-31 | Layhill Road (MD 182)                             | Norbeck Road to Ednor Road  | Shared Use<br>Path |
| SR-43 | MD 108  | Hipsley Mill Road to southern<br>boundary of Laytonsville                           | Shared Road        |

| #                       | Bikeway                                | Location   | Туре                              |
|-------------------------|--|--|-----------------------------------|
| SP-34,<br>35, 36,<br>37 | MD 108                                 | Southern boundary of Laytonsville<br>to eastern limit of the Master Plan<br>area   | Shared Use<br>Path                |
| BL-35                   | Muncaster Mill Road                    | MD 28 to Plan Boundary, except<br>for a portion between Emory Lane<br>and the trail system in North<br>Branch of Rock Creek which<br>should be Shared Use Path | Bike Lanes                        |
| DB-12                   | Norbeck Road (MD 28)                   | Muncaster Mill Road to Layhill Road  | Dual Bikeway                      |
| SR-62                   | Sundown Road                           | MD 108 to MD 650   | Shared Road                       |
|                         | Local Bikeways                         |  |                                   |
| B-1                     | Batchellors Forest Road                | Emory Church Lane to Dr. Bird Road   | Shared Road                       |
| B-2                     | Bloomfield Road                        | Rolling Acres Way to Olney Mill Road   | Shared Road                       |
| B-3                     | Bordly Drive                           | MD 97 to Brighton Dam Road   | Shared Use<br>Path                |
| B-4                     | Briars Road                            | MD 108 to Heritage Hills Drive   | Shared Road                       |
| B-5                     | Brighton Dam Road                      | Bordly Drive to County line  | Shared Road                       |
| B-6                     | Brimstone Academy<br>Drive             | Old Baltimore Road to Prince Philip Drive  | Shared Road                       |
| B-7                     | Buehler Road                           | Prince Philip Drive to Spartan<br>Road/ except for the unpaved right-<br>of-way of Buehler Road, which is<br>Shared Use Path                                   | Shared<br>Road/Shared<br>Use Path |
| B-8                     | Cashell Road                           | Bowie Mill Road to Emory Lane  | Shared Road                       |
| B-9                     | Charley Forest Street                  | Between Olney Mill Road and the park   | Shared Road                       |
| B-10                    | Cherry Valley<br>Drive/Wellfleet Drive | North Branch of Rock Creek to<br>Hines Road  | Shared Road                       |
| B-11                    | Church Street/ Market<br>Street        | Through Brookeville  | Shared Road                       |
| B-12                    | Emory Church Lane                      | Georgia Avenue to end of the<br>current paved section  | Shared Road                       |
| B-13                    | Emory Church Lane<br>Connector         | Emory Church Lane to Batchellors<br>Forest Road (in existing unpaved<br>right-of-way)  | Shared Use<br>Path                |
| B-14                    | Gandel Property<br>Connector           | Batchellors Forest Road to<br>Intercounty Connector (ICC) right-   | Shared Use<br>Path                |

| #    | Bikeway                                    | Location   | Туре               |
|------|--|--|--------------------|
|      |  | of-way   |                    |
| B-15 | Gold Mine Road                             | Briars Road to Georgia Avenue (MD 97)  | Shared Road        |
| B-16 | Gold Mine Road                             | MD 97 to Old Baltimore Road  | Bike Lanes         |
| B-17 | Gold Mine Road                             | Old Baltimore Road to MD 650   | Shared Road        |
| B-18 | Goose Creek<br>Road/Macduff Avenue         | Cashell Road Local Park to Cashell Road  | Shared Road        |
| B-19 | Lafayette Drive                            | Queen Mary Drive to Hines Road   | Shared Road        |
| B-20 | Morningwood Drive                          | MD 97 to Queen Elizabeth Drive   | Shared Road        |
| B-21 | Norbeck Grove Bike<br>Path                 | North Branch Rock Creek to MD<br>108 (on the HOA property)   | Shared Use<br>Path |
| B-22 | Northwest Investment<br>Property Connector | Batchellors Forest Road to Old<br>Baltimore Road   | Shared Use<br>Path |
| B-23 | Old Baltimore Road                         | Gold Mine Road to MD 108   | Shared Road        |
| B-24 | Old Vic Blvd. Extended                     | Farquhar Middle School to MD 108   | Shared Use<br>Path |
| B-25 | Olney Boys and Girls<br>Club Connector     | Charley Forest Street to Olney<br>Boys and Girls Club (across<br>parkland to OBGC)                           | Shared Use<br>Path |
| B-26 | Olney Manor Park                           | Emory Church Lane to Batchellors<br>Forest Road (could be routed<br>through Kimble property, if<br>acquired) | Shared Road        |
| B-27 | Olney Mill Road                            | MD 108 to Gold Mine Road   | Shared Road        |
| B-28 | Owens Road                                 | MD 97 to Old Baltimore Road  | Shared Road        |
| B-29 | Pinetree Road/<br>Sycamore Lane            | Emory Lane to Muncaster Mill<br>Road   | Shared Road        |
| B-30 | Prince Philip Drive                        | MD 97 east to MD 108, MD 108<br>north to MD 97 (existing bikeway is<br>not built to standards)               | Shared Road        |
| B-31 | Queen Elizabeth Drive                      | Morningwood Drive to MD 108  | Shared Road        |
| B-32 | Queen Elizabeth Drive                      | MD 108 to Rolling Acres Way  | Shared Use<br>Path |
| B-33 | Queen Elizabeth Drive                      | Rolling Acres Way to MD 97   | Shared Road        |
| B-34 | Queen Mary Drive                           | MD 97 to Lafayette Drive   | Shared Road        |
| B-35 | Rolling Acres Way                          | Queen Elizabeth Drive to Briars<br>Road  | Shared Road        |
| B-36 | Spartan Road                               | MD 97 to Old Baltimore Road  | Shared Road        |

| #    | Bikeway           | Location                     | Туре        |
|------|-------------------|------------------------------|-------------|
| B-37 | Utility ROW-Gas   | Cashell Neighborhood Park to | Shared Use  |
|      |                   | Queen Elizabeth Drive        | Path        |
| B-38 | Utility ROW-Pepco | Norbeck Grove Bike Path to   | Shared Use  |
|      |                   | Cashell Neighborhood Park    | Path        |
| B-39 | Zion Road         | MD 108 to Sundown Road       | Shared Road |

## **Bikeway Network**

