# 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 planning area. It provides the most direct access to the District 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 proposed 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.

Currently, the Olney Master Plan Area has approximately 12,000 households with another 1,515 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 proposed land use and zoning recommendations of this Plan anticipate a build-out capacity of approximately 14,800 households. 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 proposed Master Plan indicates that the Olney Policy Area would have an ACI of 0.55 in 2025.

# 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 Mid-county 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.

3. 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. Do not widen Muncaster Mill Road to increase capacity. Maintain the Master Plan functional classification and recommended right-of-way, and two-lane section 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 including those described as Transportation Policy Report Option 1 and Option 2, may be considered.

- 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.
  - 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.

### Recommendation:

Classify Brookeville Bypass as a Major Highway (M-8) with a 120-foot right-of-way and a maximum of two lanes for through travel, consistent with the adjacent portions of Georgia Avenue.

#### **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.

# **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 Planning Area. 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 an 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 of 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 through the Village Mart Shopping Center property. 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. The current right-of-way between Marksman Circle and James Creek should be retained as a green buffer between the Village Mart property and the adjoining townhouse development.

### **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 through the Village Mart property.
- 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.

Since the Buehler Road connection is not a critical part of the Roadway in and around the Town Center, and connecting Buehler Road would encourage Town Center traffic to travel through the residential communities on Buehler Road and King William Drive, the unbuilt portion of Buehler Road should not be used for vehicular traffic. However, Buehler Road does provide a valuable Town Center connection for pedestrians and bicycles from the adjoining residential communities. The right-of-way, therefore, should be retained for a bicycle and pedestrian path, and the road classification should be changed from A-47 to P-24.

### Recommendations:

- 1. Designate Buehler Road as a primary residential roadway with a 70-foot right-of-way between Prince Philip Drive and Spartan Road.
- 2. Retain the right-of-way for the unbuilt portion of Buehler Road for implementation of an off-road shared use path.

# 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 is 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 Batchellors Forest Road as a rustic road would be appropriate.

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 Georgia Avenue and Dr. Bird Road.
- 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. Once Bordly Drive is extended to Georgia Avenue this portion of Brighton Dam Road will be intended for local use. However, fifteen accidents, unrelated to drugs or alcohol, were reported during the five-year period 1997-2001, which indicates that this portion of Brighton Dam Road is not appropriate for rustic road designation.

Therefore, the rustic road classification is inappropriate for Brighton Dam Road due to its function in the roadway network east of Bordly Drive and its accident history south of Bordly Drive. To best recognize and respect the characteristics that warranted its interim rustic road classification, the entire portion of Brighton Dam Road between the Town of Brookeville and New Hampshire Avenue should be classified as a country road.

### **Recommendations:**

1. Designate Brighton Dam Road as a country road between the Town of Brookeville 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.

# **Evaluation of Interim Rustic Roads**

	Batchellors Forest Road between Georgia Avenue & Dr. Bird Road	Brighton Dam Road between Bordly Drive & Town of Brookeville	Brighton Dam Road between Bordly Drive & New Hampshire Avenue	Triadelphia Lake Road
Compatible Planned Land Use	V	V	V	V
Narrow, intended for Local Use	V	V		V
Traffic Volume Consistent with Rustic Status	V		V	√
Accident History Does Not Suggest Unsafe Conditions	V		V	1
Outstanding Natural Features	V	<b>V</b>		<b>V</b>
Outstanding Vistas of Rural Landscape	V	<b>V</b>		1
Follows Historic Alignments	V	√ 	1	V

# 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 2020 CLV is more than 1800 at some locations, much higher than 1525, the congestion standard for the Olney Policy Area. 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 additional types of intersection improvements 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, however possible, 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 Inter-County 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 two-

lane, 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 line-and-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.

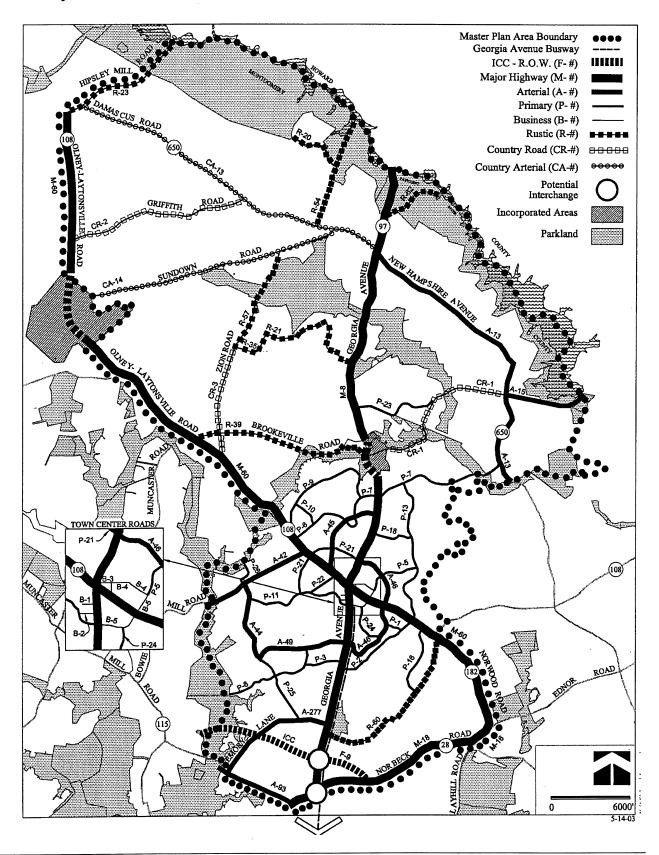
#### Recommendation:

- 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 to optimize busway use through feeder bus service. Limit future park-and-ride options to either 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**

Roadway		Limits	Minimum ROW Width (feet)	Number of Travel Lanes <sup>1</sup>
Freewa	ys			
F-9	Intercounty Connector	North Branch Rock Creek to MD 28	300	6, divided
Major F	lighways	•		1
M-8	MD 97 – Georgia Avenue	MD 28 to Emory Lane	150	6, divided
M-8	MD 97 – Georgia Avenue	Emory Lane to Spartan Road	150	4, divided
M-8	MD 97 – Georgia Avenue	Spartan Road to Prince Philip Road (northern junction)	120	4, divided
M-8	MD 97 – Georgia Avenue	Prince Philip Road (northern junction) to Howard County Line	120	2
M-16	MD 182 – Layhill Road	Ednor Road to MD 28	120	2
M-18	MD 28 – Norbeck Road	MD 115 to MD 182	150	4, divided
M-60	MD 108 – Olney- Laytonsville Road	Hipsley Mill Road to Laytonsville	120	2
M-60	MD 108 – Olney- Laytonsville Road	Laytonsville southern boundary to MD 182	150	4, divided
M-60	MD 182 - Dr. Bird Road	MD 108 to Norwood Road	120	2
M-60	MD 182 - Norwood Road	Dr. Bird Road (MD 182) to Ednor Road	120	2
Arterials	3			
A-13	MD 650 – New Hampshire Avenue	Hawlings River to MD 97	80	2
A-15	Brighton Dam Road	MD 650 to Howard County Line	80	2
A-42	Bowie Mill Road	North Branch Rock Creek to MD 108	80	2
A-44	Cashell Road	Bowie Mill Road to Hines	80	2

<sup>&</sup>lt;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.

Roadway		Limits	Minimum ROW Width (feet)	Number of Travel Lanes <sup>1</sup>
		Road		
A-45	Heritage Hills Drive	MD 97 to MD 108	80	2
A-46	Prince Philip Drive	MD 97 (northern junction) to MD 108	80	4
A-46	Prince Philip Drive	MD 97 (southern junction) to MD 108	80	2 .
A-49	Hines Road	Cashell Road to MD 97	80	2
A-93	MD 115 – Muncaster Mill Road	North Branch to MD 28	80	2
A-277	Emory Lane	MD 115 to MD 97	80	2
Primary	Residential			
P-1	Brimstone Academy Drive	Prince Philip Drive to Old Baltimore Road	70	2
P-2	Old Baltimore Road	MD 97 to MD 108	70	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 Drive	70	2
P-7	Gold Mine Road	Heritage Hills Drive to MD 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 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 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 Extended	MD 108 to Batchellors Forest Road	70	2
P-18	Owens Road	MD 97 to Old Baltimore Road	70	2

Roadwa		Limits	Minimum ROW Width (feet)	Number of Travel Lanes <sup>1</sup>
P-21	Queen Elizabeth Drive	MD 97 to Morningwood Drive	70	2
P-22	Headwaters Drive	MD 108 to Morningwood Drive Extended	70	2
P-23	Bordly Drive	MD 97 to Brighton Dam Road	70	2
P-24	Buehler Road	Prince Philip Drive to Spartan Road	70	2
P-25	Cashell Road	Emory Lane to Hines Road	70	2
P-26	Wickham Drive/Wickham Road	Bowie Mill Road to Plan Boundary	70	2
Rustic F	Roads			
R-20	Elton Farm Road	Howard Chapel Road to 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 Road	70	2
R-60	Batchellors Forest Road	MD 97 to MD 108	70	2
R-61	Brighton Dam Road	Town of Brookeville to Bordly Drive	70	2
R-62	Triadelphia Lake Road	MD 97 to End of Road	70	2
Country Arterials				
CA-13	MD 650 - Damascus Road	MD 97 to Hipsley Mill Road	80	2
CA-14	Sundown Road	Town of Laytonsville to MD 650	80	2

Roadway		Limits	Minimum ROW Width (feet)	Number of Travel Lanes <sup>1</sup>
Country	Roads			
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	s District Roads			
B-1	Third Avenue	MD 97 to 400 feet west of MD 97	70	2
B-2	North High Street	MD 97 to Morningwood Drive	70	2
B-3	Hillcrest Avenue	MD 108 to MD 97	70	2
B-4	Appomattox Avenue	Spartan Road to Hillcrest Avenue	80	2
B-5	Spartan Road	MD 97 to Appomattox 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 places special emphasis 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. This network will be implemented though public improvements (CIP) and through subdivision process. All new developments within close proximity to the proposed network should be connected to it whenever possible. The 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 Countywide Master Plan of Bikeways 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 proposed 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 two feet, although four feet 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.

# **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
Batchellors Forest Road	Emory Church Lane to Dr. Bird Road	Shared Road
Bloomfield Road	Rolling Acres Way to Olney Mill Road	Shared Road
Bordly Drive	MD 97 to Brighton Dam Road	Shared Use Path
Bowie Mill Road	MD 108 to North Branch Rock Creek	Bike Lanes
Briars Road	MD 108 to Heritage Hills Drive	Shared Road
Brighton Dam Road	Bordly Drive to County line	Shared Road
Brimstone Academy	Old Baltimore Road to Prince Philip Drive	Shared Road
Brookeville Bypass	Along Brookeville Bypass	Bike Lanes
Buehler Road	Prince Philip Drive to Buehler Road Connector	Shared Road
Buehler Road	Buehler Road Connector to Spartan Road	Shared Road
Buehler Road Connector	In the unpaved right-of-way of Buehler Road	Shared Use Path
Cashell Road	Bowie Mill Road to Emory Lane	Shared Road
Charley Forest Street	Between Olney Mill Road and the park	Shared Road
Cherry Valley Drive/Wellfleet Drive	North Branch of Rock Creek to Hines Road	Shared Road
Church Street/ Market Street	Through Brookeville	Shared Road
Dr. Bird/Norwood Road (MD 182)	MD 108 to Layhill Road	Shared Use Path
Emory Church Lane	Georgia Avenue to end of the current paved section	Shared Road
Emory Church Lane	Emory Church Lane to Batchellors Forest	Shared Use Path
Connector Emory Lane	Road (in existing unpaved right-of-way) MD 97 to Muncaster Mill Road	Shared Use Path
Gandel Property		
Connector	Batchellors Forest Road to Intercounty Connector (ICC) right-of-way	Shared Use Path
Gold Mine Road	MD 97 to Old Baltimore Road	Bike Lanes

Bikeway	Location	Туре
Gold Mine Road	Old Baltimore Road to MD 650	Shared Road
Goose Creek Road/Macduff Avenue	Cashell Road Local Park to Cashell Road	Shared Road
Hines Road	Cashell Road to Georgia Avenue	Bike Lanes
ICC Bikeway	Along the entire ICC ROW	Shared Use Path
Lafayette Drive	Queen Mary Drive to Hines Road	Shared Road
Layhill Road (MD 182)	Norbeck Road to Ednor Road	Shared Use Path
MD 108	Hipsley Mill Road to southern boundary of Laytonsville	Shared Road
MD 108	Southern boundary of Laytonsville to eastern limit of the Master Plan area	Shared Use Path
Damascus Road/New Hampshire Avenue (MD 650)	Hipsley Mill Road to eastern edge of the Master Plan boundary	Bike Lanes
MD 97	Brookeville Bypass to County Line	Bike Lanes
MD 97	Norbeck Road (MD28) to Brookeville Bypass	Shared Use Path
Morningwood Drive	MD 97 to Queen Elizabeth Drive	Shared Road
Muncaster Mill Road	MD 28 to Plan Boundary	Shared Use Path
Norbeck Grove Bike Path	North Branch Rock Creek to MD 108 (on the HOA property)	Shared Use Path
Norbeck Country Club Connector	Hines Road to North Branch Rock Creek	Shared Use Path
Norbeck Road (MD 28)	Muncaster Mill Road to Layhill Road	Shared Use Path
Northwest Investment Property Connector	Batchellors Forest Road to Old Baltimore Road (connects Batchellors Forest Road with Brimstone Academy and into Hallowell community).	Shared Use Path
Old Baltimore Road	Gold Mine Road to MD 108	Shared Road
Old Vic Blvd. Extended	Farquhar Middle School to MD 108	Shared Use Path
Olney Boys and Girls Club Connector	Charley Forest Road to Olney Boys and Girls Club (across parkland to OBGC)	Shared Use Path
Olney Manor Park	Emory Church Lane to Batchellors Forest Road (could be routed through Kimble property, if acquired)	Shared Road

Bikeway	Location	Туре
Olney Mill Road	MD 108 to Gold Mine Road	Shared Road
Owens Road	MD 97 to Old Baltimore Road	Shared Road
Pinetree Road	Sycamore Lane to Emory Lane	Shared Road
Prince Philip Drive	MD 97 to MD 108, MD 108 to MD 97 (existing bikeway is not built to standards)	Shared Road
Queen Elizabeth Drive	Morningwood Drive to MD 108	Shared Road
Queen Elizabeth Drive	Rolling Acres Way to MD 97	Shared Road
Queen Elizabeth Drive	MD 108 to Rolling Acres Way	Shared Use Path
Queen Mary Drive	MD 97 to Lafayette Drive	Shared Road
Rolling Acres Way	Queen Elizabeth Drive to Briars Road	Shared Road
Spartan Road	MD 97 to Old Baltimore Road	Shared Road
Sundown Road	MD 108 to MD 650	Shared Road
Sycamore Lane	Muncaster Mill Road to Pinetree Road	Shared Road
Utility ROW-Gas	Cashell Neighborhood Park to Queen Elizabeth Drive	Shared Use Path
Utility ROW-Pepco	Norbeck Grove Bike Path to Cashell Neighborhood Park	Shared Use Path
Zion Road	MD 108 to Sundown Road	Shared Road

# **Bikeway Network**

