

## 7.0 Recommendations

The State of Maryland has an existing process for establishing local priorities through county and regional priority letters and a public meetings with political leaders in each county and region, known as the Secretary's Annual Capital Program Tour. The three counties of Southern Maryland have been working together for many years to develop joint priorities for the region and submit a Tri-County Council's priority letter each year as part of the capital programming process.

The recommendations presented here are not intended to supersede the existing process within Maryland for establishing recommendations and priorities. The Needs Assessment does lend analytic support to the existing set of priorities outlined in the Tri-County Council for Southern Maryland's priority letter, and the specific support for these recommendations are noted throughout this section.

In addition to the projects identified, these recommendations also list strategies and policies that can and should be implemented to support the development of the transportation system in Southern Maryland. These policies and strategies represent best practices in transportation system development that are appropriate for Southern Maryland and help ensure that future capital investments will provided the expected benefits.

### 7.1 LAND USE POLICIES AND STRATEGIES

Preparing for the expected growth in Southern Maryland through rational, ordered land use planning will minimize required transportation system expenditures and support multimodal transportation systems. Many of the most densely populated areas of Southern Maryland have developed according to auto-oriented land use principles. This style of development has contributed to the high levels of traffic congestion currently experienced by many residents in the region. **It is strongly recommended that future development and redevelopment be accommodated through Smart Growth principles to promote activity centers and more dense development in designated growth areas, or Priority Funding Areas and to mitigate potential negative environmental impacts. This should be accomplished using transit-friendly land use strategies to allow for transit services to be expanded and improved in step with this new development and allow for transportation corridors, including highways, to be maintained in a safe and efficient manner. A balance in transportation and land use is essential to maintain a healthy quality of life in Southern Maryland. This includes key elements such as multimodal transportation planning, integrated planning, promoting transit and non-motorized transportation uses (hiker/biker trails), ridesharing, and access management.**

There are four fundamental land use criteria that must be in place to enable a successful transit program.<sup>41</sup> These are:

1. **Population Size** – Are the number of people who live and work along the transit route sufficient for transit service?
2. **Density** – Is the population sufficiently concentrated to provide a market for transit services?
3. **Concentrated Locations** – Are the locations of land uses concentrated near potential transit stops?
4. **Mixed Use** – Are there a mix of land uses to minimize travel to frequently used places?

The following **land use policies and strategies, if implemented, will enable the region to meet the thresholds of population and land use densities required to create highly functioning and progressive transit systems.**

### **Regional Growth Management**

Regional growth management efforts seek to influence urban form at a regional level by using a regional agency to support local planning efforts. The key recommendations for implementing regional growth management include:

- **Develop a Regional Growth Strategy Led by the Tri-County Council for Southern Maryland.** Currently, each county has their own comprehensive plan. Though these are critical to ensuring that development occurs in accordance with each county's specifications, Southern Maryland could develop a land use and growth vision to be used as an overall guide. This vision would help ensure the use of a common set of principles for all land use planning within the region and an understanding of the region's development capacity.
- **Continue to develop and implement access management strategies.** Each of the counties of Southern Maryland has access management policies in place. These will need to continue to be developed as part of the comprehensive planning process, corridor planning, and review of new developments. Given the growth expected in Southern Maryland, it is especially important that new developments provide an effective local network so that the state highway system can effectively provide for interregional and through trips.

---

<sup>41</sup>Guidelines For Transit-Sensitive Suburban Land Use Design, by Edward Beimborn, Harvey Rabinowitz, and Peter Gugliotta, The Center for Urban Transportation Studies, The University of Wisconsin Milwaukee.

## Focus on Development Nodes

Development nodes are areas of focused development, such as population concentrations, major employment centers, and commercial districts.

- **Focus Majority of Development in Activity Centers/Town Centers.** Land use patterns are one of the largest influences on trip-making. Concentrating new development can positively impact intraregional travel and enhance the viability of alternative modes of transportation.
- **Ensure a Mix of Uses within each Node.** Transit, walking, and biking to and within an activity center is easier when people have access to multiple types of development. The concentration of various types of activities also improves transit viability.

## Develop Design Guidelines

Design guidelines focus at the site level, facilitate pedestrian access to transit, and allow for efficient transit operations.

- **Focus on transit when conducting development and site plan reviews.** As the counties conduct development reviews, they should include criteria to consider transit accommodation, from both the customer and operator perspectives.
- **Focus on transit customer needs.** Accessibility of transit service should be considered when reviewing plans for new developments or changes to existing developments.
- **Focus on transit operator needs.** Efficient transit operations require maneuverability. Appropriate design ensures that transit vehicles are accommodated and can quickly enter and leave bus stops and transit stations.

## Transit-Oriented Development/Smart Growth

Transit-Oriented Development (TOD) initiatives generally operate at the *community* level, and aim to create neighborhoods that are compact, mixed-use, pedestrian-friendly, and near transit stops. TOD and smart growth recommendations include forming partnerships between land use planners and transit operators and developing planning studies in priority areas.

- **Form partnerships between land use planners and transit operators.** Land use planners should work closely with local bus operators, MTA, and WMATA to ensure that land use plans are consistent with transit plans.

- **Develop planning studies in priority areas.**<sup>42</sup> Conceptual plans should be prepared for priority areas that focus on transit-oriented development and smart growth principles.

## 7.2 TRANSIT

### Policies and Strategies

Primary transit strategies and policies for Southern Maryland to pursue have been identified in the areas of park-and-ride lots, commuter bus service, local transit coordination, transit information and dissemination, and high-capacity transit service. **To fully realize the potential of transit to improve the quality of life in Southern Maryland, the land use strategies outlined in the previous section must be implemented.**

#### *Expand/Improve Commuter Bus Service*

Commuter bus service can be expanded by adding trips to existing routes and by adding new routes. Operational improvements can improve travel time reliability for bus riders and can provide a competitive advantage over use of a personal vehicle. Increasing the ridership on the commuter bus system improves the performance of the regional transportation system. The following strategies should be considered to expand and improve the commuter bus system in Southern Maryland:

- **Perform a comprehensive review of commuter bus service serving Southern Maryland and make recommendations for change.** Origin destination analysis suggests that additional service between Southern Maryland and Prince George's County may be warranted. It also suggests a market for increased bus service to the Lexington Park area including the Patuxent River Naval Air Station. MDOT and MTA should regularly review the services provided to Southern Maryland to maximize their use and efficiency.
- **Study the feasibility of operational improvements.** Queue jump lanes, transit signal priority, and access to expressway shoulders for commuter buses can provide a competitive advantage over use of a personal vehicle. Southern Maryland, SHA, and MTA should jointly identify the potential for these types of improvements.
- **Improve amenities at park-and-ride lots,** including bus shelters and stations to limit exposure to rain, snow, sun, and cold temperatures.
- **Provide easily accessible information on the web and at park-and-ride lots,** including routes and destinations served, schedules, maps, trailblazing signs,

---

<sup>42</sup>Charles County Comprehensive Plan, 2006.

lot status signs, and, to the extent possible, real-time bus arrival and departure information.

- **Provide local bus service to park-and-ride lots** on schedules coordinated with MTA commuter buses and develop intermodal transfer stations to help concentrate local bus routes around major park-and-ride facilities and enable sharing of the operating costs of these facilities.
- **Encourage multiple uses of park-and-ride lots** such as carpools and vanpools.
- **Add park-and-ride lot capacity** where needed to support growth of the commuter bus system, including working with local jurisdictions and other partners to identify both long-term lot development opportunities and short-term lots, such as those at malls and churches.
- **Streamline planning, development, and construction of park-and-ride lots.** MTA, SHA, and County planners need to work together to ensure that park-and-ride lots, once approved and funded, are brought on line in a smooth and efficient manner.

### ***Improve Local Transit Service and Coordination***

Each county in Southern Maryland operates an independent local transit service. Increasing commuting between counties and general growth require that the region examine potential coordination and expansion of services. Specific recommendations include:

- **Study regional coordination of local bus routes.** To better serve riders, the counties of Southern Maryland should consider a regional approach to route planning, including increased cooperation and information sharing among local transit agencies; formal coordination of decisions and actions among the agencies; or consolidation of operational authority into a single regional agency.
- **Improve convenience for intraregional work trips.** With increasing growth and traffic, local transit agencies should evaluate intraregional commuter services and local circulator services within major activity centers, such as Waldorf and Lexington Park.

### ***Implement Feasible High-Capacity Transit Options***

As Southern Maryland continues to grow, options for high-capacity transit will become increasingly feasible. The MD 5/U.S. 301 corridor will likely be the first to be able to support a high-capacity route.

In October 2004, MTA completed the *MD 5/U.S. 301 Transit Service Staging Plan*, which outlined four alternatives for staged implementation of higher capacity transit in the corridor: Enhanced Commuter Bus; Moderate-Level Bus Rapid Transit (BRT); High-Level BRT; and Light Rail Transit. MTA is currently con-

ducting a study to identify right-of-way needs for a transitway alignment, for stations, and for park-and-ride lots along the 18-mile corridor between the Branch Avenue Metrorail station and White Plains. High-capacity transit in Southern Maryland should be supported in the following ways:

- **Preserve right-of-way along the transitway identified in the MTA study.** Preserving right-of-way for the transitway will maintain the feasibility of this option. Without preservation, residential and commercial development along the transitway will make it much more difficult and expensive to build.
- **Support the results of the commuter rail feasibility study.** The MTA is about to study the feasibility of establishing commuter rail service between Washington, D.C. and St. Mary's County.

### **Transit Projects**

The following set of transit projects have been identified for Southern Maryland based on the Tri-County priority letter and the analysis contained within the Needs Assessment. Regionally significant highway projects are listed first, followed by a specific list of additional priority projects for each county.

#### ***Regionally Significant Projects***

- Accelerate Mass Transit improvements in Southern Maryland including the accelerated implementation of the Transit Service Staging Plan in the U.S. 301/MD 5 corridor. Implementation of regional transit improvements would include:
  - Enhanced commuter bus service from Calvert, Charles, and St. Mary's Counties to the metropolitan Washington area – including Prince George's County;
  - Construction of six additional park-and-ride lots – two in each county;
  - Accelerated Mass Transit improvements in the U.S. 301/MD 5 corridor including identification and preservation of a transit right-of-way, enhanced commuter bus service, bus rapid transit to fixed-rail transit from Waldorf-White Plains to the Branch Avenue Metro station (*map location T3*);

**Table 7.1 County Transit Projects of Regional Importance**

Description	Map Location <sup>a</sup>
<i>Calvert County</i>	
Construct park and ride lots at Dunkirk and Prince Frederick	T1
Establish commuter bus service from Calvert County to the Suitland Metrorail Station and/or other employment destinations in Prince George's County	T2
Continue to monitor park-and-ride lot needs. Acquire land and develop park-and-ride lots as required	N/A
<i>Charles County</i>	
Construct park-and-ride lots at Waldorf and La Plata	T1
Enhance commuter bus service from Charles County to employment centers in the Washington, D.C. area including Prince George's County	N/A
Build a transfer station for Charles County VanGO service at the U.S. 301 park-and-ride lot	T6
Continue to monitor park-and-ride lot needs. Acquire land and develop park-and-ride lots as required	N/A
<i>St. Mary's County</i>	
Construct park-and-ride lots at Charlotte Hall and New Market	T1
Continue to monitor park-and-ride lot needs. Acquire land and develop park-and-ride lots as required	N/A
Enhance commuter bus service along the MD 235/MD 5 corridor	T5
Explore commuter bus service to the Patuxent River Naval Air Station to include additional transit service on-base and shuttle service between the base and local businesses along MD 235	N/A

<sup>a</sup> Map locations are for Figure 7.1.

## 7.3 HIGHWAY

Southern Maryland is a peninsula bisected by the Patuxent River. As a result, the region relies on elements of highway infrastructure to provide connections within Southern Maryland, to the rest of Maryland, and to the U.S. as a whole. This includes the Governor Thomas Johnson Memorial, Governor Harry W. Nice Memorial, Benedict, and other bridges, several of which are in need of additional capacity. The following set of strategies, policies, and projects are intended to identify the capacity needs of the region and the set of policies and strategies that can help Southern Maryland address expected future growth.

### Strategies and Policies

Primary highway strategies and policies for Southern Maryland to pursue have been identified in the areas of access management, operations, and travel demand management. Highway strategies should be implemented in conjunc-

tion with land use strategies to ensure an organized pattern of development in Southern Maryland and increase the efficient use of the transportation system.

### ***Access Management***

As the population of Southern Maryland continues to grow, increased long-distance commuting will result in greater demands on the region's arterials. Allowing unrestricted access to these arterials from new and existing developments will exacerbate congestion and safety issues over and above that caused by increasing through traffic. Implementing the following recommendations will help to preserve arterial capacity for through traffic and improve traffic safety.

- **Formally address access management in all county transportation plans and State or local corridor plans.** The legal and policy components of access management should be in place in corridors before extensive development occurs. Counties should require access control plans that meet their policy goals and minimize new accesses to arterials for new developments.
- **Partner with MDOT and SHA to strengthen access management.** County and SHA planners should work together to ensure that county land use plans and arterial access management plans are coordinated. Since private interests frequently use the political process to obtain direct access to arterials, State and County elected leaders and policy makers should be aware of the importance of access management to traffic flow and safety.
- **Require circulation plans for municipalities and new large-scale development that conform to access management guidelines in the region.** As the Counties of Southern Maryland review new development plans, the counties of Southern Maryland should ensure an acceptable level of local circulation that protects the capacity of the State and regional arterial system.
- **Increase spacing of signalized intersections on major arterials where possible.** In locations where closely spaced signalized intersections already exist along arterials, one or more of the following actions should be considered:
  - Restrict cross movement from the side roads and use J-turns;
  - Limit arterial left-turn movements;
  - Remove the signalized intersection and force right-turn movements at the intersection or construct overpasses or underpasses;
  - Build service or frontage roads to consolidate access points; or
  - Replace intersections with grade-separated interchanges.
- **Reduce private access to arterials.** Fewer driveways spaced farther apart allow for more orderly merging of traffic.
- **Create an effective local roadway network.** An effective local roadway network enables traffic to access local developments without using arterial

highways thereby preserving their functional capacity for through trips and provides alternate routes for local and through traffic in the event of a mainline emergency.

### ***Operations***

Different types of operational strategies can be used to address recurring and nonrecurring congestion. Maryland's Coordinated Highways Action Response Team (CHART) recently completed a Rural Management and Operations/ Intelligent Transportation Systems (M&O/ITS) Strategic Deployment Plan for the State of Maryland. The Plan identifies several strategies for Southern Maryland that should be implemented as soon as practical, including:

- Creating a new CHART Traffic Operation Center (TOC) in Southern Maryland;
- Deploying dynamic message signs (DMS), closed circuit television cameras, roadway weather information systems, and traffic speed detectors at appropriate locations;
- Installing emergency evacuation guide signs; and
- Expanding CHART's Freeway Incident Traffic Management Plan into Southern Maryland.

An additional operations improvement strategy is to improve and coordinate signal timing in key corridors. Currently, the State Highway Administration (SHA) examines traffic signal timing on a three-year rotation. Southern Maryland and the SHA should continue to refine the timing of individual traffic signals and consider coordinating signal timing along key corridors, such as U.S. 301 from White Plains to the Prince George's County line and the MD 2/4 Corridor through Prince Frederick.

### ***Safety***

Maryland's Strategic Highway Safety Plan (SHSP) is a working document that provides a framework for reducing highway fatalities and serious injuries on all public streets and highways. The SHSP applies the 4E's of highway safety: Enforcement, Education, Engineering, and Emergency Medical Services, across the following emphasis areas:

- Reduce Impaired Driving;
- Improve Information and Decision Support Systems;
- Eliminate Hazardous Locations;
- Increase Occupant Protection;
- Improve Driver Competency;

- Curb Aggressive Driving; and
- Improve Emergency Response System.

Current SHSP efforts are focused on creating regional implementation plans based on crash data analysis. The Tri-County Council for Southern Maryland is playing a key role in this effort by facilitating cooperation and coordination of the SHSP implementation efforts among Calvert, Charles, and St. Mary's counties and by organizing the political support required to implement the identified behavioral and infrastructure safety priorities for the region.<sup>43</sup>

In addition to the SHSP, many of the highway strategies related to access management and operations, if implemented, will have a positive impact on highway safety. Access management strategies improve safety by removing conflict points and managing access to the regions arterials, while operations strategies improve safety by improving response time to incidents, providing real-time incident information to the public, and monitoring roadway weather conditions.

### ***Security***

Each county in Southern Maryland has emergency evacuation information available on their web sites. This information is primarily focused on evacuation routes and locations of shelters hospitals, police stations, etc.

The Maryland CHART (Coordinated Highways Action Response Team) Program, a joint effort of MDOT, MTA, and Maryland State Police, published the *Rural Management and Operation Systems (M&O)/Intelligent Transportation Systems (ITS) Strategic Deployment Plan* in March 2007. The document outlines a strategy for deploying ITS in the rural areas of the State, including Southern Maryland.

The primary focus of this Plan is to define the M&O and ITS planning and deployment needs of rural Maryland that would lead toward reduced seasonal highway congestion, better information to motorists of evacuation and emergency procedures, and improved communications with neighboring areas.

Specific recommendations related to evacuation planning for Southern Maryland include:

- Installation and testing of 700 to 800 MHz radios for emergency operation control;
- Digital Message Signs for vital decision points for diversion routes;
- Installation of guide signs directing motorists to specific routes in the event of an emergency situation;
- Improved regional coordination in advance of emergency evacuations to develop workable strategies for detours and sheltering;

---

<sup>43</sup>Maryland Safety Summit, November 2007.

- Update of each County's Evacuation Plan to reflect the destinations and routing of evacuees; and
- Establishment of a working group in Southern Maryland to support the use and maintenance of the Strategic Plan.

### ***Travel Demand Management***

Travel Demand Management (TDM) strategies are relatively low-cost solutions to reduce vehicular traffic at a regional level. These strategies include or are related to carpools, vanpools, biking, walking, alternative work-hours or work-place programs, and parking management. Strategies to preserve important places, landscapes, and critical features can support TDM strategies by promoting more compact development which in turn encourages carpools, vanpools, etc. The following low-cost strategies should be pursued to reduce regional travel:

- **Promote telecommuting, alternative work hours, and compressed work week programs.** State and county agencies can promote these programs through marketing or incentives. These methods have the greatest effectiveness when combined.
- **Continue to encourage ridesharing and vanpooling.** The Tri-County Council for Southern Maryland has a full-time staff person dedicated to outreach on this topic. Ridesharing helps to reduce congestion and VMT while providing more modal options and accessibility. Strategies to increase ridesharing and vanpooling include:
  - Targeted incentives to employers or participants;
  - Education and outreach programs that increase the awareness of ridesharing opportunities;
  - A one-stop Internet portal that provides ridematching services and information on connecting modes; and
  - A guaranteed ride home program that accommodates unforeseen work schedule changes.

### **Highway Projects**

The following set of highway projects have been identified for Southern Maryland based on the Tri-County Council for Southern Maryland's priority letter, the CTP, the HNI, public input, and the analysis contained within the Needs Assessment. Regionally significant highway projects are listed first, followed by a list of additional priority projects for each county. Note that while the identified projects are located within Calvert, Charles, and St. Mary's counties, projects in Prince George's and Anne Arundel counties are also important to the residents of Southern Maryland. In particular, implementation of identified CTP and HNI projects along the MD 210, MD 5, and MD 4 corridors in Prince

George's County and along the MD 2, MD 4, and MD 260 corridors in Anne Arundel County will reduce travel time and improve safety for Southern Maryland residents who commute to destinations north of Calvert and Charles counties.

### **Top Regional Priorities**

- Construct a Western Bypass of Waldorf with controlled access, selecting the alignment with the least environmental impact on the Mattawoman Creek watershed.<sup>44</sup> Construct a limited upgrade of U.S. 301 through Waldorf to facilitate traffic flow and relieve congestion at failing intersections and create a “boulevard” design for Charles County’s “main street” with minimum impact on commercial businesses in the Corridor (*map location 17 in Figure 7.1*); and
  - The northernmost portion of U.S. 301 through Waldorf currently is operating at level of service (LOS) E or F. Many intersections along the route are currently or will soon be operating at LOS E or F. Many others are predicted to be at LOS D. Completion of a Western Bypass should improve the LOS on existing U.S. 301.
- Build a second span of the Governor Thomas Johnson Memorial Bridge. Widen MD 4 from the Governor Thomas Johnson Memorial Bridge to MD 235. Upgrade the intersection of MD 4 and MD 235 (*map location 1 in Figure 7.1*).
  - MD 4 currently operates at a poor LOS from the Thomas Johnson Memorial Bridge to the MD 235 intersection. Analysis of 2030 conditions show continued poor LOS along this roadway segment and beyond the MD 235 intersection to MD 5 near Leonardtown.

### **Regionally Significant Projects**

- Reconstruct the intersection of MD 2/4 and MD 231 in Prince Frederick (*map location 7 in Figure 7.1*);
- Widen MD 2/4 from south of MD 765A to north of Stoakley Road through Prince Frederick (*map location 6 in Figure 7.1*); and
- Widen MD 2/4 from MD 264 to MD 765A south of Prince Frederick (*map location 5 in Figure 7.1*).

---

<sup>44</sup> Prince George's County prefers an upgrade of U.S. 301 rather than a bypass of Waldorf.

## County Projects of Regional Importance

**Table 7.2 County Highway Projects of Regional Importance**

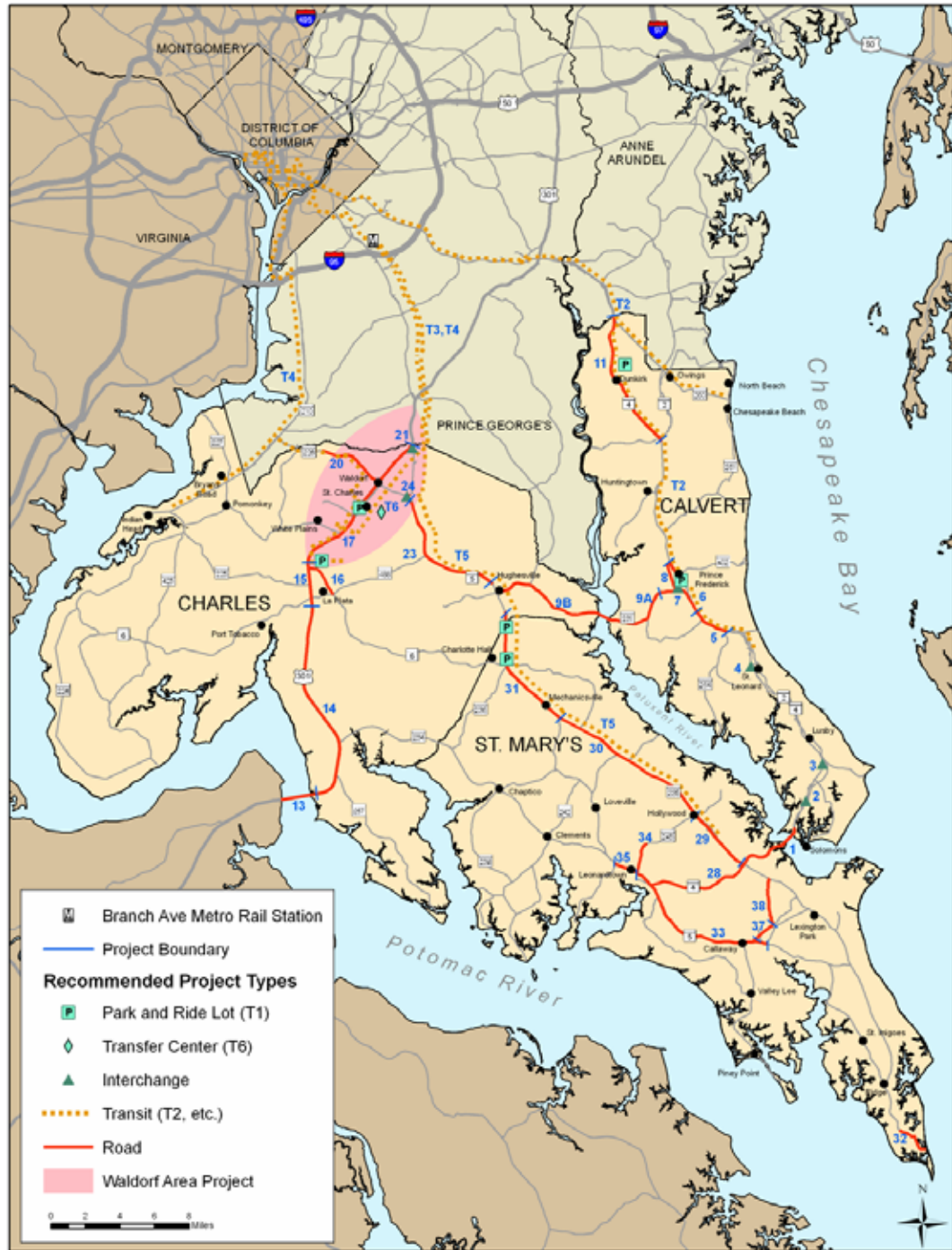
Road	Description	Map Location <sup>a</sup>
<i>Calvert County</i>		
MD 231	Widen from Barstow Road to MD 2/4 in Prince Frederick	9A
Prince Frederick Loop Road	Complete construction of the Prince Frederick Loop Road	8
MD 4	Widen from MD 2/4 to MD 258 with a focus on the section though Dunkirk	11
MD 2/4	Construct an interchange at Lusby Southern Connector Road	2
MD 2/4	Construct an interchange at MD 497	3
MD 2/4	Construct an interchange at Ball/Calvert Beach Roads	4
<i>Charles County</i>		
U.S. 301	Accelerate completion of the SHA Project Planning Study and Environmental Impact Statement for the U.S. 301 Study – Waldorf Upgrade/Bypass	17
MD 6	Build the MD 6 connector in the town of La Plata from MD 6 at Willow Lane to U.S. 301. This segment is projected to be heavily congested by 2020	16
MD 5	Improve the intersection at St. Charles Parkway by building an interchange	24
U.S. 301/MD 5	Construct an interchange at U.S. 301 and MD 5. The intersection will soon be operating at LOS E or F	21
MD 231	Widen between MD 5 and the Benedict Bridge with a focus on the section between MD 5 and MD 381. This section will function at LOS E/F by 2030.	9B
U.S. 301 Governor Harry W. Nice Memorial Bridge	Expand the Governor Harry W. Nice Memorial Bridge to facilitate the flow of traffic at the toll facilities and improve access from Maryland to Virginia. While currently operating at LOS D, the Bridge is projected to operate at LOS E by 2030	13
U.S. 301	Implement access controls from South of La Plata to the Potomac River	14
U.S. 301	Widen from South of La Plata to White Plains	15, 17 (part)
MD 5	Widen from North of Hughesville to MD 5 Bus/St. Charles Parkway	23
MD 228	Widen from Middletown Road to U.S. 301	20
<i>St. Mary's County</i>		
MD 237	Widen Chancellors Run Road (MD 237) from Pegg Road to MD 235 in Lexington Park	38
Pegg Road	Extend Pegg Road to MD 5	37
MD 5	Widen from MD 243 to MD 245	35

<sup>a</sup> Map locations are for Figure 7.1.

Road	Description	Map Location <sup>a</sup>
<i>St. Mary's County (continued)</i>		
MD 5	Widen from MD 246 to MD 245 with a focus on the section between MD 4 and MD 245. Some segments currently operate at LOS E or F with more expected to deteriorate to this level by 2020.	33
MD 4	Widen from MD 5 to MD 235. The section between MD 235 and Indian Head Road is projected to be at LOS E or F by 2030.	28
MD 235	Widen from MD 4 to MD 245. Five intersections in this segment are currently operating at LOS E or F. Widening this section with access controls will benefit a highway segment that currently has no access control and reduce delay at the poorly functioning intersections.	29
MD 245	Widen from MD 5 to McIntosh Road. This section is projected to operate at LOS E or F by 2030	34
MD 5	Widen from MD 235 to the Charles County Line	31
MD 235	Implement access controls from MD 245 to MD 5	30
MD 5	Reconstruct from Ranger Station to Camp Brown Road. This section has narrow lanes and no shoulders. Summer traffic is heavy on this section and enforcement efforts will be improved with the addition of shoulders	32

<sup>a</sup> Map locations are for Figure 7.1.

Figure 7.1 Locations of Transit and Highway Project Recommendations



Source: Cambridge Systematics, based on data from State Highway Administration, Maryland Transit Administration, and Tri-County Council for Southern Maryland.

## 7.4 BICYCLE AND PEDESTRIAN POLICIES AND STRATEGIES

Policies and strategies to promote bicycle and pedestrian activity relate to improved modal and neighborhood connectivity, improved facilities, and improved safety.

### Improve Connectivity

To allow for increased bicycling and walking connections among transit facilities, residential areas, activity centers, parks, and tourist attractions should be maintained where existing and established where missing. The following strategies support increased connectivity.

- **Focus on improving Bicycle Level of Comfort (BLOC)** along key roadway segments identified in the Maryland Bicycle and Pedestrian Access Master Plan and on appropriate County and local roadways.
- **Expand the off-road trail system and create linkages among existing trails** by implementing the recommendations of the *Southern Maryland Regional Trail and Bikeway System Study*. Connect bike paths, sidewalks, and trails to fill in any gaps.
- **Enhance and expand bicycle and pedestrian access to transit.**

### Improve Facilities

To ensure that bicycle and pedestrian facilities are improved and appropriately maintained, the following strategies are recommended.

- **Integrate bicycle and pedestrian facilities into roadway development projects at both the State and local level.** These facilities can include wider lanes, bike lanes, paved shoulders, and bike safe storm drains.
- **Integrate bikeway and sidewalk maintenance and cleaning into established roadway maintenance routines.**

### Improve Safety

To improve safety for bicyclists and pedestrians the following strategies are recommended.

- **Develop bicycle and pedestrian safety plans for each County in cooperation with the State's Strategic Highway Safety Plan.**
- **Plan, design, and construct bicycle and pedestrian facilities using appropriate design standards.**
- **Provide pedestrian and bicycle traffic control devices where appropriate.**
- **Provide bicycle and pedestrian route signage as appropriate.**

## **7.5 BARRIERS AND CHALLENGES**

Southern Maryland will face barriers and challenges to implementing the identified projects and strategies. These barriers and challenges generally fall into the following categories:

- Funding challenges;
- Growth, planning and zoning challenges;
- BRAC issues; and
- Geographical limitations.

### **Funding Challenges**

Several of the top priority projects for the Southern Maryland region are for significant investments in new capacity or improved infrastructure that easily exceed the funding that has typically been available to transportation projects in the region. Notable examples include additional capacity for the Governor Thomas Johnson Memorial and the Governor Harry W. Nice Memorial Bridges. Major infrastructure projects, such as these, will require careful examination of potential revenue sources. There will be no easy solutions, and Southern Maryland and the State of Maryland may need to explore potential Federal funding options, pricing strategies, innovative financing arrangements, and other strategies.

#### ***Federal Funding***

One key funding challenge facing Southern Maryland, as well as the State of Maryland and the nation as a whole, is the growing surface transportation investment gap. In testimony before the U.S. House of Representatives Committee on Transportation and Infrastructure on January 15, 2008, the National Surface Transportation Policy and Revenue Study Commission stated that addressing this investment gap would require annual investments of between \$225 billion and \$340 billion (compared the current \$68 billion) over the next 50 years to upgrade all modes to a state of good repair.

This gap has resulted from a funding mechanism (the gas tax) that has not grown at the Federal level in over 20 years; the Federal transportation trust fund continues to lose purchasing power each year. In combination with rising construction costs due to increases in oil and material costs, it has become difficult for states to generate enough revenue to address major projects.

Similar investment gaps are evidenced throughout all states, regions, and localities, including Southern Maryland. The high demand for transportation infrastructure projects combined with limited funding results in an environment where even worthy projects may not be funded due to greater needs demonstrated somewhere else.

### ***State and Local Funding***

Between \$6.0 and \$7.3 billion in total unfunded transportation system needs have been identified through the Southern Maryland Transportation Needs Assessment, but only between \$640 and \$770 million are expected to be available to Southern Maryland over this period. Considering only the top priority projects leaves a gap of at least \$1.5 billion, not including the proposed high capacity transit service in the MD 5/U.S. 301 Corridor, which could cost up to \$1.2 billion. The top priority projects identified for Southern Maryland include several ‘mega projects’ such as a new span of the Thomas Johnson Memorial Bridge and a bypass around Waldorf. Projects of this magnitude will always pose funding challenges.

Finding funding for mega projects and addressing the overall gap in resources will require a combination of federal, state, and local efforts, as well as potential toll revenues. The State, through a Fall, 2007 special legislative session generated new funding for key projects in Southern Maryland, including planning for upgrades to MD 4 and the Thomas Johnson Memorial Bridge, the Waldorf bypass, and the Southern Maryland Commuter Bus program. However, the current fiscal challenges facing the State and nation will present additional hurdles challenges in the years ahead.

Local government participation in projects will be essential to further their development, including assisting in purchasing or otherwise preserving right-of-way for new transportation infrastructure. Other methods existing to generate funding for transportation, including local option sales taxes, tax increment financing and other value capture methods, property taxes, payroll taxes and others. Some of these methods would require State enabling legislation (such as a local option sales tax) and all would have to be carefully evaluated for their ability to generate revenue and their appropriateness for Southern Maryland.

### **Base Realignment and Closure (BRAC) Challenges**

Maryland has been fortunate to benefit from the most recent round of BRAC. Although the military bases in Southern Maryland were not significantly impacted, the BRAC process highlights the value of military installations to all of Maryland. For example, Andrews Air Force Base in nearby Prince George’s County will experience significant job growth as a result of this most recent BRAC round. This will impact traffic volumes along MD 4 and U.S. 301, key commuter corridors for Southern Maryland residents working in the Washington, D.C. area. Within Southern Maryland proper, it will be important to maintain access to the Patuxent River Naval Air Station and the Indian Head Naval Surface Warfare Center as they are key components of the regional economy. At the same time, State resources are needed to provide improved access to Maryland military bases that received additional personnel in the most recent round of BRAC.

## **Growth, Planning, and Zoning Challenges**

Southern Maryland is expecting to continue its rapid growth over the next 20 years. This rapid growth is increasing the need for new transportation investments and presenting new planning and zoning challenges. This assessment has presented a set of potential strategies for Southern Maryland to consider, several of which are oriented towards improving the efficiency of the transportation system through improved land use policies and investments in the transit system.

One challenge that the region will face is the difficulty that long-time residents of rural areas may have in embracing the transition from low-density land use patterns to higher-density suburban and urban land use patterns. Yet to prevent widespread sprawl, and the congestion associated with it, it will be vital to develop high-density, mixed-use centers to encourage transit use and walkable and bikeable pedestrian-oriented lifestyles.

Similarly, there will be significant potential challenges getting multiple jurisdictions to work together to implement the land use policies and strategies that will help make Southern Maryland more transit accessible. Individual counties and jurisdictions have authority over land use within their jurisdictions and it will take significant work to get each of the individual actors to agree with the policies identified in this needs assessment.

## **Geographical Limitations**

Some challenges are related to the fact the Southern Maryland comprises a peninsula bounded by water on three sides and split by the Patuxent River. This is a benefit in that it reduces through travel and helps the region maintain its charm and rural character. However, the bridges integrating and connecting the region can become chokepoints that are expensive to alleviate.

A specific challenge will occur during construction of any additional reactors at the Calvert Cliffs Nuclear Power Plant in Lusby. It is likely that many of the potentially thousands of workers would travel north over the Thomas Johnson Memorial Bridge from St. Mary's County and many others would travel south along the MD 2/4 Corridor in Calvert County. Prior to this event a traffic management plan should be developed and implemented to mitigate the increased traffic generated by this potential multi-year construction project.

## **7.6 CONCLUSION**

The Southern Maryland Transportation Needs Assessment was developed collaboratively by the Commission to Study Southern Maryland Transportation Needs, the Tri-County Council for Southern Maryland, and the Maryland Department of Transportation. Through an extensive outreach process and a detailed analysis of transportation system conditions, needs, and projects, a set of

recommended projects and strategies have been identified. The top priority projects identified include:

- A western bypass of Waldorf and limited upgrade to U.S. 301;
- A second span of the Thomas Johnson Memorial Bridge; and
- Expanded transit service to Southern Maryland with a focus on developing a high capacity bus rapid transit and fixed-rail service in the MD 5/U.S. 301 Corridor, from Waldorf and White Plains to the Branch Avenue Metro Station.

The Commission also recommends that the State and counties continue to promote strategies to reduce traffic congestion and promote strategic funding for transportation improvements in Southern Maryland, including:

- Providing improved transit options through analysis of and investments in high capacity transit options, park-and-ride facilities, commuter bus routes, and local transit;
- Enhancing the extent of information available for transit and highway users on the web, at transit stops and park-and-ride lots, and on the roadside;
- Promoting access management, operational improvements, and travel demand management strategies, including ridesharing, to improve the efficiency of the transportation system;
- Promoting strategic capacity expansions that address the mobility, safety, and accessibility of the transportation strategically; and
- Providing multimodal trail, bike, and pedestrian infrastructure and connectivity where needed.

Funding some of the large infrastructure projects identified in this report may require consideration of new funding mechanisms that are not currently available. Additionally, the State and region may wish to pursue potential revenue generating strategies for the transportation system, such as tolls on bridges (e.g., as is currently done on the Governor Harry W. Nice Memorial Bridge) or on new limited access highway facilities. Given the significant transportation financing challenges facing both the State of Maryland and the nation as a whole, it will become ever more important to identify alternative funding and financing mechanisms for new transportation infrastructure investments and for local governments to participate actively in the development of projects. The Southern Maryland Transportation Needs Assessment represents a good example of how State, regional, and local staff and elected officials can work together to address important transportation investment challenges.