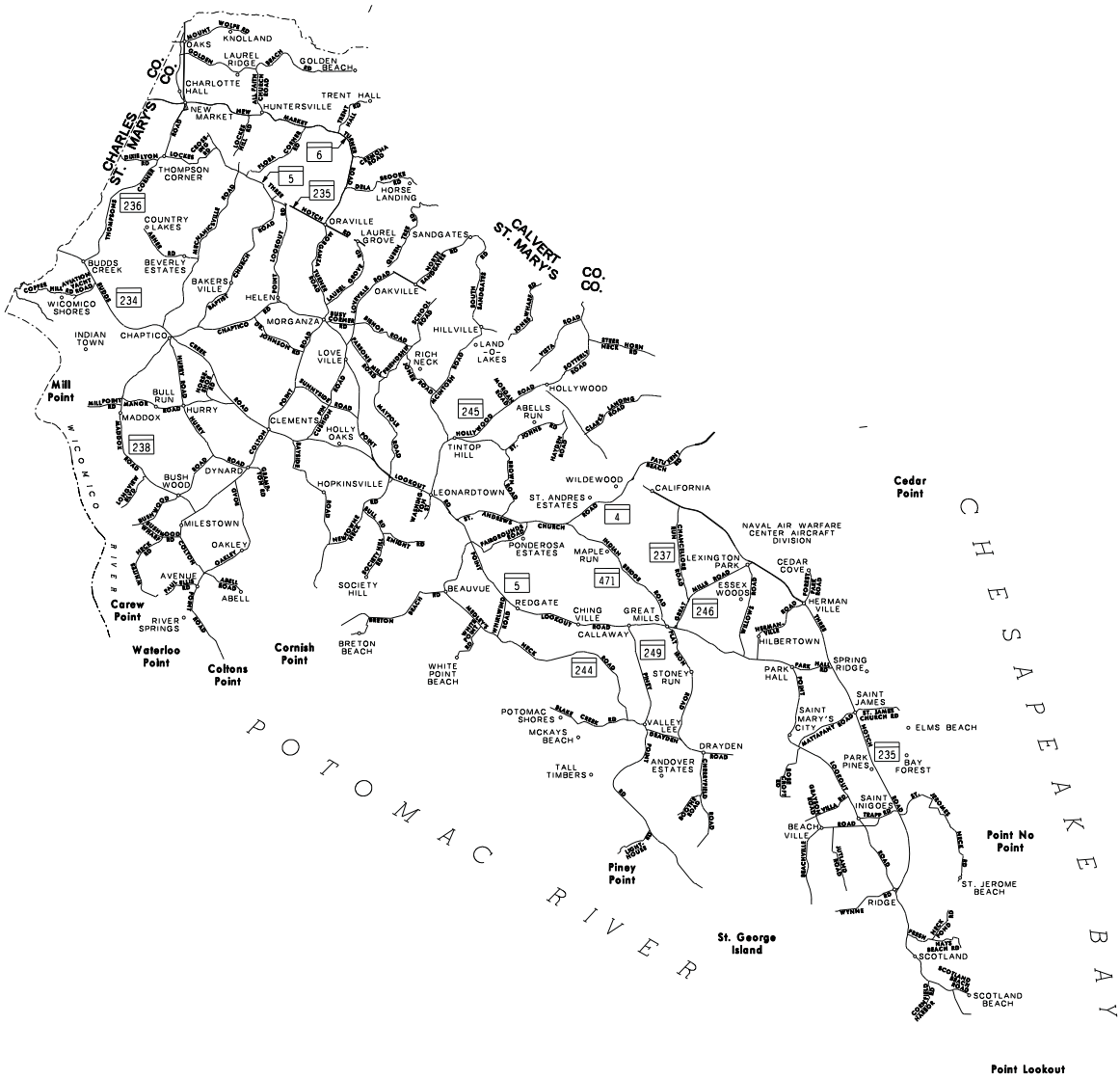

CHARLES CO.
ST. MARY'S CO.
CALVERT CO.
ST. MARY'S CO.
KNOLLAND
OAKS
LAUREL RIDGE
GOLDEN BEACH
CHARLOTTE HALL
NEW MARKET
HUNTERSVILLE
TRENT HALL
THOMPSON CORNER
HORSE LANDING
COUNTRY LAKES
ORAVILLE
LAUREL GROVE
SANDGATES
BEVERLY ESTATES
BUDDS CREEK
BAKERSVILLE
OAKVILLE
WICOMICO SHORES
HELENA
MORGANZA
HILLVILLE
INDIAN TOWN
CHAPTICO
LAND-O-LAKES
LOVE VILLE
RICH NECK
HOLLYWOOD
Mill Point
BULL RUN
ABELLS RUN
MADDOX
HURRY
CLEMENTS
HOLLY OAKS
TINTOP HILL
BUSH WOOD
DYNARD
WILDEWOOD
CALIFORNIA
HOPKINSVILLE
LEONARDTOWN
ST. ANDRES ESTATES
Cedar Point
SMILESTOWN
PONDEROSA ESTATES
MAPLE RUN
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
OAKLEY
LEXINGTON PARK
CEDAR COVE
AVENUE
ESSEX WOODS
SOCIETY HILL
BEAUVUE
ABELL
REDGATE
HERMAN VILLE
Carew Point
RIVER SPRINGS
CHING VILLE
GREAT MILLS
CALLAWAY
HILBERTOWN
Waterloo Point
Cornish Point
Coltons Point
BRETON BEACH
WHITE POINT BEACH
STONEY RUN
PARK HALL
SPRING RIDGE
SAINT JAMES
POTOMAC SHORES
MCKAYS BEACH
VALLEY LEE
SAINT MARY'S CITY
ELMS BEACH
DRAYDEN
TALL TIMBERS
ANDOVER ESTATES
PARK PINES
BAY FOREST
SAINT INIGOES
BEACH VILLE
Point No Point
Piney Point
ST. JEROME BEACH
RIDGE
St. George Island
SCOTLAND
SCOTLAND BEACH
Point Lookout
POTOMAC RIVER
CHESAPEAKE BAY
WICOMICO RIVER

ST. MARY'S COUNTY TRANSPORTATION PLAN

August 2006

Prepared For:

St. Mary's County Department of Public Works
P.O. Box 508
California, Maryland 20619

Prepared By:

Johnson, Mirmiran & Thompson
72 Loveton Circle
Baltimore, Maryland 21152

TABLE OF CONTENTS

I. INTRODUCTION 1

II. ROADWAYS 3

A. Future Travel Demand 4
B. Roadway Improvements 9
C. Streetscape Projects 20
D. Religious Freedom Tour Scenic Byway 20
E. Intersection Improvements 21
F. Substandard Roadways 22
G. Functional Classification 23
H. Shoulders 24
I. Amish and Mennonite Routes 25
J. Emergency Evacuation Routes 26
K. Travel Demand Management 26

III. MASS TRANSIT 48

A. St. Mary's County Transit 48
B. Light Rail/Bus Rapid Transit 50

IV. AIR FACILITIES 53

V. PARK AND RIDE LOTS 56

VI. BICYCLES 59

A. Existing Facilities 59
B. Planned Bicycle Routes 60
C. Proposed Bicycle Network 62

VII. SIDEWALKS 73

A. Countywide 73
B. Lexington Park 73

VIII. TRAILS 79

A. Schools 79
B. Three Notch Trail 80
C. State and County Park Trails 81
D. Three Notch Trail and Other Trail Funding 82

IX. WATER ACCESS POINTS 84

A. Public Landings 84
B. Ferry Service 86
C. Acquisitions and Funding for Public Landings 86

APPENDIX A 88

APPENDIX B 91

LIST OF FIGURES

Figure II.1. 2002 Average Daily Traffic 31
Figure II.2. 2025 No Build Average Daily Traffic 32
Figure II.3. 2025 No Build AM Peak Hour Volume, Peak Direction 33
Figure II.4. 2025 No Build PM Peak Hour Volume 34
Figure II.5. Signalized Intersection Level of Service 2025 No Build 35
Figure II.6. Unsignalized Intersection Level of Service 2025 No Build 36
Figure II.7. Link Levels of Service 2025 No Build 37
Figure II.8. 2025 Build Average Daily Traffic 38
Figure II.9. 2025 Build AM Peak Hour Volume, Peak Direction 39
Figure II.10. 2025 PM Peak Hour Volume, Peak Direction 40
Figure II.11. Signalized Intersection Levels of Service 2025 Build 41
Figure II.12. Unsignalized Intersection Levels of Service 2025 Build 42
Figure II.13. Link Levels of Service 2025 Build 43
Figure II.14. Proposed Highway Improvements 44
Figure II.15. Existing Number of Lanes 45
Figure II.16. Proposed Number of Lanes 46
Figure II.17. Functional Classification 47
Figure III.1. Mass Transit Improvements 52
Figure IV.1. Captain Walter Francis Duke Airport Master Plan 55
Figure V.1. Park and Ride Lots 58
Figure VI.1. Cultural Resources 70
Figure VI.2. Bicycle Levels of Comfort 71
Figure VI.3. Proposed Bicycle Plan 72
Figure VII.1. Lexington Park Sidewalks 77
Figure VII.2. Leonardtown Sidewalks 78
Figure VIII.1. St. Mary's County Existing and Proposed Trails 83
Figure IX.1. Public Water Access Points 87

I. INTRODUCTION

St. Mary's County has experienced a rapid growth in population and employment over the last fifteen years. This growth has impacted the transportation system throughout the County. Quiet, pastoral two lane country roads have become commuter routes bustling with morning and evening commuters which need to share the roadway with other users such as buggies, bicyclists, and walkers. Congestion has developed at intersections where minimal delays have historically occurred. An unprecedented expansion of military and high technology activity has created a demand for commuter air service. An increase in the non-driving population has expanded the need for alternate transportation options throughout the County. An influx of residents from more developed areas has increased expectancy for quality transportation services and recreational opportunities. Congestion in other areas of the region has increased the need for and feasibility of ferry service. In order to meet present and future transportation needs of the County in a coordinated and efficient way, not only for today but into the future, an integrated transportation plan is needed. Failure to adequately plan for the future will result in higher future transportation operational and improvement costs, reduced traffic safety, increased air pollution, reduced economic viability, and a lower quality of life for all County residents.

The Board of County Commissioner's supports the Navy Base Realignment and Closure (BRAC). This includes supporting the ongoing, planned and potential activity at the Patuxent River Naval Air Station, such as the Joint Strike Fighter Program. The continuous improvement of the transportation infrastructure will help to provide a climate consistent with the expansion of the NAS.

Purpose and Intent

The purpose of the St. Mary's County Transportation Plan is to evaluate proposed transportation improvements, and to develop additional improvement projects based on the needs such as Level of Service and safety concerns identified in the Existing Conditions report and through analyzing year 2025 travel demand forecasts. The goal of this study is to provide an integrated transportation plan that will assist all aspects of transportation including motor vehicles, mass transportation, horse and buggy, bicycles, pedestrians, waterways, and air transportation while considering the cultural resources throughout the county.

The development of the Transportation Plan is a collaborative effort of the following groups:

- Board of County Commissioners
- Transportation Task Force
- Departments of Public Works and Transportation
- Recreation and Parks

- Land Use and Growth Management
- Economic and Community Development
- Town of Leonardtown
- Tri-County Council
- Maryland Department of Transportation and its agencies
- Various community representatives

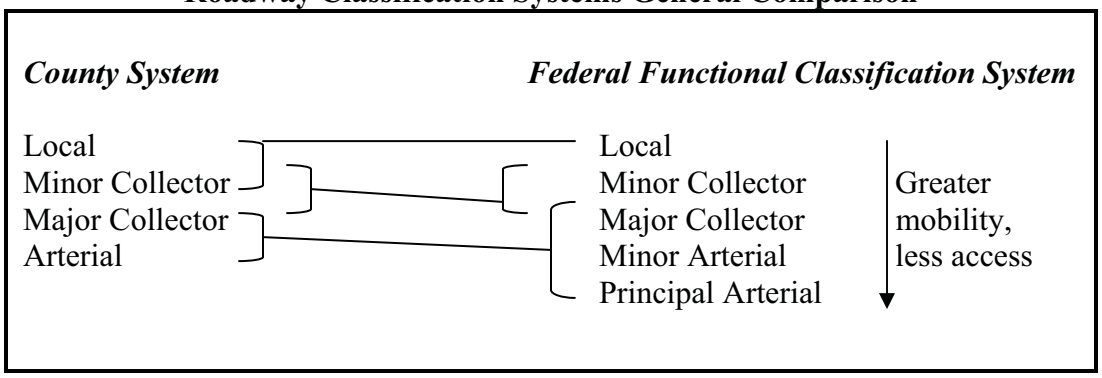
The St. Mary's County roadway system has seen major changes the past few decades such as new and improved roadways. The leftmost picture shows the MD 5/MD 246 intersection as it was 15 years ago and the picture on the right shows the intersection as it is today.

II. ROADWAYS

The major linkage between home, work, shopping and schools in St. Mary's County is through the roadway network. Residents, commuters, and visitors utilize the various roadways to travel to and from their destinations. Virtually all commerce utilizes trucks to deliver goods to distributors and consumers. The use of mass transit has greatly increased over the past five years and will continue to experience growth in ridership, but the automobile is still the primary means of transportation. Year 2002 Average Daily traffic volumes are displayed on Figure 1. In order for the County to be able to move people and goods, an analysis of the future roadway system is required. This analysis will identify which locations will experience congestion in the future, and which roadway improvements will be required to ensure efficient travel through those areas. These improvements will assist in reducing travel times and the potential for accidents to improve the overall quality of life for residents of St. Mary's County.

In order to serve roadway travel in St. Mary's County, the State, County and Town of Leonardtown maintain roadway systems which are classified on a hierarchical system, with higher level roadways biased towards serving high speed and high volume traffic movements, and lower level roadways serving primarily local traffic. The State's system is based on the Federal Functional Classification System, while the County and Town systems are based on ordinances of the County and Town. A roadway classification, established based on function as well as future traffic volumes, is a fundamental need to assure that development and road improvement projects are planned in accordance with the transportation needs for the foreseeable future. This will ensure adequate capacity and safety for the traveling public, and the appropriate level of access. In addition, a properly planned roadway reduces the need for costly retrofit projects in the future.

Roadway Classification Systems General Comparison



A. Future Travel Demand

In order to evaluate the need for future roadway improvements in St. Mary's County travel demand forecasts need to be developed. The major input into the travel demand forecasts is the change in socio-economic data such as the growth in population and employment. The base year for the data is 2000 when the last census took place. This shows that the population of St. Mary's County is approximately 86,000 persons. The population in the County has increased by 13% from 1990 to 2000. Over 32,000 people who live in St. Mary's County work in St. Mary's County. The total employment for the County is approximately 49,000 persons, with the Patuxent Navel Air Station being by far the largest employer.

Projections are made for each transportation analysis zone based from information developed by the Tri-County Council. Transportation analysis zones break down the County into smaller tracts of land. These projections are input into the Washington Council of Government (Wash. COG) regional transportation model to develop the travel demand forecasts. The projections are developed for various years. Normally, projections are developed for 20-25 years in the future for the purposes of determining needed roadway improvements. For the Transportation Plan, 2025 is being used as the design year. By 2025, the population is anticipated to increase to over 120,000 people and employment is anticipated to grow to over 66,000 jobs.

No Build Condition

Travel demand forecasts were developed for the "No Build" condition. The No Build condition includes no roadway improvement projects. The WashCOG model was run to show the projected increases in travel demand on the existing roadway network. The projections were developed on an average daily traffic basis, and also for the A.M. and P.M. peak hours which experience the highest volume of traffic. Analysis was performed to identify areas that will experience congestion.

The travel demand forecasts show that the areas identified for development such as the Development Districts and Town Centers will have the highest volumes of traffic. In Lexington Park, the traffic volumes along MD 235 north of MD 237 are anticipated to increase to over 70,000 vehicles per day. Other roadways such as MD 246, MD 5, MD 4, and MD 237 will see volume increases such that over 20,000 vehicles per day will utilize these facilities. In the California area, MD 235 between MD 4 and MD 245 will see increases between 15,000 to 20,000 vehicles per day. In Leonardtown, MD 5 between MD 243 and MD 245 will an increase to 35,000 to 40,000 vehicles per day. The northern portion of St. Mary's County will continue to see growth in traffic volumes. The volume along MD 5 is anticipated to

increase to approximately 50,000 vehicles per day. The 2025 projected average daily traffic is shown in Figure 2.

Peak hour volumes will increase in an associated manner along the various roadways. The highest volume is projected to occur in the P.M. peak along MD 235 between MD 237 and MD 4 with over 4,000 vehicles per hour in the peak direction. Other roadways such as MD 5 in Leonardtown, MD 5 in Charlotte Hall and Mechanicsville, and MD 235 north of MD 4 to MD 245 will grow to approximately 2,000 vehicles per hour in the peak directions. The A.M. peak hour volumes are shown in Figure 3 and the P.M. peak hour volumes are shown in Figure 4.

MD 235 is the highest volume roadway in the county

Traffic analysis was performed for the No Build condition. The signalized intersection level of service analysis was based on the Critical Lane Summation technique and unsignalized intersection and roadway link level of service analysis was based on the 2000 Highway Capacity Manual. Results of the signalized intersection Level of Service is shown on Figure 5 while the unsignalized LOS analysis is shown on Figure 6. The roadway link LOS analysis is shown on Figure 7. The link Level of Service for roadways with signalized intersections is based on the intersection LOS along the link. The analysis showed that a number of locations would experience failing conditions. This is shown in Tables 1 and 2.

MD 4 (Patuxent Beach Road) shown above is currently a two lane roadway and serves as a major collector between St. Mary's County and Calvert County. This roadway is expected to operate at LOS F by the year 2025 unless the roadway and the Thomas Johnson Bridge are widened.

Table 1. 2025 No Build Failing Signalized Intersection Levels of Service

Location	LOS	
	AM	PM
MD 235 @ MD 245	E	F
MD 235 @ Airport Road	F	F
MD 235 @ Wildewood Boulevard	E	F
MD 235 @ MD 4	F	F
MD 235 @ Shady Mile Drive	F	F
MD 235 @ Town Creek Drive	F	F
MD 235 @ MD 237	F	F
MD 235 @ MacArthur Boulevard	E	F
MD 235 @ Pegg Road	F	F
MD 235 @ Golden Beach Road	D	F
MD 235 @ Mohawk Drive	D	F
MD 235 @ MD 6	C	F
MD 5 @ MD 471	F	F
MD 5 @ MD 246	D	F

Table 2. 2025 No Build Failing Roadway Link Locations

Location
MD 4 between MD 235 and Thomas Johnson Bridge
MD 237 between Pegg Road and MD 235
MD 5 between MD 246 and MD 249

In addition to the above locations that require improvements based on capacity needs, several intersections require improvements due to safety issues. The following scheduled projects will be completed in 2005 as safety improvement projects by the Maryland State Highway Administration:

Table 3. SHA Safety Improvement Projects

Location	Improvement Type	Start Date
MD 4 @ Fairgrounds Road	Installing Bypass Lane	Summer 2005
MD 234 @ MD 238	Roundabout	Winter 2005
NB MD 5 from MD 235 to Old Village Road	Safety and Resurfacing	Winter 2005
MD 5 @ Morganza Turner Road	Channelization	Planning Stage

Build Condition

A build condition scenario was developed to determine the effectiveness of previously proposed improvements in various plans. These plans that were the basis for the improvements included:

- St. Mary's County Capital Improvement Program

- St. Mary's County Comprehensive Plan
- Southern Maryland's Regional Transportation Needs Inventory
- Lexington Park Transportation Program
- Maryland State Highway Administration Highway Needs Inventory
- Maryland Department of Transportation Capital Transportation Program.

The improvements outlined in those plans which were modeled to determine their impact on the roadway network. Priorities were established for each project as follows: **Short 0-10 years, Medium 10-20 years, Long 20 or more**. Those projects are listed below in order of importance along with the priority level and cost excluding right-of-way costs for each project:

Table 4. Build Condition Roadway Improvements

Project	Priority	Cost* (millions)	Funding Source
Widen MD 237 from Pegg Road to MD 235 to four lanes.	Short	$30	State
Extend Pacific Drive to Pegg Road.	Short	<$1	Developer
Provide Service Road Connections between the "big box" stores along the west side of MD 235, including a Wal-Mart - K-Mart connection and a connection of First Colony to Old Rolling Road.	Short	<$1	Developer
Extend Lei Drive to the Shangri-la Drive/Willows Road intersection and Extend Tulagi Place from South Coral Drive to the Lei Drive extension.	Short	$2	County/ Developer
Provide for a divided highway or five lane section along MD 5 in Leonardtown, between MD 245 and MD 243.	Short	$10	State/ Developer
Realign Strickland Road connection to MD 237 to the south and extend to Pegg Road.	Short	$4	County/ Developer
Widen MD 712 from MD 235 to PNAS to four lanes.	Long	$12	State
Provide intersection improvements at Business MD 5 and Fenwick Street Improvements.	Short	<$1	State
Construct an urban diamond interchange at the MD 235 – MD 4 intersection.	Medium	$35	State/ County/ Developer
Extend Pegg Road from MD 237 to MD 5 at the MD 249 intersection.	Short	$19	County/ Developer
Construct FDR Blvd. from MD 4 to Willows Road. Include a linkage between MD 4 and MD 235 north of the intersection. (Short term)	Medium	$19	County/ Developer
Construct a second span on the Thomas Johnson Bridge	Medium	$131	State
Widen MD 4 from MD 5 to the Thomas Johnson Bridge to four lanes.	Medium	$41	State
Extend Saint John's Road/Lawrence Hayden Road to MD 4 as a major collector road, intersecting MD 4 at the Indian Bridge Road intersection.	Medium	$10	County/ Developer

Project	Priority	Cost* (millions)	Funding Source
Perform an access management study for the MD 235/MD 5 corridor, from MD 4 to the Charles County line. Implementation would be medium/long.	Short	N/A	State
Widen MD 5 from MD 245 to MD 249 to four lanes.	Medium	$47	State/ Developer
Construct a parallel service road along MD 5 between Mechanicsville and Mohawk Drive.	Long	$13	Developer
Extend Pacific Drive to proposed Bradley Boulevard/Bay Ridge Road.	Long	$3	County/ Developer
Construct Bradley Boulevard from Pacific Drive extended to MD 235 and Hermanville Road.	Long	$25	County/ Developer
Construct a North Ring Road around Leonardtown.	Long	$12	County/ Developer
Extend Bay Ridge Road to Pacific Drive extended.	Long	$3	County/ Developer
Extend Carver School Boulevard to Bay Ridge Road.	Long	$2	County/ Developer

*Excludes Right-of-Way costs.

The proposed improvements summarized above do not include all service roads and inter-parcel connections required to minimize the number of access points on major roadways and to provide increased circulation between adjacent properties. These connections are considered on a case-by-case basis, at the time of subdivision or site plan development. Additional local roadway improvements will also be contained within the individual Local Area Plans, and as determined to be necessary as part of the site plan and subdivision plan approval process.

All projects listed as short term priorities should be recommended to be included in the Capital Improvement Program if funded by the County. The funding for and project details for FDR Boulevard, Strickland Road, Bradley Boulevard, Pacific Drive Extended and Lawrence Hayden Road, as well as the Adequate Public Facilities project (to address County roadways <18 feet) were removed from prior Capital Improvement Programs.

The proposed improvements were entered into the Washington Council of Governments regional model. The model was run and the raw outputs were refined to produce the 2025 average daily traffic. These volumes are shown in Figure 8. From that A.M. and P.M. peak hour volumes were developed. These volumes are shown in Figures 9 and 10, respectively.

The proposed improvements will assist in reducing the volumes along the major arterials and the new roadways such as FDR Boulevard and Pegg Road will provide alternative routes to avoid congestion, decrease delay, avoid major intersections, and provide secondary access with the proposed

improvements. The 2025 volume on the section of MD 235 from north of MD 237 to MD 4 is anticipated to decrease between 10,000 to 15,000 vehicles per day. Many of the improvements will cause decreases of 5,000 vehicles per day on the major roadways. These projects will assist in providing a means of alternative connections to allow the local traffic to operate on the local roadway network instead of having all trips funnel to a single roadway.

The improvements have a corresponding reduction in the number of peak hour trips. This in turn will improve traffic operations on the major roadways. Still with this, a few locations are anticipated to operate at failing levels of service. Minor geometric improvements at MD 235/MD 245/Airport Road and MD 235/MD 712 and MD 235/Wildewood Boulevard, which could be included as part of developer projects, would alleviate the failing intersections at those locations. The remaining signalized intersections that will fail are shown in Table 3:

Table 5. 2025 Build Failing Signalized Intersection Levels of Service

Location	LOS	
	AM	PM
MD 235 @ Town Creek Drive	F	F
MD 235 @ MD 237	F	F
MD 235 @ MacArthur Boulevard	E	F
MD 235 @ Pegg Road	E	F
MD 235 @ MD 712	F	B

Results of the signalized intersection Level of Service is shown on Figure 11 while the unsignalized LOS analysis is shown on Figure 12. Link LOS analysis is shown on Figure 13. As shown, in Figures 11 and 12, unsignalized intersections will operate at an unsatisfactory LOS. For all failing intersections and failing unsignalized intersection approaches, a detailed traffic study should be conducted to develop alternatives and identify appropriate improvements based on a detailed analysis.

No roadways segments are anticipated to fail in the build condition.

B. Roadway Improvements

Based upon the results of the no build analysis, improvements were developed to improve traffic operations and circulation. These improvements are shown on Figure 14. Existing and proposed lane usage is displayed on Figure 15 and 16. These improvements are described as follows:

MD 237 widening – Pegg Road to MD 235

MD 237 is currently a two-lane roadway from MD 235 (Three Notch Road) to Pegg Road with limited turn lanes. The proposed improvements to MD 237 include widening to four lanes with two lanes in each direction, bike lanes, and sidewalks. The widening of MD 237 is needed to accommodate future growth driven by nearby developments plus growth due to the increase in traffic from outside the immediate area. Some of the residential developments along MD 237 include Beechwood Estates, Greenview Knolls, Heards Estates, Foxchase Village, and Chancellors Village.

The mainline segment of MD 237 presently has an average daily traffic of approximately 11,900 to 16,100 vehicles per day and operates at LOS E during the worst peak period. The ADT is expected to increase to 20,000 to 26,000 vehicles per day by the year 2025 and consequently, mainline MD 237 is expected to operate at LOS F by the year 2025 without any improvements. The widening will allow this section to operate at LOS B. This project will not only decrease delay and travel time along MD 237, improving this roadway may decrease the potential for rear end accidents associated with congestion.

Realignment of Norris Drive with Buck Hewitt Road

The proposed improvements on MD 237 should also include a realignment of Norris Road with Hewitt Road.

The intersection of MD 237 and Norris Road is offset by 150 feet from the intersection of MD 237 and Buck Hewitt Road. This causes the problem of queuing between left turning vehicles at the two intersections blocking the other intersection. The realignment will eliminate the off-set intersection and potential traffic safety/queuing problem as development takes place along MD 237. The improvement will protect turning movements along MD 237 at Buck Hewitt and Norris Roads. This improvement is included in the SHA's construction plans.

Extend Pacific Drive to Pegg Road

Pacific Drive has been constructed from MD 246 to approximately 400' east of Pegg Road. It is recommended that Pacific Drive be completed to tie into Pegg Road. Pegg Road is a major north-south county roadway. The proposed extension of Pacific Drive to the east of MD 246 will provide a central east/west roadway through Lexington Park. This tie-in will allow for a continuous roadway network that would allow motorists from this area the option of not utilizing any of the more congested state roadways.

Provide Service Road Connections between the "big box" stores along the west side of MD 235, including a Wal-Mart - K-Mart connection and a connection of First Colony to Old Rolling Road.

This proposed connecting roadway between the Wal-Mart and K-Mart and First Colony and Old Rolling Road will reduce the amount of short distance trips on MD 235 through this section and divert trips to and from MD 4 to the retail shops. In turn, this will allow for a minor improvement in the level of service along MD 235. MD 235 can function as a major arterial which should handle more long distance trips. This proposed roadway would provide for a connection between these two major commercial destinations.

During site plan review or when opportunities exist, service road connections or driveways between major retail centers along MD 235 should be considered along the entire corridor. These will reduce vehicular trips on MD 235 by giving motorists an opportunity to travel retail centers with out having to access MD 235. In many instances, linkages between shopping centers are not provided, forcing motorists to use the major arterial MD 235 as a collector roadway.

Extend Lei Drive to the Shangri-la Drive/Willows Road intersection and Extend Tulagi Place from S. Coral Drive to the Lei Drive extension

The access in the area to the west of the MD 246/MD 235 intersection is very limited. Parallel east/west streets such as South Coral Drive and South Shangri Drive tie into MD 246 but provide no access to each other forcing motorists to traverse on to MD 246. In order to improve access it is recommended that Lei Drive be extended to the Shangri-la Drive/Willows Road intersection, and Tulagi Place be extended from South Coral Drive to the Lei Drive extension. These roadways would provide increased circulation in the downtown area and provide an additional route to access the Post Office and Park and Ride Lot.

Provide for a divided highway or five lane section along MD 5 in Leonardtown, between MD 245 and MD 243

The roadway section of MD 5 from MD 243 to MD 245 had the second highest accident rate in the county with 4.38 accidents per million vehicle miles. This segment of MD 5 has been classified as a high accident location by the Maryland State Highway Administration. Moreover, average daily traffic volumes along MD 5 are expected to increase from 22,700 vehicles to 35,700 vehicles and future developments along MD 5 will increase the number of left turning vehicles. MD 5 should be reconstructed as a divided roadway to reduce the potential for accidents such as angle and rear end accidents. An undivided five (5) lane section is being considered to minimize property acquisition in the interim.

Realign Strickland Road connection to MD 237 to the south and extend to Pegg Lane

Since existing Strickland Road was built with sharp curves and was built for local traffic, a realignment of the roadway near MD 237 would better meet future needs. The realigned Strickland Road would tie into existing Horsehead Road and proceed to the east and tie into Pegg Lane. The central portion of MD 237 has limited roadways to access the commercial developments along MD 235 and the PNAS. A roadway between Strickland Road and Pegg Lane will connect proposed Planned Unit Developments (PUDs) along MD 237 and will give local residents better access to the surrounding road network. It will provide another option to access MD 235, thereby further splitting up the traffic through the congested area. The proposed connection will primarily be used by residents along MD 237. It could also be utilized as a bike trail for residents along the MD 235 corridor to access Chancellors Run Regional Park. This proposed two lane road will connect Strickland Road and Pegg Lane and then tie into Pegg Road.

Widen MD 712 to 4 Lanes from MD 235 to the PNAS

The South Gate to PNAS will continue to become a more important and more utilized entrance to the base. The anticipated growth at the base will be concentrated on the south end. Two lanes should be adequate to handle future traffic needs; however, if the base exceeds projections (as has been the case in the past) then MD 712 will become a vital access point and will need to be widened to four lanes to meet the demand. Under the no-build alternative, MD 712 will operate at LOS E during the AM/PM peak hours for a two-lane roadway.

Provide Intersection Improvements at Business MD 5 and Fenwick Street

The Business MD 5 and Fenwick Street minor intersection approaches are expected to operate at a poor LOS during the PM peak by the year 2025. The intersection has a wide (approximately 64 feet) median which creates two separate intersections. The existing intersection controls and assignment of right-of-way are not consistent with geometrics and volumes. While traffic volumes are higher on northbound Washington Street, thru traffic must stop and yield to Fenwick Street and left turning traffic from southbound Washington Street. The following alternatives should be considered for improving intersection operations:

Alternative 1: Remove the stop sign on northbound Washington Street, and place a stop sign on the westbound Fenwick Street approach. The left turn movement from southbound Washington Street onto Fenwick Street would be controlled by a stop sign. If this alternate is selected for implementation, it is suggested that a temporary 3-way stop condition be

provided for a temporary period of 60 days. With this alternate, it is suggested that the first parking space on the east side of Washington Street be eliminated, either by signing or by constructing a bulb-out.

Alternative 2: Eliminate all movements within the median by closing the median gap. This will force turning movements to be made at intersections at the turn around points to the north and south.

Provide an Urban Diamond Interchange at MD 4/MD 235 and/or Extend FDR Boulevard north from MD 4 to MD 235

An option to improve the failing levels of service at MD 235/MD 4 is by providing an interchange at that location. The through movements along MD 235 or some of the higher volume turn movements at MD 4 could be grade separated.

Another option is to extend FDR Boulevard to continue north from its proposed terminus at MD 4 and intersect with MD 235 approximately 1,600 feet north of the MD 235/MD 4 intersection. This improvement will assist in alleviating congestion at the MD 235/MD 4 intersection by offering motorists an alternative route to bypass the intersection and reduce the volume of left turning vehicles.

Extend Pegg Road from MD 237 to MD 5

The intersection of MD 5/MD 471/Flat Iron Road is anticipated to operate at LOS F during the AM and PM peak hour by the design year. The MD 5 roadway segment between MD 246 and Indian Bridge Road is anticipated to operate at LOS F during the peak hours. This section has many residences that border close to the roadway. Major impacts to these residences would occur if any widening took place. Therefore in order to relieve the congestion alternatives were developed to reduce traffic volumes through this area.

The extension of Pegg Road to MD 5 would provide a parallel roadway to MD 246 and would be defined as a cross-county connector. Detailed engineering studies will determine the best alignment for the Pegg Road extension and its connection with MD 5. The extension of Pegg Road would commence from MD 237 and intersect with MD 471.

Three options exist as to an alignment tie-in with MD 5. One possible option is to form a fourth leg with the intersection of MD 249 and MD 5. This would eliminate the situation where motorists must make a dogleg turn from MD 249 to access MD 5 to proceed into the Lexington Park area. The second option consists of tying into MD 5 between MD 249 and Indian Bridge Road. This reduces costs but would require the MD 249 traffic to access MD 5. Both of these options would require a crossing of the Western

Branch of the St. Mary's River. The third option would be to extend Pegg Road only to Indian Bridge Road. The existing bridge over the St. Mary's River could then be utilized to access MD 5. It would be recommended as part of this option to realign Indian Bridge Road to tie in west of its present terminus opposite Flat Iron Road. This would provide for two off-set T-intersections, which would be preferred from a traffic operations standpoint. Presently, this intersection is being signalized and minor geometric improvements are being constructed.

All of these options would reduce traffic volumes along MD 5, which will improve the levels of service. The proposed extension would give motorists a more direct route to/from Lexington Park and the MD 5 corridor.

Motorists wishing to access the PNAS from MD 5 coming from the Leonardtown area will have direct access to the north gate. Option 1 was assumed for the travel demand forecasts.

If Pegg Road is not extended, a fourth option is to widen MD 5 to four lanes between MD 246 and MD 249. This option will cause a major impact to some residences and commercial establishments along MD 5. An option that avoids this area is recommended to provide an alternate route around the Great Mills area, which has historically flooded.

Extend Pegg Road from MD 237 to Indian Bridge Road

An alternative to extending Pegg Road from Indian Bridge Road to MD 5, is to only extend Pegg Road from MD 237 to Indian Bridge Road and upgrade Indian Bridge Road and MD 5. This alternative may be more cost effective by using more of the existing right-of-way. It will reduce the amount of impacts of crossing floodplain/wetland areas west of Indian Bridge Road.

Construct FDR Boulevard

The need for FDR Boulevard was first determined in the mid 1980's. Since that time, a preliminary alignment was established by the Department of Public Works and Transportation. Although the alignment has not been officially mapped, it has been utilized as a tool to obtain or reserve rights-of-way as development has progressed along the corridor. The parallel road system to MD 235 would allow local trips to have an alternate route to access the Naval Air Station as well as Lexington Park. This diversion would cause a reduction of traffic volumes on MD 235, thereby easing congestion for non-local users of MD 235. Large residential developments such as Laurel Glen, Hickory Hills, and San Souci will be traversed by this roadway. Therefore, the roadway should be designed in such as way as to limit traffic speeds through the residential areas, and a pedestrian and bicycle friendly atmosphere should be created. Sidewalks, bicycle accommodations, crosswalks, roundabouts and medians/pedestrian refuge

areas could be considered to make this roadway compatible with the adjacent residential uses.

Two sections of FDR Boulevard have been constructed: MD 4 to First Colony Boulevard and from MD 246 to east of Corporate Drive. The section of FDR Boulevard from MD 4 to First Colony Boulevard is a four-lane divided roadway while the section between MD 246 to east of Corporate Drive is a two-lane roadway. Two intersections along MD 235 currently operate at LOS E and by the year 2025, many intersections are expected to operate at LOS F without additional improvements. It is recommended that these two sections of FDR Boulevard be connected in order to relieve congestion on MD 235 and also complete the section of FDR Boulevard between MD 246 and South Shangri-la Drive. FDR would begin at its present western terminus and intersect with Old Rolling Road, Laurel Glen Road, Athlone Street/Meath Road, Iverson Drive, MD 237, MacArthur Boulevard, Hewitt Road, Scott Circle, Pegg Road, Valley Drive, MD 246, and terminate at South Shangri-la Drive.

Portions of FDR Boulevard will follow the alignment of an existing railroad right-of-way. The roadway and Three Notch Trail should be coordinated to ensure both can be built. It will give motorists the option of using the roadway to access existing and planned commercial/business centers and residential developments. This roadway is considered an integral part of the recommended transportation network. It will provide an option to utilizing MD 235 and improve traffic operations along MD 235 by reducing the number of failing intersections. FDR Boulevard will be characterized as a two lane divided major collector with traffic management devices/streetscapes/gateways in order to preserve the residential character of the neighborhood between Old Rolling Road and MD 237.

It should be noted that an additional section of FDR Boulevard was proposed under item 9 above which would extend from MD 4 to MD 235 as a short term improvement to alleviate congestion at the MD 235/MD 4 intersection.

Construct a second span of the Thomas Johnson Bridge

The Thomas Johnson Bridge is currently a two-lane bridge and is the primary connection between Calvert County and St. Mary's County. It provides access to the Patuxent Naval Air Station for workers living in Calvert County and points to the north. Traffic operations across the bridge currently operate at LOS E and are expected to operate at LOS F by the year 2025. Slow moving traffic traveling across the bridge causes poor traffic conditions along MD 4 through the MD 235 intersection. A second span is needed to accommodate the future growth anticipated in southern Calvert County and St. Mary's County.

Widen MD 4 from MD 5 to the Thomas Johnson Bridge Road

MD 4 is currently a two-lane roadway from MD 5 (Point Lookout Road) to the Thomas Johnson Bridge. MD 4 is one of the major access points of Calvert County to St. Mary's County, particularly the Patuxent Naval Air Station in Lexington Park. Currently in the P.M. peak, traffic queues from the bridge to the MD 235 intersection. The widening of MD 4 is needed to accommodate the existing traffic volumes plus the future growth anticipated in southern Calvert County and in St. Mary's County.

The existing Average Daily Traffic Volumes on MD 4 ranges from approximately 11,000 vpd (near MD 5) to 26,000 vpd (near the Thomas Johnson Bridge). During the worst peak period, mainline MD 4 currently operates at LOS D from MD 5 to MD 235, and LOS E from MD 235 to the Thomas Johnson Bridge. The ADT is expected to increase to 32,000 vpd by the year 2025. The section length of MD 4 from MD 235 to the bridge is expected to operate at LOS F by the year 2025 without any improvements. After widening, the roadway is expected to operate at LOS C. The portion of MD 4 from MD 5 to MD 235 will operate in 2025 at a LOS E. This project will not only decrease delay and travel time along MD 4, improving this roadway may decrease the potential for rear end accidents associated with congestion.

Widening of MD 4 from MD 235 to the Thomas Johnson Bridge should be conducted in coordination with the widening of the Thomas Johnson Bridge. Pedestrian and bicycle facilities should be considered for the entire section of MD 4. Widening from MD 5 to MD 235 is a longer term project as congestion is not currently being experienced.

Extend Saint John's Road/Lawrence Hayden Road to MD 4 as a major collector road, intersecting MD 4 at the Indian Bridge Road intersection.

It is recommended that St. John's Road/ Lawrence Hayden Road be constructed to MD 4 as a major collector road, intersecting MD 4 at the Indian Bridge Road intersection. This roadway would provide additional access from MD 4 to MD 235 and help relieve some congestion along MD 235 and would operate as a cross county connector. The roadway would also serve residential development expected in that area.

Implement access management along MD 5/MD 235

An access management plan was initiated by the State Highway Administration in January 2005. After adoption as an acceptable plan, the program should be implemented along MD 5/235 to preserve the functional classification of these roadways as a major collector. These roadways serve as major connectors between counties to the north and primary locations in

St. Mary's County such as Lexington Park and Leonardtown. It is desirable to maintain the existing travel time and efficiency between these locations by limiting future access points and consolidating existing access points. Limiting access will also maintain or improve mainline operations, decrease the potential for accidents by eliminating conflict points, and create a more attractive corridor.

In addition, it is recommended that a development in the corridor be required to conform to the plan via donation/dedication of right-of-way. It is suggested that CIP projects be included for the purchase of additional properties, as they become available or as needed to assure implementation of the plan.

Widen MD 5 from MD 245 to MD 249 or MD 246 Depending Upon the Option Selected for Pegg Road

The section of MD 5 from MD 245 to MD 249 is a 2-lane roadway with numerous side roads and driveways. This section serves as a major connector between Leonardtown and Lexington Park.

The current ADT along this section of MD 5 ranges from 12,300 vehicles per day to 19,600 vehicles per day and mainline MD 5 operates at LOS D during the worst peak period. Traffic is expected to increase to approximately 20,000 to 30,000 vehicles per day by the year 2025 and the mainline is expected to operate at LOS F. The widening of MD 5 this would help alleviate the traffic congestion and reduce the potential for accidents.

Provide a Minor Collector Roadway Parallel to MD 5 through Charlotte Hall and Mechanicsville

MD 5 is presently a four lane divided arterial through the Charlotte Hall/Mechanicsville area and is surrounded by several commercial developments. This roadway serves as a major commuter route from St. Mary's County to areas to the north. A parallel local collector roadway to MD 5 is needed through this area to help alleviate congestion along MD 5 caused by the increasing commuter traffic, prevent additional access points along MD 5, and provide improved access for Charlotte Hall/Mechanicsville residents to the commercial areas along MD 5. If the parallel roadway is not constructed, then it may be necessary to widen MD 5 to six lanes between MD 6 and the Charles County Line. This roadway could also serve as an integral part of the MD 5 Access Management Plan.

Average daily traffic volumes are expected to increase from 34,000 vehicles to over 44,800 vehicles on MD 5 through the Charlotte Hall/Mechanicsville area by the year 2025. The mainline segment of MD 5 is expected to operate at LOS D during PM peak hour and several intersections along MD

5 through the Charlotte Hall/Mechanicsville area are expected to fail without any improvements.

Extend Pacific Drive to proposed Bradley Boulevard/Bay Ridge Road

It is recommended that Pacific Drive be extended to the proposed Bradley Boulevard/Bay Ridge Road. This roadway will allow for motorists to have options of using local roadways instead of MD 235 and MD 246.

Pacific Drive extended should not be tied into Essex Drive in order to eliminate the impacts to residents along this roadway but should continue through to Bay Ridge Road Extended, Willows Road, and Hermanville Road. This would not only allow alternative access from residential developments but also to the industrial developments along Bradley Boulevard. This roadway will help to remove congestion from the MD 246/Shangri-La Drive/MD 235 area and will allow those motorists not destined for the town center the opportunity to bypass it. It would also provide a central east-west major collector roadway approximately midway between MD 235 and MD 5.

Construct Bradley Boulevard from Pacific Drive Extended to MD 235 and tie a connector road into Hermanville Road

It is recommended that Bradley Boulevard be constructed between Pacific Drive and MD 246 and a connector road be constructed between the present terminus of Bradley Boulevard to connect Hermanville Road and MD 5. These connections will provide better access the south gate of PNAS as well as developments such as Essex Woods, Pembrook and South Lexington Park. Improvements to Willows Road may be required to accommodate possible future traffic growth.

Construct a Leonardtown Ring Road

MD 5 and MD 245 are the primary two roadways though Leonardtown. Both roadways serve as the primary access to the Town of Leonardtown, the Government Center and St. Mary's Hospital. Although the MD 5 bypass was constructed in order to alleviate traffic along the original MD 5 (now MD 5 Business) route through Leonardtown, additional local routes are suggested to alleviate congestion along MD 5 and MD 245, improve access to the Government Centers and Hospital, and to enhance mobility throughout Leonardtown. The first of two ring roads, which is not shown in any of the Build displays, would be internal to the Town of Leonardtown incorporating proposed developments such as Tudor Hall Village. This roadway would form a semi-circle to the west of MD 245 and MD 5 Business. The roadway would commence near Fenwick Street intersect MD 5 west of Abell St, and tie into MD 245 north of Greenbrier Rd. The second ring road (shown on the Build diagrams) would be to the north of

Leonardtown. This is proposed to commence in the area of the MD 5/ MD 234 intersection cross Maypole Rd and tie into MD 245 near the Cemetery Rd intersection, possibly continuing to Brown Road. This differs from the Leonardtown Transportation Plan by being a more southerly route and encouraging motorists from MD 234 to use an alternative access to MD 245.

Average daily traffic volumes for the year 2025 are expected to be 20,700 and 16,000 vehicles along MD 5 and MD 245, respectively. By 2025, MD 245 is expected to operate at LOS D while MD 5 is expected to operate at LOS F. With the proposed improvements along MD 5 and Leonardtown Ring Road, 2025 average daily traffic volumes along MD 5 and MD 245 are expected to decrease to 27,100 and 14,200, respectively. Also the link LOS along MD 5 through Leonardtown is expected to be C.

If the Ring Road is not constructed, then it is recommended that the MD 5/MD 245 intersection be improved.

Extend Bay Ridge Road to Pacific Drive Extended

Development between MD 246 and Willows Road will continue to occur. One such development is Stewart's Grant PUD. Without improvements to the north-south roadway network all trips would need to access either MD 246 or Willows Road. An extension of Bay Ridge Road would divert local trips away from MD 246 by providing an outlet to MD 5 and eventually to the Willows Road/Hermanville Road area. The proposed two lane collector road would commence at the existing terminus of Bay Ridge Road and continue north to Carver School Boulevard and to the possible extension of Pacific Drive. It will provide an additional point of access for the mixed use development planned at Stewart's Grant; offer a parallel route to MD 246 for local residents; and reduce traffic congestion at the MD 246/MD 5 and MD 246/MD 237 intersections.

Extend Carver School Boulevard to Bay Ridge Road

The Stewart's Grant/Westbury area is an important residential/commercial area. In order to meet the traffic demands from developments in this area it is recommended a roadway be constructed from the terminus of Carver School Boulevard to the proposed extension of Bay Ridge Road. This roadway will provide access to Stewart's Grant PUD and the Westbury PUD. A portion of this roadway, Carver School Boulevard, has already been constructed to the McKays retail center, and will be a part of a network of local roads needed to serve planned developments east of MD 246. This proposed roadway will assist in reducing traffic volumes along MD 246, thereby allowing for better traffic operations throughout the entire area.

C. Streetscape Projects

Streetscape projects provide for a safe and beautiful public environment for the urban community. Instead of large paved areas that are unfriendly to the pedestrians, streetscapes provide a visually appealing sense of place. Trees are planted to provide shade. Lighting is placed to meet the character of the historic community while providing elements of safety. Sidewalks are defined to encourage pedestrian usage.

Two locations within St. Mary's County are recommended for streetscape projects:

1. MD 5 Business Leonardtown

The County Seat of St. Mary's County is in Leonardtown. The relocation of MD 5 to the north side of town allows the central portion of the town to experience reduced traffic volumes. This allows for a more pedestrian friendly environment to occur through town.

In order to continue to encourage persons to come to the downtown area and feel safe to walk streetscape improvements should be implemented. This could involve a variety of measures that include landscaping, brick pavers and street lighting. A future project could be to expand the limits along MD 245 toward the Government Center.

2. MD 246 (Great Mills Road) from Saratoga Drive to MD 235

Various commercial establishments are located along MD 246. They were constructed over a long period of time utilizing many different types of architecture. The roadway mirrors this, making the area less appealing. A streetscape project is needed along MD 246 to address the numerous curb cuts, lack of sidewalks, crosswalks and landscaping. The discontinuity in the area lends itself to the potential for accidents. It also discourages non-motorized travel throughout the area. This project would provide an upgrade to the Town Center area by making the area more attractive, and would provide an incentive for businesses to up grade their storefronts and continue to encourage a viable community center. Both sides of MD 246 should have a continuous sidewalk. Crosswalks should be provided at all signalized intersections.

D. Religious Freedom Tour Scenic Byway

The Charles and St. Mary's County Planning Offices are preparing to develop a corridor management plan for the entire Religious Freedom Tour scenic byway in Southern Maryland. The byway measures 139 miles following a network of scenic roads that border the Potomac River and its tributaries. The plan will enable Charles and St. Mary's Counties to

document the intrinsic qualities that define the Southern Maryland landscape, to develop effective strategies to protect it, and ultimately, to enhance visitor's enjoyment and understanding of the area.

The Religious Freedom Tour Scenic Byway follows scenic corridors that border the Potomac River and its tributaries from northern Charles County to southern St. Mary's County.

E. Intersection Improvements

Various intersections will need minor improvements. These improvements are needed either from a safety or capacity standpoint. The improvements would involve adding turn lanes or an additional lane on an approach. These improvements in some cases can be tied into mitigation in relation to proposed developments. The locations for intersection improvements and the type of improvements include:

Table 6. Intersection Improvement Locations

Location	Improvement Type
MD 235/Airport Road	Traffic control/turn lane/other capacity improvement
MD 235/MD 237	Traffic control/turn lane/other capacity improvement
MD 235/MD 245	Traffic control/turn lane/other capacity improvement
MD 235/MD 472	Traffic control/turn lane/other capacity improvement
MD 235/MD 6	Traffic control/turn lane/other capacity improvement
MD 235/MD 712	Traffic control/turn lane/other capacity improvement
MD 235/Millstone Landing Road	Traffic control/turn lane/other capacity improvement
MD 235/Pegg Road	Traffic control/turn lane/other capacity improvement
MD 235/Rue Purchase Road	Traffic control/turn lane/other capacity improvement
MD 235/Shady Mile Drive	Traffic control/turn lane/other capacity improvement
MD 235/Town Creek Drive	Traffic control/turn lane/other capacity improvement
MD 235/Wildwood Parkway	Traffic control/turn lane/other capacity improvement
MD 237/Norris Drive	Traffic control/turn lane/other capacity improvement
MD 237/Pegg Road Extended	Traffic control/turn lane/other capacity improvement
MD 237/Strickland Road	Traffic control/turn lane/other capacity improvement
MD 242/MD 234	Traffic control/turn lane/other capacity improvement
MD 245/Doctor's Crossing Way	Traffic control/turn lane/other capacity improvement
MD 245/Greenbrier Road	Traffic control/turn lane/other capacity improvement
MD 246/MD 5	Traffic control/turn lane/other capacity improvement
MD 246/Carver School Boulevard	Traffic control/turn lane/other capacity improvement
MD 246/FDR Boulevard	Traffic control/turn lane/other capacity improvement
MD 246/Saratoga Drive	Traffic control/turn lane/other capacity improvement
MD 5/Fenwick Street	Traffic control/turn lane/other capacity improvement
MD 5/MD 245	Traffic control/turn lane/other capacity improvement
MD 5/MD 4	Traffic control/turn lane/other capacity improvement
MD 5/MD 6	Traffic control/turn lane/other capacity improvement

Location	Improvement Type
MD 5/Medley's Neck Road	Traffic control/turn lane/other capacity improvement
MD 5/Moakley Street	Traffic control/turn lane/other capacity improvement
MD 5/Mohawk Drive	Traffic control/turn lane/other capacity improvement
MD BUS 5/Fenwick Street	Traffic control/turn lane/other capacity improvement
Mechanicsville Road/Old Village Rd	Traffic control/turn lane/other capacity improvement
MD 4/Fairgrounds Road	Safety
MD 4/Wildewood Parkway	Traffic control/turn lane/other capacity improvement
MD 238/MD 234	Safety

F. Substandard Roadways

Piney Point Road is 14 feet wide south of Ball Point Road and serves as access to a residential community, a dock, and a small shop.

There are over 200 substandard narrow roadways less than 18 feet wide in St. Mary's County. AASHTO recommends a minimum roadway width of 18 feet for all roadways, and a minimum width of 20 feet for roadways with traffic volumes over 400 vehicles per day. Some of these roads could be widening as needed when the roads are scheduled to be resurfaced. At that time a review should take place to determine the existing right-of-way width. A traffic volume count should be conducted at that time to determine if the roadway meets the volume criteria. If sufficient right-of-way exists and traffic volumes are greater than 400 vehicles per day, plans should be developed to widen these roadways. Developments that increase traffic volumes on these substandard roadways must address the need to widen this roadways in order to adequately serve the development.

Ultimately, all roads less than 18 feet should be considered for widening to at least 18 feet to meet AASHTO standards. These roads are considered high priority routes for widening:

- Bayview Road – 16 feet wide and serves as access to the St. Clements Island – Potomac River Museum
- Piney Point Road- 14 feet wide south of Ball Point Road. Serves as access to a residential community, a dock and small shop
- Point Breeze Road – 14 feet wide
- Old Hollywood Road – 16 feet wide, serves as access to a community.
- Waterloo Road – 17 feet wide

G. Functional Classification

St. Mary's county classifies its roadways to function in a manner that meets the needs of its users. This system identifies arterials as the highest classification followed by collectors (major/minor) and finally local roadways. The higher the classification, the more the roadway acts as connecting other roadways and serving higher volumes. The county roadways were evaluated based on vehicular volume, speed, and geometric conditions. A list was developed of recommended upgrades and downgrades in the classification of St. Mary's County Roadways and is shown on Figure 17. This list includes the following:

Table 7. Downgrade from Major Collector Roadway to Minor Collector Roadway

Roadway	Length (feet)	Average Daily Traffic	2025 Average Daily Traffic
North Essex Drive	6,300	800	500-2,000
Stoney Run Drive	4,900	300	500-2,000
Weatherby Lane	1,000	800	500-2,000
Wilderness Road	4,600	700	500-2,000

Table 8. Upgrade from Minor Collector Roadway to Major Collector Roadway

Roadway	Length (feet)	Average Daily Traffic	2025 Average Daily Traffic
All Faith Church Road	7,400	2,500	2,000-6,000
Aviation Yacht Club Road	2,600	2,600	2,000-6,000
Blackistone Road	7,100	1,900	2,000-6,000
Bull Road	7,000	3,700	2,000-6,000
Fairgrounds Road	12,100	2,000	2,000-6,000
Flat Iron Road	20,400	3,000	2,000-6,000
Happyland Road	6,800	3,500	2,000-6,000
Hermanville Road	13,800	2,100	6,000-8,000
Jones Wharf Road	10,800	2,200	2,000-6,000
Laurel Ridge Drive	4,600	1,500	2,000-6,000
Long Lane	5,500	3,200	2,000-6,000
Mattapany Road	11,200	2,000	2,000-6,000
Mervell Dean Road	3,300	800	2,000-6,000
Morganza Turner Road	17,000	1,000	2,000-6,000
Old Rolling Road	5,400	3,400	6,000-8,000
Old Three Notch Road	5,900	1,300	2,000-6,000
Old Village Road	18,000	2,500	2,000-6,000
Society Hill Road	6,900	1,500	2,000-6,000
Spring Valley Drive	2,800	3,000	2,000-6,000
St. John's Road	21,000	3,000	6,000-8,000
Trapp Road	6,700	1,800	2,000-6,000
Triangle Drive	580	300	2,000-6,000
Villa Road	8,606	3,800	2,000-6,000

Table 9. Upgrade from Local Roadway to Minor Collector Roadway

Roadway	Length (feet)	Average Daily Traffic	2025 Average Daily Traffic
Doctor Johnson Road	10,100	800	500-2,000
Lockes Crossing Road	10,100	400	500-2,000
Lockes Hill Road	7,200	1,200	500-2,000
Maypole Road	18,700	600	500-2,000
Pin Cushion Road	14,900	500	500-2,000
South Sandgates Road	14,900	900	500-2,000
Sunnyside Road	11,700	1,200	500-2,000
Whirlwind Road	6,400	1,000	500-2,000

H. Shoulders

There are a number of roadways with limited width shoulders in St. Mary's County. These roads are often used by pedestrians, bicyclists, and horses/carriages. Shoulders should be provided on all roadways in accordance with the appropriate design standard for their classification. In some cases, grass or gravel shoulders are required; in others, an improved (paved) shoulder is needed. Shared travel lanes are appropriate for low speed, low volume roadways. Grass or gravel shoulders can be utilized on those roadways. In general, improved shoulders are recommended on rural roadways where a combination of traffic volume, speed, geometric conditions, and level of competing usage make it impractical or unsafe for all roadway users to share the main travel lanes. These roadways should also be incorporated into the bicycle plan, as improved shoulders provide a roadway suitable for bicycle travel. Roads in need of improved shoulders are prioritized below:

High Priority

A high priority should be placed on providing or improving shoulders along roadways where needed to address traffic safety issues, and in areas with a significant volume of bicycle/carriage traffic along with traffic conditions noted above. Such roadways will generally be collector – type roads with through traffic, or main entrances to large subdivisions.

- MD 5 from Camp Brown Rd. to Scotland Beach Road
- Thompson Corner Road (MD 236)
- Chancellor's Run Road (MD 237)
- McIntosh Road

MD 5 (Point Lookout Road) through Point Lookout State Park has limited shoulders. There are several biker trails within the state park

Low Priority

On low volume, low speed roads, shoulders still provide a level of comfort to the motorists. These roadways have fewer conflicts between motorists and other roadway users. However, safety would be improved if shoulders were provided on these roadways:

- MD 5 from Scotland Beach Road into Point Lookout Park
- Aviation Yacht Club Road
- Friendship School Road
- Jones Wharf Road
- MD 245 (Sotterly Road)
- Flat Iron Road
- Bishop Road
- Parsons Mill Road
- Maypole Road
- Pin Cushion Road
- Sunnyside Road
- Dixie Lyon Road
- Ryceville Road
- Lockes Crossing Road
- New Market Village Road

I. Amish and Mennonite Routes

Due to the difference in travel speeds, the mix of horse and buggy traffic and motor vehicle traffic can result in conflicts. These conflicts occur more regularly on roadways with insufficient passing opportunities, and where there are moderate to high motor vehicle volumes. In addition to the shoulder improvements listed above, the following improvements to Amish and Mennonite transportation in St. Mary's County should be considered:

- Develop the Three Notch Trail, with sufficient width for buggy travel especially between the Charles County line and MD 236.
- Preserve network of private roadways established by the Amish through private properties.
- Improve and expand St. Mary's County Transit service.

MD 236 is a high speed/moderate volume collector roadway frequently used by carriages although there are limited shoulders throughout most of the roadway.

J. Emergency Evacuation Routes

St. Mary's County residents face challenges from the weather from time to time. Hurricane Isabel caused significant damage in September 2003 to many low lying areas in St. Mary's County. The County has identified four major roadways for people to use in case of the need to evacuate the area. The major evacuation routes will be along MD 5/235, MD 4, and MD 234. Improvements such as signage on all major evacuation routes should be discussed with Maryland SHA. This would improve the effectiveness and public awareness of the evacuation routes in case of emergency. In addition, the extension of Pegg Road from MD 237 to MD 5 will improve the evacuation time from the Naval Air Station.

K. Travel Demand Management

The Tri-County Council's Commuter Assistance Program and Regional Transportation Planning Program have implemented many Transportation

Demand Management (TDM) measures since the early 1980's in St. Mary's County. TDM measures are those which increase mobility and reduce the environmental impacts of air pollution by promoting alternatives to the solo commute.

As the key component of multi-state (MD-VA-DC) "Commuters Connection" network, the Council's Commuter Assistance Program has been assisting Southern Marylanders with locating alternative transportation for commuting for more than two decades. These transportation options include ridesharing (carpools and vanpools), commuter bus, local public transit services, subscription bus service, park-and-ride, guaranteed ride

home (GRH) and bicycling. The major TDM efforts led by Tri-County Council efforts on-going in St. Mary's County include:

Rideshare and Guaranteed Ride Home (GRH)

Since the early 1980's, Southern Maryland commuters have used the Rideshare Program to link with others, reducing the number of single occupant vehicle trips. Activities include providing general carpool matching assistance via a dynamic network database to identify potential ridesharing partners; publishing newsletters for vanpool operators and offering personalized aid to vanpool owners/operators for ride matching purposes; establish the Tri-County Vanpool Owner /Operator Focus Group to deal with the vanpool issues; sponsoring event promotions to advocate alternate transportation for commuting; working with Maryland Transit Administration (MTA) staff to identify and locate potential park-and-ride lots in Southern Maryland to meet the growing demand of carpool, vanpool and commuter bus riders.

Employer Outreach Program

The employer outreach program increases the public awareness and benefits of traveling by non-single occupancy vehicles through educating the major employers in the region and other marketing campaign efforts. These programs educate employers and employees on the socio-economic benefits and financial incentives for alternate transportation. The actions include alternate work schedules, compressed work weeks, carpool and vanpool, Metrochek program, etc.

Education and Support Tele-commute and Tele-work

Telecommuting provides for a means to work at special telework centers, facilities equipped with computers and communications equipment that allow employees to work near home, therefore turning some long commutes into shorter work trips. The Council staff has led the regional efforts to provide public education and technical support in the tele-commute and tele-work initiative.

Advocate Utilization of Clean Fuel Vehicle

The Council staff has been working with the Maryland Department of Transportation (MDOT), Maryland Energy Administration, and Ford Motor Company, Inc. to facilitate a series of activities that involve several local non-profit and private transportation service providers to upgrade their fleets by purchasing clean fuel vehicles.

Bike to Work and Walk to Work

The first regional bikeway plan and a regional network- Southern Maryland Regional Trail and Bikeway System (SMRTABS) was developed and endorsed in 2000 that included St. Mary's County. By providing this the SMRTABS recommendations can make bike to work a viable alternate for some workers. At present St. Mary's County Department of Recreation and Parks is working on the Three Notch Trail project, the backbone of the SMRTABS in St. Mary's County. In additional, the Council also coordinates with the U.S. Park Services on other trail projects, including Potomac Heritage Trail designation.

Multi-Mode Approach

The results of three state-sponsored studies in the past 15 years, has identified the MD 5 / US 301 corridor between White Plains and Branch Avenue Metro station as a major light rail transit corridor for Southern Maryland. The *Transportation Action Plan* of the "Southern Maryland Regional Strategy", the comprehensive regional plan which was adopted by three County Board of Commissioners in 1999, has recommended to take immediate actions necessary to meet the State and federal requirement in order to prepare for eventual implementation of the light rail transit service in that corridor. This light rail transit service will benefit St. Mary's County commuters, and the general public that visits the D.C. Metropolitan area.

Promote Public Transit and Advocate Regional Transit Connections

The promotion of public transit with MTA has assisted in adding additional service to St. Mary's County in order to meet the rapid growing transit demand. The MTA Commuter Bus has been providing the St. Mary's County commuters a very dependable and viable transportation alternative.

In addition to promoting the MTA commuter express bus service, TDM measures have included working with the Washington Metropolitan Area Transit Authority (WMATA) to secure two metro bus lines, which operate during the non-rush hours, between Charles County and Metro Rail Stations.

Through regional cooperation and coordination, the STS is connected with Charles County's VanGO and Calvert County Public Transportation service. Currently, St. Mary's County citizens can access the Metro rail system via public transit by taking various transit transfers.

K. Funding Mechanisms

Several funding mechanisms are used to finance County roadway projects. Typically, County projects are funded through the Capital Improvement Program (CIP). This program receives funds from general obligation bonds, transfer taxes, impact fees, and the general fund. State Aid funds (approximately $125,000 per year), State Highway user funds, and some

federal bridge and safety funds are also available. During the last six (6) years, an approximate average of only $500,000 per year has been committed to roadway projects which would improve capacity, while this study has shown the need for County funding in an amount of approximately $4.6 million over the next ten years. The State Highway Administration funds its projects through the Consolidate Transportation Program (CTP). Tax increment financing districts are available but have not been used in St. Mary's County. These funding mechanisms are discussed in more detail below.

Gas Tax Revenue – Each county is allocated a percentage of the revenue from gas tax. The County allocates the money from various projects to meet the local transportation needs. This funding is currently used to fund operational needs.

Impact Fees – These are fees assessed to developers as part of development approval process. Fee is intended to make developers pay for public facilities/services to offset the impacts of the proposed development. Public facilities might include: Schools, Fire Protection, Emergency Medical Services, Police Enforcement, Parks and Recreation, Public Water and Sewer, Community Centers, Libraries, etc. Fees may be designated to specific project or be put in interest bearing accounts waiting for enough development to take place that requires government to act to expand services.

Impact fees are assessed on building permits for home construction. A fee of $450 is charged to the permittee for each new dwelling constructed (approximately $360,000 to 500,000 in revenue per year), while the latest calculation of actual road portion of the impact is estimated at $1,450 per home (which would generate $1M to $1.5M in revenue per year). These fees are for the road component only and not the total impact fee.

Tax Incremental Financing- This allows for funding of infrastructure projects through the use of bonds. The bond payments are based on increased tax revenue associated with the increase in assessed property value due to improvements. These are usually accomplished with a partnership with the Maryland Department of Business and Economic Development.

Pro Rata Share- This is a method by which the cost of infrastructure improvements are paid for through developers paying a percentage based upon the impact their development will cause.

State Consolidate Transportation Program – Maryland's Consolidate Transportation Program (CTP) is used to fund projects related to State roadways. The CTP is the document approved annually by the state legislatures and establishes the capital program funding for the Maryland

Department of Transportation. The CTP covers a 6 year period which includes the current fiscal year and the next 5 fiscal years. Each CTP identifies various projects within the county and the amount funded for the project.

Adequate Public Facilities Requirements – As required in Chapter 70 of the Comprehensive Zoning Ordinance, developers are required to conduct traffic impact studies and mitigate the immediate impact of developments on nearby intersections. Mitigation methods include traffic control improvements (such as traffic control signals) and capacity improvements. If intersection improvement is not feasible, a fee-in-lieu of improvement is also accepted, which can be used for property acquisition and/or physical improvements. These funds can supplement the CIP or CTP.

Figure II.1. 2002 Average Daily Traffic

Figure II.2. 2025 No Build Average Daily Traffic

Figure II.3. 2025 No Build AM Peak Hour Volume, Peak Direction

Figure II.4. 2025 No Build PM Peak Hour Volume

Figure II.5. Signalized Intersection Level of Service 2025 No Build

Figure II.6. Unsignalized Intersection Level of Service 2025 No Build

Figure II.7. Link Levels of Service 2025 No Build

Figure II.8. 2025 Build Average Daily Traffic

Figure II.9. 2025 Build AM Peak Hour Volume, Peak Direction

Figure II.10. 2025 PM Peak Hour Volume, Peak Direction

Figure II.11. Signalized Intersection Levels of Service 2025 Build

Figure II.12. Unsignalized Intersection Levels of Service 2025 Build

Figure II.13. Link Levels of Service 2025 Build

Figure II.14. Proposed Highway Improvements

Figure II.15. Existing Number of Lanes

Figure II.16. Proposed Number of Lanes

Figure II.17. Functional Classification

III. MASS TRANSIT

A. St. Mary's County Transit

St. Mary's County Transit is a rural transit service that makes stops on demand by passengers. Remote areas are served once a week in order to transport the elderly and persons with disabilities. Transportation to the Ripple Medical Adult Day Services Center on Mervell Dean Road in Hollywood, the Senior Centers on Chancellors Run Road in Lexington Park, Baldridge Street in Leonardtown, and Charlotte Hall Road in Charlotte Hall, as well as the nutrition site in Oakley, is provided by the Transit System. The Transit system has deviated demand response routes. This means that handicap customers may request to be picked up or dropped off no more than ¾ miles off the primary bus route.

The St. Mary's County Transit System has seen rapid growth in service over the last few years. Ridership, exclusive of ADA passengers, has increased from 57,000 passengers in 1998 to over 320,000 passengers by 2005. Two new routes have been installed September 2003. The "Northern Route" serves the areas of Mechanicsville, Golden Beach, Country Lakes and Wicomico Shores. In January 2005, the "Southern Route" began service to Hermanville, Dameron, St. Mary's College, Park Hall and the Willows Road area of Lexington Park.

St. Mary's County Transit System Buses wait to pick up passengers at the Government Center in Leonardtown

Mass transit will become a very important transportation component into the middle of the 21st century. Efforts should be made to encourage use of transit in order to minimize trips, help reduce emissions, increase economic opportunities for persons without motor vehicles, and provide service to the elderly and those with medical needs. Transit is also a valuable service for the Amish since their way of life restricts them from owning vehicles and they often travel to places like Waldorf for medical reasons.

In order to improve the St. Mary's County Transportation System, the following improvements are recommended to encourage additional ridership and expand service. These improvements can also be found on Figure 1:

- Provide for Sunday bus service in the Lexington Park/ California/ Leonardtown Area.
- Add bus stop amenities at the following major transfer locations: 1st Colony in California and the MVA in Loveville. There are bus shelters at the Government Center Complex in Leonardtown and Tulagi Place Park and Ride Lot in Lexington Park.
- Provide a permanent public location for a transfer point in the Oakville area.
- Add services along the remainder of the MD 4 corridor, Indian Bridge Rd, MD 249, MD 243 (Compton), St. Clements Shore, and Colton Point.
- Coordinate with the Patuxent Naval Air Station to improve connections from nearby locations such as Tulagi Place to the base. The issue of allowing buses or having the base operate shuttle buses will need to be resolved. Currently buses are not permitted inside the base although it is the largest employer in the County.
- Bike racks should be added to buses on the Southern Route since it is expected that some college students at St. Mary's College will use bikes.
- Expand the frequency of services to making stops every half hour instead of every hour in Lexington Park, Leonardtown, and California. These areas have the highest load volumes and at times demand exceeds capacity. More frequent bus service would be more beneficial then larger buses since it would reduce overall wait time throughout the day.
- Increase the frequency of service after 6:30 PM along major routes.
- Improve bus service over the Thomas Johnson Bridge from Calvert County. Traffic back ups on the bridge cause the bus service to run very slowly during the peak hours.

In addition, the Maryland Transit Administration (MTA) operates three commuter bus lines in St. Mary's County. The demand for the service in the northern portion of the County has taxed the existing leased lot located off of MD 5 in Charlotte Hall. The MTA is completing the planning phase on a 500 space Charlotte Hall replacement Park and ride lot located along MD 6 east of MD 5.

The park and ride lot at St. Mary's County Airport should be monitored to determine if further additional spaces are needed and a formal lease with the MTA established. The need for further facilities to serve the southern portion of the county should be evaluated.

Both STS and MTA should explore providing real time information at bus stops. STS should start providing the information first at transfer points. The

buses should be equipped with a Global Positioning System to assist in providing better operations.

In addition, the Maryland Consolidated Transportation Plan identified MTA projects that should be implemented. These should be coordinated with the St. Mary's County Transit System. The following improvements are included in the CTP:

- Additional equipment
- Facility
- Ridesharing
- Vehicles – small bus
- Governor's Transit Initiative – Coordination Study by Tri-County Council
- Governor's Transit Initiative – Small Bus
- Vehicles to Non-Profit Organizations – Pathways, Inc.

B. Light Rail/Bus Rapid Transit

The results of three state-sponsored studies in the past 15 years, has identified the MD 5 / US 301 corridor between White Plains and Branch Avenue Metro station as a major light rail transit corridor for Southern Maryland. The *Transportation Action Plan* of the "Southern Maryland Regional Strategy", the comprehensive regional plan which was adopted by three County Board of Commissioners in 1999, has recommended to take immediate actions necessary to meet the State and federal requirement in order to prepare for eventual implementation of the light rail transit service in that corridor. This light rail transit service will benefit St. Mary's County commuters, and the general public that visits the Washington D.C. Metropolitan area. Bus rapid transit would be an option to light rail in this corridor.

In order to meet both the future regional needs and existing local concerns, temporary, removable easements across the railroad right-of-way have been granted since 1974. St. Mary's County developed a set of guidelines in 1999 entitled "Railroad Right-of-Way and Easement Agreement Guidelines" for the abandoned railroad line. These guidelines are for property owners who wish to gain access to their property through crossings or easements. When applying for easements the applicant must be prepared to demonstrate the need for the easement and present specific details of his efforts in securing alternate access points.

As population and land value increases, the cost of acquiring and constructing new right-of-ways becomes more expensive. Alignments for proposed projects are difficult to implement due to rights of way being taken. For this reason, it is in the best interest that a minimum of 30 feet of

ROW (the minimum width required for light rail) be protected for the future as possible mass transit, the proposed "Three Notch Trail" or railroad use. The Old Railroad right-of-way should be preserved for possible future light rail or rapid transit usage and park and ride lots to support these facilities. The property should be protected for eventual implementation 50+ years from now, in accordance with the Maryland Department of Transportation's 1999 report to the General Assembly, entitled "Hughesville to Lexington Park Right-of-Way Preservation Study". The ultimate condition of the right-of-way will be dictated by the greater need whether it will be preserved as a trail or utilized for light rail or bus rapid transit.

Figure III.1. Mass Transit Improvements

IV. AIR FACILITIES

St. Mary's County is served by one public airport located in California. This airport, named the Walter Francis Duke Regional Airport at St. Mary's, was constructed in 1969 with various improvements taking place since that time. In addition, there are several private airfields including:

- Chandler Airport, Ridge
- Cherry Field, Drayden
- Clements Field, Clements
- Deerfield Airport, Leonardtown
- Hampton Airport, Leonardtown
- Recompense Farm Airport, Clements
- West Saint Mary's, Drayden
- Wingfield Airstrip, Dameron

The Walter Francis Duke Regional Airport at St. Mary's provides important services to residents of St. Mary's County as detailed in the "Economic Impact Study" for the Walter Francis Duke Airport at St. Mary's. Some of the key points from the study include the following:

- Importance of regional economic activities that support the airport such as tourism, socioeconomic trends, industrial developments, and the Patuxent River Naval Air station.
- Regional economic impacts including 30 jobs, $800,000 in local incomes, $2 million in overall economic impacts, and $101,000 in State and local taxes.
- Non-monetary impacts such as transportation benefits, stimulation of business, aero medical evacuation, and recreation.

In order to determine the needed improvements at the Walter Francis Duke Regional Airport at St. Mary's, airport master plans have been developed throughout the period of time. The first Airport Master Plan was begun in 1978 under a Federal grant. The current Master Plan was adopted by the Board of County Commissioners on September 3, 2002, approved by the Maryland Aviation Administration on November 8, 2002, and approved by the Federal Aviation Administration on November 19, 2002. Since that time, the BOCC, MAA (on 4/29/04), and the FAA (on 5/12/04) approved revisions to the Airport Layout Drawing to incorporate an additional 50,000 square feet of hangar space on a fee simple acquisition adjacent and to the south of the existing airport property. As such, Figure 1 is for illustrative purposes only. Proposed developments to the airport are categorized as Short (Phase I & II), Medium (Phase III), and Long (Ultimate) term. Funding will be allocated as follows: Federal 95%, State 2.5%, County 2.5%. The following improvements are planned:

- Develop a localizer approach (with approach lights) to Runway 11 to better accommodate aircraft traffic during periods of adverse weather.

- Determine the needed additional infrastructure to accommodate future commuter and commercial air service and other general aviation use.
- Recommend and develop a land acquisition program for the Airport to accommodate general aviation and commuter air service development for the 20-year planning period.
- Areas for additional general aviation apron and hangar (both T-hangar and conventional) development.
- Further refine orientation and layout for future development needs.
- Analyze existing and future obstructions to the FAR Part 77 surfaces.
- Evaluate feasibility of ILS approach.
- Lengthen to 5,350 feet, and strengthen Runway 11-29 in preparation for commuter air service, commercial and other general aviation use.
- Continue to evaluate airfield/airside signage and improved navigational aids.
- Change working name of the airport to "St. Mary's Regional Airport" to address flight safety concerns.

Figure IV.1. Captain Walter Francis Duke Airport Master Plan

V. PARK AND RIDE LOTS

Parking spaces from the County office buildings in Leonardtown could be used as a park and ride lot.

There are five official park and ride lots in St. Mary's County and twenty-six unofficial lots. These park and ride lots are shown on Figure 1. During field visits to the numerous park and ride lots in St. Mary's County, observations were made regarding the usage of the lots. Some lots are highly utilized by commuters. This is especially true at lots used by commuters to Washington, D.C. Other lots, especially the unofficial lots, had few motorists parked in these lots.

One of the most utilized park and ride lots is the MTA park and ride lot at the Charlotte Hall Shopping Center. This lot is being relocated to County property at the intersection of MD 5 and New Market Turner Road (MD 6). In the short term, a new public park-n-ride will be established on MD 5 (salt dome property) in Loveville. In the long term, another park and ride lot in that area (possibly in the Golden Beach Road area) will be needed to meet the demand of commuters into the Washington, D.C. area. The existing joint use arrangement at St. Mary's County Regional Airport appears to have the flexibility to meet future demand depending upon the Airport and MTA's needs.

The VFD parking lot in Hollywood is utilized by approximately 25 commuters daily.

A description of the usage of each park and ride lot is shown in Table 4. It is recommended that the VFD lots in Mechanicsville and Hollywood be converted into official lots and it is recommended that proximity to the railroad right-of-way be considered in planning future facilities. Also, all existing and future bus transfer points should have park and ride lots associated with them. Presently, the transfer points without park and ride lots include:

- MVA in Loveville.
- Boatman's Mini Mart (Oakville) – This should not be upgraded, but if a new public site is considered a lot should be included.
- Government Center (Leonardtown) – The last few rows from the County office parking lots could be designated as a park and ride.

Table 1. St. Mary's County Park and Ride Lot Utilization

Location	Description	Status	Parking Spaces	Observed Utilization	Comments
1	Charlotte Hall Shopping Center	MTA	350*	100%	New lot at the MD 5/ MD 6 intersection undergoing development and review process
2	Regional Airport @ St. Mary's County	MTA	89*	80%	No action
3	MD 5 @ MD 235	SHA	24	50%	No action
4	MD 242 @ MD 234	SHA	17	35%	No action
5	Tulagi Place	SMC	93	15%	No action
6	N/S MD 4 @ Oak Drive	U	140		
7	West of St. Andrews Ln.	U	30		
8	S/E Quad MD 6	U	13	0%	Not used
9	Mechanicsville VFD	U	92	24%	Convert to an official county park and ride lot
10	W/S Old MD 5	U	43	0%	Not used
11	At Flora Corner Rd	U	33	0%	Not used
12	E/S Of Birch Manor	U	35	0%	Church parking lot. Not used by commuters
13	North Of MD 242	U	93	0%	Church parking lot. Not used by commuters.
14	MVA	U	30	0%	Spaces are limited and may all be needed for the MVA customers
15	North Of MD 245	U	75	0%	No lot found
16	South Of MD 245	U	45	0%	No lot found
17	At MD 245	U	40	0%	No lot found
18	N/E Mt. Zion Ch Rd	U	40	0%	Church parking lot. Not used by commuters
19	Laurel Grove Park	U	80	0%	No action
20	MD 235/247 Loveville	U	N/A	0%	No action
21	At MD 472	U	61	0%	This strip mall has few spaces and should not be an official P&R
22	At Jones Wharf Rd	U	N/A	0%	No lot found
23	Hollywood Rescue Squad	U	25	0%	No action
24	VFD	U	450	5%	Convert to an official county park and ride lot
25	Former VFD	U	30	0%	No action
26	E/S St. Johns Rd	U	25	0%	No lot found
27	S/W St. Johns Rd	U	50	0%	
28	Wildewood Shopping Ctr.	U	50		Difficult to determine shoppers from commuters
29	North of By the Mill Rd	U	60	0%	Strip mall
30	At MD 4	U	N/A	0%	This strip mall has few spaces and should not be an official P&R
31	Norris Hewitts Rd	U	130		

SMC – St. Mary's County
U – Unofficial Lot
MTA – Maryland Transit Authority
SHA – State Highway Administration

Figure V.1. Park and Ride Lots

VI. BICYCLES

The scenic landscapes of the surrounding waterways, the area's relatively flat terrain, and the historic villages that mark the countryside are among the attributes that make St. Mary's County attractive to cycling enthusiasts.

Over the last two decades, Southern Maryland has become one of the fastest growing regions in the state. The rapid increase in growth has created dramatic changes in land use and transportation. In response to growth trends St. Mary's County's transportation system is enhanced to accommodate increased traffic volumes. As improvements to the transportation system occur both vehicular and bicycle movements should be considered.

The bicycle section of the St. Mary's County Transportation Plan provides a strategy for the development of a county-wide bicycle network. As part of this strategy, a vision for bicycle planning was established. The vision of the bicycle plan promotes a safe, comfortable and bicycle friendly environment which encourages people to use bicycle facilities both for transportation and leisure purposes. The vision for the bicycle plan is supported by a comprehensive set of recommendations and implementation strategies.

There are three goals of the bicycle plan. Together, these goals provide specific guidance for developing policies and strategies that will establish cycling as a recognized transportation mode:

- To enhance public awareness of the bicycle so that it is considered a viable and safe mode of transportation.

- To create and maintain an extensive network of bikeways, that will enhance access to cultural resources throughout the county including residential, recreational, educational, institutional and commercial areas within St. Mary's County. Some of these cultural resources are mapped on Figure 1.

- To provide support for people and their bicycles once they reach their destinations.

A. Existing Facilities

The condition and extent of the existing transportation network plays a key role in determining how successful a bicycle facility can be implemented. A brief description of the condition and inventory of these facilities are presented below:

1. Road Conditions
Road conditions within St. Mary's County are variable, ranging from excellent conditions on rural roads with large shoulders and low traffic volumes, to poor conditions on congested and high speed roads that extend through suburban areas of St. Mary's County.

2. Existing Off-Road Facilities
There are few off-road facilities in St. Mary's County. These facilities are generally loop trails associated with state or county parks. In addition, there are residential communities that have off-road paths, but these are generally reserved for use by the residents.

3. Bridge Connections
St. Mary's County and Calvert County are divided by the Patuxent River. There are two bridges that connect these two Counties. However, neither bridge has shoulders or sidewalks, presenting a cross county barrier to cyclist.

4. Bicycle Parking
Bicycle parking is currently lacking throughout St. Mary's County. The lack of bicycle parking facilities will deter people's incentive to use bicycles, particularly to common destinations such as employment centers, stores and public buildings. In addition, bicycle parking at historic and recreation areas is needed to support bicycle tourism.

B. Planned Bicycle Routes

Various bicycle plans have been developed for St. Mary's County. These plans recommend county and state roads that provide a safe environment for bicycles. There are three principle sources that provide this information. The State of Maryland Bicycle Map identifies State routes within each county that have the potential to accommodate bicycle traffic. The Southern Maryland Bicycle Map evaluates both state and local roads in Charles, Calvert, and St. Mary's Counties. The Southern Maryland Regional Trail and Bikeway System (SMRTABS) study provides an analysis of both existing and planned facilities for the tri-county area (Charles, Calvert, and St. Mary's Counties) of Southern Maryland. These and associated plans are presented below:

1. Maryland State Bicycle Map
The Maryland State Bicycle Map is one source that identifies the suitability of State routes for cyclists. The criteria used to identify these routes include a generalization of shoulder widths and the average daily traffic (ADT).

2. Southern Maryland Bicycle Map
The Southern Maryland Bicycle Map classifies state and county roads with a rating scheme of "Good" to "Dangerous". There are ten (10) loops represented

in the three Southern Maryland Counties. These loops are linked roads that form a circuitous path for cyclist and have the common thread of providing a connection to historic and/or scenic sites.

3. Southern Maryland Regional Trail and Bikeway System
The Southern Maryland Regional Trail and Bikeway System (SMRTABS) study recommends a network of on-street and off-road bicycle routes, multi-use trails and greenways that will provide access to the environmental, historic, cultural, recreational, residential and commercial areas. The five routes identified in St. Mary's County are the Amish Country Route, St. Clements Island Route, Leonardtown Route, St. George Island Route and Point Lookout Route.

4. Three Notch Trail
St. Mary's County Department of Recreation, Parks and Community Services is moving forward with plans to construct a recreational trail along the 28-mile County railroad ROW which runs south from Hughesville (in Charles County) to Lexington Park (to the Patuxent River Naval Air Station). The trail will be a non-motorized pedestrian, bicycle and equestrian trail.

Phase one of the trail begins at MD 236 in New Market and proceeds approximately one mile north to the new Northern County Senior Center in Charlotte Hall. This area of the trail will provide a connection between the southern Maryland Regional Library, the St. Mary's County Farmers' market, the Veteran's Home, the Charlotte Hall Welcome Center, and the new northern Senior Center and link the villages of new Market an Charlotte Hall. Phase II will continue north from the Northern County Senior Center, another two miles to the County line. Design and engineering work for Phase II is currently underway. The remainder of the trail – from Lexington Park north to New Market – may be constructed in phases over the next several years as funding permits. Some of the sections are proposed to be constructed by private developers.

A trails advocacy group, the Friends of the Three Notch Trail, was recently formed to assist with promoting awareness of the Three Notch Trail project and will coordinate volunteer work on the trail once completed. The "Friends" group is comprised of cyclists, runners, equestrians and hikers who are dedicated to the creation and maintenance of the non-motorized trail.

5. Potomac Trail Council
Numerous opportunities to explore the Potomac shoreline are offered throughout St. Mary's County. However, the topography of this area does not provide a practicable route for a continuous trail. The Potomac Heritage System utilizes existing roads along the Potomac River, between Point Lookout State Park and the, Piscataway Park in Charles County to identify an on-road bicycle route connecting numerous points along the Potomac River.

6. Maryland Scenic Byways
The Maryland State Highway Administration (SHA) has designated 31 state Scenic Byways reflecting the rich heritage of the region surrounding each of the routes. The southern region scenic byway explores the shores of the Chesapeake Bay and its tributary rivers, Maryland's first capital-St. Mary's City and Chesapeake's rich maritime history.

7. Star Spangled Banner National Historic Trail Study
The purpose of this study is to evaluate the feasibility and desirability of designating the routes used by the British and Americans during the Chesapeake Campaign of the War of 1812 as a National Historic Trail. The proposed National Historic Trail would commemorate the British invasion of Washington, DC and the Battle for Baltimore in 1814.

8. Southern Maryland Bicycle Routes
The Southern Maryland Bicycle Route map has four routes in St. Mary's County. The routes were developed by the Southern Maryland Travel and Tourism Committee. The bicycle route names are "To the Point Route", "Rolling Hills and Tall Timbers Route", "The Historic Seventh Route", and Hollywood on the Patuxent Route."

C. Proposed Bicycle Network

The proposed bicycle network will include routes designed to showcase St. Mary's County attractions by following the most attractive routes while providing a safe and accessible transportation facility. Roads that were identified in the State of Maryland Bicycle Map, the Southern Maryland Bicycle Routes Map and the Southern Maryland Regional Trail and Bikeway System (SMRTABS) study were compiled to provide a network of roads that were used as a foundation for the St. Mary's Bicycle Plan.

County roads were then assessed for the application of a bicycle facility and ultimately, the inclusion in the St. Mary's Bicycle Plan. Land use features such as parks, park and ride lots, off road trails, water access areas, schools, points of interests (farmers markets, historical landmarks/churches, museums) and county designated growth areas were quantified for each county road and documented in an inventory analyses matrix.

The Bicycle Level of Comfort (BLOC) Model was also used in the assessment of county roads. The BLOC model reflects a perception of compatibility associated with road width, shoulder width, traffic volume, pavement surface condition, motor vehicle speed and type, and presence or absence of on-street parking. The BLOC model provides a grading system for rating bicycle riding conditions. Level A reflects the best conditions for cyclists and level F reflects the worst condition. BLOC values for all state and principal county roads were

calculated. The results of the BLOC analysis are illustrated on Figure 2 and the BLOC calculation worksheet is located in the Appendix.

The inventory analysis matrix assigns a value to the various land use features associated with county roads plus the BLOC results. The results of the inventory analysis for county roads are located in the Appendix. County roads with values greater than 6 were selected as roads that would be most desirable for the application of a bicycle facility. As depicted in Figure 3, the roads that were selected for the St. Mary's County bicycle network were composed of roads that were recommended in various bicycle plans and county roads that were rated as most desirable (roads with inventory analysis totals greater than 6).

After the bicycle network was developed, several segments were identified as being valuable to the overall system but current conditions are not suitable to support a bicycle facility. Therefore, improvements to these roadways would be needed. These improvements could include the addition of shoulders, signage or a bicycle lane. Roads that were selected for improvements are either rural roads that do not have shoulders or curbed urban intersections. Roads with no outlet were classified as having suitable conditions to support a bicycle facility because traffic volumes are low and the adjacent areas typically provide scenic values. The following is a list of roadways in need of improvements.

An example of an urban roadway with conditions not suitable for a bicycle facility is Point Lookout Road (MD 5), south of the Maypole Road (MD 243) intersection.

- New Market Turner Road (MD 6) from Point Lookout Road (MD 5) to All Faiths Church Road
- Thompsons Corner Road (MD 236)
- Bayside Road
- Newtowne Neck Road (MD 243)
- Sandgates Road South (MD 272)
- Medleys Neck Road (MD 244)
- Hollywood Road (MD 245) from Point Lookout Road (MD 5) to Baldridge Street
- Flat Iron Road
- Point Lookout Road (MD 5) from Newtowne Neck Road (MD 243) to Hollywood Road (MD 245)

- Point Lookout Road (MD 5) at Saint Andrews Church Road (MD 4)
- Point Lookout Road (MD 5) at Point Lookout Park

D. Implementation Strategies

Implementation strategies described in this section establish the means by which goals of the plan can be achieved and recommendations implemented. These strategies are described as follows:

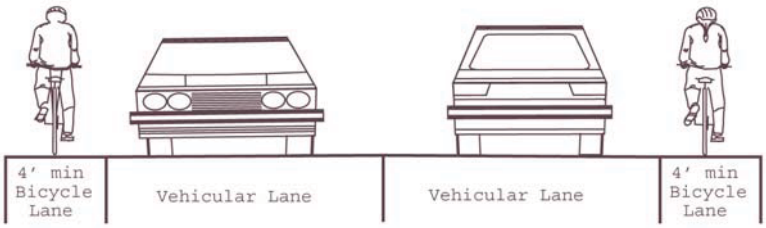
1. Adopt Design Standards

A set of design standards should be developed for bicycle facilities. These should be included as part of the county's Road Ordinance and the county's Manual of Design and Construction Standards.

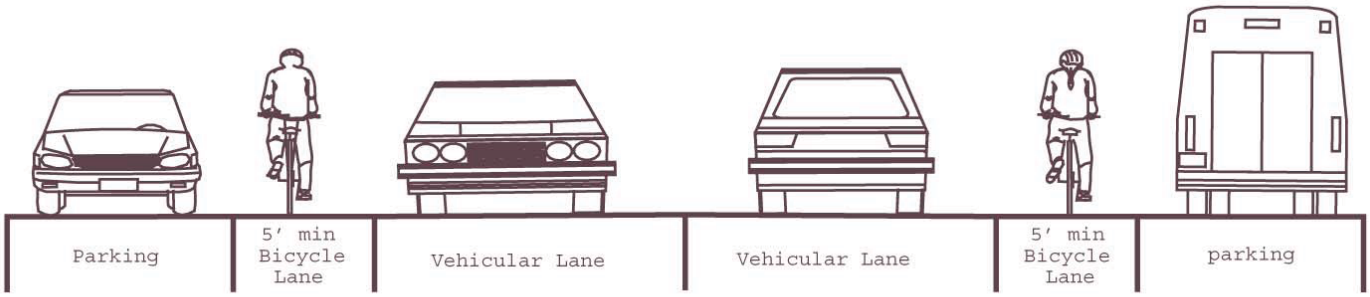
a) On-Street Bicycle Facility Design Standards

The basis for the recommended bicycle design standards was developed by the Association of Highway and Transportation Officials (AASHTO). The ASSHTO Guide for the Development of Bicycle Facilities provides standards for facility cross sections, signage and pavement markings. Depending upon the existing condition of the road, the application of these designs can be accomplished in different ways. In some cases bicycle facilities can be retro-fit onto existing roads by simply re-striping. In other cases, additional paving and/or grading may be required.

Bicycle lanes may be implemented by: 1.) narrowing existing travel lanes; 2.) removing a travel lane; 3.) removing parking; 4.) shoulder widening and; 5.) including bike lanes in new construction. Bicycle lanes are recommended for roads that have high traffic volumes and speeds where it is necessary to provide the cyclist with the maximum amount of separation between the motor vehicle.



Bicycle lane configuration for on road with no on-street parking – can be used for both rural roads urban streets.



Bicycle lane configuration on road with on-street parking. The minimum bike lane width should be 5 feet.

Roads that do not have bicycle lanes but are designated bikeways are identified with a share the road sign. This signage is intended to alert motorists of cyclists and to guide cyclist to use roads that have designated bikeways. This type of facility would be more prevalent in rural areas where roads do not have curb and gutters. In many cases the use of a paved shoulder would be no different than having a bicycle lane. The primary difference is how the facility is marked. It is important that the shoulder be paved with the same material as the travel lanes as opposed to using a tar and chip surface that can be considerably rougher to ride upon.

The use of a wide curb lane that does not delineate as an area for cyclist is also referred to as a shared use facility where motor vehicles and cyclists share the same space. This type of facility can be retrofitted by re-striping the inside travel lanes to a width of 10 to 11 feet to create a wider outside curb lane. It is not recommended to have a curb lane wider than 15 feet.

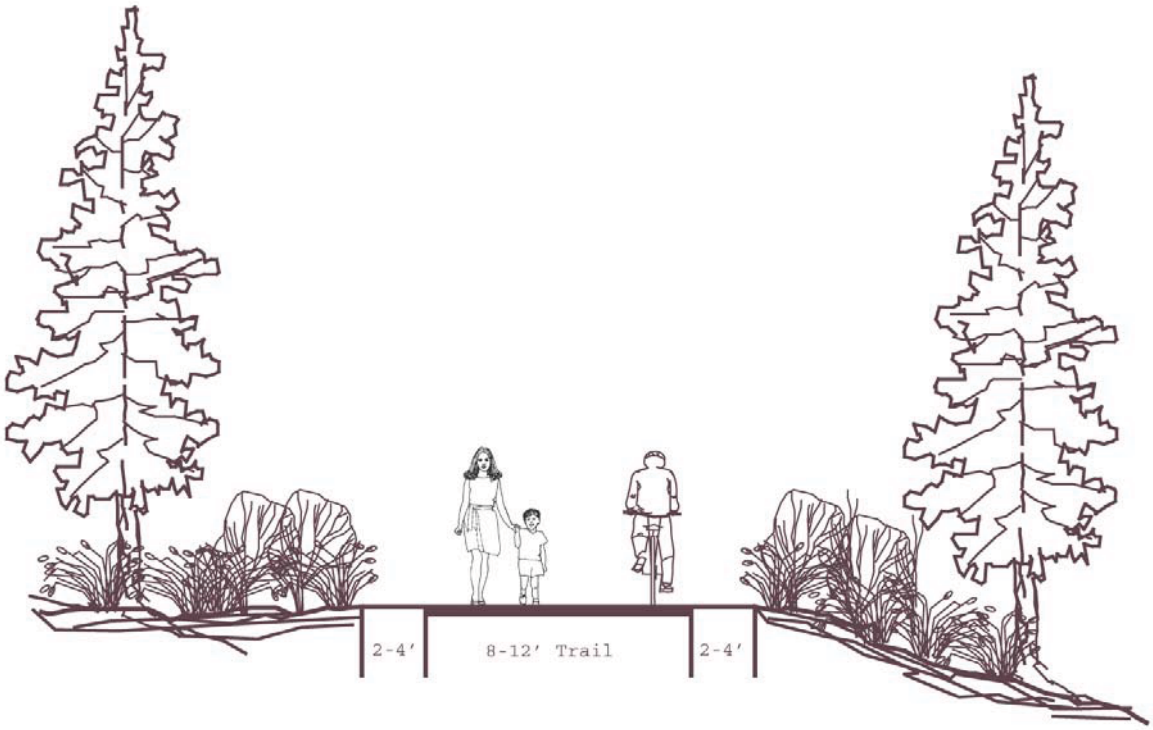
A variation of the wide curb lane would involve painting a bicycle symbol on the pavement along the edge of road without any striping to separate the bike lane from the motor vehicle travel lane. This is referred to as a Hybrid Bicycle Lane.

b) Off-Street Trails Design Standards

Natural surface trails are primarily for mountain bike use. Natural trails have dirt or gravel surface and vary in width. Specific standards for natural trail are not provided. The design of these trails is dependent upon the topography, vegetation, restrictions and the proximity to environmental features.

Multi-use trails are specifically designed to accommodate several different users at the same time. The surface material used on multi-use trails includes either a compacted crushed stone or asphalt. The width of the trail varies from 8 feet to 12 feet. Within the more developed areas a 10 foot width should be the minimum. Since many of the trail corridors are proposed along environmentally sensitive areas special consideration should be taken to

minimize any adverse impacts. Issues relating to the environmental impacts from trails would be addressed as part of a more detailed study of the individual corridor.



Multi-use trails are designed and designated to accommodate several different users at the same time.

2. Bicycle Parking

Secure and convenient bicycle parking must be available at all cycling destinations to encourage and support the use of a bicycle. A comprehensive bicycle parking program must provide two levels of parking to match the cyclist's needs. Basic bike parking is typically a bike stand on the sidewalk suitable for short-term parking. An enhanced level of service is required for long-term bike parking. This type of parking targets employees, students and residents who will be parking for more than two hours.

Providing protection from the elements is an important amenity for cyclists who ride in all weather conditions. There are many examples of covered bicycle parking facilities in European cities, ranging from simple inexpensive shelters to multi-level bicycle storage facilities. Further investigation is required to develop design concepts, identify potential locations and investigate the potential for cost recovery generated through advertising revenue.

Bicycle storage facilities should be provided at principle bicycling destinations (such as schools, and recreation facilities) as well as at public facilities such as county parks, post offices, public libraries, health care facilities, visitor information centers and museums.

It is recommended that St. Mary's County research and develop demonstration projects for enhanced bicycle parking facilities. In addition, amendments to the St. Mary's County's Comprehensive Zoning Ordinance should also be made to include bicycle parking guidelines for developers and property managers. Several North American cities (Vancouver, Portland, Los Angeles and Tucson) have produced bicycle parking guidelines which can serve as a model for St. Mary's County.

3. Integration with Regional Plans
The network of bicycle facilities that result from this plan should also be recognized in the various county and community plans. Furthermore, in order to maintain continuity and consistency over county borders, St. Mary's County should coordinate with adjacent counties to include the proposed bicycle facilities in their master plans.

4. Updating the St. Mary's Bicycle Plan
Periodic updates to the St. Mary's bicycle plan should be completed to ensure that the proposed bicycle network is meeting the goals established in this plan. It is recommended that this update be undertaken whenever the Transportation Plan is updated at minimum.

5. Develop a Bike Facility Maintenance Program
While implementing bikeway facilities is important, keeping constructed facilities in good condition is equally important. This task would involve identifying easy to implement improvements that eliminate hazards for the cyclist and make all roads more compatible with bicycles. A particular staff person within the St. Mary's County Department of Public Works could be identified as the bicycle coordinator for the county to address any roadway surface problems. For off-street trails, volunteer organizations can play an important role in performing clean-up activities and light maintenance work.

6. Bicycling and Transit
Bicycling and public transit both provide transportation alternatives to the private automobile. However, neither form of transport alone can complete with the automobile's range, flexible and convenience. If bike and transit work as a team, they make a formidable alternative to the automobile.

Over the past ten years, many North American transit agencies have equipped part or all of their bus fleets with bike racks. Bike racks on buses provide benefits for cyclist, in that the rack enables the bike to accompany the cyclist during peak periods. It is recommended that St. Mary's County coordinate with

the St. Mary's Transit System to make provisions for bicycle accommodations on transit vehicles.

7. Signage and Intersection Controls

The Southern Maryland Regional Trail and Bikeway System Study recommended the development of a Southern Maryland Bike Touring Sign. A sign containing an image specifically designed for Southern Maryland is proposed to be placed along all designated touring routes in the Tri County region. The bike touring signs will be combined with names of specific touring routes as well as destinations of a particular route. It is recommended that St. Mary's County develop a similar road sign that will delineate the county's bicycle network to be shared with the southern Maryland Regional Trail.

8. Safety & Education Programs

It is recommended that St. Mary's County utilize a variety of mechanisms to communicate, deliver and sustain effective safety education programs. Partnerships between the county and groups including local police departments, the Board of Education, civic associations, health care organizations and the business community should be explored. An education program must also be directed to the motorist on how to avoid crashes with bicycles and understanding how driving violations lead to serious accidents. At a minimum the following elements should be included in an education program:

- Include bicycle safety programs as part of all elementary school curriculums.
- Promote the use of helmets by all cyclists.
- Enforce bicycle traffic regulations.
- Educate the motoring public as to the rights and responsibilities of operating a bicycle on public roadways.
- Publicize hunting season schedules where there may be conflicts with trail usage.
- Organize community biking events.
- Coordinate bicycle maintenance courses.

9. Funding Methodologies

There are a number of available funding methodologies to enable the bicycle improvements outlined in this master plan to be realized. Most of the recommended improvements are for upgrades to existing roadway facilities both county and state owned. These types of roadway facilities typically can be funded through a variety of existing programs at the federal, state, and county level.

Some improvements could be funded from federal funds available through the existing Transportation Enhancements program (TEA-21) or its successor. Others projects could utilize existing funds in the state Consolidated

Transportation Program (CTP) or the County's Capital Improvement Program (CIP) for roadway improvements including resurfacing and re-striping. Often times, bicycle facilities can be added to existing roadway projects at minimal cost to the project's overall budget. Projects involving improvements at more of the local level could rely on private development funds to provide bicycle facilities in local subdivisions. This variety of funding options provides a tremendous amount of flexibility in the methods and strategies for funding the proposed bicycle facility improvements.

Additional funding resources include the following:

- Transportation Enhancement Program
- Retrofit Bicycle Program
- National Recreation Trails Program

Figure VI.1. Cultural Resources

Figure VI.2. Bicycle Levels of Comfort

Figure VI.3. Proposed Bicycle Plan

VII. SIDEWALKS

Duke Street is missing sidewalks along the west side of the roadway in front of the school.

Sidewalks are mainly located in the Lexington Park and Leonardtown areas of St. Mary's County. These locations for sidewalks were evaluated to determine areas where new sidewalk connections should be constructed. Sidewalk networks should also be constructed between neighborhoods, schools, and parks. There are several neighborhood streets with sidewalks but no connection to adjacent collector roadways. Additionally, many sidewalks are not ADA compatible, and some sidewalks are in need of repair or are overgrown with foliage. The following are recommendations to improve the sidewalk network in St. Mary's County:

A. Countywide

All new residential developments zoned at less than 1 acre lots, all commercial developments, and all areas where curb and gutter is proposed and the main access of all residential subdivisions should include sidewalks.

Current countywide sidewalk needs include the provision of sidewalks from the proposed Three Notch Trail to the two new proposed Charlotte Hall Park and ride lots. Crosswalks should be marked where the sidewalk intersects MD 235.

B. Lexington Park

The existing and proposed sidewalk network for Lexington Park is shown on Figure 1 and is described below:

High Priority

- Chancellors Run Road (MD 237) entire length– there are no sidewalks although two nearby developments, Heards Estates and Saint George's, have sidewalks. Sidewalks along MD 237 would connect these developments plus other developments to the sidewalks along MD 235. Chancellor Run Road Park is located on the west side of MD 237, south of Clipper Drive. The 80-acre park has a teen center, and a senior center. Sidewalks are proposed as part of the SHA widening project.

- Willows Road from South Shangri La Drive to John G. Lancaster Park. There are no sidewalks leading to a 47 acre park along Willows Road between MD 246 and the park.

- Complete the sidewalk network where necessary along MD 246.

- South Shangri La Drive– fill in sidewalks where gaps exist on both sides of the roadway (included in the Pathways to Schools project).

- South Essex Drive – South Shangri-La Drive to MD 246.

- FDR Boulevard – MD 235 to MD 246.

- Carver School Boulevard (proposed elementary school).

- Great Mills Swimming Pool sidewalk connection to Great Mills Road.

- Bunker Hill Drive – construct sidewalks on east side of Bunker Hill Drive to provide access to Nicolet Park.

- Buck Hewitt Road – complete missing sections between MD 237 and MD 235.

- Pegg Road – entire length.

Low Priority

- Willows Road from Lancaster Park to MD 5.

- Lexwoods Drive – sidewalks are located on west side of Lexwoods Drive however the east side provides access to a shopping center.

Sidewalk Repair

- Patuxent Park.

C. Leonardtown

The existing and proposed sidewalk network in Leonardtown is shown on Figure 2 and is described in detail below.

High Priority

- East side of MD 245 between the Community College entrance and Baldridge Street - this would complete the sidewalk network on the east side of MD 245.

- North side of Doctors Crossing Way – construct sidewalk connection from the St. Mary's Hospital to MD 245.

- MD 5, from the end of the existing sidewalk to MD 234.

- Courthouse Drive from the north side to east of Guyther Drive – Approximately 40 feet of sidewalk is needed to connect exiting sidewalks. This area is on a slope and may be difficult to build, but is necessary to connect the sidewalk network.

- Dorsey Street, Connelly Court, Norris Circle – complete sidewalk network in this neighborhood.

- North side of Church Street between Lawrence Avenue and Duke Street.

- West side of Duke Street, north side of Seymour Street – this roadway leads to a school and tennis courts. There are no sidewalks on either side of the road north of Seymour Street although the sidewalk network is completed to the south.

- North side of Shadrick Street – complete sidewalk network.

- Fenwick Street- sidewalks should be added or updated as part of the proposed streetscape project.

- MD 5 from MD 234 to Abell Street – this would provide a sidewalk connection from the Town Center to the shopping areas located on the west side of town.

Low Priority

- Park Avenue in front of the Commissioners of Leonardtown building – complete sidewalk network as appropriate.

- Guyther Drive between Courthouse Drive and Park Avenue.

- North side of Tudor Hall Road network between Washington Street and Camalier Drive- there is a break in the sidewalk that should be eliminated along this roadway.

Sidewalk Repair

- Dorsey Street.

D. Sidewalk Retrofit Program

This program provides funding for construction of new sidewalks and reconstruction of existing sidewalks along State highways in locations identified by local jurisdictions. The state can pay for half or 100 percent, depending if it is a designated "redevelopment area." The local jurisdiction is required to maintain the sidewalks.

Figure VII.1. Lexington Park Sidewalks

Figure VII.2. Leonardtown Sidewalks

VIII. TRAILS

The development of a trail network provides many benefits. Trails are a positive mode of transportation since they serve as a recreational facility and provide an alternative to driving without creating congestion and emissions. Trails can provide connections to neighborhoods and schools, creating a safe facility for children using school facilities. The trails create opportunities to improve physical fitness while avoiding traffic congestion.

A. Schools

Approximately half of the St. Mary's County public schools have trails, with four more trails planned within the upcoming years. A list of existing and proposed public school trails is shown in Table 6 and is also displayed on Figure 1.

Table 1. Environmental Trails at St. Mary's County Public Schools

	Existing Trail	Trail to be developed next 12-24 months	No Trail Planned
Elementary School			
Banneker/Loveville			X
Carver	X		
Dynard			X
Green Holly		X	
Greenview Knolls			X
Hollywood	X		
Leonardtown			X
Lettie Dent	X		
Lexington Park			X
Mechanicsville			X
Oakville		X	
Park Hall	X		
Piney Point		X	
Ridge	X		
Town Creek	X		
White Marsh			X
Middle School			
Esperanza		X	
Leonardtown			X
Margaret Brent			X
Spring Ridge	X		
High School			
Chopticon	X		
Great Mills			X
Leonardtown	X		

B. Three Notch Trail

The proposed Three Notch Trail is approximately 28 miles long and runs from the Charles County line to Lexington Park. The trail will be constructed in 8 phases and will for the most part follow the existing railroad right-of-way. In the Lexington Park area, several commercial developments are located adjacent

The existing railroad right-of-way, shown in red, for the proposed Three Notch Trail is only several hundred feet from Three Notch Road through Lexington Park. There are numerous driveways to commercial developments that cross the existing right-of-way.

to the existing railroad right-of-way and consequently, numerous driveways cross over the trail. Alternatives should be considered for relocating the trail behind the commercial developments. For the most part, the trail will be used for recreational purposes; however the Three Notch Trail will be especially advantageous for Amish and Mennonites as an alternative means to riding their buggies along MD 235 which they do frequently to access the Charlotte Hall Farmer's Market. Also, the section of the trail through Lexington Park would be ideal for bicycle commuters to the Patuxent Naval Air Station.

Hiking trails in Greenwell State Park

C. State and County Park Trails

The various state and county parks have established a network of trails with various uses and purposes. Presently nine parks have a trail system with two additional parks proposing trails. The location of the State and county trails is displayed on Figure 1. The location of trails in state and county parks is as follows:

Table 2. Trails at State and County Parks

Name	Status	Type	Length (mi.)
County Parks			
Cardinal Gibbons Park			
Cecil Park			
Chancellor's Run Reg. Park	Existing	Hiking/fitness	0.38
Chaptico Park	Planned	Nature/hiking/jogging/equestrian	1.5
Dorsey Park	Existing	Nature/hiking	1.5
Elm's Beach Park			
Fifth District Park	Existing	Nature/hiking	1
Hollywood Soccer Complex			
Jarboesville Park			
John G. Lancaster Park	Existing	Nature/jogging/biking	.25
John Baggett Park at Laurel Grove	Proposed Enhancements	Nature/hiking	1.5
Laurel Ridge Park			
Leonardtown Elem. Park			
Miedzinski Park			
Myrtle Point Park	Existing	Nature/hiking	3
Nicolet Park	Proposed	Nature/jogging/hiking/biking	N/A
Piney Point Lighthouse Park			
Seventh District Park			
St. Andrews Estates Park			
St. Clements Shore Park			
Town Creek Park			
State Parks			
Greenwell State Park	Existing	Nature/hiking/biking/equestrian	10
Point Lookout Park	Existing	Hiking/biking	5
St. Clements Island St. Park	Existing	Hiking/biking	N/A
St. Mary's River State Park	Existing	Hiking /equestrian	8.15

The following improvements should be considered for St. Mary's County trails:

- Expand upon a trail network in St. Mary's City that would incorporate St. Mary's College and the historical sites.

- Expand trails within St. Mary's River State Park.
- Provide for a trail along Mattapany Road if archeological/historical review allow for the improvement
- Provide for a trail through Mill Field in St. Mary's City

D. Three Notch Trail and Other Trail Funding

The Three Notch Trail is being funded by a combination of County (county bonds, local transfer tax and impact fees), State POS development funds and Federal (TEA-21 National Recreation Trails Program) funds.

Other trails within County parks are funded as part of park development projects or are sometimes constructed by staff and volunteers (nature trails).

Figure VIII.1. St. Mary's County Existing and Proposed Trails

IX. WATER ACCESS POINTS

A. Public Landings

One of the many assets of St. Mary's County is it proximity to water. Residents can utilize one of the twenty-two public access points or numerous private locations to reach the Patuxent River, Potomac River or Chesapeake Bay. Facilities range at the public access points from boat ramps to trailer parking to piers and beaches. Public water access points are shown on Figure 1. In order to keep up with the demand Capitol Improvement Program (CIP) includes several improvement projects needed at public landings and access points. Those improvements are listed below:

- **Fox Harbor Landing** (CIP FY 06)
  - Replace existing pier
- **Patuxent River Public Landing acquisition project** (CIP FY 06-FY 07)
  - Acquire land to develop public landings
- **Piney Point Public Landing** (CIP FY 07)
  - Replace shoreline bulkhead
- **Myrtle Point Park** (future project to be determined)
  - Non-motorized boat launch for water devices such as canoes and kayaks.
- **St. Mary's River Access at Former Mansfield Property** (FY 06)
  - Provide canoe and kayak launch
- **Paul Ellis Public Landing** (CIP FY 06)
  - Replace Existing Pier
- **Tall Timbers Landing** (CIP FY 06)
  - Replace existing pier
- **Leonardtown Landing Waterfront Park** (CIP FY 05, 06)
  - Provide public waterfront park and promenade
  - Provide for boat landings
- **Piney Point Landing Shore Erosion** (CIP FY 05)
  - Replace deteriorating shoreline bulkhead

In addition to projects in the CIP, various longer term improvements are needed throughout the County to improve public access to the water. This includes:

- **Patuxent River**
  - Provide additional public landings. Public landings are nonexistent in the central to north portion of St. Mary's County and would be desirable.
  - The Cape St. Mary's Landing is open for public use, but the lease agreement for this usage expires in 2019, an alternative location

for a public landing on the Patuxent River in the central part of the County should be acquired in the next ten years.

- A public landing for motorized boats is needed on the lower Patuxent River. Enhancements of facilities at Clarke's Landing Public landing (CIP FY 06) would help address this need. A private/public partnership should be developed with the owner of Clarke's Landing Restaurant for additional parking.

Forest Landing, shown above, before improvements were made.

- **Wicomico Shores**
  - Provide additional parking.

- **Bushwood Wharf**
  - Formalize long term parking. Currently, parking is leased from nearby property owners.

- **Fresh Pond Neck Landing**
  - Provide parking.

- **Camp Calvert**
  - Provide parking.

- **Potomac River**
  - Provide more public access. This could include a beach park in the area near Breton Bay

B. Ferry Service

At this time, there is no ferry service within the County. According to the Maryland Archives, ferries were the first form of transport covered by law. An Act of 1638 provided for a ferry service across St. George's River to enable folks to attend provincial assemblies in St. Mary's City; the toll was set at one pound of tobacco. More recently, House Bill 1376 from the 2002 Legislative Session (not enacted) proposed a ferry franchise service between St. Mary's County and Somerset County. In addition, the State's Department of Transportation studied the feasibility of ferry service throughout the bay area in 2002. St. Mary's County was found to be unsuitable for ferry service. The Comprehensive Plan does not address ferry service. Currently, the County is considering a proposal offered by a private entrepreneur to establish a ferry service in St. Mary's County to run from Piney Point to Northumberland County, Virginia.

Short term recommendations include the solicitation of public/private partnerships through requests for proposals and the identification for existing facilities that could be upgraded such as Abell's Wharf in St. Mary's County (Potomac Crossing) and the Solomon's' Recreation Facility in Calvert County (Patuxent Crossing).

C. Acquisitions and Funding for Public Landings

Parkland acquisitions, park development projects and waterfront park/public landing acquisition projects are funded by a combination of County (general fund, park impact fees, local transfer tax, county bonds) and Maryland Department of Natural Resources, and Program Open Space funds. One half of one percent of the purchase price of a home or land is paid at the time of settlement and goes into special fund for POS. The local share of funds is allocated by formula based on population, size of the county and the amount of transfer tax originating from the county.

Public landing improvement projects are typically fully funded by the Maryland Department of Natural Resources Waterway Improvement (WWI) Program. Projects include new piers, boat ramps and shore erosion control and are funded up to $99,000 per year (some are funded overall several years to secure enough funding to do the project). Revenues for the WWI fund come from a one time 5% excise tax that is paid to the state when a boat is purchased and titled by the state.

Figure II. Public Water Access Points

APPENDIX A

LEVEL OF SERVICE DEFINITIONS

The following are the definitions for level of service for intersections, multi-lane highways and two lane highways.

Intersections

LOS A - Free traffic flow.

LOS B - Stable traffic flow, occasional delays at traffic signals.

LOS C - Stable traffic flow, moderate delays at traffic signals.

LOS D - Approaching unstable traffic flow, frequent delays at traffic signals.

LOS E - Unstable traffic flow, signal backups.

LOS F - Unacceptable, forced traffic flow.

Multi-Lane Highway[1]

LOS A describes completely free-flow conditions.

LOS B indicates free flow, although the presence of other vehicles becomes noticeable.

In LOS C the ability to maneuver within the traffic stream is clearly affected by other vehicles.

At LOS D, the ability to maneuver is severely restricted due to traffic congestion. Travel speed is reduced by the increasing volume.

LOS E represents operations at or near capacity, an unstable level. Vehicles are operating with the minimum spacing for maintaining uniform flow.

LOS F represents forced or breakdown flow.

Two Lane Highways[1]

LOS A describes the highest quality of traffic service, when motorists are able to travel at their desired speed.

LOS B characterizes traffic flow with speeds of 50 mi/h or slightly higher. The demand for passing to maintain desired speeds becomes significant and approximates the passing

capacity at the lower boundary of LOS B. Drivers are delayed in platoons up to 50 percent of the time.

LOS C describes further increases in flow, resulting in noticeable increases in platoon formation, platoon size, and frequency of passing impediments.

LOS D describes unstable traffic flow. The two opposing traffic streams begin to operate separately at higher volume levels, as passing becomes extremely difficult.

At LOS E, passing is virtually impossible and platooning becomes intense, as slower vehicles or other interruptions are encountered.

LOS F represents heavily congested flow with traffic demand exceeding capacity. Volumes are lower than capacity and speeds are highly variable.

1 - Highway Capacity Manual/2000

APPENDIX B