

# Calvert County Comprehensive Plan Update

## *Providing an Efficient and Multi-modal Transportation System*

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Concerns about traffic delays, pedestrian amenities, bicycle facilities, and transit service pervade every discussion of the County's condition and future. Calvert County's geography limits accessibility to the county and presents challenges to the creation of a robust internal transportation network. The county is surrounded on three sides by water. The primary road access is in the narrow north end of the county. There is only one highway crossing to the west into Charles County, MD 231 Benedict Bridge, and one to the south into St. Mary's County, MD 4 Thomas Johnson Bridge, which is being studied for replacement and widening. There are no highway connections to the east.

The transportation network in Calvert County is a function of the county's shape—a long narrow peninsula. The long length of the peninsula and large water bodies along it encourage north-south movements. Because the peninsula is narrow, there is limited space for multiple north-south routes. MD 2/4 is the only road that extends for the full length of the county, and at the headwaters of St. Leonard's Creek, it is the only road linking the northern and southern ends of the county. Whether commuting out of the county to the north or south or traveling within the county to Prince Frederick and the other Town Centers, the vast majority of residents travel by car on MD 4 and 2/4 at some point. The county's dependence on auto travel along MD 4 and MD 2/4 corridors is at the center of the concerns related to transportation.

This issue paper proposes strategies for providing a multi-modal transportation network within these limitations. It also discusses the different types of travel movements that occur: within the county, through the county, and within a Town Center. While there is overlap between these categories, it is important to recognize the differences and develop approaches to addressing the needs of each.

### Current Conditions

#### Highways

Highway traffic is a product of Calvert County’s car-centric transportation network, and traffic on MD 4 and 2/4 is the most frequently-mentioned transportation issue. However, despite its dominance as an issue, Calvert County has not seen increasing levels of traffic along the primary county arterial road in recent years. Figures 1 and 2 show annual average daily traffic (AADT) at five points along MD 4 and 2/4 from 2000-2015. Aside from one sharp increase in 2005 at MD 2/4 in Prince Frederick, traffic volumes have been fairly stable. The higher counts are in the middle of the county and moving to the north; the south has significantly lower traffic volumes than the rest of the county, but has seen the most consistent growth in volumes over time.

Planned Highway improvements

The Maryland State Highway Administration has begun a six-phase project to upgrade and widen MD 2/4 in Prince Frederick from north of Stoakely Road to south of MD 765A to a six-lane divided highway. This project will accommodate bicycles and pedestrians as appropriate.

The second phase of the project, from Fox Run Boulevard to Commerce Lane is scheduled for completion in 2021.

Figure 1. Traffic Count Locations

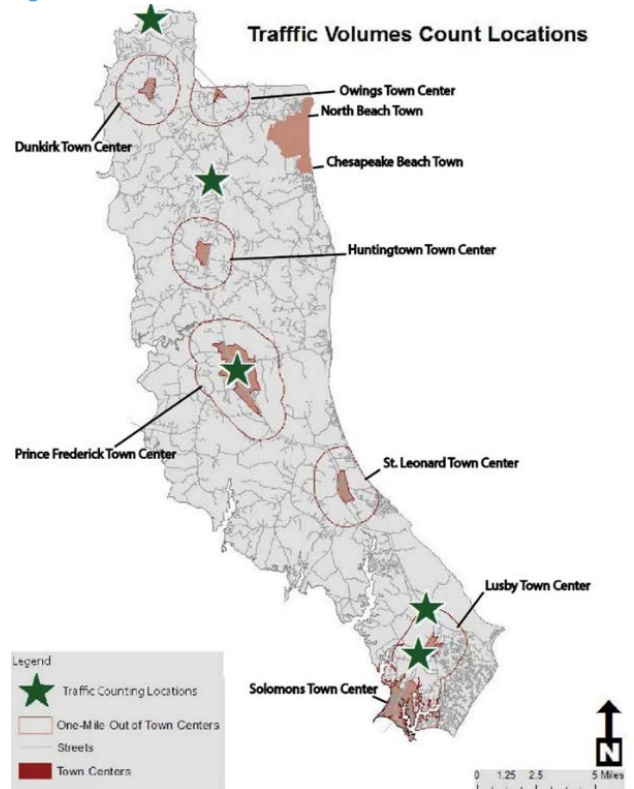
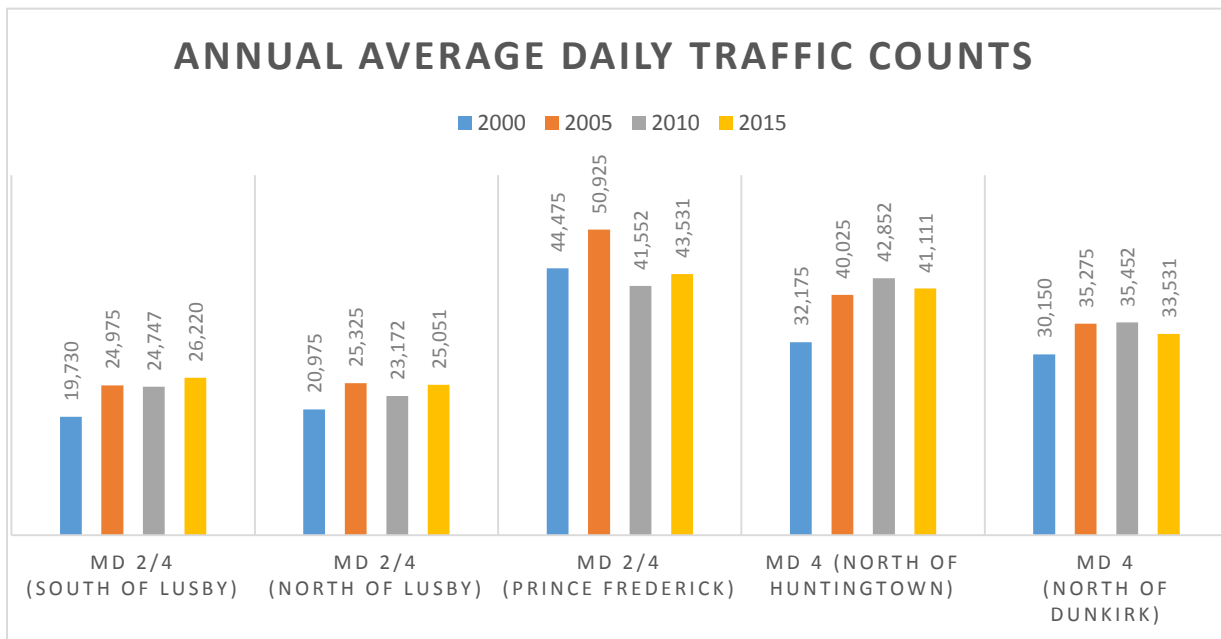


Figure 2. Traffic Counts 2000-2015



The state is also studying the replacement and widening of the Thomas Johnson Bridge, which carries MD 4 over the Patuxent River at the south end of the county. The improved bridge is slated to include accommodations for pedestrians and bicyclists.

### Transit

The County Government provides seven bus routes in and between the Town Centers: two routes provide service within Prince Frederick, two routes provide service to the northern part of the county, one route serves the middle section of the county, one route serves in the south part, and one route provides service through Lusby and Chesapeake Ranch Estates. Depending on the route, there are between five and 13 trips a day.

There are five daily commuter routes into Washington, DC, and the commuter buses are typically filled to capacity.

### Pedestrian and Bicycle Facilities

There are few connected trails for bicyclists or pedestrians to use, either for recreation or for transportation between developed areas. Providing these connections is challenging because of east-west stream valleys cutting through the county on either side of the ridgeline that MD 2/4 follows.

The volume and speed of vehicles, and in some instances, the lack of shoulders make MD 2, MD 4, and MD 2/4 impediments to pedestrian and bicycle travel. In addition, where the highways bisect developed areas, the lack of signalized pedestrian crossings discourages people from walking, most notably in the Prince Frederick Town Center. While there are sidewalks, they are limited and not fully connected even in developed areas. The lack of pedestrian and bicycle facilities fosters reliance on automobiles and does not provide alternatives to auto travel.

### National Trends

Several national and regional current trends could lead to increased traffic in the county in the future. First, the Federal Highway Administration has identified a national increase in total vehicle-distance traveled along highways starting in 2014. Washington, DC is consistently ranked as one of the worst metropolitan areas in the country for congestion. In the 2015 Urban Mobility Scorecard produced by Texas A&M Transportation Institute, the Washington, DC Metro Area is ranked first in three of the four categories for congestion. Since 61 percent of county residents commute outside of the county, commuters can expect to deal with increased congestion on their way to work.

Second, the advent of connected and autonomous vehicles is generally anticipated to affect driving patterns in several ways. Commuters may choose to send their cars home rather than paying for daily parking. This practice would double the number of daily work trips for cars whose owners decided to do this. Also, these vehicles with their enhanced safety features may encourage individuals who are not

drivers or who do not drive frequently to travel more often and further distances than they might in less-sophisticated cars.

Beyond auto traffic, increasing numbers of travelers are opting to walk and to bicycle for short daily trips. Communities which provide safe and attractive facilities attract residents and businesses interested in healthier and more affordable travel options.

## Perspectives on Transportation

### Board of County Commissioners and Planning Commission

Both the County Commissioners and the Planning Commission consider traffic an issue that must be addressed in the Comprehensive Plan. With only one major road in and out of Calvert County, they are pursuing highway improvements and are seeking viable alternatives to driving such as teleworking, transit and rideshare, and improved bicycle and pedestrian facilities. Specific transportation improvements suggested included additional park-and-ride lots to handle future needs, a new Thomas Johnson Bridge, expanded transit including consideration of light rail, bicycle paths, sidewalks, and trails.

### Comments from public

Residents consider the future of MD 4 and 2/4 and its traffic a major issue with little consensus. Congestion on MD 4 and 2/4 and the difficulty of getting onto these highways from side streets were often raised as a concern at the workshops. Residents' concerns about the car-centric travel in the county revolve around the perception that congestion has worsened throughout the county, particularly through Prince Frederick and Dunkirk and on the Thomas Johnson Bridge and MD 231.

Residents recognize that there are limited transportation options in Calvert County, but do not have consensus on solutions. Proposed solutions for MD 2/4 range from "it shouldn't be widened" to "it should be widened properly at appropriate places." Many workshop participants noted that the rural landscape of Calvert County presents challenges for a well-connected and efficient bus network. However, some felt that public transportation system was great for the elderly while others argued that transit service is in need of dire repair for all users.

Pedestrian and bicyclists access issues are a growing concern for residents. Workshop participants felt that there are poor walking conditions throughout the county, and called out Solomons as needing improvement. Some residents noted that millennials and seniors prefer walking and biking for daily errands as well as other trip destinations and stressed the importance of bicycle and pedestrian accommodations, not just in rural areas but also in more built-up areas with an on-road and side-path network. Residents suggested filling in missing links to the county's trail network and better promoting the county's current transportation alternatives through biking and trails maps.

Sidewalk improvements and bicycle facilities along parts of MD 2/4 and MD 231 were also mentioned. Limited pedestrian crossings of MD 4 and 2/4 are raised as a particular concern in the Town Centers. Moreover, it was felt that Dunkirk Town Center has great pedestrian improvements, but limited bicycle accommodations. The area around Cove Point was felt to be unsafe for pedestrians.

## Desired Outcomes

Calvert County residents would like to be able to travel throughout the county and within their communities, using a variety of modes, with greater ease. Improving conditions for bicyclists and pedestrians was also expressed, as was a desire to see expanded transit service.

There are several different types of travel needs. There is a need to travel through the county, for example, long distance travel primarily on MD 4 and 2/4). There is a need to travel within the county, that is, shorter distance travel that likely includes some travel on MD 4 or MD 2/4, for example getting from one Town Center to another or from a residential area to a Town Center. There is also a need to travel within a Town Center. While there is some overlap among these categories, it is important to recognize the differences and develop different approaches to fulfilling the needs of each.

The 2010 Comprehensive Plan indicates that preventing severe congestion on MD 4 and 2/4 is important, and the Plan recommends the gradual conversion of MD 4 and 2/4 into a controlled access expressway as a key to resolving future traffic congestion.

With regard to transit, the 2010 Comprehensive Plan calls for the creation of local transit service areas within major Town Centers and express bus service between the Town Centers. The Comprehensive Plan notes that rapid transit, defined as buses or trains traveling in an exclusive right of way, requires higher population densities than Calvert County has today and is unlikely achievable given the county's desire to promote a rural development pattern with the Town Centers offering relatively small urban concentrations.

The 2010 Comprehensive Plan suggests that waterborne commuter ferry has potential in Calvert County to connect the southern portion of Calvert County across the Patuxent River to Lexington Park.

One of the 10 Visions of the 2010 Comprehensive Plan is that walking and bicycling are practical transportation alternatives. The Plan notes that sidewalks and bikeways should remain a top priority, in accordance with Town Center master plans. Promoting walking and bicycling is one of the objectives of the Plan. There are several actions associated with requiring sidewalks to be constructed and establishing bicycle routes to create connections to residential, commercial, employment, educational, recreational, and open space areas, and specifically enhancing opportunities for walking and bicycling in Town Centers.

A successful transportation element of the Comprehensive Plan will identify transportation concerns at all three levels (through the county, within the county, and within the Town Centers) and recommend short-term and long-term actions for roadways, transit services, bicycle facilities and pedestrian improvements that improve the overall travel experience in the county.

## Possible Strategies

The Calvert County Transportation Plan was adopted 1998. An update to this plan should develop a coordinated program of roadway, transit, bicycles and pedestrian improvements to serve needs throughout the county and within designated areas. The Transportation Plan should establish a hierarchy of county roads with appropriate Complete Streets features<sup>1</sup>, identify locations for new or expanded transportation facilities, and set standards for the adequacy of the transportation system to guide development approvals and the capital improvements program.

## Through County Movements

### MD 2/4

- Convert MD 4 and MD 2/4 within designated areas like Prince Frederick and Dunkirk to a Complete Street facility with shared access and parallel access roadways and convert MD 4 and MD 2/4 outside designated areas to a managed access highway with new access limited to streets and at-grade intersections.

### Transit

- Option 1: Expand commuter bus service into Washington, DC and St. Mary's County.
- Option 2: Continue to plan for transit stations, where passengers can transfer from commuter buses to local buses.
- Option 3: Improve daily transit connections with Charles County and St. Mary's County.

## Within County Movements

### Roadways

- Option 1: Improve roadways to address coastal and stormwater flooding.
- Option 2: Improve MD 231 to address safety and reduce congestion.

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<sup>1</sup> The National Complete Streets Coalition, a coalition of transportation officials and advocates, defines "Complete Streets" as those that "are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities." (Accessed 1/24/2017, <https://smartgrowthamerica.org/program/national-complete-streets-coalition/what-are-complete-streets/>).

- Option 3: Promote travel demand management such as ridesharing options, preferential parking for carpooling, and expanded park and ride lots.

### Transit

The County Transit system configures its service to address the two types of movements—three routes run between Town Centers and four routes operate within a single Town Center. All the routes begin or end at a community or senior center and operate between 7 a.m. and 8 p.m., serving the needs of those attending the senior centers and running daily errands.

- Option 1: Explore the demand among local employers and workers for buses to take employees to and from work places within the county.
- Option 2: Work with Calvert Hospital and the College of Southern Maryland to develop routes likely to encourage transit access for employees, patients and students from throughout the county to include the new College of Southern Maryland campus in Hughesville.
- Option 3: Explore the potential for dedicated bus lanes to expedite transit movements between and through Town Centers during congested traffic periods.
- Option 4: Improve wayfinding (the system that underlies the design of a signage program) and bring to people’s attention the option of public transportation in a creative and inviting way.

### Bicycling

While there may be limited demand for bicycle travel extending the entire length of the county from north to south, the geography of the county does support shorter movements between adjacent Town Centers and development and from east to west across the county.

- Option 1: Establish priorities for the creation of marked bike lanes or separate bike facilities along state and county highways connecting to MD 2, MD 4, and MD 2/4 and connecting Town Centers.
- Option 2: Develop a bicycle master plan for the county, to include both on road and off road routes and include priorities to expand or create opportunities for bicycling.
- Option 3: Promote bicycle events around the county to increase awareness of bicycles as a regular means of transportation and to encourage tourism.
- Option 4: Create a wayfinding signage system for bicycle routes.

### Local and Town Center Movements

In order to increase the vibrancy of Town Centers, Calvert County needs to create a transportation network within the Town Centers that support vibrancy and vitality. This means prioritizing county transportation dollars toward constructing a transportation network that is more balanced—and focus more on walking and biking—within the Town Centers. A vibrant place is one with people out and about, not one full of speeding cars. In order to help draw people out of their vehicles, it is necessary to create an environment that is pedestrian-friendly. This includes a roadway network made up of short

block lengths with wide sidewalks, pedestrian-scaled lighting, on-street parking buffered from roadways designed to promote slower traffic, destinations to walk to and from, amenities, and street furnishings.

### Streets and Roads

#### *Develop north-south roadway systems, parallel to MD 2/4 in Prince Frederick and Dunkirk*

- Option 1: Connect the current roads parallel to MD 2/4 into a complete roadway network that extends the length of MD 2/4 through the Prince Frederick and Dunkirk Town Center areas.
- Option 2: Focus commercial on parallel roads not MD 2/4.

#### *Establish a Road Connectivity Requirement for New Development*

- Option 1: Establish road and sidewalk/path connectivity requirement based on block length in designated areas and for residential and commercial subdivisions above a certain size to help reduce traffic congestion and improve walkability, especially in Town Centers. Because most subdivisions in Calvert County do not interconnect, even short trips require the use of major arterials, contributing to the overload of MD 4 and MD 2/4.

### Transit

- Option 1: Review the routes serving Town Centers to include stops at employment centers, consider extending transit hours to serve employees within the Town Centers and adjacent areas.
- Option 2: Review routes connecting major subdivisions to Town Centers. Housing in higher densities, but still outside of the Town Center has the potential to be utilized stops in a transit network.
- Option 3: Increase availability of demand-response public transportation. This call-by-call public transportation would be used to connect the low density areas of the county.

### Bicycle and Pedestrian Facilities

- Option 1: Develop and implement a Complete Street program in each Town Center.
- Option 2: Set aside funding in the capital budget to install sidewalks along both sides of all streets in Town Centers.
- Option 3: Develop a local bicycle system plan for each Town Center.
- Option 4: Establish bicycle parking requirements for commercial, employment, and institutional uses in Town Centers and Employment Centers.
- Option 5: Install traffic calming measures such as roadway narrowing, raised and colored intersections, street chokers (also called neckdowns, they narrow the street by extending the sidewalk), and traffic circles in select locations in Town Centers. These processes focus on reducing the speed of cars and increase alertness of motorists in order to enhance the environment for non-motorists.



## Share Your Ideas:

Thank you for reviewing this paper, which is intended to get you thinking about how Calvert County should plan for the future of transportation. You are invited to the public workshop to discuss transportation issues and to share your thoughts via the County Comprehensive Plan website: <http://www.co.cal.md.us/futureCalvert>.

Use these questions to prepare for the workshop and to provide comments on the website.

1. Think about where and how you currently travel through and around the county. What would need to change for you to use a different method (such as taking transit, walking, or biking) to make those trips?
2. What steps could be taken to create more walkable, bikeable Town Centers? What particular Town Centers or sections/areas of Town Centers should be prioritized for improvement? Why?
3. How can the county make it easier to get between Town Centers and other population centers in the county? What are the ways to encourage more of these trips be by bus or bicycle?
4. How should MD 4 and MD 2/4 be treated when they bisect a Town Center? What improvements, if any, could be/should be made to turn MD 4 and MD 2/4 into a connection rather than a barrier between the different parts a Town Center?
5. Allocate 100 points across the following five areas where Calvert County should invest its time and funding. The more desirable the approach, the more points should be allocated to it.

Improve through county movements on MD 4 and MD 2/4 by limiting access along it and building over/under passes and interchanges

Improve local roads that connect residential areas to Town Centers

Continue/improve bus service that connects the Town Centers

Make the Town Centers more walkable/bikeable

Improve/expand transit services that circulate within the Town Centers

Total (100)