

VII. Transportation

7.1 Introduction

This section addresses existing **circulation** in Centreville and provide guidance on addressing future access and circulation for the Town's long term development. Some existing streets will need to be improved and several major new streets will need to be constructed when the time is right in order to sustain municipal growth and expansion. Left unplanned, the street system in the growth area, especially, would imposes significantly impacts on the existing residents of Centreville leading especially to gridlock within the MD 213 corridor and Downtown.

Map 1 shows the existing street and highway system in the Centreville area and Map 2 shows the planned street system focusing on major streets --- called Collectors and Primary Local streets. The alphanumeric symbols on Map 2 correspond to the discussion of proposed projects later in this section under the heading "Recommendations".

Among other things, this section of the Plan also recommends that the Town continue the course of building an interconnected network of sidewalks, trails, and bikeways and extend that network into the planned growth area as development take place.

7.2 Existing Conditions

Functional Roadway System

Map 1 classifies existing major streets and highways in the Centreville area by their function—arterials and collectors. Two arterial highways carry higher traffic volumes at relatively high speeds and connect Centreville to the region: MD Route 213 and U.S. Route 301.

MD Route 213 is the north-south axis through the core of Centreville where it operates with one lane in each direction: Commerce Street headed north, and Liberty Street headed south. The Maryland State Highway Administration (SHA) classifies MD Route 213 as a minor arterial highway. U.S. Route 301, by contrast, is a principal arterial on the federal highway system. It bypasses Centreville on its southern and eastern sides where it intersects with MD Routes 213 and 304 at grade separated interchanges. U.S. Route 301 in the Centreville area is a four-lane divided and access-controlled highway.

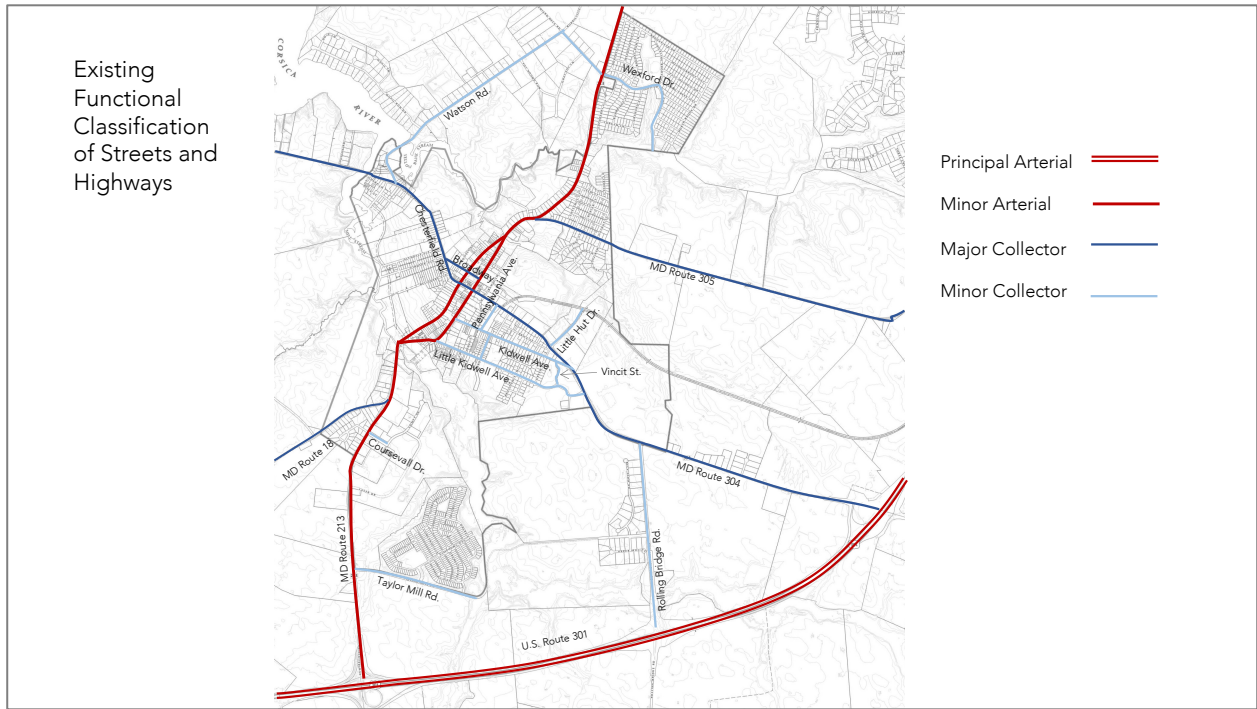
SHA classifies MD Routes 18, 304, and 305 as major collectors. Major collectors collect traffic from lesser streets and convey it arterial highways and thus to points beyond Centreville, and in reverse, they collect traffic from the arterial system and distribute it to local neighborhoods. Within Town, these same collectors—MD Routes 18, 304, and 305—are the primary means of east-west travel. The efficient movement of areawide traffic is a primary concern on the collector road network.

Map 1 also shows a set of the Town’s minor collector roads including Wexfrod Road, Watson Road, Kidwell Avenue, Little Kidwell Avenue, Coursevall Drive and Taylor Mill Road. These roads also collect traffic from minor streets but are secondary in that function to the major collectors. As a network, arterials, and collectors (both major and minor) shape the distribution and character of travel in and around Centreville.

Highway Traffic Volumes and Conditions

Table 1 shows average daily traffic volumes reported by SHA in 2000, 2010, and 2019 for the main north-south movements through Town—that is, along MD Route 213¹. As shown, traffic increased over time along MD Route 213, most notably on the section south of MD Route 18, which is the section of highway fronting the Centreville Business Park and the Town’s busiest shopping center. The Table shows that the average number of vehicles per day along the shopping center’s frontage increased by 18% between 2010 and 2019. By comparison, during the same decade, traffic north of Downtown increased by only 2%.

¹ Because the reported 2020 volumes were likely impacted by the economic shut down due to the pandemic, data for 2019 is presented. Note that at each location where volumes were recorded, the 2020 volumes were significantly lower than the 2019 volumes indicating the pandemic’s probable impact on areawide traffic.



Map 1

Table 1

Traffic Volumes in Centreville Over Time

Highway Section	Vehicles per Day			Change 2010-2019	
	2000	2010	2019	#	%
At the Gateways to Downtown					
MD 213 South of MD 18 (4H Park Rd)	14,600	13,532	16,002	2,470	18%
MD 213 North of MD 18 (4H Park Rd)	12,150	15,042	16,674	1,632	11%
MD 213 South of MD 305 (Hope Rd)	-	11,842	12,135	293	2%
Within Downtown					
Commerce Street (northbound) at Kidwell Ave.	-	7,272	7,665	393	5%
Commerce Street (northbound) at Water St.	-	6,452	6,205	(247)	-4%
Liberty Street (southbound) at Church Ln.	-	7,152	7,795	643	9%
Liberty Street (southbound) at Water St.	-	6,102	6,825	723	12%

Table 1 shows that traffic within Downtown has increased since 2010 most notably on the southbound side (Liberty Street). Traffic on Liberty Street increased 12%, measured near Water Street, and 9% measured further south at Church Lane. The data show that on northbound Commerce Street traffic volumes drop as vehicles move toward Downtown indicating the role that Kidwell Avenue plays in intercepting eastbound traffic before it gets to the core of Downtown. Traffic on Commerce Street at its intersection of Water Street fell by 4% between 2010 and 2019. Peak period congestion and delay remain a recurring issue in the MD Route 213 corridor through Town and often coincides with the release of students from area schools in the afternoon.

One of the consequences of the opening of the interchange at U.S. Route 301 and MD Route 213 was the introduction of a steady flow of traffic northbound into Town during peak periods. (Traffic on MD Route 213 used to stop at the signalized intersection with U.S. Route 301 and entered Centreville in intermittent cycles.) The signalized intersection at Coursevall Drive was intended, in combination with the signalization of the Laser Drive intersection, to break up the steady flow of travel to allow upstream traffic in Downtown (at the Water Street intersection) to dissipate. Laser Drive however has not been completed nor signalized so the State's traffic operations strategy has not been implemented. This has complicated the unsignalized entrance into the Food Lion Shopping Center which SHA determined back in 2004 warranted a traffic signal. This intersection is the site of significant delay and congestion when MD 213 is carrying high volumes of traffic.



Figure 1: MD Route 213 at the Coursevall Intersection

MD Routes 304 (Ruthsburg Road and Water Street) and 305 (Hope Road) connect the Town to U.S. Route 301 east of Town. As noted above MD Route 304 intersects the U.S. Route 301 at a grade-separated interchange and MD Route 305 intersects the highway at an on-grade crossing. The distribution of traffic over time on these main east-west routes and on U.S. Route 301 is shown in Table 2 below. Traffic has increased on each of these highway sections except for MD Route 305 (Hope Road). Traffic on Hope Road has trended downward for 20 years and even decreased by 15% between 2010 and 2019 likely owing to the improved crossing provided by the US 301/ MD 304 interchange.

Table 2

Traffic Volumes Area Roadways: 2000, 2010 and 2019

Highway Section	Vehicles per Day			Change 2010-2019	
	2000	2010	2019	#	%
U.S. Route 301 (south of MD Route 304)	15,126	17,427	24,353	6,926	39.7%
MD Route 305 - Hope Road (East of MD 213)	1,900	1,743	1,481	-262	-15.0%
MD Route 304 - Water Street (East of MD 213)	5,400	4,260	5,000	740	17.4%

Source: Maryland State Highway Administration

While not shown in Table 2, MD Route 304 as a collector, also extends to the west side of Downtown on an alignment made up of W. Water Street, Chesterfield Road, and Corsica Neck Road. A proper and consistent comparison of traffic volumes on this route cannot be made using SHA data because the count location has changed frequently over time. For the section between Chesterfield Road and Liberty Street, SHA’s 2019 counts show 3,673 vehicles per day. This roadway section is an important part of the major collector road network for traffic headed to southbound MD Route 213 from Shore Lumber Millwork, Centreville Elementary School, and the offices of the Queen Annes County School Board. These land uses contribute to heavy morning volumes on Chesterfield Avenue.

The most significant change in area traffic volumes is the nearly 40% increase on U.S. Route 301 between 2000 and 2019. This reflects the response of interstate traffic to major highway upgrades in the U.S Route 301 corridor in Delaware, which have provided a viable alternative to the more heavily travelled Interstate Highway 95 corridor.

Local Streets

The municipal street system is comprised of original streets like Broadway and Lawyers Row laid out in the 18th century at the Town's development, collector streets like Kidwell Avenue and Little Kidwell Avenue and residential streets constructed at various stages of subdivision development. Overall, travel speeds and volumes on Town-owned streets are typical of local streets with a residential character. The roads are adequate to safely handle the traffic they carry, and they are no known safety or capacity issues that require rehabilitation or roadway expansion. Because of the small blocks, intersecting streets, and extensive sidewalks, the Town's core is highly interconnected and very walkable. Most town streets have sidewalks so walking within neighborhoods is generally convenient. However pedestrian linkages between the Town's various residential communities and between them and Downton is not well developed.

Public Transit

The Queen Anne's County Department of Aging operates three weekday "deviated fixed routes" within the County, and one of those routes connects Centreville to Stevensville. These routes operate on a standard schedule, but the bus driver may deviate from the route up to ¾ mile for any rider. The regular stops in Town include the Kramer Center, Acme, Tilghman Terrance, and Food Lion. Rides are available to the general public, as well as disabled persons and senior citizens.

Trails

There are three hiker / biker trails in Town. The first is the Town-owned Millstream Trail which extends from Mill Stream Park on MD Route 213 (at the merging of Liberty and Commerce Streets) northwest to Creamery Lane. From that point it is a short distance over existing residential streets to Centreville Wharf Park via Front Street. The second is the Nature Trail which is a platted open space amenity contained entirely within in the North Brook Subdivision. The third is the trail connecting Symphony Village to the shopping center on MD Route 213.

7.3 A Plan for Transportation

This section addresses future access and circulation needs. Map 2 shows the planned street system. This section also included a recommended trail network map.

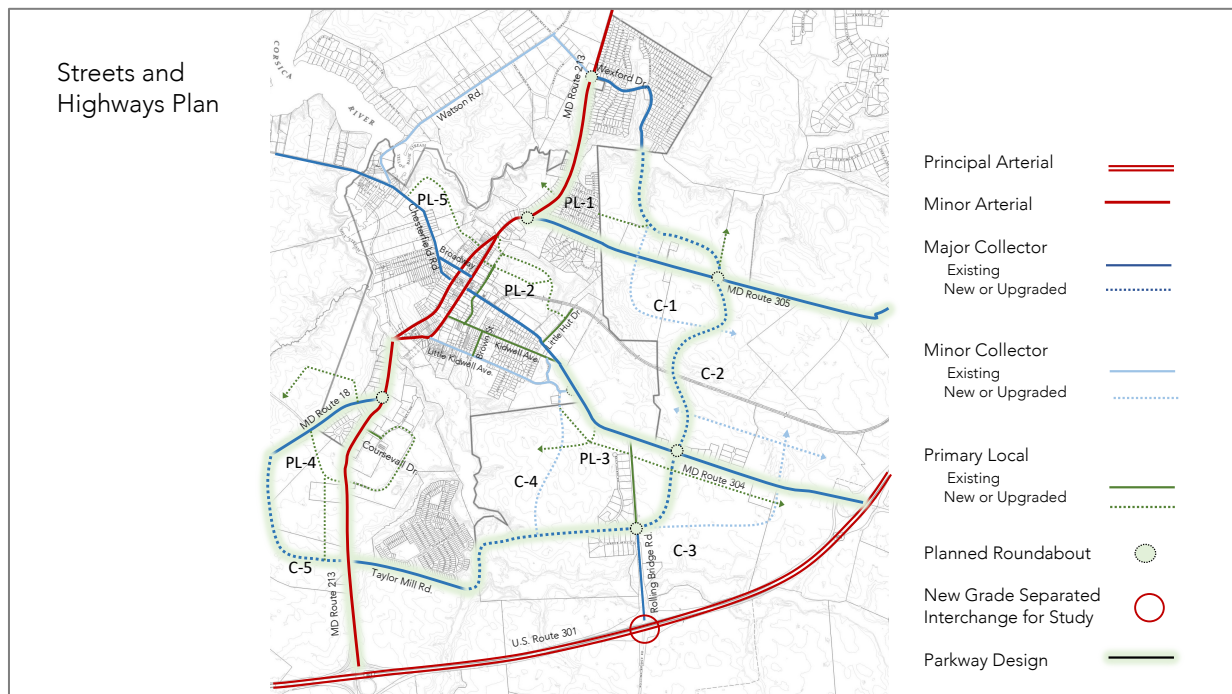
Objectives

- To have a transportation system that allows residents of all stages of life and abilities the freedom to move about Town and be active participants in the cultural, civic , and business life of Centreville without unnecessary obstacles.
- To ensure long-term street access and circulation throughout Centreville is protected so that residents and visitors move efficiently through the community and business goods and commercial services are efficiently transported.
- To be guided by an overall street system plan where traffic speeds and loadings are compatible with the local context, and beautiful with the complete set of features that make them a joy to drive on or walk or bike along.
- To have an interconnected town where the logical extensions of existing and planned streets and trails are made.
- To promote walkability in Downtown and along all streets extending from downtown where sidewalks, crosswalks, pedestrian amenities, and parking are strategically located.
- To ensure the problem of heavy truck traffic is continually addressed and to eliminate, to the extent possible, the mixing of heavy truck traffic with local traffic and pedestrian movement.
- To promote modernized street infrastructure that capitalizes on existing and emerging traffic operational and safety technologies and supports the use of alternative fuel vehicles.
- To promote a cost effective and system based and holistic approach to development, improvement, and maintenance of Town streets.

Recommendations

Build the Planned Collector Street System as the Town Develops

The Centreville street system will need to evolve to accommodate the Town’s planned development, especially within the growth area. This Plan is needed to ensure that streets are improved in a way that is cost effective, delivers lasting mobility benefits to existing and future residents and businesses, and provides options for minimizing congestion on MD Route 213 through Downtown. The proposed general alignments for new and upgraded Collector and Primary Local streets are shown on Map 2.



Map 2

When the large tracts of land within the growth area are proposed for development, developers will be required to conform their plans with this planned street system and build the new streets or upgrade existing ones that serve their projects. The Town will coordinate with the Maryland SHA to review traffic impact studies for developments that impact State owned and maintained roadways. As is its practice, the Town will continue to require that developers make planned street upgrades as a condition of development approval. Until they are needed, the mapped street alignments are to be reserved and protected from development.

Map 2 shows the major elements of the future street system which is planned to serve the eventual build-out of Centreville and its growth area. It shows both new and upgraded streets and the future functional classification of the street network. The map does not show all future local streets that may be needed; these would be built as development takes place. Instead, it shows the planned alignments of Collectors (C) and Primary Local (PL) streets. The planned projects corresponding to Map 2 are described below.

- C-1. This minor collector would run from the planned Oak Street Extended south crossing MD Route 305 before heading east to connect with the planned East Side Major Collector. It would address circulation needs of future residents east of the existing Town limits between MD Route 305 and the railroad.
- C-2. This is the planned East Side Major Collector. This major Collector would extend from Wexford Drive in the north to Rolling Bridge Road south of MD Route 304 before turning westward onto the Taylor Mill Road alignment. It would collect traffic throughout the growth area and distribute it to the arterial road network--that is, to U.S. 301 or to MD Route 213. It would also function to link existing and future neighborhoods and commercial areas in the growth area. As this route is constructed in the southern part of the growth area, Rolling Bridge Road could be downgraded to a Primary Local street and carry slower moving traffic. This route in combination with other collector routes would provide congestion relief to MD Route 213.
- C-3. This minor Collector would extend from Rolling Bridge Road eastbound before bending northward and crossing MD Route 304 near the Planned Business Park.
- C-4. This minor Collector would extend Vincit Road southward to the East Side Major Collector at Taylor Mill Road Extended). This would serve the north-south travel needs of the southeast portion of the growth area.
- C-5. Taylor Mill Extended-West. This would continue the Eastside Major Collector to MD Route 18.
- PL-1. This is the extension of Oak Street eastward toward the Eastside Major Collector and westward over MD Route 213, through a narrow portion of the larger tract which has been set aside for future access.
- PL-2. This is a set of Primary Local streets that connect Commerce Street to Banjo Lane and Little Hut Drive through the Turpin Farm.

- PL-3. This is a set of Primary Local streets that primarily run parallel to MD Route 304 providing for the circulation needs of future mixed use development. This allows MD Route 304 to be an attractive parkway as commercial driveways, truck loading zones, and parking lots would connect directly to it rather than to the Route 304.
- PL-4. This is a set of Primary Local streets that includes the completion of Laser Drive and its extension westbound from MD Route 213 to MD Route 18. It also includes a commercial street that would be extended south on the west side and parallel to MD Route 213 and a separate residential street connecting Hibernia Road to MD Route 18.
- PL-5. This Primary Local street would extend from Chesterfield Road to Liberty Street through the following three properties, Carter Farm, Queen Anne's County Board of Education, and the Town owned public works lot. It would include an upgrade to the existing Johnstown Lane which presently intersects Liberty Street. This roadway would relieve traffic on Chesterfield Avenue.

Apply New Street Development Principles

To promote overall design uniformity, good balance with planned land uses, street design quality, and functional resiliency, several general principles must guide the development of Collector and Primary Local streets. These are as follows:

- The primary purpose of each Collector street is to collect traffic from the local street system and to allow efficient travel throughout the Town as it grows. While the alignments of the planned streets may vary somewhat from that shown on Map 2, the planned Collector streets are to be roughly spaced one-half to two-thirds of a mile apart, which is the approximate distance at which they are mapped. Where possible they should be designed as parkways scales to the context of the Town's future development. In other words, they should be landscaped scenic throughfares with a high degree of emphasis on natural beauty and ease of movement serving the travel needs of future development.
- Access onto the planned Collectors via public street intersections is preferred over direct driveways. Public street intersection spacing of about one-quarter mile along major Collectors is about right. For the minor Collectors shown on Map 2, however the spacing could be less and should be balanced with the goal of serving the circulation needs of the land uses proposed. Generally, direct access to adjoining properties (e.g., via driveways) along all existing and proposed Collector streets shown on Map 2 should be limited in order preserve their capacity, functionality for cars, bikes and pedestrians, and their scenic beauty.

- Collector and Primary Local streets should provide wide planting strips for large street trees, landscaped medians where feasible, and separate protected bike lanes or multi-use trails.
- To the extent possible, the right-of-way for each new or upgraded Collector street should be 80 to 100-feet wide which ensures street space for the ultimate buildout of the Town and the optimal flexibility for configuring travel lanes, turning lanes, bikeways, pedestrian amenities, street trees, landscaping, and utilities. The current “major and minor collector road” standards in the Centreville Subdivision Regulations, cap right-of-way width at only 60 feet and should be revised. Rights-of-way for Primary Local streets can generally be much less wide and should be sized for the land uses they would serve: 50 to 60 feet wide is generally adequate.
- To the extent possible, all Primary Local streets should include ample planting strips and street trees well suited to and selected to complement the design of the street.
- The development of all new streets, primary streets, and local streets and lanes, should follow required design standards and specifications that the Town maintains and would revise in accordance with this Plan.

- The images here and on the next page reflect the recommended character (for Major Collector street design) for MD Routes 213, 304, 205 and the East Side Major Collector as indicated with the “parkway” designation on Map 2. In the images, note the boulevard median, the separated bike lanes, the use of street trees within the median and along the street, the capacity for on-street parking, the use of street lighting and landscaped setbacks between the street and buildings. Initial phases of Collector street development may never need to exactly match the standards reflected in these images. For instance, one traffic lane in each direction separated by a landscape

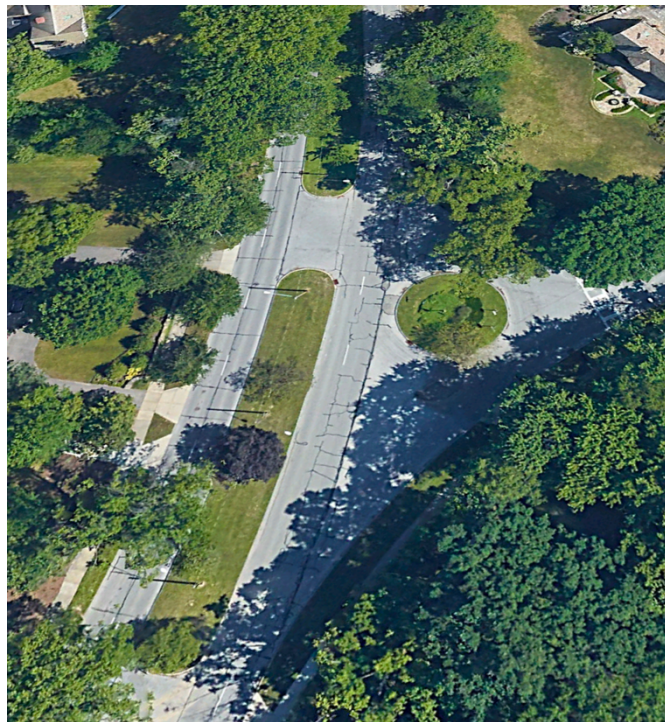


Figure 2

medium could generally be sufficient in most cases through the foreseeable future. These image are for long term guidance however and they help ensure that street development does not foreclose the possibility for optimal design.

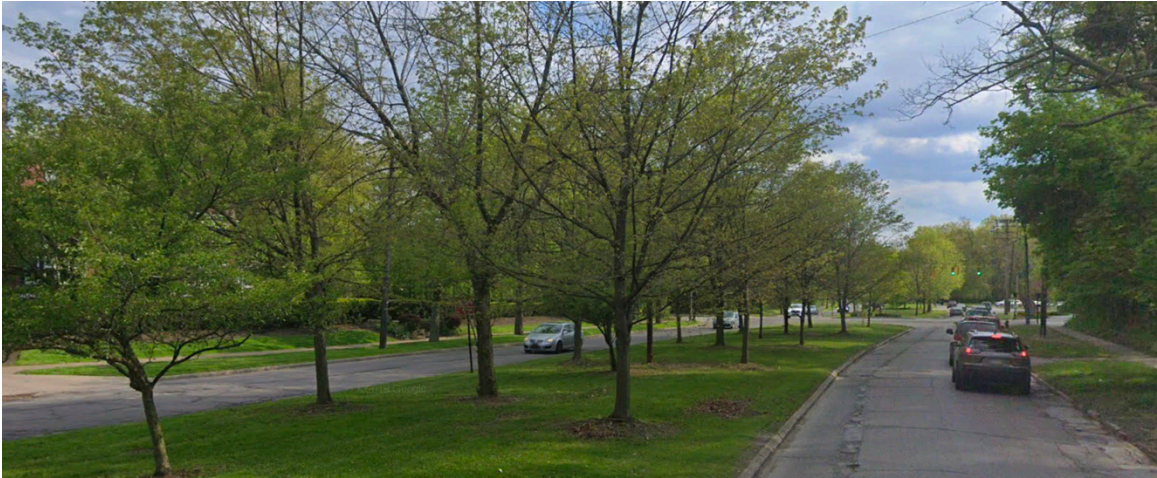


Figure 3



Figure 4

- All planned upgrades and improvements should reflect the context and character of the areas through which they pass and contribute to the sense of place of the local neighborhood or part of Town. This is especially the case with the Primary Local streets. While these streets, which are shown in green on Map 2 are intended to carry traffic through and between future neighborhoods, intersecting residential or commercial driveways would be acceptable. The right-of-way and the required pavement widths of the Primary Local streets should be balanced against the land uses they are intended to serve. So, for example Laser Drive as an industrial roadway would be significantly wider than the local residential streets that would extend through the Carter and Turpin Farms.

Deploy Smart Street Technologies for Safer and More Effective Streets

New Collector streets should be smart streets—that is, outfitted with sensors that monitor and record traffic volumes, heavy truck traffic, wear and tear, and conditions such as temperature, ice, and other factors that would allow for the most efficient long-term care and management of the street system. For MD Routes 213, 304 and 305, encourage the State Highway Administration to deploy smart street technologies. Also, for all streets consider the use streetlight technologies that can detect traffic volumes at signalized intersections and adjust red and green times and pedestrian crosswalk times to improve overall convenience and safety. Consider streetlights that can adjust to ambient light conditions and increase in intensity when pedestrians approach on a sidewalk or crosswalk. Consider embedded lights in crosswalks that light up to signal to oncoming vehicles that a pedestrian is about to enter the crosswalk.

Insist that New Development Build an interconnected Local Street System

It is critical that no major development become an island onto itself; that all neighborhoods and parts of Town are interconnected. Roads that may be stub-ended in anticipation of future extension into newly developed areas must not be prevented from being extended when the time comes. New development must also conform itself to the planned streets shown in this Plan and construct those streets whose alignments pass through the proposed development tract.

Work to ensure all aspects of the Transportation System are Accessible and Safe to people with Disabilities, Children, and Seniors.

Through development plan review and attention to the details of street design, the Town can ensure that new and redeveloped parking lots, sidewalks, crosswalks, transit stops, trails, and entrance ways into commercial and institutional buildings or sites meet the objectives of the federal Americans with Disabilities Act.

Build A Town-wide Trail Network

Extend the Millstream Trail from Mill Stream Park east into the Growth Area and build an interconnected trail network as shown on Map 3, "Greenway and Trail Plan". The Town should require developers to build multi-use trail linkages within and near their development projects using the exhibit as a guide. This is relevant within the Town and in the planned growth area.

This Plan recommends that trail alignments be reserved, and the trails be constructed as land development takes place or sooner where practical. The trails may run within or along the planned collector road rights-of-way or on separate alignments and ultimately would provide a greenway network connecting residents to the Town's park system.

The Town should also consider preparing and implementing a Walking and Bicycle Trail Plan which would recommend and program specific improvements for pedestrian and bicycle connectivity throughout the greater Centreville area. This plan should refine and detailed the proposed greenway trail alignments shown in this Chapter and coordinate with property owners as needed to secure rights of access. The Town could then actively implement projects recommended in that plan, supported where possible by grant programs. In the meantime, the major trail alignments shown on Map __ should be implemented to the extent possible.



Map 3

Coordinate with Queen Anne's County to Ensure Continued Transit

Queen Anne's County provides bus service to Town residents to Kent Island at Stevensville. Over time the Town and County should coordinate in the context of the County's five year transit planning process to determine if adjustments and expansions of the services would be beneficial to local mobility goals. To be a vibrant intergenerational community, paratransit service may need to become especially useful within Centreville given the trends toward an increasingly older population.
