

4.0 Transportation

4.1 Introduction

Land use and transportation are interrelated. How land is used affects how the public moves between home, shopping, work, school, and elsewhere. As a result of expanded land use, traffic on roads also increases. Improving existing roads and constructing new ones help reduce congestion and improve safety. This chapter of the Comprehensive Plan spells out the required transportation improvements needed to achieve the optimal performance of our roadways.

The Virginia Department of Transportation (VDOT) maintains the County's public roads. Property owners' associations and management companies maintain private streets in residential areas and commercial centers. The County works with VDOT and the Fredericksburg Area Regional Metropolitan Planning Organization (FAMPO), to plan for and improve our transportation infrastructure.

This chapter of the Comprehensive Plan identifies future expansion and improvement of existing roadway facilities supplemented by the strategic construction of new roadways, the expansion of existing transit and commuter parking facilities, and the construction of new facilities to support increased options for transportation. This chapter intends to implement the goals and objectives identified in the County's Comprehensive Plan to meet our current and future transportation needs.

This chapter of the Comprehensive Plan identifies anticipated transportation improvements in the county, in addition to projects' scope, estimated costs, funding sources as well as estimated project timelines. In 2020 County staff began developing the foundation for a Transportation Master Plan and are working with key stakeholders including the public, VDOT and the Fredericksburg Area Metropolitan Planning Organization (FAMPO). Once complete, the Transportation Master Plan will provide more detailed strategies regarding specific components of this chapter. The Master Plan will guide transportation decision making into 2050 with data driven projections utilizing advanced software and planning techniques and will also be reviewed annually and updated on an as needed basis to reflect any necessary changes.

There are a number of key factors that influence County-wide transportation planning and the County's ability to make infrastructure improvements. These include but are not limited to:

- Economic Climate
- Revenue streams and funding sources, including grant programs and budgetary appropriations
- Existing and Future Conditions including population growth and land use
- Coordination with federal, state and regional agencies including Federal Highway Administration (FHWA), VDOT and FAMPO
- Multi-modal facilities including transit, bicycle and pedestrian accommodations
- Operating levels system constraints

- Right-of-way requirements including public access
- Roadway Access management and residential traffic management
- Secondary Street Acceptance Requirements (SSAR)
- Road improvement projects in approved capital improvement programs
- New local and regional transportation improvements
- Technological advancements

4.2 Existing and Future Conditions

Roads

Stafford County has a transportation system typical of a suburban locality strategically located near major population and employment centers. The County is influenced by the expansion of the Washington, D.C. metropolitan region and growth of the Fredericksburg metropolitan area. The County's rural transportation system includes narrow, constrained roads that are often incompatible with the evolving land use patterns as the County's zoned agricultural areas continue to undergo substantial development. Road systems within the County's rural/agricultural areas are automobile dependent and prone to major peak period delays.

I-95 and U.S. Route 1, serve as the major north-south corridor for local residents, regional commuters, vacationers, business travel, and commercial freight. In addition, (U.S. Route 17) and Kings Highway (SR-3) provide strategic east-west links for major transportation activities. Several millions of dollars in commercial goods and activity flow in every direction throughout Stafford County daily.

I-95 is the main north-south Interstate Highway on the East Coast of the United States, running from U.S. Route 1 (U.S. Route 1) in Miami, Florida to the Houlton-Woodstock Border Crossing between Maine and the Canadian province of New Brunswick. Virginia's statewide transportation plan (VTrans) categorizes I-95, US Route 1, and US Route 17 (Warrenton Road) as Corridors of Statewide Significance (CoSS). These include facilities and services which comprise the multimodal network connecting major centers of activity Regional Networks and Urban Development Areas (RNs and UDAs) and accommodate inter-city travel between these centers as well as interstate traffic.

Travel within the County also places additional demand on our transportation facilities. Strategic local roadway corridors include Mine Road, Telegraph Road, Centreport Parkway, Garrisonville Road, Courthouse Road, Brooke Road, Poplar Road, Mountain View Road, Hartwood Road, Ramoth Church Road, Kellogg Mill Road, Eskimo Hill Rd., Berea Church Rd., Deacon Road, Forbes St., Shelton Shop Road, Truslow Road, Enon Road, Leeland Road., and White Oak Road. These corridors are not principally for travel outside of Stafford County, but serve the citizens of Stafford and allow them to avoid interstate congestion. For Example, the Mine Road / Centreport Parkway corridor provides a north/south reliever road to U.S. Route 1 and I-95. Garrisonville Road provides a connection from Interstate 95 and destinations within Fauquier County. Courthouse Road is an east-west transportation route that links a number of schools and residential areas to Interstate 95 and U.S. Route 1. Brooke Road is a north-south route that serves much of the eastern part of the county. Similarly, Poplar Road is a north-south route that serves the western part of the county providing a linkage between Garrisonville Road and Warrenton Road.

Rail

There are two rail corridors within the County. The CSX Corporation owns and operates a main rail line that traverses the eastern portion of the County from Quantico to Fredericksburg. There is a spur line known as the Dahlgren Spur that branches off from the main line and parallels US-3 (Kings Highway) and serves only freight. The main rail line serves both freight and passenger trains. There are currently two commuter rail stations in the County at Brooke Road and Leeland Road. Virginia Railway Express (VRE) provides passenger service from a starting point at Union Station in Washington, D.C. and continues from these stations to both the Fredericksburg and Spotsylvania train stations.

The foundation for identifying future roadway improvements in this chapter of the Comprehensive Plan will be derived from the County's Master Transportation Plan and Travel Demand Model. County staff are working with various regional stakeholders in the development and future launch of an enhanced Travel Demand Model which will utilize modern data gathering techniques and synthesizing methods. This Travel Demand Model will examine existing and future land use, existing road networks and capacity, and future build scenarios.

The purpose of this model will be to evaluate future year conditions and allow for the testing of various roadway improvement alternatives in order to achieve an overall operating Level of Service (LOS) equal to or better than C (see Level of Service, Section 4.6). In order to more accurately evaluate the impact on the roadway system, an iterative process is used, which projects growth on the transportation system over time based on the Land Use Plan. The results of this modeling process will allow the County to better implement effective transportation solutions that keep in pace with ongoing growth and development.

With the exception of most of the residential streets, all roadways are included in the modeling process for greater flexibility and accuracy. Modeling evaluates both roadway segments and intersections based on a volume-to-capacity ratio. Due to the varying rate and location of development in the County, the final transportation network proposed in our upcoming master plan will be dynamic and refined continuously over time. Future detailed studies will determine the exact locations and design features of the master plan's recommended investments to the Board of Supervisors.

Even with the extensive road facility improvements and the establishment of new roadways, several roadways in the County are anticipated to continue operating at levels of service C or better. To alleviate these congested areas and maximize the capacity of the transportation network, transportation demand management along with congestion mitigation analysis and other transportation alternatives are being evaluated and implemented through the County and beyond its borders in collaboration with our neighboring municipal partners.

4.3 Transportation Coordination

FAMPO, is the federally designated Metropolitan Planning Organization (MPO) for the Fredericksburg Area. Its serves as the forum for comprehensive, continuing and cooperative regional coordination around transportation plans, policies and projects. The MPO houses our region's Policy Committee which is composed of representatives from Fredericksburg City, Stafford County, and

Spotsylvania County who work together to guide transportation decision making throughout the area.

Funding sources that are facilitated through FAMPO include Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Block Grant (STBG) funds for transportation improvements. FAMPO also coordinates the development of a Transportation Improvement Program (TIP) for the region in addition to a Constrained Long-Range Transportation Plan (CLRTP). For more information about FAMPO and the regional transportation planning process please visit: [www.https://www.fampo.gwregion.org/](https://www.fampo.gwregion.org/).

The Virginia Department of Transportation (VDOT) has primary responsibility for maintaining public streets within the County. The County works closely with VDOT to plan and program road improvement projects. The County also approves an annual secondary road improvement budget and Secondary Six-Year Plan (SSYP) in conjunction with VDOT. These two actions program state-allocated funds for secondary road projects. Interstate and primary system funds are allocated by the Commonwealth of Virginia in coordination with FAMPO through the TIP process. In addition, the County coordinates safety-related transportation projects with VDOT and other stakeholders to improve the safety of our roadways.

4.4 Multi-Modal Transportation Facilities

4.4.1 Car Pool and Van Pool

The George Washington Regional Commission (GWRC) coordinates carpool and vanpool options for the region through the GWRideConnect program. The GWRideConnect program maintains a database of participating individuals seeking to coordinate collective transportation and helps individuals locate one another. The Commonwealth of Virginia, through the Department of Rail and Public Transit and the federal Urbanized Area Formula Funding program (49 U.S.C. 5307), provide financial resources that fund GWRC's coordination. In 2019, there were 89 formal carpools 5 buses, and 387 vanpools in the region. On every onramp to I-95, residents are presented with informative signage regarding how to engage in carpool and van pool activities and to how to access various other sources of commuter information and resources, by dialing 1-800-745-RIDE.

The County fully endorses the expansion of carpool and vanpool operations and actively advocates for the continued expansion of this program for our residents. For more information on GWRideConnect, please visit their website at <https://www.gwrconnect.org/>.

4.4.2 Park and Ride Lots

Four Virginia Department of Transportation (VDOT) commuter parking lots serve Stafford County. Each lot is located near one of the Interstate 95 interchanges. There are two lots adjacent to Garrisonville Road; one on the north side of Staffordboro Boulevard and the Mine Road lot on the south side of Garrisonville Road. Recently the lot on Courthouse Road was relocated with increased capacity. Additionally, the south end of the County services the Warrenton Road lot.

The Park & Ride lot on Courthouse Road in Stafford County has moved to its new permanent location, east of the Interstate 95 interchange at Exit 140. The new commuter lot has been relocated as part of the diverging diamond interchange at Exit 140. It is now located at Old Courthouse Road. It contains approximately 600 parking spaces, which is 50 more spaces than the former commuter lot. Once complete the final lot will have a total of 850 parking spaces. It will also include a dedicated carpool, vanpool and bus pickup and drop-off area to assist with High Occupancy Vehicle (HOV) use.

In the future, the County plans to acquire land adjacent to or nearby the Warrenton Road commuter parking lots for future expansion when additional capacity is needed and funds are available. In the upcoming years, County staff will continually explore federal and state grant funding program opportunities to gather the resources necessary to complete this expansion endeavor.

Commuter parking has not been established at the Centreport Parkway (SR- 8900) interchange, but should be considered in the future as development occurs in that area. The FAMPO 2040 Long Range Transportation Plan projects the future 2050 need for an additional 8,827 Parking spaces in the region at an estimated cost of \$31.7 million.

In conjunction with these efforts, joint use parking areas at centrally located commercial and office centers should be considered. Specific areas could be designated at major centers for commuters. Larger residential developments should also incorporate commuter parking areas for their residents. The intent of these parking lots is to act as a supplement parking area for commuters for established car and vanpools and not to replace the primary commuter parking lots.

4.4.3 Bus

Fredericksburg Regional Transit (FRED) serves as the local and regional bus provider in the County. FRED provides bus routes within Stafford which connect the County with the Fredericksburg metropolitan area.

The County also supports the expansion of privately operated bus services. Bus service is most efficient when serving large concentrations of commuters in subdivisions or at central parking areas. All future central parking areas used for commuters should be designed to accommodate bus stops. In addition, developers of large communities should be encouraged to support transit programs and provide a coordinated effort to accommodate bus and commuter parking services.

Currently, Bus Rapid Transit is provided to residents via the recently established I-395 Commuter Choice Program. This program provides commuter services from the Staffordboro Commuter Lot to both the Pentagon and Washington DC. The County in collaboration with the Potomac and Rappahannock Transportation Commission (PRTC) Omni Ride service plan to continue and expand service to the region into the future.

4.4.4 Commuter Rail

Virginia Railway Express (VRE) is supported by Stafford County, Spotsylvania County, Fairfax County, Arlington County, City of Alexandria, Prince William County, City of Manassas, City of Manassas Park, and the City of Fredericksburg. Commuter rail service is primarily a work-related commuting option operating in the morning from Fredericksburg and Manassas to Washington, D.C. and reversing itself

for the evening commute. However, in the future, VRE trains will also run on weekends. Access to the commuter rail lines is provided in the county via the Brooke Road and Leeland Road stations.

From FY15 to FY20 VRE parking capacity utilization decreased significantly from August 2014. Leeland station utilization decreased by 8% and Brooke station utilization decreased by over 12%. The most recent 5-year average for VRE utilization for Leeland and Brooke stations is 81% and 76% respectively. These data indicate that there is opportunity for the county to invest in increased utilization of these two stations by county residents who can, but do not choose this method of commuting.

Stafford County is also within the Washington D.C. to Richmond section of the Southeast High-Speed Rail project. This multi-state and multi-agency effort aims to improve the performance and capacity of passenger rail service in the corridor. The project plans for the construction of a third set of rail tracks through the County. Alternative routes around the City of Fredericksburg are currently being considered which may have impacts to areas of the County near the Dahlgren Spur Line. Construction of the third rail line is currently underway between Arkendale and Quantico in the northern part of the County. The construction of a third rail will require the expansion of VRE facilities including an additional passenger platform at both the Brooke Road and Leeland Road stations. The new platforms will be of greater length than the current platforms in order to accommodate longer trains.

4.4.5 Telecommuting

Stafford County supports alternatives that will help reduce traffic congestion. A program that has direct benefit in this area is telecommuting. Technological advances in recent years has dramatically influenced employer acceptance of this means of working. Although telecommuting does not necessarily imply working at home, this alternative is widely used and will continue to grow in utility as broadband communication networks expand. Appropriately equipped remote working centers, can also serve employees of both the public and private sectors as a practical means of reducing traffic congestion and vehicle emissions throughout the region, telecommuting centers should be encouraged and developed in areas where the greatest number of individuals may be served.

4.4.6. Stafford Regional Airport

The Stafford Regional Airport was developed by an authority comprised of representatives from Prince William County, Stafford County, and the City of Fredericksburg, and began operations in December 2000. It is located along Centreport Parkway on the south side of Ramoth Church Road, west of I-95 in central Stafford County. The airport site is approximately 500 acres in size. The runway is 5,000 feet in length with a full parallel taxiway system. . In 2022 the airports runway will be extended another 1000 ft. allowing aircraft to take on additional fuel and pay-loads and make the airport more attractive to corporate users for cross country and international flights.

The Stafford Regional Airport is a reliever airport. A reliever airport is a general aviation airport which the Commonwealth of Virginia and the Federal Aviation Administration (FAA) have identified as being close enough to a commercial airport (Reagan National and Dulles International Airports) to provide congestion relief for commercial air traffic. General aviation airports serve business and personal transportation, emergency rescue, express delivery, and news reporting flights. Most general aviation aircraft are small single and twin-engine aircraft as well as business and corporate jets with wing spans up to 80 feet.

The Stafford Regional Airport accommodates both fixed-wing and helicopter aircraft. The airport accommodates up to 100 based aircraft and 75,000 flights annually. Ultimate design of the airport includes hangar space for 120 non-corporate aircraft; 200,000 square feet of corporate hangar space; and tie-down space for 150 aircraft.

4.4.7 Bicycle and Pedestrian Facilities

In 2019, the County's Board of Supervisors approved the Bicycle and Pedestrian Facilities Plan. The plan identified locations for bicycle and pedestrian facilities in an effort to meet growing demand, to provide viable and safe alternatives to automobile transportation, to expand recreational opportunities, and to identify strategies and resources for providing these facilities. Also, the plan allows for more effective prioritization of projects, and opportunities to maximize the use of limited available funds. In the future, County staff will recommend amendments to the Bicycle and Pedestrian Facilities Plan to include a new Cannon Ridge Trail. This trail would connect existing pedestrian trails in the Celebrate Virginia North development to the Belmont-Ferry Farm Trail with proposed trails along the Rappahannock River.

Consistent with the Bicycle and Pedestrian Facilities Plan, all new, reconstructed, or expanded roadways should include bicycle and pedestrian routes. Inside the Urban Service Area, subdivisions should accommodate pedestrian and bicycle facilities in compliance with VDOT standards. Because U.S. Bicycle Route 1 traverses Stafford County, the County will be encouraging bicycle accommodations along the Virginia portion of this route.

Most of the trails in Stafford County are privately owned and constructed as part of individual neighborhoods. Providing a series of connecting trails and sidewalks is a priority for the County. Trails projects include the planned Belmont-Ferry Farm trail and the Warrenton Road Corridor Trail. Where roads cannot be constructed to connect adjacent existing neighborhoods, pedestrian and bicycle trails should be considered to create connectivity.

Stafford County participated in the FAMPO 2045 Bicycle and Pedestrian Plan. The purpose of the Plan was to develop a safe, comprehensive and connected regional network of on-road and off-road bicycle and pedestrian corridors and related facilities. The 2045 Bicycle and Pedestrian Plan is part of FAMPO's regional 2045 Long Range Transportation Plan (LRTP). This regional plan identifies several facility enhancements in various locations including the installation of bike lanes, shoulder improvements, shared road signage, sidewalks, shared-use paths, and signalized pedestrian cross walk.

4.5 Transportation Demand Management

Transportation Demand Management (TDM) aims to reduce roadway congestion, decrease pollution, and promote healthy travel options, by optimizing the movement of people within the transportation system. A major goal of TDM is to reduce the dependence on and use of single-occupant vehicles. Alternative modes of travel include public transit, carpooling, vanpooling, ridesharing, walking, and cycling. Some conceptual models also include telecommuting as a TDM topic.

4.6 Level of Service

The Level of Service (LOS) is a measure of a road's effectiveness to operate in an efficient manner. The operating characteristics of a roadway include, but are not limited to, the number of lanes, pavement width, design speed, traffic controls, shoulder condition, and horizontal and vertical alignments. Levels of Service are divided into six categories from LOS A (best operating conditions) to LOS F (worst operating conditions). At a minimum, LOS should be maintained at LOS C or better.

LOS A	Free flow; low volumes and no delays; volume less than 60% of capacity; delay at signals 0-10 seconds.
LOS B	Stable flow; speeds restricted by travel conditions; minor delays; volume 60-70% of capacity; delay at signals 10-20 seconds.
LOS C	Stable flow; speeds and maneuverability closely controlled due to higher volumes; volume 70-80% of capacity; delays at signals 20-35 seconds.
LOS D	Stable flow; speeds considerably affected by change in operating conditions; minor delays; high density traffic restricts maneuverability; volume 80-90% of capacity; delays at signals 35-55 seconds.
LOS E	Unstable flow; low speeds; considerable delay; volume at or near capacity; freedom to maneuver extremely difficult; volume 90-100% of capacity; delay at signals 55-80 seconds.
LOS F	Forced flow; very low speeds; volume exceeds capacity; long delays; stop and go traffic; delays at signals more than 80 seconds.

LOS is used in transportation modeling to determine the impacts of a particular development project or the addition of a new transportation facility on the operation of the existing road network. Development applications that meet specified thresholds will be required to submit a traffic impact analysis (TIA) in accordance with VDOT Chapter 527 requirements. Stafford County will review the TIA based on LOS C. Where LOS C cannot be attained, development applications will be evaluated by "non-degradation" and "offsetting impact" policies discussed below:

The Non-Degradation Policy requires applicants to ensure that the transportation system affected by the application performs no worse after the project is developed than it would otherwise. This approach is primarily a performance based approach which requires applicants to provide improvements or other guarantees to maintain certain performance levels. These levels would be measured by levels of service or other measures as deemed appropriate by the County and VDOT.

The Offsetting Impact Policy requires applicants to contribute to transportation improvements. The contributions would be proportional to the traffic generated by the project and the amount of transportation capacity required to accommodate that traffic, presumably based on lane-miles. However, this policy would not ensure that the localized performance of the transportation system would be maintained. Instead, it recognizes that in some instances, it may be impossible for performance to be maintained or for one individual applicant to provide the transportation improvements which may be needed.

In general, the Non-Degradation Policy would be pursued in reviewing development applications, with the Offsetting Impact Policy employed in those instances where the Non-Degradation policy is not appropriate.

4.7 Access Management

The VDOT latest Access Management Regulations were adopted in 2009 and amended in 2011, 2012, and 2014. Recognizing the benefit of minimizing impacts to roadways by development and the community benefits, the County follows the established regulations. The regulations are designed to preserve the performance of the existing highway and retain capacity through reduction in conflicting traffic movements. This will extend the transportation infrastructure capacity and promote economic development.

Typical techniques used in access management are use of reverse frontage, inter-parcel access and combining street entrances. Reverse frontage and/or inter-parcel connectors are required by the County's zoning ordinance along arterial and collector roads. In the Highway Corridor Overlay District (HCOD), the requirement supports the County's transportation objective to maximize the efficiency of roadway facilities. Principal arterials primarily accommodate through travel movements. However, direct access to and from these highways occurs frequently. In general, the provision of many access points reduces the efficiency and capacity of an arterial road. This reduction is caused by the interruptions in smooth traffic flow due to turning movements into and out of driveway entrances. Reverse frontage and inter-parcel connectors provide for the separation of the access and travel functions along roadways. When correctly planned and built, their use allows the adjacent parallel roadway to operate more efficiently, with increased capacity and safety. At the same time, access to adjacent properties is provided and oriented to controlled access points. These alternatives also allow for purely local inter-parcel trips to be made without disrupting the through traffic on the adjacent arterial.

Since October 2002, Stafford County has served as a liaison between residents and VDOT regarding traffic related concerns through the County's Residential Traffic Management Plan (RTMP). This plan, which closely follows the VDOT Traffic Calming Guide for Neighborhood Streets, ensures that various programs are available to citizens and communities to address residential traffic related problems for streets and roads operated and maintained by VDOT. In addition, the RTMP provides the minimum criteria (if any) to be satisfied, the steps citizens need to follow to obtain assistance with traffic related requests, and the process that the County will follow to resolve those requests.

As traffic issues in residential areas may have various sources, the following programs are available to address most concerns:

- Residence District – Additional \$200 Fine Signs
- Residential Cut-Through Traffic
- Through Truck Restriction
- Traffic Calming
- Watch for Children Signs
- Restricted Parking Area Program

4.8 VDOT Secondary Street Requirements

In March 2009, VDOT implemented its revised Secondary Street Acceptance Requirements (SSAR). These standards were further revised in 2011. The purpose of these requirements is to ensure that streets built by developers will enhance the overall capacity of the transportation network by providing additional transportation connections to adjacent developments. A disconnected local street network reduces the effectiveness of the overall regional and local roadway system by forcing local trips onto the regional network. A connected transportation system provides benefits to citizens and residents. The revised requirements expand street connectivity and improve traffic circulation. It also reduces the number of one single-entrance subdivisions. This should also enhance emergency access to neighborhoods, improving safety for the residents of Stafford. The County supports the VDOT Secondary Street Acceptance Requirements. Roads that are designed in accordance with these requirements may qualify for acceptance into VDOT's secondary system of highways for public maintenance.

4.9 Funding Sources

Road improvements in Stafford County are financed from various sources including the federal government usually through the Federal Highway Administration (FHWA), the Commonwealth of Virginia through VDOT, FAMPO, and with developers as well as County contributions. Funding sources include, but are not limited to:

- VDOT Six-Year Improvement Program for Interstate and Primary Systems (SYIP) — determined through VDOT. Funding is based on the Code of Virginia formula and approved by the Commonwealth Transportation Board (CTB).
- VDOT Six-Year Improvement Program for Secondary System (SSYP) — determined by VDOT. Funding is based on the Code of Virginia formula and approved by the Board of Supervisors and the CTB.
- Congestion Management and Air Quality (CMAQ) Program funds—federal monies allocated by FAMPO negotiated and based on formula
- Surface Transportation Block Grant (STBG) — federal funds allocated by FAMPO
- VDOT Revenue Sharing Program
- SMART SCALE: VDOT administered multi-modal transportation funding program
- Legislative appropriations (others not currently programmed)
- Advance construction funds through VDOT
- Federal Highway Administration (FHWA) Bonus Obligation Funds
- Federal earmarks
- County general funds
- Debt issued by the County for road projects
- 2.1% fuel sales tax
- Transportation Impact Fees
- Transportation Service District Tax
- The 2019 Bond Referendum
- Developer funds and improvements
 - Proffers
 - Built directly
 - Financial securities, usually supplemented by other funds for projects abandoned or unfinished by developers.

- Transportation Enhancement Grants — federal grants allocated through the CTB
- Other grants—there are a wide variety of grant programs

4.9.1 Transportation Service Districts

The Transportation Service Districts are special taxing districts in which commercial properties contribute to transportation improvement projects within the service district areas. Three transportation service districts serve the County, one in the Garrisonville Road (SR-610) area, one in the Warrenton Road (U.S. Route 17) area, and another in the Rockhill district in the Lynhaven Lane area below the northwest portion of Courthouse Road. The County began collecting revenues in 2008. All funds must be expended on transportation improvements within the respective service areas.

4.9.2 2.1% Fuel Sales Tax

As a member of the Potomac and Rappahannock Transportation Commission, (PRTC), a 2.1% motor fuels sales tax is collected and paid monthly by registered retail outlets in the County. The tax is, in effect, assessed at the pump. The revenue collected through this tax is used for transportation improvements in the County. PRTC is the management agency for the fuels tax collected within Stafford County's borders. Except for a small annual PRTC administrative fee, all of the fuels tax revenue collected in the County is used in the County. The County is obligated to use these funds to off-set the subsidy for VRE ridership within the County. Any remaining funds beyond what is required for the subsidy can be used by the County for other transportation improvement projects.

4.10 Anticipated Transportation Needs

A summary of all of these anticipated transportation needs in are listed in Table 4.1. Some of the transportation needs are graphically represented in Figure 4.1



FIGURE 4.1 Anticipated Transportation Needs Stafford County Comprehensive Plan Stafford County, Virginia September 8, 2021

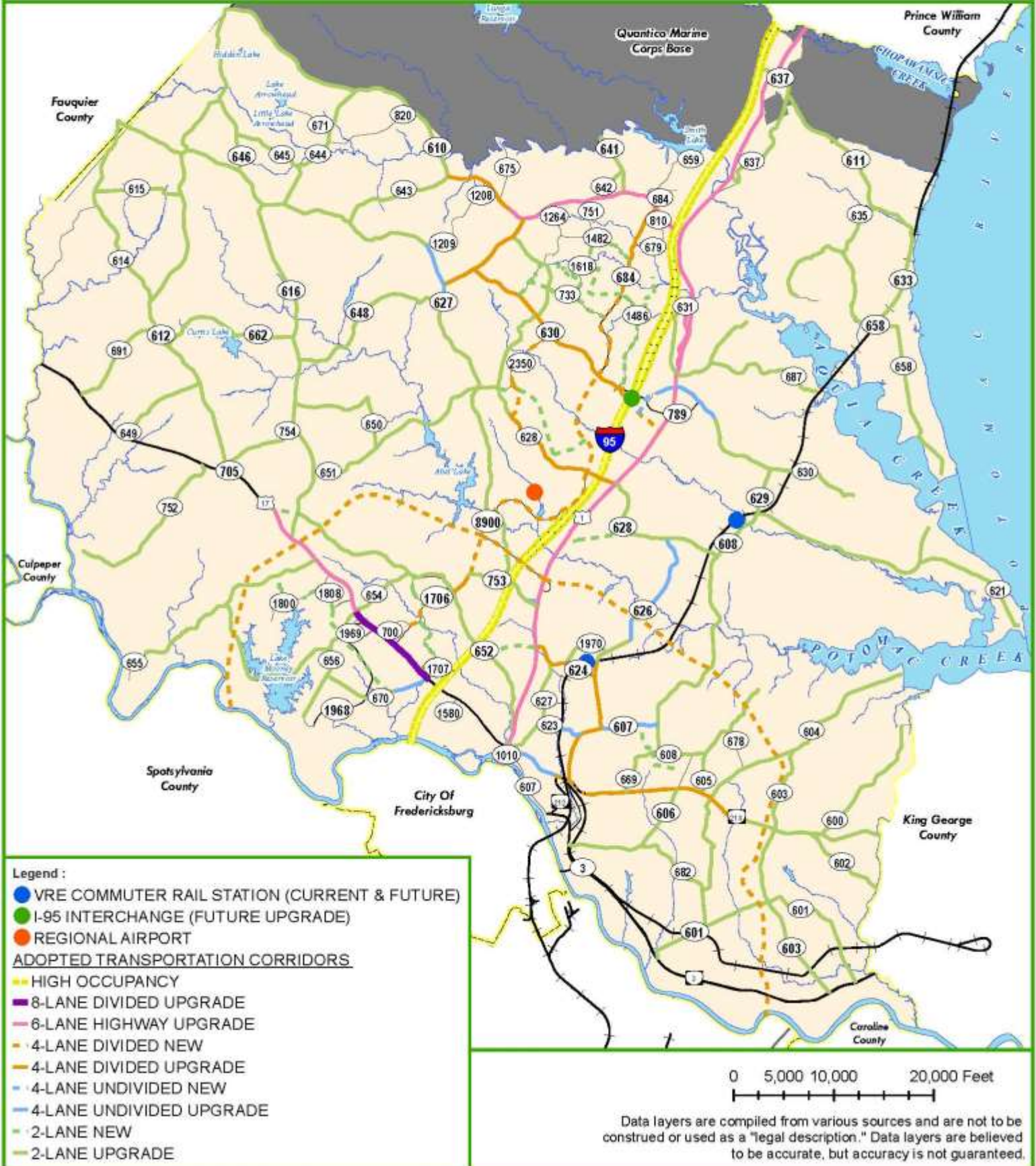


Table 4.1 Anticipated Transportation Needs

Route	Road Name	From	To	Future	R/W	Urban /Rural	Cost (in millions)
1	Cambridge Street / U.S. Route 1	Fredericksburg County Line	Accokeek Creek Bridge	6	160	Urban	\$135.72
1	U.S. Route 1	Accokeek Creek Bridge	Hope Road	6	120	Urban	\$31.49
1	U.S. Route 1	Hope Road	Prince William County Line	6	160	Urban	\$156.43
17	Warrenton Road	Interstate 95	Berea Church Road	8	160	Urban	\$108.11
17	Warrenton Road	Berea Church Road	Truslow Road Extended	6	145	Urban	\$53.87
212	Butler Road	Cambridge Street	Chatham Heights Road	4	110	Urban	\$18.98
218	White Oak Road	Deacon / Cool Springs Road	Caisson / Newton Road	4	110	Urban / Rural	\$55.13
218	White Oak Road	Caisson / Newton Road	King George County Line	2	60	Rural	\$7.06
600	Bethel Church Road	White Oak Road	King George County Line	2	60	Rural	\$9.90
601	Forest Lane Road	Kings Highway	Caisson Road	2	60	Urban / Rural	\$9.22
601	Hollywood Farm Road	Caisson Road	Kings Highway	2	60	Rural	\$8.84
602	Chapel Green Road	White Oak Road	King George County Line	2	60	Rural	\$5.58
603	Caisson Road	Kings Highway	White Oak Road	2	60	Rural	\$11.88
603	Newton Road	White Oak Road	Belle Plains Road	2	60	Rural	\$5.38
604	Belle Plains Road	White Oak Road	End of State Maintenance	2	60	Rural	\$15.05
604	McCarty Road	Forest Lane Road	White Oak Road	2	60	Rural	\$8.98
605	New Hope Church Road	White Oak Road	End of State Maintenance	2	60	Rural	\$9.57
606	Ferry Road	Kings Highway	White Oak Road	2	60	Urban	\$12.43
607	Deacon Road	Leeland Road	Brooke Road	4	110	Urban	\$18.14
608	Brooke Road	New Hope Church Road	End of State Maintenance	2	60	Urban / Rural	\$38.19
610	Garrisonville Road	Fauquier County Line	Joshua Road	2	60	Urban / Rural	\$19.03
610	Garrisonville Road	Joshua Road	Shelton Shop Road	4	110	Urban	\$28.56
610	Garrisonville Road	Shelton Shop Road	U.S. Route 1	6	135	Urban	\$72.93
611	Widewater Road	Telegraph Road	Arkendale Road	2	60	Urban / Rural	\$13.93
612	Hartwood Road	Poplar Road	Warrenton Road	2	60	Rural	\$23.40

Route	Road Name	From	To	Future	R/W	Urban /Rural	Cost (in millions)
612	Heflin Road	Poplar Road	Tacketts Mill Road	2	60	Rural	\$3.96
615	Skyline Drive	Cropp Road	Hartwood Road	2	60	Rural	\$5.94
616	Poplar Road	Warrenton Road	Fauquier County Line	2	60	Urban / Rural	\$33.04
621	Marlborough Point Road	Brooke Road	End of State Maintenance	2	60	Rural	\$8.42
624	Layhill Road	Forbes Street	Cambridge Street	4	110	Urban	\$2.52
624	Morton Road	Leeland Road	Primmer House Road	2	60	Urban	\$4.44
626	Leeland Road	Deacon Road	Morton Road	4	110	Urban	\$25.70
626	Leeland Road	Morton Road	Potomac Run Road	2	60	Urban / Rural	\$1.90
626	Potomac Run Road	Eskimo Hill Road	Leeland Road	2	60	Rural	\$7.69
627	Forbes Street	Cambridge Street	Layhill / Morton Road	2	60	Urban	\$9.61
627	Mountain View Road	Poplar Road	Choptank Road	2	60	Urban / Rural	\$11.77
627	Mountain View Road	Choptank Road	Stefaniga Road	4	120	Urban	\$20.83
627	Mountain View Road	Stefaniga Road	Centreport Parkway	2	60	Urban / Rural	\$14.76
628	Ramoth Church Road	Woodcutter Road extended	Interstate 95	4	110	Urban	\$38.30
628	American Legion Road	Interstate 95	U.S. Route 1	4	110	Urban	\$5.54
628	Eskimo Hill Road	U.S. Route 1	Brooke Road	2	60	Urban / Rural	\$9.97
628	Winding Creek Road	Courthouse Road	Shelton Shop Road	2	60	Urban	\$8.87
630	Courthouse Road	Spartan Drive	End of State Maintenance	2	60	Rural	\$11.25
630	Courthouse Road	Shelton Shop Road	Austin Ridge Drive	4	135	Urban	\$64.51
631	Bells Hill Road	U.S. Route 1 South	U.S. Route 1 North	2	60	Urban	\$7.76
633	Arkendale Road	Widewater Road	Brent Point Road	2	60	Rural	\$6.93
635	Decatur Road	Widewater Road	End of State Maintenance	2	60	Rural	\$9.74
637	Telegraph Road	Interstate 95	Woodstock Lane	2	60	Urban	\$10.40
639	Woodstock Lane	Telegraph Road	U.S. Route 1	2	60	Urban	\$0.83

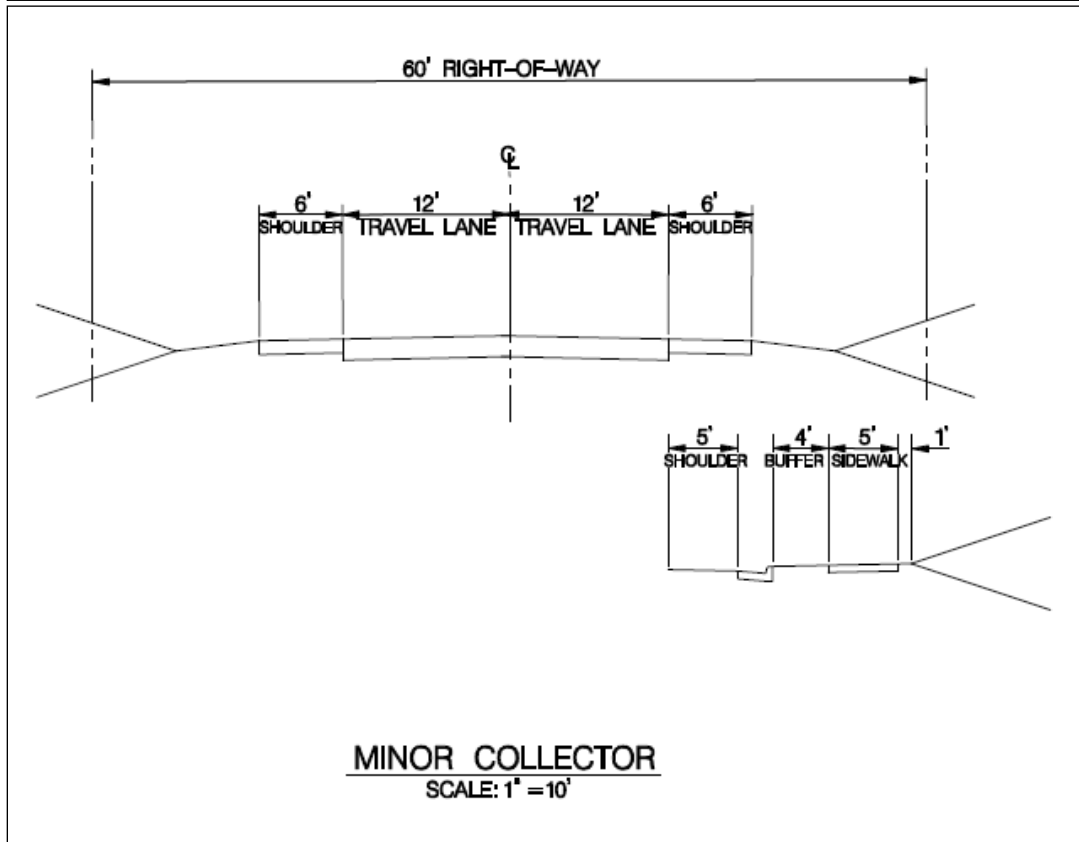
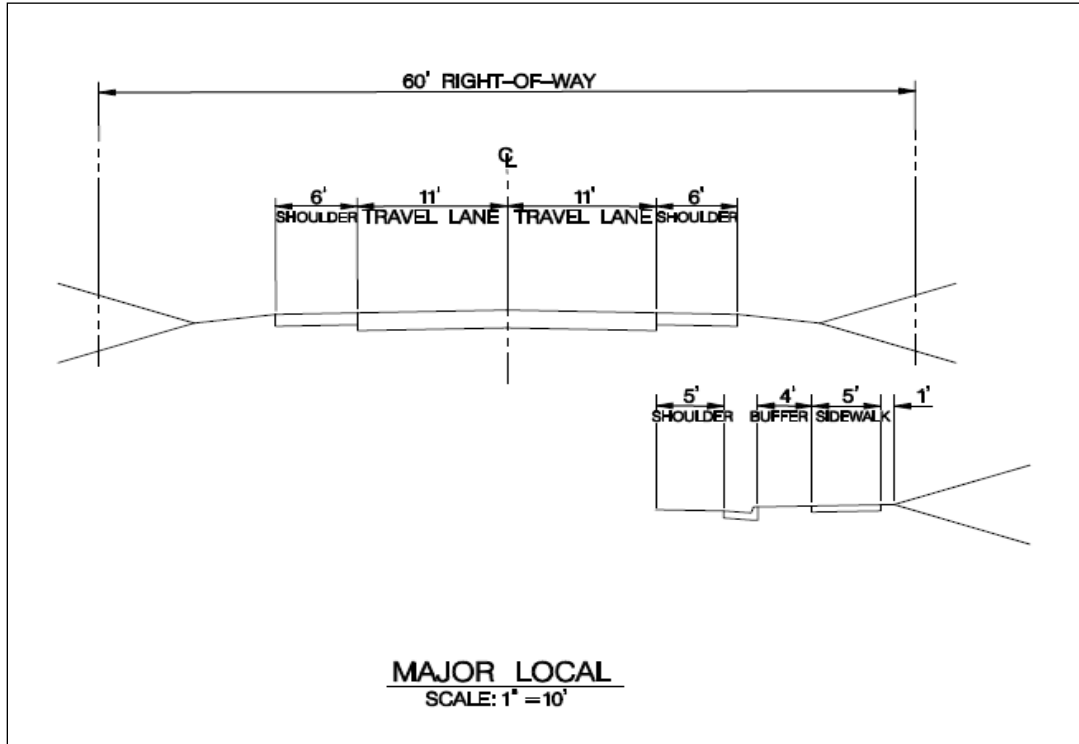
Route	Road Name	From	To	Future	R/W	Urban /Rural	Cost (in millions)
641	Onville Road	Garrisonville Road	Quantico Marine Corp Base	2	60	Urban / Rural	\$4.83
642	Barrett Heights Road	Garrisonville Road	Onville Road	2	60	Urban	\$3.23
643	Joshua Road	Garrisonville Road	Mountain View Road	2	60	Urban / Rural	\$8.47
644	Rock Hill Church Road	Mountain View Road	Garrisonville Road	2	60	Rural	\$9.04
645	Dunbar Road	Tacketts Mill Road	Rock Hill Church Road	2	60	Rural	\$4.95
646	Tacketts Mill Road	Poplar Road	Fauquier County Line	2	60	Rural	\$9.90
640	Porter Lane	Enon Road	End of State Maintenance	2	60	Urban	\$1.06
648	Shelton Shop Road	Mountain View Road	Garrisonville Road	4	110	Urban	\$33.43
648	Stefaniga Road	Poplar Road	Mountain View Road	2	60	Rural	\$11.78
649	Richland Road	Warrenton Road	Hartwood Road	2	60	Rural	\$6.27
650	Mount Olive Road	Poplar Road	Kellogg Mill Road	2	60	Rural	\$9.21
651	Kellogg Mill Road	Poplar Road	Ramoth Church Road	2	60	Rural	\$14.06
652	Truslow Road	Poplar Road	Cambridge Street	2	60	Urban	\$31.23
654	Berea Church Road	Truslow Road	Warrenton Road	2	60	Urban	\$6.14
654	Rocky Run Road	Holly Corner Lane	River Acres Lane	2	60	Rural	\$4.85
654	Rocky Run Road	Greenbank Road	Burgess Lane	2	60	Rural	\$2.38
655	Holly Corner Road	River Ridge Lane	Warrenton Road	2	60	Urban / Rural	\$14.30
656	Greenbank Road	Warrenton Road	End of State Maintenance	2	60	Urban / Rural	\$8.32
658	Brent Point Road	Decatur Road	End of State Maintenance	2	60	Rural	\$16.43
670	Sanford Drive	Greenbank Road	Paul Lane	2	60	Urban / Rural	\$5.99
670	Sanford Drive	Paul Lane	Warrenton Road	4	110	Urban	\$11.26
682	Colebrook Road	Ferry Road	McCarty Road	2	60	Urban / Rural	\$6.39
684	Staffordboro Boulevard	Garrisonville Road	Sunningdale Drive	4	110	Urban	\$2.69
684	Staffordboro Boulevard	Sunningdale Drive	Pike Place	2	60	Urban	\$0.96
687	Hope Road	U.S Route 1	End of State Maintenance	2	60	Urban / Rural	\$12.86
691	Stony Hill Road	Hartwood Road	Poplar Road	2	60	Rural	\$9.57

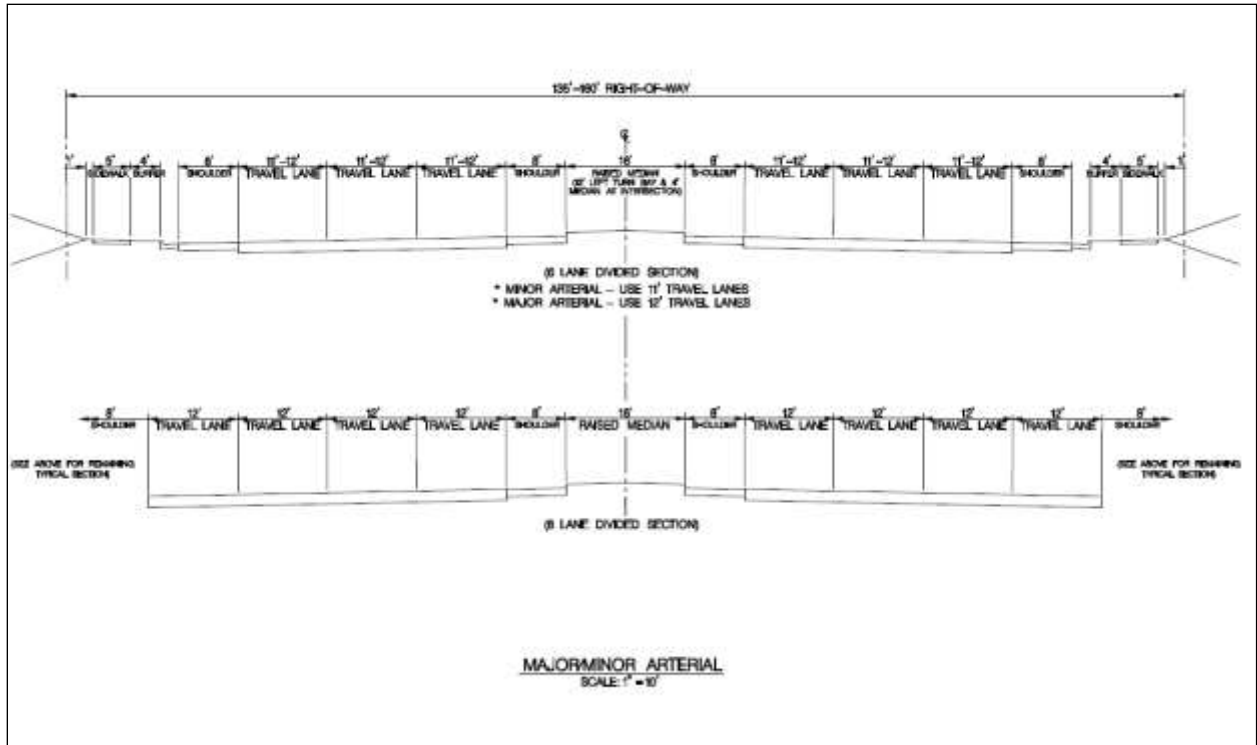
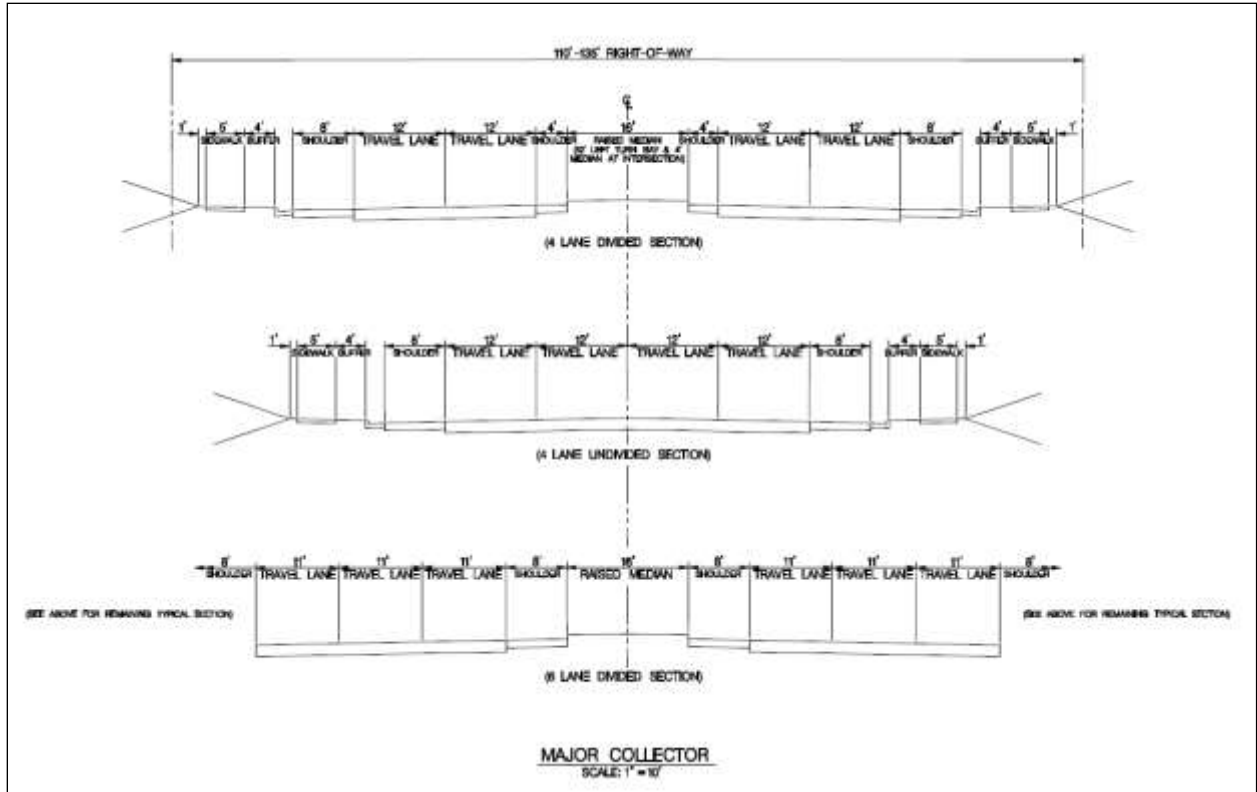
Route	Road Name	From	To	Future	R/W	Urban /Rural	Cost (in millions)
691	Storck Road	Warrenton Road	Hartwood Road	2	60	Rural	\$6.86
721	Olde Concord Road	Hope Road	End of State Maintenance	2	60	Urban	\$5.17
753	Enon Road	Porter Lane	U.S. Route 1	4	110	Urban	\$3.53
753	Enon Road	Hulls Chapel Road	Truslow Road	4	110	Urban	\$6.89
753	Enon Road	Porter Lane	Hulls Chapel Road	2	60	Urban	\$1.57
754	Shackelford Well Drive	Hartwood Road	Poplar Road	2	60	Rural	\$6.01
1264	Parkway Boulevard	Garrisonville Road	Kimberly Lane	2	60	Urban	\$5.61
1706	Plantation Drive	Lichfield Boulevard	Truslow Road	4	110	Urban	\$19.15
2140	Pine View Drive	Centreport Parkway	Enon Road	2	60	Urban	\$2.91
8900	Centreport Parkway	Ramoth Church Road	Berea Parkway (new)	4	110	Urban	\$50.74

New Roads

Road Name	From	To	Future	R/W	Urban / Rural	Cost (in millions)
New I-95 Connector East	U.S. Route 1	Courthouse Road East	4	110	Urban	Unknown
Mine Road Extension	Austin Ridge Drive	Ramoth Church Road	4	110	Urban	\$96.77
Mine Road Extension	Centreport Parkway	Enon Road	4	110	Urban	\$20.43
Woodcutter Road	Courthouse Road	Kellogg Mill Road	4	110	Urban	\$35.75
Woodcutter Extended	Kellogg Mill Road	Ramoth Church Road	4	110	Urban	\$6.99
Austin Ridge Drive Extended	Eustace Road	Parkway Boulevard	2	60	Urban	\$12.10
Embrey Mill Road extended East	Embrey Mill Road	Mine Road	2	60	Urban	\$6.05
Embrey Mill Road extended West	Embrey Mill Road	Walpole Street	2	60	Urban	\$2.87
Eskimo Hill Connector	U.S. Route 1	Eskimo Hill Road	2	60	Urban / Rural	\$7.75
Kellogg Mill Road extended	Woodcutter Road	Mine Road extended	2	60	Urban	\$17.39
Truslow Road Connector	Truslow Road	U.S. Route 1	2	60	Urban	\$7.56
Warrenton Road Parallel Road	Sanford Drive	Stafford Lakes Parkway	2	60	Urban	\$14.52
Truslow Road extended	Poplar Road	Warrenton Road	4	110	Urban	\$10.75

Typical Roadway Sections





4.11 Right of Way Requirements

In an effort to preserve land for roadway improvements and to decrease delays in land acquisition, roadway plans are identified in Table 4.1 in the previous section. The right-of-way specified therein should be planned for through the development approval process (e.g. zoning reclassification, conditional use permit, site plan, etc.) as applications are submitted to the County or through their purchase by the County. The County ordinance sets forth transportation standards for right-of-way protection. In locations where roadway plans are identified in the Comprehensive Plan, or approved by either VDOT or the County Board of Supervisors, for road improvements, setbacks for any new construction shall be calculated based on the planned right-of-way area. The provision of these rights-of-way will allow for future road improvements to be constructed with adequate ancillary features such as turning lanes, sidewalks, trails, and buffering, while minimizing impacts on properties which are subsequently developed. It should be stressed, however, that the ultimate roadway designs will recognize available right-of-way to the extent possible; the intent of these plans is not to impose a rigid right-of-way swath through areas or mature neighborhoods, but rather to secure additional right-of-way needed for road improvements as development or redevelopment occurs.

Figure 4.1 depicts the anticipated road network improvements within the county based on the 20-year growth projection and build-out of the land use plan. Right of way plans for specific road segments are identified as future improvements on the map and are described in more detail in Table 4.1. Many of these projects are not currently funded and may be constructed beyond the 20-year plan horizon. However, it is important to identify these needed roadway improvements for future planning purposes. In the future, funding opportunities may come available for corridor improvements and safety improvements as new projects and lane widening and shoulder improvements as maintenance projects. Appendix H also contains diagrams depicting typical street sections with extents of desired right-of-way, number of lanes to be provided, median sizes and types and treatments for the of the roadway.

4.12 Targeted Development Area Improvements

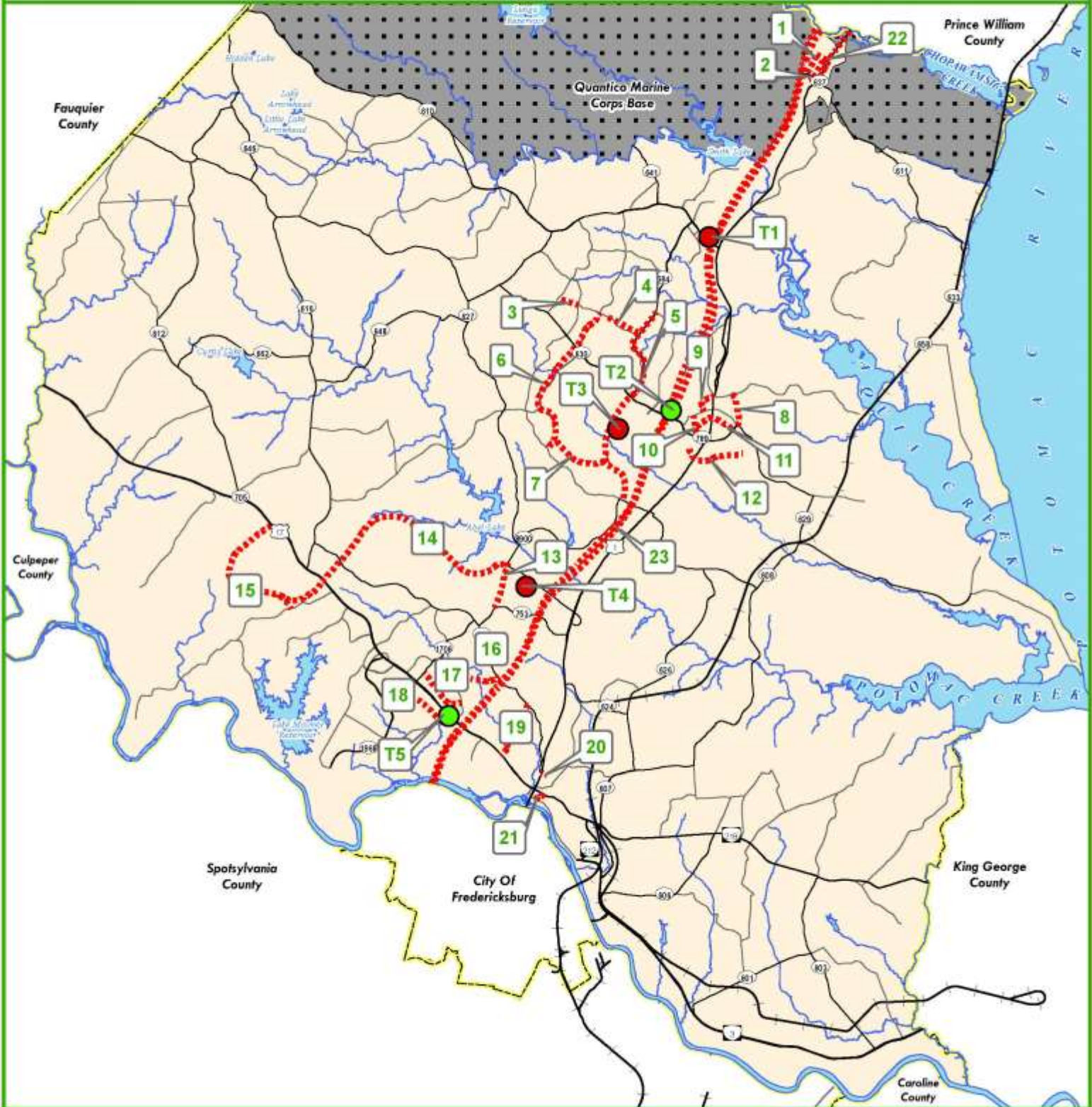
New roads will be required to support additional traffic generated by the growth patterns identified in the Targeted Development Areas (TDAs) of the Land Use Plan. Some of these roads have been previously identified on the Transportation Element Map and Land Use Plan Map. The new roads have many benefits. In the designated TDAs, proposed road segments are intended to meet the vision of these areas by creating a grid pattern street network that serves to relieve existing congested roadways. In new growth areas, collector roads will be required to move residents to work, shopping and other activities. The map in Figure 4.3 identifies the new improvements to the road network and transit facilities.

The map in Figure 4.3 identifies the new improvements to the road network and transit facilities.



FIGURE 4.2 Targeted Development Area Improvements Stafford County Comprehensive Plan Stafford County, Virginia

September 8, 2021



Legend

-  New Transit / Park & Ride Facility
-  Improvement to Existing Facility
-  New Road Segments

0 5,000 10,000 20,000 Feet

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

Table 4.2. Targeted Development Area Improvements

Map Number	Road Name	Estimated Cost
1	Corporate Drive Extension (to Telegraph Road)	Unknown
2	US Route 1 Parallel Roads (Corporate Drive to Telegraph Road)	Unknown
3	Embrey Mill Road Extension West (to Walpole Street)	Unknown
4	Embrey Mill Road Extension East (to Mine Road)	Unknown
5	Mine Road Extension (Austin Ridge Drive to Ramoth Church Road)	Unknown
6	Woodcutters Road (Eustace Road to Ramoth Church Road)	Unknown
7	George Washington Village Connector Road	Unknown
8	Northeast Courthouse Bypass (Courthouse Road to Hope Road)	Unknown
9	Northwest Courthouse Bypass (US Route 1 to Government Center Access Drive)	Unknown
10	Jason Mooney Drive Extension (Courthouse Road to US Route 1)	Unknown
11	Courthouse Road Parallel Road (Jason Mooney Drive to Hospital Center Blvd)	Unknown
12	Venture Drive Extension/South Campus Blvd	Unknown
13	Centerport Parkway Extension (south to Enon Road)	Unknown
14	Berea Parkway (Centerport Parkway to Warrenton Road)	Unknown
15	Westlake Parkway (Loop Road off of Warrenton Road)	Unknown
16	Falls Run Drive Extension (South Gateway Drive to Truslow Road)	Unknown
17	US Route 17 Parallel Road (North side - from Plantation Dr to South Gateway Dr)	Unknown
18	US Route 17 Parallel Road (South side - extension of Capital Ave to Sanford Dr)	Unknown
19	Lendall Lane Extension (Warrenton Road to Truslow Road)	Unknown
20	Clearview Avenue Extension (to US Route 1)	Unknown
21	Rowser Road Extension (River Road to Butler Road)	Unknown
22	Jefferson Davis Highway Widening (Telegraph Road to Prince William County Line)	Unknown
23	Interstate 95 High Occupancy Toll (HOT) Lanes	Unknown
T1	Garrisonville Road Transit Center	Unknown
T2	Courthouse Road Park and Ride Lot Expansion	Unknown
T3	George Washington Village Transit Center and Park and Ride Lot	Unknown
T4	Centerport UDA Transit Center and Park and Ride Lot	Unknown
T5	Warrenton Road/Southern Gateway UDA Park and Ride Lot Expansion	Unknown

4.13 Road Improvement Program Projects

Several transportation improvements are close to becoming reality. Programs at the County and Regional level have been identified as funding sources for projects.

- The 2019 Transportation Bond that was approved by the citizens identified 18 projects. Most of these projects consist of capacity and safety improvements to existing roads. For more information on the 2019 Bond Referendum please visit: https://www.staffordcountyva.gov/residents/projects_and_programs/2019_bond.php
- The VDOT Six Year Improvement Program is a list of designated transportation improvements that will be undertaken by VDOT. The list is developed by VDOT (for the interstate and primary systems) and in consultation with county staff (for the secondary system). For more information on the program please visit: <http://syip.virginiadot.org/Pages/allProjects.aspx>

A summary of all of these road improvement projects in approved programs are listed in Table 4.3. Some of the projects are graphically represented in Figure 4.3.



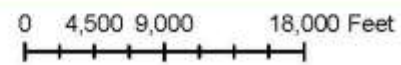
FIGURE 4.3 Road Improvement Program Projects Stafford County Comprehensive Plan Stafford County, Virginia

September 8, 2021



Legend :

- Intersection Improvement Projects
- 2019 Transportation Bond
- FAMPO CLRP
- FY22 Capital Improvement Program
- VDOT SYIP



Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

Table 4.3 Road Improvement Program Projects

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
1	U.S. Route 1	0.207 miles north of Hope Road	0.199 miles south of Courthouse Road	Reconstruction w/Turn Lanes	0.62	FY22 Capital Improvement Program	\$19.94
1	U.S. Route 1	0.082 miles south of Telegraph Road	0.184 miles north of Woodstock Lane	Intersection Improvements	0.70	FY22 Capital Improvement Program	\$9.81
627	Mountain View Road	Stefaniga Road	Lightfoot Drive	Roundabout	0.10	FY22 Capital Improvement Program	\$3.70
17	Warrenton Road	Short Street	Olde Forge Drive	Pedestrian Improvements	0.17	FY22 Capital Improvement Program	\$9.76
218	Butler Road	Carter Street	Castle Rock Drive	Study	0.78	FY22 Capital Improvement Program	\$0.20
N/A	Emergency Access Drive	Windermere Drive	Crestwood Lane	New Construction	0.17	FY22 Capital Improvement Program	\$1.54
608	Brooke Road	Raven Road	Maplewood Drive	Reconstruction	0.45	FY22 Capital Improvement Program	\$7.50
753	Enon Road	U.S. Route 1	Beauregard Drive	Reconstruction	0.60	FY22 Capital Improvement Program	\$10.60
648	Shelton Shop Road	Mountain View Road	Garrisonville Road	Reconstruction and Intersection Improvements	1.85	FY22 Capital Improvement Program	\$29.83
624	Layhill Road	U.S. Route 1	Forbes Street	Intersection Improvements	0.16	FY22 Capital Improvement Program	\$8.40
641	Onville Road	Worth Avenue	Barrett Heights Drive	3-lane Widening and Intersection Improvements	0.28	FY22 Capital Improvement Program	\$10.86
624	Leeland Road	Julian Drive	Walnut Drive	3-lane Widening	0.35	FY22 Capital Improvement Program	\$7.01
624	Morton Road	Forbes Street	Primmer House Road	Shoulder Improvements	0.34	FY22 Capital Improvement Program	\$1.60
627	Mountain View Road	Choptank Road	Stefaniga Road	Shoulder Improvements	1.21	FY22 Capital Improvement Program	\$9.38
627	Mountain View Road	Stefaniga Road	Kellogg Mill Road	Shoulder Improvements	1.92	FY22 Capital Improvement Program	\$4.80
610	Garrisonville Road	Shelton Shop Road	Eustace Road	6-lane Widening	1.40	FY22 Capital Improvement Program	\$52.39
709	Flatford Road	Winding Creek Road	Parkway Boulevard	Sidewalk	0.22	FY22 Capital Improvement Program	\$0.85
684	Staffordboro Boulevard	Juggins Road Connector	Crater Lane/Pike Place	Sidewalk	0.23	FY22 Capital Improvement Program	\$1.08
810	Salisbury Drive	Garrisonville Road	Mine Road Commuter Lot	Sidewalk	0.17	FY22 Capital Improvement Program	\$0.95

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
I-95	Interstate 95	Exit 133	Exit 143	HOT Lanes Extension	10.00	VDOT SYIP	\$35.00
I-95	Interstate 95	Exit 133	Exit 133	Bridge Replacement	0.03	VDOT SYIP	\$13.33
I-95	Interstate 95	U.S. Route 17 (Warrenton Rd)	Russell Road	Reconstruction w/Added Capacity	10.00	VDOT SYIP	\$488.20
1	U.S Route 1	0.096 miles south of Potomac Creek	0.133 miles north of Potomac Creek	Bridge Replacement	0.23	VDOT SYIP	\$7.01
1	U.S. Route 1	0.37 miles south of Russell Road	0.086 miles south of Russell Road	Bridge Replacement	0.28	VDOT SYIP	\$7.75
3	Kings Highway	0.044 miles west of City/County line	0.256 miles east of City/County line	Bridge Rehabilitation	0.30	VDOT SYIP	\$20.82
Various	Various	Various	Various	Shoulder Rumble Strips	N/A	VDOT SYIP	\$6.51
607	Deacon Road	Butler Road	Leeland Road	Sidewalk	1.13	VDOT SYIP	\$1.05
626	Leeland Road	0.025 miles south of Walnut Drive	0.12 miles north of Primmer House Road	Shared-Use Path	0.73	VDOT SYIP	\$2.87
644	Rockhill Church Road	0.087 mile south of Aquia Creek	0.098 miles north of Aquia Creek	Bridge Replacement	0.18	VDOT SYIP	\$6.48
648	Shelton Shop Road	Intersection with Winding Creek Road	Intersection with Winding Creek Road	Sight Distance Improvement	0.01	VDOT SYIP	\$0.05
1005	Manning Drive	James Madison Drive	Forbes Street	Sidewalk	0.17	VDOT SYIP	\$0.32
700	Lichfield Boulevard	Harrogate Road	Plantation Drive	Sidewalk	0.07	VDOT SYIP	\$0.25
VRE	Brooke Road Station	N/A	N/A	VRE Platform Extension	N/A	VDOT SYIP	\$7.40
VRE	Leeland Road Station	N/A	N/A	VRE Platform Extension	N/A	VDOT SYIP	\$15.26
VRE	Leeland Road Station	Leeland Road Parking Lot	Leeland Road Parking Lot	Parking Expansion	N/A	VDOT SYIP	\$5.52
639	Woodstock Lane	End	U.S. Route 1	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$19,569.00
618	Falls Run Drive	South Gateway Drive	U.S. Route 17	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$48,923.00

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
608	Brooke Road (New Hope Church to Eskimo Hill)	Eskimo Hill Road	New Hope Church Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$396,821.00
651	Kellogg Mill Road	Woodcutters Road	Stefaniga Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$506,626.00
646	Tacketts Mill Road (Heflin Rd to Aquia Rd)	Fauquier County	Heflin Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$163,077.00
612	Heflin Road	Tacketts Mill	Poplar Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$145,682.00
658	Brent Point Road (Arkendale to End)	End	Arkendale Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$282,667.00
700	McWhirt Loop	U.S. Route 17	Banks Ford Parkway	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$21,744.00
648	Stefaniga Road	Mountain View Road	Poplar Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$378,339.00
652	Truslow Road (Cambridge St to Berea Church)	Berea Church Road	U.S. Route 1	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$360,944.00
612	Hartwood Road	Poplar Road	U.S. Route 17	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$761,026.00

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
614	Spotted Tavern Road	Hartwood Road	Cropp Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$253,313.00
635	Decatur Road	End	Norman Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$390,298.00
669	Little Whim Road	Brooke Road	White Oak Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$130,462.00
626	Potomac Run Road	Eskimo Hill Road	Leeland Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$253,313.00
644	Rock Hill Church Road	Garrisonville Road	Mountain View Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$297,887.00
614/615	Cropp Road	Poplar Road	Fauquier County	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$242,441.00
608	Brooke Road (Eskimo Hill to End)	End	Eskimo Hill Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$629,477.00
646	Tacketts Mill Road (Poplar to Heflin)	Heflin Road	Poplar Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$191,344.00
628	Ramoth Church Road	Courthouse Road	Centreport Parkway	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$483,795.00

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
616	Poplar Road (Rt. 17 to Stefaniga)	Stefaniga Road	U.S. Route 17	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$391,385.00
628	Winding Creek Road	Shelton Shop Road	Embrey Mill Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$141,333.00
637	Telegraph Road	U.S. Route 1	U.S. Route 1	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$385,949.00
643	Joshua Road	Garrisonville Road	Mountain View Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$250,051.00
610	Garrisonville Road (Joshua to Lake Arrowhead)	Arrowhead Drive	Joshua Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$396,821.00
753	Enon Road (Stafford Indians to Truslow)	Truslow Road	Stafford Indians Lane	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$142,421.00
630	Courthouse Road (Winding Creek to Shelton Shop)	Shelton Shop Road	Winding Creek Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$170,687.00
606	Ferry Road	White Oak Road	Route 3	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$292,451.00
628	Winding Creek Road (Courthouse to Embrey Mill)	Embrey Mill Road	Courthouse Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$121,764.00

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
642	Barrett heights Road	Onville Road	Garrisonville Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$119,590.00
627	Mountain View Road (Centreport to Kellogg Mill)	Centreport Parkway	Kellogg Mill Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$354,421.00
687	Hope Road	End	U.S. Route 1	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$351,159.00
610	Garrisonville Road (Lake Arrowhead to Fauquier)	Fauquier County	Arrowhead Drive	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$215,262.00
616	Poplar Road (Stefaniga to Hartwood)	Hartwood Road	Stefaniga Road	Road Widening Safety Improvements. 2 ft. should wedge widening performed by VDOT with overlay		2019 Transportation Bond	\$554,462.00
1706	Plantation Drive Sidewalk	Southern Gateway	Plantation Drive	Construct 500' of sidewalk along east side of Plantation Drive from South Gateway to Knight's Court		FAMPO CLRP	\$1.34
Private?	Foreston Woods Drive Sidewalk	Foreston Woods Drive	U.S. Route 1	Construct 500' of sidewalk along north side of Foreston Woods from Susa Drive to U.S. Route 1 and crosswalk and ped signal to cross U.S. Route 1		FAMPO CLRP	\$1.34
1208	Furnace Road Sidewalk	?	?	Construct 750' of sidewalk along east side of Furnace Road from Choptank to rear entrance to North Stafford Complex Center		FAMPO CLRP	\$1.38

VDOT Route Number	Street Name	Termini From	Termini To	Project Scope	Length (miles)	Program	Est. Cost (In millions)
1304	Stafford Avenue Sidewalk	Hope Road	U.S. Route 1	Construct 1,060' of sidewalk along west side of Stafford Avenue from Courthouse Road to Stafford Community Center		FAMPO CLRP	\$1.85
751	Eustace Road Sidewalk	?	?	Construct 850' of sidewalk along the west side of Eustace Road from Appalachian Drive to Cabin Court		FAMPO CLRP	\$1.48
U.S. Route 1	U.S. Route 1 & Coal Landing Road	Coal Landing Road	Coal Landing Road	Left turn lane extension on U.S. Route 1 at Coal Landing Road		FAMPO CLRP	\$3.05
8900	Centreport Parkway Study	U.S. Route 1	Ramoth Church Road	Traffic study of Centreport Parkway area for future development and roadway improvements		FAMPO CLRP	\$200,000.00

4.14 Transportation Impact Fees

In 2000, and as amended in 2007 the Virginia General Assembly granted the County the authority to impose transportation impact fees for new development in order to generate revenue for the costs of reasonable road improvements “necessitated by and attributable to new development.” The Transportation Impact Fee program has been in place since 2003. The purpose of the program is to require new development to assist in the funding of future road improvements, the need for which results from the additional demand generated. The impact fee service area encompasses all land located in the county, except any land located within the boundary of Marine Corps Base Quantico. Transportation Impact Fees are unique to Stafford County. Currently, no other locality in Virginia has taken advantage of this legislative authority. The County will be conducting a new impact fee study that is anticipated to generate a framework for amending the currently imposed policy.

The transportation impact fee program identifies specific road improvements that are necessary to accommodate new growth.

The identified improvements for the Stafford County are:

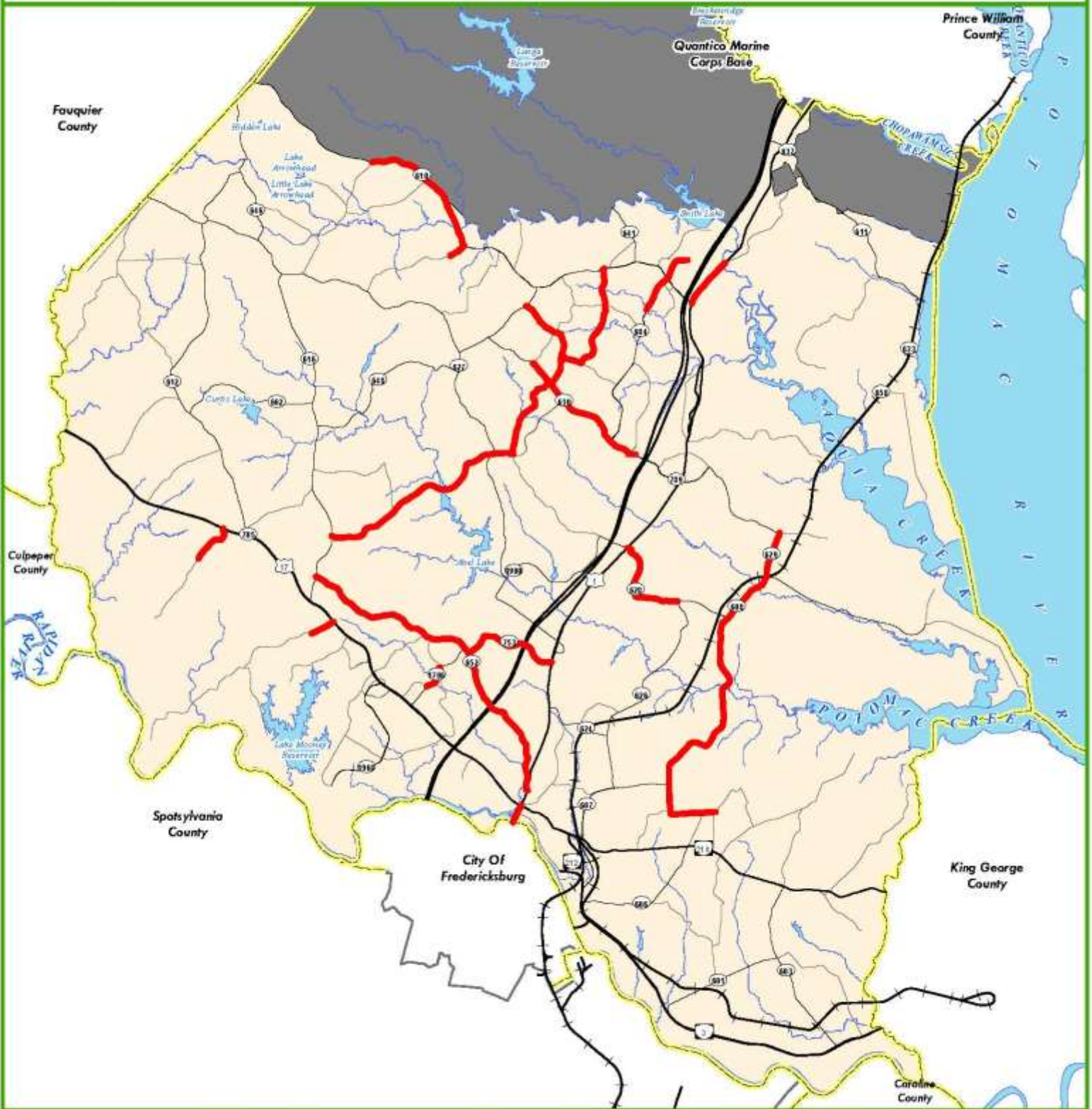
- Upgrade Richards Ferry Road (SR-752) from Warrenton Road (U.S. Route 17) to Cotton Lane (private road) to a rural two lane major local standard
- Upgrade Holly Corner Road (SR-655) from Warrenton Road (U.S. Route 17) to Hall Lane (SR- 726) to a rural two lane major local standard
- Upgrade Ramoth Church Road (SR-628) from Courthouse Road (SR-630) to Kellogg Mill Road (SR-651) to a rural two lane major local standard
- Upgrade Embrey Mill Road (SR-733) from Winding Creek Road (SR-628) to Eustace Road (SR-751) to an urban two lane major local standard
- Widen Courthouse Road (SR-630) from an urban two lane major local to a four-lane divided major collector from Austin Ridge Drive (SR-1486) to Walpole Street (SR-709)
- Widen Enon Road (SR-753) from an urban two lane major local to a four-lane divided major collector from Hulls Chapel Road (SR-653) to Truslow Road (SR-652)
- Upgrade Enon Road (SR-753) from Porter Lane (SR-640) to Hulls Chapel Lane (SR-653) to an urban two lane major local standard
- Widen Enon Road (SR-753) from an urban two lane major local to a four-lane undivided major collector from Cambridge Street (U.S. Route 1) to Porter Lane (SR-640)
- Widen Cambridge Street (U.S. Route 1) from a four-lane undivided minor arterial to a six-lane divided major arterial from the Fredericksburg City Line to Warrenton Road (U.S. Route 17) / Butler Road (SR-218)
- Widen Eustace Road (SR-751) from an urban two lane major local to a four-lane divided major collector from Embrey Mill Road (SR-733) and Garrisonville Road (SR-610)
- Upgrade Kellogg Mill Road (SR-651) from Poplar Road (SR-616) to Ramoth Church Road (SR-628) to a rural two lane major local standard
- Upgrade Eskimo Hill Road (SR-628) from U.S. Route 1 to Potomac Run Road (SR-626) to a rural / urban two lane major local standard
- Upgrade Brooke Road (SR-608) from New Hope Church Road (SR-605) to Andrew Chapel Road (SR-629) to a rural / urban two lane major local standard
- Widen U.S. Route 1 from a four--lane divided major arterial from Garrisonville Road (SR-610) to Telegraph Road (SR- 637)

- Upgrade Andrew Chapel Road (SR-629) from Courthouse Road (SR-630) to Brooke Road (SR-608) to a rural / urban two lane major local standard
- Upgrade Winding Creek Road (SR-628) from Courthouse Road (SR-630) to Shelton Shop Road (SR-648) to an urban two lane major local standard
- Upgrade Staffordboro Boulevard (SR-684) from Sunningdale Drive (private) to Pike Place (private) to an urban two lane major local standard
- Widen Staffordboro Boulevard (SR-684) from an urban two lane major local to a four-lane divided minor collector from Garrisonville Road (SR-610) to Sunningdale Drive (private)
- Upgrade Mine Road (SR-684) from Garrisonville Road (SR-610) to Settlers Way (SR-1460) to a four-lane major collector standard
- Upgrade Truslow Road (SR-652) from Cambridge Street (U.S. Route 1) to Poplar Road (SR-616) to a rural / urban two lane major local standard
- Upgrade Garrisonville Road (SR-610) from Rock Hill Church Road (SR-644) to Joshua Road (SR-643) to a rural / urban two lane major local standard
- Widen Plantation Drive (SR-1706) from an urban two-lane minor collector to a four-lane divided minor collector from Lichfield Boulevard (SR-700) to Lyons Boulevard (SR- 2030) / Gladstone Drive (private)
- Upgrade Joshua Drive (SR-643) from Garrisonville Road (SR-610) to St. George's Drive (SR-1250) to an urban two lane major local standard

Figure 4.4 provides a map of the County-wide impact fee road projects.



FIGURE 4.4 Transportation Impact Fee Area Stafford County Comprehensive Plan Stafford County, Virginia September 8, 2021



Legend :
 Impact Fee Eligible Road Projects

0 5,500 11,000 22,000 Feet

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

4.15 2018 Countywide Comprehensive Road Evaluation

The County has initiated and helped fund 22 road improvement projects for an investment of \$57,000,000 since 2010. In 2018, the Stafford County Board of Supervisors initiated an objective, data-driven Comprehensive Road Evaluation to determine how best to plan for future road improvements in the County while identifying sources for funding.

To view information, data, and presentations related to this ongoing effort, please visit:

https://staffordcountyva.gov/government/departments_p-z/public_works/captial_design_and_construction/transportation_engineering/comprehensive_road_study.php