6.5 Historic and Cultural Resources

6.5.1 A Brief History of Stafford County

Stafford County was established in 1664 and originally encompassed most of northern Virginia, including the areas which later became the Counties of Arlington, Fairfax and Prince William, and the City of Alexandria.

Stafford County's prehistory is documented with fossil remains of small sea creatures that can be found along the rivers and tributaries. Artifacts identified through archaeological study tell us that prehistoric man occupied Stafford County from the Paleo-Indian Period (ca. 10,000-8,000 B.C.) through the Archaic Period (ca. 8,000-500 B.C.), during which people lived in seasonal, nomadic groups, and the Woodland Period (ca. 500 B.C.- A.D.1600), which is characterized by the establishment of permanent settlements and an emphasis on agricultural practices.

In 1608, John Smith mapped the major rivers, tributaries, and Native American settlements of the Chesapeake Bay area, including substantial portions of Stafford County. Powhatan, chief of the Potowomeks, and his daughter Pocahontas, were associated with these settlements, which included the large village of Potowomek, located at what is now Marlborough Point.

Stafford County has strong connections to events that shaped our nation's Rich arable land and early history. colonial industries, such as iron manufacturing and quarrying sandstone and granite, attracted important families, such as the Brents, Carters, Masons, Fitzhughs, Mercers, Washingtons. During Revolutionary War, James Hunter's Iron Works contributed significantly to earning our freedom from British rule by supplying weapons and implements to the Continental Army and Navy.



Falmouth, founded on the north side of

the Rappahannock River, was a prominent port town throughout the 18^{th} century and the first quarter of the 19^{th} century. It was the terminus for goods, including tobacco and flour, transported east from Warrenton and shipped to England in exchange for a variety of products. Enslaved Africans were also shipped to Falmouth where slave auctions were held.



Like other port towns of the colonial period, Falmouth attracted Scottish entrepreneurs, such as Basil and Samuel Gordon. The Gordons established a thriving marketing industry. The town also supported several water mills that flourished mostly due to the transition from tobacco cultivation to grain.

Stafford County residents rallied to defend the country during the War of 1812 by establishing the 45th Virginia Militia Regiment, which defended both Stafford and Westmoreland Counties. British troops rampaged through areas of the County en route to Washington, D.C.

In the first half of the 19th century, Stafford County experienced the rise of the railroad. In 1834, the Richmond, Fredericksburg and Potomac Railroad opened its first segment, connecting Fredericksburg with Richmond. Then in 1842, the railway was extended north to Aquia Landing and eventually to Washington, D.C.

Situated halfway between the Union and Confederate capitals, Stafford County became a crossroads of military activity during the Civil War. The federal forces arrived en masse in the latter part of 1862. During the Fredericksburg and Chancellorsville campaigns, November 1862 through June 1863, Stafford County was occupied by more than 100,000 troops. The effect of the Federal Army's presence on the Stafford County landscape and economy was devastating. The army denuded the County of its trees and fences, agricultural fields were trampled and neglected, and foraging troops "liberated" food and other essentials from the civilian population. Four years of warfare left Stafford County barren and ravaged. The effects of the Civil War remained visible on the landscape into the 20th century.



After the Civil War, Stafford County struggled to regain its former economic stability. The agricultural practices of Stafford at this time were characterized by a transition from grain crops to dairying and market gardening. Large family farms were still present, but several were subdivided—many producing only enough to sustain the immediate family and their livestock. This period also saw the rise of the fishing industry in Stafford County.

From the early 20th century through the end of World War II, Stafford County witnessed growth with the construction of U.S. Highway 1, expansion of Marine Corps Base Quantico to the north, and establishment of Fort A. P. Hill to the south and Dahlgren Naval Base to the east. With the rapid expansion of the Washington, D. C. metropolitan area and the construction of the Federal Interstate Highway System (I-95) in the late 1960s, Stafford County witnessed the creation of many suburban residential communities and commercial developments.

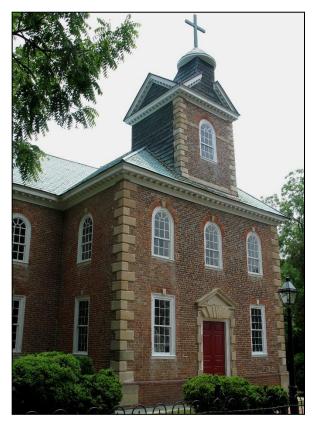
Stafford's long agricultural heritage is now being offset by an increasing emphasis on commercial enterprise. Stafford is faced with issues of growth, conservation of natural and heritage resources, and maintaining a sense of community and place.

6.5.2 Known Heritage Resources

Stafford County's heritage resources are identified and evaluated through several mechanisms, including the National Register of Historic Places Program, the Virginia Landmarks Register Program, the Stafford County Historic Resource Overlay District designation, the National Historic Landmarks Program, and the Stafford County Cultural Resource Inventory designation.

The National Register of Historic Places, which is administered by the National Park Service, is the nation's official list of cultural resources worthy of preservation. Stafford County currently has 26 listings in the National Register of Historic Places, but several other properties have been determined eligible for this prestigious listing.

The Virginia Landmarks Register, administered by the Virginia Department of Historic Places, is the state's official list of properties that are significant to Virginia's history. There are currently 25 Stafford County resources listed in the Virginia Landmarks Register.



The Stafford County Board of Supervisors designates historic places as Stafford County Historic Resource Overlay Districts by ordinance. Properties included within historic overlays must have public value and warrant conservation and preservation. There are now 22 individual Stafford County Historic Resource Overlay Districts, in addition to Falmouth Historic District, which includes more than 70 individual properties.

The National Historic Landmark Program designates nationally significant historic places that possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, fewer than 2,600 historic places in the United States bear this distinction. While there are many important historic places in the United States, only a small number qualify for the National Historic Landmark Program. Three Stafford County sites—Belmont, Ferry Farm, and the Aquia Episcopal Church—have been designated as National Historic Landmarks.

6.5.3 Stafford County Cultural Resource Inventory

As a Certified Local Government, Stafford County is required to periodically update and maintain an inventory of known cultural resources. The Department of Planning & Zoning maintains the Stafford County Cultural Resource Inventory. As of July 1, 2021, over 2,400 resources were included in the inventory. Resources include historic buildings, archaeological sites, and over 540 family and community cemeteries.

6.5.4 Significant Cultural Resources

The table below lists some of Stafford County's most significant cultural resources. Most are currently listed in the National Register of Historic Places or Virginia Landmarks Register or designated as a National Historic Landmark or Stafford County Historic Resource Overlay District. Properties recorded with no distinction have been determined eligible for the National Register of Historic Places. As more intensive survey continues in the County, additional resources may be determined worthy of listing.

<u>Table 6.20 Significant Heritage Resources 2021 (Stafford County, VA)</u>

Property	Location	National Register	Virginia Landmark	Stafford County Historic Resource Overlay District	National Historic Landmark	Eligible for National Register but not Currently Listed
Accokeek Furnace Site	Address Restricted	Х	X	Х		
Aquia Episcopal Church	3938 Jefferson Davis Highway	X	X	X	X	
Belmont (Gari Melcher Home)	224 Washington Street	X	X	X	X	
Bloomington House Site & Adie Cemetery	Patowomack Park					X
Aquia Landing Aquia Landing Battlefield	Aquia Creek & Potomac River					X
Aquia Landing Aquia Creek Battlefield	2846 Brooke Road					X
Advanced Courthouse Road Redoubt	15 Old Fort Road	Х	X	Х		
Bethlehem Primitive Baptist Church	135 Chapel Green Road	X	X			
Brent Cemetery	Address Restricted			X		X
Carlton	501 Melchers Drive	X	X	X		
Chatham (within Fredericksburg- Spotsylvania National Military Park)	120 Chatham Lane	Х	Х			
Clearview	22 Strawberry Lane	X	X	X		
Civil War fortifications (4), encampments (2), corduroy road, 18 th – 19 th century quarries (2), sandstone bridge abutments & roadbed (Old Potomac Church Road)	Rappahannock Regional Landfill					X
Clifton Chapel	60 Clifton Chapel Lane					Х
Crucifix Monument	3140 Jefferson Davis Highway			Х		X
Duff Green House	638 Kings Highway					
Ebenezer Methodist Church	168 Onville Road			X		X
Falmouth Historic District	Hwy 1 & Hwy 17	X	X	X		
Ferry Farm	240 Kings Highway	X	X		X	
Fort McLean	End of Courthouse Road. 40-56B			Х		X
Government Island	Aquia Creek & Austin Run	X	X	X		
Stafford Training School (Rowser Building)	1739 Jefferson Davis Highway	Х	Х			
Hartwood Manor	335 Hartwood Road	X	X	X		
Hartwood Presbyterian Church	50 Hartwood Road	X	X	X		
Hunter's Iron Works	138 Blaisdell Lane	X	X			
Ingleside	219 Ingleside Drive			X		
Irvin House	1791 Warrenton Road					X
Little Whim	375 White Oak Road			X		X

Property	Location	National Register	Virginia Landmark	Stafford County Historic Resource Overlay District	National Historic Landmark	Eligible for National Register but not Currently Listed
Long Branch Mill Sites	Long Branch down to Poplar Rd, West Stafford					X
Marlborough Point Site (Town of Marlborough Archaeological Site)	Marlborough Point	X	X	Х		
Moncure Conway House	305 King Street	X	X	X		
Mud March, Union 5th Corps Advancement along River Road, Battle of Chancellorsville	Stafford & Spotsylvania Counties		X			X
Norman-Towson Cemetery	Quarry Road					X
Potomac Church Site	1090 Brooke Road	X	X			
Potomac Creek Site (Potowomek Indian Village)	Address Restricted	X	X			
Rappahannock River Historic Overlay District	see historic overlay map			X		X
Richland	945 Widewater Road					X
Robertson-Towson House Site & Quarry	Austin Ridge Subdivision, adjacent to community pool					Х
Sanford-Burgess Enslaved Persons Quarters	500 Greenbank Road					
Sherwood Forest	971 Kings Highway 59-71D, 59-71.					X
Smith-Forbes House	58 Westebe Lane			X		X
Stafford County Courthouse	2119 Jefferson Davis Highway			X		
Stafford County High School (Stafford School Board Offices)	31 Stafford Avenue					X
Tennessee Camp		X	X			
Thompson House	122 Cambridge Street			X		X
Union Church and Cemetery	Carter Street	X	X	X		
White Oak Museum (White Oak Elementary School)	985 White Oak Road			Х		X
White Oak Primitive Baptist Church	8 Caisson Road	X	X	X		

Source: Stafford County Department of Planning & Zoning

* A State Owned Resource

6.5.5 Findings

- Many historic and cultural resources are located in Stafford County.
- The Cultural Resources Management Plan uses the land development process to identify and protect cultural resources.
- Procedures for identification and protection of historic and cultural resources are recommended but not mandatory; the County's adoption of the Cemetery ordinance codifies these procedures for cemeteries. Adoption of a Historic Preservation Ordinance would further strengthen the protection of historic and cultural resources.

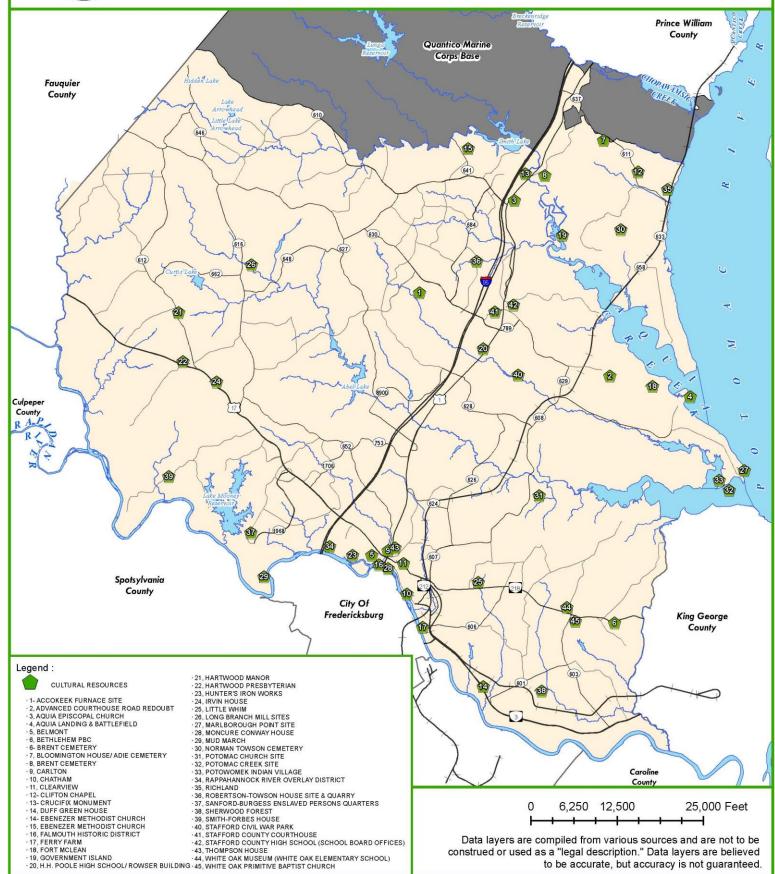


Cultural Resources Stafford County Comprehensive Plan



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6.6 Community Facilities

The ability to provide adequate services help to shape a community and make it a desirable place to live. These services include public safety, education and cultural amenities, and waste management. This section explores the services that are provided in Stafford County. Several

maps in this section identify the location of community services in

the County.

6.6.1 Public Schools

increase through 2026 to 33,094 students.

map identifies their location in the County.

Prior to 2018, Stafford County Public Schools used average daily membership (ADM) in the calculation of school enrollment. Although ADM is still used for state funding purposes, Stafford County Public Schools uses the term "official count" when referring to student enrollment.

As Stafford County's population has steadily increased, so too has its student enrollment figures. The official count for Stafford County Public Schools in 1995 was 16,520 students, and has since climbed to 29,576 students for the 2019/2020 school year. As of September 30, 2019, the Stafford School District had 12,665

Community Facilities

- Schools
- Law Enforcement
- Correctional Facilities
- Fire and Rescue
- Libraries
- Hospitals
- Waste Management

Currently the County operates 30 schools (17 elementary schools, 8 middle schools and 5 high schools), including 2 early childhood education centers (North Star and Rising Star), and The Phoenix Center for Innovative Learning The table below provides basic data on each school and a

elementary school students, 7,186 middle school students and 9,725 high school students. With the rapid growth in Stafford County, the School Board projects that enrollments will continue to

Table 6.21 Stafford County Public Schools

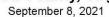
School	Location	Official Count 2019-2020	Program Capacity	Construction Date
Elementary Schools	(K-Grade 5)			
Kate Waller Barrett	150 Duffey Dr.	858	849	2002
nate Waller Barrett	2125 Mountain	050	017	2002
Margaret Brent	View Rd.	805	931	2004
Anthony Burns	60 Gallery Rd.	760	844	2006
Tillicity Burits	105 Primmer House	700	011	2000
Conway	Rd.	885	863	2006
connay	1141	000	000	Renovation/Addition -
Falmouth	1000 Forbes St.	649	703	2013
1 411110 4411	100010100000	017	700	1957; Additions - 1963,
Ferry Farm	20 Pendleton Rd.	645	743	1989, 1992, and 2020
Garrisonville	100 Wood Dr.	543	801	1981; Addition- 1999
darrisonvine	100 11000 111	515	001	1967; Additions -1977,
				1996, and 2014
				Renovation/Addition -
Grafton Village	501 Deacon Rd.	722	811	2014
araiton vinage	107 Northampton	, 22	011	2011
Hampton Oaks	Blvd.	871	859	1992; Addition - 1996
numpton outs	14 Shackelford's	071	007	1963; Additions - 1966,
Hartwood	Well Rd.	548	582	1989, and 1993
Hartwood	Wenta	510	302	1966; Additions - 1973,
Anne E. Moncure	75 Moncure Ln.	882	841	1997; Rebuilt - 2019
Park Ridge	2000 Parkway Blvd.	793	864	1990; Addition – 1994
Rock Hill	50 Wood Dr.	668	865	1989; Addition – 1994
Rocky Run	95 Reservoir Rd.	845	881	2000
Rocky Rull	1349 Courthouse	043	001	Renovation/ Addition -
Stafford	Rd.	726	785	2013
Widewater	101 Den Rich Rd.	662	801	1988; Addition – 1995
Widewater	475 Winding Creek	002	001	1988, Addition - 1993
Winding Creek	Rd.	803	943	1997
		003		1777
Middle Schools (Gra	des 6-8)		Design Capacity	
Dixon-Smith	503 Deacon Road	805	1,100	2006
				1951; Additions -
Edward E. Drew	501 Cambridge St.	630	650	1957,1990 and 1998
T. Benton Gayle	100 Panther Drive	950	1,100	2002
Shirley C. Heim	320 Telegraph Road	990	1,100	2008
H. H. Poole	800 Eustace Rd.	896	1,100	1995; Addition - 1998
Stafford Middle	101 Spartan Dr.	950	1,100	1991
Rodney E.				
Thompson	75 Walpole St.	1032	1,100	2000
A. G. Wright	100 Wood Dr.	898	920	1981; Addition - 1999
High Schools (Grade	s 9-12)		Design Capacity	, ,
mgn schools (drade	-	ı	Design capacity	I
Decele Dei i	1700 Courthouse	4.054	0.405	1002 413 2016
Brooke Point	Rd.	1,951	2,125	1993; Addition - 2016
Colonial Forge	550 Courthouse Rd.	2,003	2,125	1999; Addition - 2016
	2135 Mountain			
Mountain View	View Rd.	1983	2150	2005; Addition - 2017
	839 Garrisonville			
North Stafford	Rd.	1788	2,050	1981; Addition – 2003
0 00 1	33 Stafford Indian			1975; AIMIE Bldg -
Stafford	Ln.	2000	2,150	1981; Rebuilt - 2015

Source: Stafford County Public Schools as of September 2019;

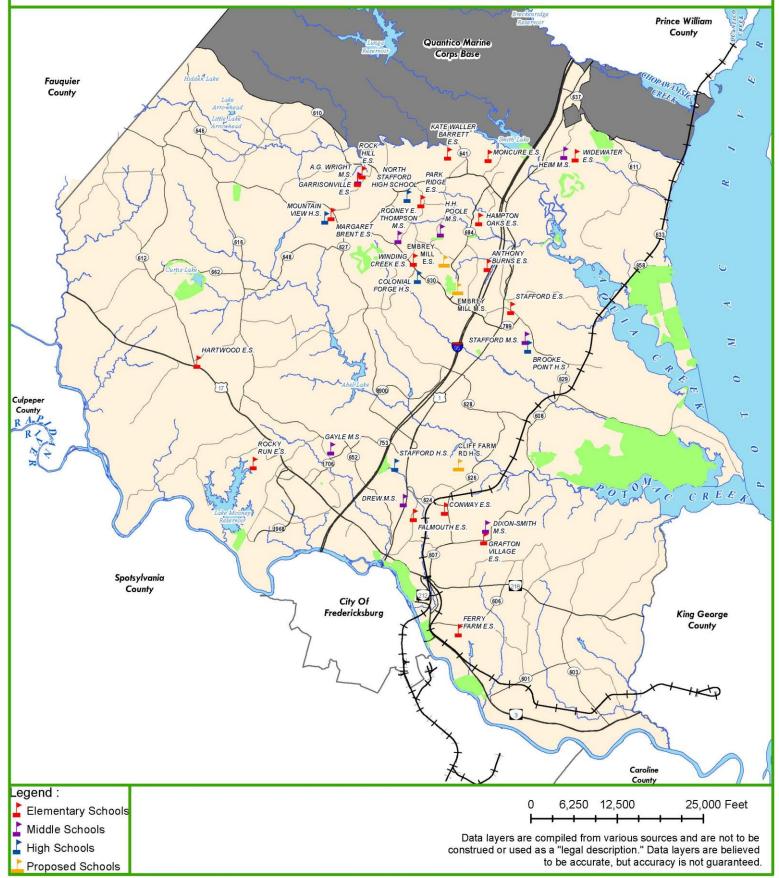


Schools

Stafford County Comprehensive Plan Stafford County, Virginia







Between 1986 and 2010, the County constructed 10 elementary schools, five middle schools and three high schools, and added multiple classroom additions to elementary and middle schools. However, since 2010, with the exception of a limited increase in overall capacity, there has been no significant increase for middle or high schools. Due to school reduilds, there has been no new schools constructed.

Between 2010 and 2020, the County completed major renovations and additions to four elementary schools (Falmouth, Stafford, Grafton Village, and Ferry Farm) and three high schools (Brooke Pointe, Colonial Forge, and Mountain View) and rebuilt one elementary school (Moncure) and one high school (Stafford). With rapid growth in Stafford County, a significant investment will be required by the Board of Supervisors and the School Board to ensure school capacity keeps pace with projected growth.

The Stafford County Public Schools Capital Improvement Program (CIP) for fiscal years 2022 - 2031 includes High School #6, Elementary School #18, Drew Middle School renovation (adds capacity), and Middle School #9.

Adult Education

Germanna Community College offers undergraduate degrees and certification programs. Facilities in Stafford County are leased space of the Aquia Park Commerce Center and Taylor-Bott Industrial Park. The County worked with Germanna to secure land for a permanent campus, located on Jumping Branch Road in central Stafford. Efforts are underway to expand training and other higher education opportunities for county residents.

The University of Mary Washington offers both undergraduate and graduate degrees, and has a permanent campus in Stafford, located off of Warrenton Road near Stafford Lakes Village.

6.6.2 Law Enforcement

The Stafford County Sheriff's Office provides countywide law enforcement services. Supplemental services are also provided to the Counties of Spotsylvania, Prince William, Fauquier, and King George and the City of Fredericksburg with whom the County has mutual aid agreements. The Sheriff's Office has a total of 306 employees that includes sworn officers, animal control personnel, civilian personnel, and emergency communication center personnel. In addition, the Sheriff's Office cooperates with numerous state and federal law enforcement agencies that have jurisdiction in the County. These include, but are not limited to, the Virginia State Police, Virginia Conservation Police, Virginia Alcohol Beverage Control Authority Bureau of Law Enforcement, the Federal Bureau of Investigation, the Drug Enforcement Administration and the Bureau of Alcohol, Tobacco, Firearms and Explosives.

During 2020 the Sheriff's Office Emergency Communications Center (ECC) processed 160,161 law enforcement incidents of which 73,638 (42%) were law enforcement calls for service. In addition, the ECC processed an additional 54,454 Computer Aided Dispatch law enforcement activities. Law Enforcement Calls for Service in 2020 increased 8% over calls for service in 2015.

The Sheriff's Office headquarters are in the Ford T. Humphrey Public Safety Building located on Courthouse Road adjacent to the County Administration Complex. The Sheriff's Office occupies about 90,000 sq. ft of the public safety building, housing the Sheriff's Office, Field Operations, Special Operations, Emergency Communications, Administrative Services, Professional

Standards, Court Services and Criminal Investigations. In addition, a large garage building houses specialized equipment for rapid deployment when needed. The public safety complex is expected to meet the facility needs of the Sheriff's Office for approximately the next 15 years.

The Sheriff also operates an Animal Shelter on Frosty Lane where the shelter staff and Animal Control Officers are located. The current Shelter was opened in June of 2018 to provide modern facilities to house and care for animals, provide adequate operating support facilities for Animal Control Officers, and to provide better access to the public. The 15,936 square foot facility provides administrative and public areas (16), cat enclosures (91), dog enclosures (76), small animal enclosures (12) and animal support and care areas. It is forecasted that the facility has a 20-year life cycle remaining. The former animal shelter located on Eskimo Hill Road was decommissioned and turned over to the R-Board for solid waste operations.

Furthermore, the Sheriff's Office operates a law enforcement firearms training facility (range) at the Rappahannock Regional Landfill located on Eskimo Hill Road. The range was constructed in 2005 by Stafford County to meet or exceed National Rifle Association standards and current environmental standards. It was certified by the Virginia Department of Criminal Justice Services in December of 2005. The range is used to certify and maintain Stafford County and City of Fredericksburg law enforcement officer's firearms skills to state and industry standards for law enforcement. Improvements to the range have been made on a piece-meal basis over the years to include improved firing lanes and target mechanisms, temporary shelter and improved berms and backstops. Additional improvements are needed, including classroom space and improvements to the parking lot and drill facilities. The current configuration of this facility is estimated to have 10 years of life remaining.

6.6.3 Correctional Facilities

The <u>Rappahannock Regional Jail</u>, located at 1745 Jefferson Davis Highway, serves the adult corrections needs of the Counties of Stafford, Spotsylvania, and King George, and the City of Fredericksburg. A new 264,000 square foot, state-of-the-art corrections facility was opened in June 2000 which has a 662-bed capacity that can expand to 1,200.

The <u>Rappahannock Juvenile Detention Center</u> is an 80-bed, 59,000-square-foot facility located at 275 Wyche Road that opened in December 2000. The facility provides pre-dispositional and post-dispositional juvenile detention housing.

The <u>Stafford Correctional Unit #21</u> located on Eskimo Hill Road is operated by the Commonwealth of Virginia and houses male inmates.

6.6.4 Fire and Rescue

The Fire and Rescue Department serves the entire County and is headquartered at the Ford T. Humphrey Public Safety Building on Courthouse Road. The Department was established in 2005 as an "all hazards" agency that provides fire, rescue, basic and advanced life support emergency medical service, ambulance transportation and environmental hazard (Haz-Mat) response and mitigation. Other responsibilities of the Department include emergency management, explosive ordnance disposal, building plan review and fire code enforcement, fire and environmental crime

investigation, and public education and preparedness. Mutual aid agreements exist with the Counties of Fauquier, King George, Prince William, Spotsylvania, the City of Fredericksburg, as well as the Marine Corps Base Quantico. In 2020, fire and rescue personnel responded to 15,455 calls for service calls; an increase of more than 20% from 2010 when the Department responded to 12,693 calls for emergency service.

The Fire and Rescue Department has a workforce of 120 career firefighter/EMTs and firefighter/paramedics, 16 civilians, and 150 volunteers that deploy from 15 fire and rescue stations, which are currently organized into two battalions. Battalion 1 serves the southern portion of the County and Battalion 2 serves north Stafford. Nine stations are combined fire and rescue facilities; the remaining six are stand-alone fire or rescue stations. New facilities are designed and built as combination stations. Fire and Rescue Station 14, is the newest station near the Shelton Shop Road and Garrisonville Road intersection, serves as a new station constructed to address community growth in northern Stafford. The table that follows lists the stations and their locations.

Table 6.22 Fire and Rescue Stations (Stafford County, VA)

Station	Location
Fire-Rescue Co. 1 – Falmouth	250 Butler Road
Fire-Rescue Co. 2 – Stafford	305 Jason Mooney Drive
Fire-Rescue Co. 3 – Widewater	749 Widewater Road
Fire Co. 4 – Mountain View	924 Kellogg Mill Road
Rescue Co. 4 – Mountain View	1268 Mountain View Road
Fire-Rescue Co. 5 – Brooke	222 Andrew Chapel Road
Fire-Rescue Co. 6 - Hartwood	67 Hartwood Church Road
Fire Co. 7 – White Oak	12 Newton Road
Rescue Co. 7 – White Oak	535 White Oak Road
Fire Co. 8 – Rockhill	2133 Garrisonville Road
Rescue Co. 8 – Rockhill	1565 Garrisonville Road
Fire-Rescue Co. 9 – Aquia	1001 Washington Drive
Fire-Rescue Co. 10 – Potomac Hills	3528 Jefferson Davis Highway
Fire-Rescue Co. 12 – Berea	20 Sebring Drive
Fire-Rescue Co. 14 – Garrisonville	54 Shelton Shop Road

Source: Stafford County Fire and Rescue Department

The Capital Improvements Program for fiscal years 2020 - 2029 identifies the need for major repairs and upgrades to numerous volunteer stations..

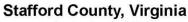
6.6.5 Hospitals

Stafford Hospital Center, the first hospital in Stafford County, opened in 2009 on a 70-acre site on the southeast side of U.S. 1 and Courthouse Road. The hospital is designed to hold up to 100 beds. The site presently includes one medical office building. The facility is operated by MediCorp, the parent company of Mary Washington Hospital.

The next closest facilities are Mary Washington Hospital about 9 miles from central Stafford in the City of Fredericksburg and Sentara Northern Virginia Medical Center about 16 miles from central Stafford in Woodbridge, VA.

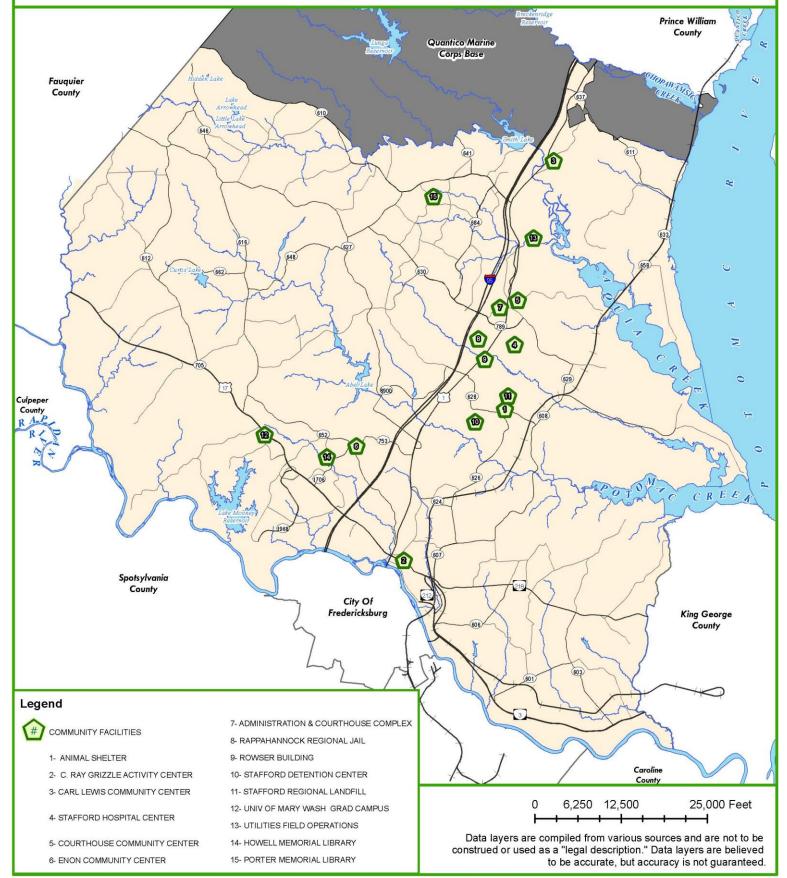


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6.6.6 *Libraries*

The John Musante Porter and the William J. Howell Branches of the Central Rappahannock Regional Library system are the only Libraries within the County. The Porter Branch is located at Parkway Boulevard in the Garrisonville area, and the England Run Branch is located on Lyons Boulevard in the Falmouth area. The Central Rappahannock Regional Library system consists of eight different branches in the City of Fredericksburg and in Spotsylvania, Stafford, and Westmoreland counties.

The Porter Branch of the Central Rappahannock Regional Library is housed in a 23,000 square foot building that was constructed in 1992. It has an 80- theater which can be partitioned into smaller meeting rooms. The England Run Branch opened in 2010 and is 30,000 square feet building with meeting rooms that can accommodate up to 180 seats. Both branches provide free access to computers and Wi-Fi communications.

6.6.7 Solid Waste

The Rappahannock Regional Solid Waste Management Board operates the landfill in Stafford County. Residents may deposit household garbage at minimal charge. Commercial refuse haulers serving residents must pay to use the landfill. The landfill is completely self-sufficient and does not require operating funds from the surrounding counties. The landfill accepts newspaper, aluminum cans, glass, plastic, cardboard, steel can, oil and office paper for recycling. The landfill is located on 700 acres of land. The County is currently working to open a new cell for depositing refuse. There is an estimated 40-year life of the facility.

6.6.8 Virginia Cooperative Extension

Using a combination of paid and volunteer staff, the Virginia Cooperative Extension (VCE) provides research-based information to County residents in the fields of agriculture/horticulture, 4-H youth development, food, nutrition and health, and family and consumer sciences. Educational programs in Agriculture and Natural Resources programs help to sustain the profitability of agriculture and forestry production, while protecting and enhancing the quality of land and water resources. The Food, Nutrition and Health Program and the Smart Choices Nutrition Education Program improve the quality of life of residents by encouraging appropriate and safe food choices and improving health literacy. Through the 4-H program, youth aged 5-19 receive hands-on learning experiences and develop leadership skills.

6.6.9 Rappahannock Area Community Services

The Rappahannock Area Community Services Board (RACSB) is a regional government agency that provides comprehensive services to individuals with mental health, mental retardation and substance abuse problems in Planning District 16 (including Stafford and Spotsylvania Counties). Established in 1970, the agency is managed by a board of 15-volunteer members who are appointed by member jurisdiction's local governing bodies. Two RACSB service sites are Stafford County: the Stafford Clinic and the Leeland Road Group Home.

6.6.10 Findings

- Significant resources need to be allocated for the construction of additional educational facilities to accommodate Stafford County's growing school population.
- The Ford T. Humphrey Public Safety Building that houses the Sheriff's Office and Fire and Rescue Department should meet these agencies' needs over the next 25-year period.
- The Rappahannock Regional Landfill has areas to expand for the future.
- Stafford County's Fire and Rescue Department is staffed by 120 career officers, 16 civilians, and approximately 150 volunteers.
- A 100-bed hospital opened in 2009 near the Courthouse.
- The John Musante Porter Library and the William J. Howell Library serve Stafford County.

6.7 Infrastructure

Adequate access to water, sewage disposal and electric and gas utilities is generally considered essential to the health and well being of residents. This section presents a discussion of

infrastructure facilities that are available in Stafford County. A map is included to identify infrastructure locations in the County.

6.7.1 Water and Sewer

The Stafford County Department of Utilities (DOU), under the direction of the County Board of Supervisors, has provided public water and sewer services to Stafford County residents for over two decades. During that time, the service area population and demand for services have more than quadrupled and continue to grow. The public utility

Infrastructure

- Water and Sewer
- Stormwater Management
- Natural Gas
- Electric
- Telecommunications & Cable

customer base is currently increasing at an annual rate of 5%. The DOU provides services to over 25,000 residential customers and more than 700 non-residential customers. It operates as an enterprise fund that is separate from the County's General Fund and is funded solely by the revenues received from its customers.

Not all residents have access to public water and sewer services. The County only provides public water and sewer to the Urban Services Area (USA), which is the portion of the County that has been designated for residential, commercial and industrial development, with some minor public water exceptions. The designation of USAs, which limit the location of sewer line expansion, serves to limit residential densities in rural areas. Outside the USAs, approximately 10,000 dwellings use private wells and septic tanks to meet their water and sewage disposal needs.

Public drinking water is obtained from two surface water reservoirs (Smith Lake and Lake Mooney). The Lake Mooney Reservoir is located in south Stafford, and the Smith Lake Reservoir is located in North Stafford. The combined safe yield of these reservoirs is approximately 17 million gallons a day (MGD) (7.77 MGD from Smith Lake, and 9.4 MGD from Lake Mooney). The County's annual average daily demand is 9.4 MGD and the peak 90-day average is 13.2 MGD. The Abel Lake Reservoir is located in Central Stafford. While this reservoir is not currently used as a water source, it could be reinstated for use as either a direct-use reservoir or to augment flow to the Lake Mooney reservoir. The safe yield for Abel Lake is 6.1 MGD.

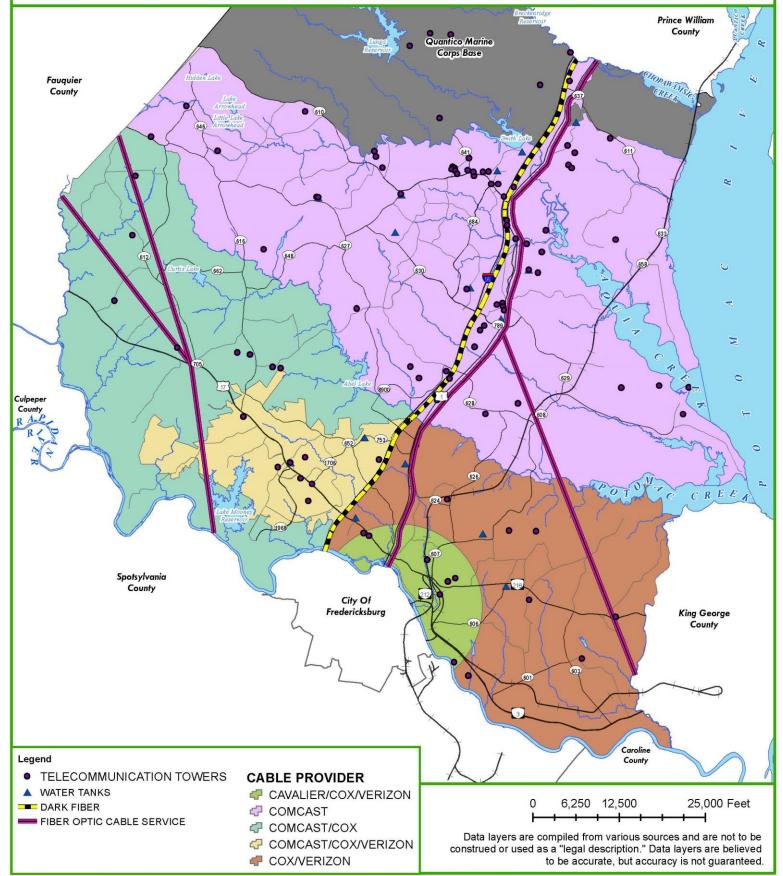


Infrastructure Stafford County Comprehensive Plan



September 8, 2021





Water treatment occurs at the Smith Lake Water Treatment Facility and at the Lake Mooney Water Treatment Facility. The Smith Lake facility supplies water to the northern region of Stafford County while Lake Mooney supplies the southern region. The maximum daily capacity for the two facilities is 21.64 MGD (Smith Lake at 12.5 MGD and Lake Mooney at 9.1 MGD). After treatment, the water from both facilities meets or exceeds Virginia Department of Health and the Federal Safe Drinking Water Act Amendments of 1986 standards. The water distribution system stores approximately 17.2 million gallons of water in three ground storage tanks, one standpipe and 10 elevated tanks. The system also includes five primary pumping stations, and six standby pumping stations.

Sewage treatment is provided at Little Falls Run Wastewater Treatment Facility and Aquia Wastewater Treatment Facility. They have permitted capacities of 8 MGD and 10 MGD, respectively. The Little Falls Run facility is the southeast part of the County and the Aquia facility is in the north. The wastewater collection and transmission systems consist of approximately 475 miles of gravity sewers, 90 pump stations, 63 miles of associated sewer force mains and 15 miles of low pressure mains.

With these resources and future planned improvements, the County anticipates being able to meet the water and sewer needs of its residents within the USA to the year 2055.

6.7.2 Stormwater Management

Stormwater Management is a mechanism for controlling water from rain or snowmelt that flows over the land surface and is not absorbed into the ground and urban and industrial stormwater that is discharged through conveyances, such as separate storm sewers, ditches, channels or other conveyances. The purpose of stormwater management is the mitigation of the adverse effects that land use changes and increased impervious land cover have on flooding and the aquatic environment. Adverse effects include downstream erosion, water quality degradation, and water channel flooding.

Stafford County's Stormwater Management Ordinance (Chapter 21.5 of the County Code) establishes minimum stormwater management requirements. All land development projects must comply with the requirements of this ordinance. Both the Stormwater Management Ordinance and the Zoning and Subdivision Ordinances encourage the use of Best Management Practices (BMP). BMP is an innovative stormwater management approach whose goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate and detain runoff close to its source.

Stafford County's stormwater infrastructure consists of more than 650 stormwater management facilities that fall into the following general categories: ponds; miscellaneous; manufactured/underground; and infiltration trenches. Roughly 60% of the stormwater BMPs being used in the County are a type of pond. Overall, about 40% of the County's BMPs were classified as being in "Good" condition, 30% in "Fair" condition, and 15% in "Poor" condition. The condition of 15% of the BMPs was unknown because they could not be located or accessed.¹ Most

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¹ U.S. Army Corps of Engineers, Baltimore District. Stafford County, Virginia Stormwater Infrastructure and Watershed Management Study, July 2005.

facilities are under private or community association ownership. The County requires Maintenance Agreements to be recorded in the County's land records.

6.7.3 Natural Gas

Residents, businesses and industries in Stafford County are provided natural gas service by Columbia Gas of Virginia, a member of the Columbia Energy Group Company. Columbia Gas of Virginia is the third largest distributor of natural gas in the State. A major natural gas pipeline bisects the County.

6.7.4 Electric

Four companies provide electric power in Stafford County: Dominion Virginia Power; Rappahannock Electric Cooperative; Northern Virginia Electric Cooperative, and Northern Neck Electrical Cooperative.

Major high voltage power lines bisect the County, generally from north to south; one through the eastern half of the County and one through the west. Other undeveloped easements exist as well. Figure 6.8 identifies the location of major power and gas transmission lines.

6.7.5 Telecommunications

Residents and businesses in Stafford County have access to an array of telecommunications services including high-speed Internet access, cable and wireless services. Several major national and international phone carriers provide local and long-distance service. Unfortunately, access to these services is not universal. Certain areas of the County have limited access to the various technologies.

To accommodate the needs of the telecommunications industry while protecting the public safety and welfare of its residents and the character and aesthetics of the community, Stafford County adopted a Telecommunications Plan Element of the Comprehensive Plan which encourages the co-location of new telecommunications facilities on existing structures. This reduces the need for the construction of new towers. When this is not possible, the preferred locations for new towers are within Virginia Department of Transportation rights-of-way near interchanges along I-95, within the existing right-of-way for overhead power lines, within the railroad right-of-way adjacent to industrial or agricultural districts, or on industrial, commercial and public lands that are suitably buffered from residential areas.

Several initiatives in 2020 were launched in order to provide wireless broadband to unserved residents in the southwestern and northeastern areas of the County. A collaborative effort between the County, Stafford County Schools, and The Center for Innovative Technology (CIT) secured grant funds for a pilot program in the Hartwood area to provide wireless broadband to numerous residents, allowing school-aged children to continue at-home learning during the Covid-19 pandemic. In addition, the County obtained a Virginia Department of Housing and Community Development (DHCD) Virginia Telecommunication Initiative (VATI) grant to provide wireless internet services to underserved areas of Widewater, including Widewater State Park; Marlborough Point and vicinity; and a northern part of King George County; by bringing over two

gig signals from King George County using the combination of fiber and radio waves. A new VATI grant received in 2021 would allow for additional expansion to other parts of Hartwood and the Rock Hill area.

6.7.6 Findings

- Water and Sewage treatment facilities are projected to meet the needs of Stafford County residents until 2050.
- 650 stormwater management facilities control surface runoff throughout the County.
- Utilities and an array of telecommunications services are available in Stafford County, but certain areas of the County still have limited access to these services.

Major Electric and Gas Lines Stafford County Comprehensive Plan

Stafford County, Virginia

September 8, 2021



