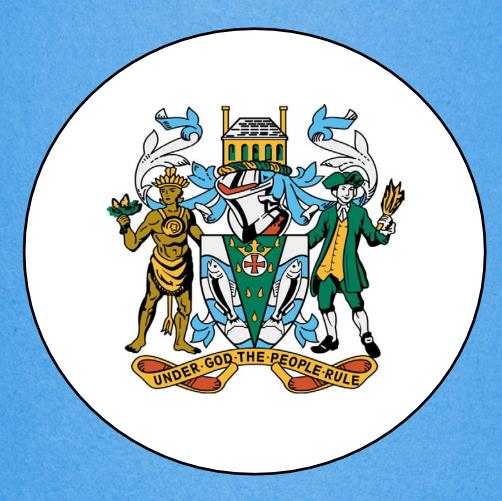
# **King William County Comprehensive Plan**



# (Adopted 11/21/16)

#### King William County Vision Statement

King William County envisions a united community built on the foundation of its past, the strength of its diverse population and the promise of the future generations by focusing on the quality of education for all citizens, quality of public services and quality of life balancing rural and suburban life-styles.

Adopted October 19, 2002

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## TABLE OF CONTENTS

Executive Summary	5
Introduction	
What is a Comprehensive Plan?	7
Objectives	10
SWOT Analysis	11
Plan Roadmap	13
Population and Housing	
Population	14
Housing	17
Goals and Implementation Strategies	20
Environment	
Waterways	21
Flood-prone areas	26
Potable water	27
Forests	30
Minerals	31
Goals and Implementation Strategies	33
Workforce and Economy	
Workforce	37
Unemployment	38
Industry	40
Agriculture	42
Goals and Implementation Strategies	45
Community Facilities	
Communications	47
Utilities	47
Education	49
Libraries	50
Emergency Services	51
Health services	52

Corrections	53
Government	53
Parks and recreation	58
Community organizations	61
Solid waste disposal	62
Goals and Implementation Strategies	63
Transportation	
Transportation	66
Goals and Implementation Strategies	79
Future Land Use Map	77
References	
List of Images	78
List of Figures	79

# **Executive Summary**

The waters of the Mattaponi and Pamunkey Rivers, and the fertile soil of the land between them, formed the heart of life in King William County. Long before the first Englishmen arrived in Virginia, Mattaponi and Pamunkey tribes hunted the lands and fished the waters. By the middle of the 17th century, a burgeoning economy was fed by a system of tobacco plantations lining the shores of the two rivers, while barges loaded with goods lined the waterways to and from the markets. In 1702, King William County was officially created from King & Queen County, named for William III of Orange, King of England, Scotland, and Ireland.

Today, King William County is growing with strong ties to the Richmond metro area; many of its citizens work in that area, but the land and water in King William provides an identity and landscape all its own. Farming, logging, and mining continue to be mainstays of the local economy. Unique among Virginia's counties, King William is home to the only two Native American Indian reservations in the Commonwealth of Virginia, with the Pamunkey Indian Tribe recent recipients of federal recognition. The County has abundant historic landmarks and is home to the oldest courthouse in continuous use in the United States. Today's residents cherish the dual heritage that comes from their colonial and Native American roots, and treasure King William County's past while setting their sights firmly on its future.

The King William County Comprehensive Plan ("Comp Plan") serves as a guiding document to

help balance new residential, commercial, and industrial growth, while preserving the rural landscape, as well as agricultural, historical, and natural resources, for future generations. The Comp Plan is used by many stakeholders in the community, from elected officials, to local and State agencies, to developers and citizens alike in making decisions. It is a roadmap for the future of the County and is instrumental in addressing difficulties faced while working to preserve cherished aspects about King William County. The document, however, should not be considered complete once adopted; rather, the Comp Plan is a living document to be regularly



reviewed and evaluated. As goals are achieved, or new challenges arise, the plan should be

regularly updated to keep it relevant and useful, adapting to the needs the County faces at any given time.

### What is a Comprehensive Plan?

A Comprehensive Plan, often referred to as a "Comp Plan," is a strategic, long-term plan for the orderly development of a locality. The State Code of Virginia requires that all localities adopt a Comp Plan and review or update it at least every five years (*Code of Virginia, 2016*). However, a Comp Plan is much more than just a state mandate and must be a reflection of what the population and its leaders want for the County, not just for tomorrow but decades into the future. Whether it is considering a subdivision proposal, a commercial development plan, revising an old law, or creating a new one, the Comp Plan should be used in the decision-making process to ensure actions are consistent with the long-term goals established by the County. The plan contains maps, data, research, policies, and recommendations to meet the goals of the community. The plan is developed by working with various stakeholders including the political leadership, administrative personnel, planning community, business and industry community, homeowners, property owners, and general citizens. Information is gathered and the plan developed through surveys, workshops, community meetings, and public hearings.

Comprehensive Plans are general in nature. The Code of Virginia states that the plan shall "designate the general or approximate location, character, and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned, or changed in use as the case may be." (Code of Virginia, 2016)

The Code of Virginia Section 15.2-2223 further provides that the Comprehensive Plan "*may include, but need not be limited to*" a number of categories of information including:

- 1. The designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, mineral resources, conservation active and passive recreation, public service, flood plain and drainage, and other areas;
- 2. The designation of a system of transportation facilities such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, ports, terminals, and other facilities;
- 3. The designation of a system of community service facilities such as parks, sports

playing fields, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal areas, and the like;

- 4. The designation of historical areas and areas for revitalization and other treatment;
- 5. The designation of areas for the implementation of reasonable ground water protection measures;
- 6. An official map, a capital improvements program, a subdivision ordinance, a zoning ordinance and zoning district maps, mineral resource district maps and agricultural and forestal district maps, where applicable; and
- 7. The location of existing or proposed recycling centers.

In addition, 15.2-2223 stipulates that the Comprehensive Plan "...shall include the designation of areas and implementation of measures for the construction, rehabilitation and maintenance of affordable housing, which is sufficient to meet the current and future needs of residents of all levels of income in the locality while considering the current and future needs of the planning district within which the locality is situated."

Within these broad guidelines, the County, including the Planning Commission and Board of Supervisors, has broad discretion to develop and maintain a Comprehensive Plan document that is appropriate to the County's unique characteristics, challenges, aspirations, and needs.

### What a Comprehensive Plan is not

The Comp Plan, a guiding document, does not have the power of law. Enforcement of any community standard or law is accomplished through the County's ordinances (Zoning Ordinance, Animal Control Ordinance, Building Code, etc.). However, those standards or laws should be reviewed to ensure they are consistent with the goals of the Comp Plan. The Comp Plan is also not a quick fix for all issues or goals. Some goals or recommendations may be for the immediate future and may see implementation quickly after a new Comp Plan is adopted; however, others may take decades to come to fruition. The Comp Plan, once updated and adopted, should not be considered a finished product. The Comp Plan is a living document which should regularly be reviewed and changes or new elements considered, not just when it is up for its required five-year review. Having such a long-term plan ensures that as opportunities become available and make goals achievable, the County is ready to make the most of them.

# **Objectives of the Plan**

- Promote social, educational, and cultural institutions to assist in the advancement of citizens;
- Promote the development of a diversified industrial and commercial tax base;
- Promote policies that encourage exurban and commercial development to occur in a compact and contiguous manner in areas of the County with existing infrastructure;
- Maximize the use of existing infrastructure, facilities, and services to ensure economically and financially responsible service delivery and plan for economic and efficient expansion of public facilities to serve a growing population;
- Provide for the independent but harmonious development of separate and distinct agricultural, forestall, and exurban areas of the County for optimal agricultural, forestal, residential, commercial, and industrial uses;
- Provide for the orderly and timed development of land consistent with the County's ability to provide services; and
- Balance the protection of natural resources to maintain environmental health and quality while utilizing them for citizens' recreational uses and economic development.

# "SWOT" (Strengths, Weaknesses, Opportunities, Threats) ANALYSIS:

A major effort in the comprehensive planning process is the identification of issues facing the community. In 2010, the County and the King William Citizens Action Team developed a survey in conjunction with the local office of Virginia Tech's Virginia Cooperative Extension to allow formal citizen input to the revision of the Comprehensive Plan. That survey, along with analyses of County documents, plans, and interviews with stakeholders revealed the following strengths, weaknesses, opportunities, and threats (SWOT). Maximizing the strengths and capitalizing on opportunities, as well as minimizing weaknesses and avoiding threats, was a major consideration in developing this plan.

#### Strengths

- Mattaponi and Pamunkey Rivers, valued for their superior natural and scenic beauty and a possible future source of drinking water
- Primary highways (Routes 360 and 30) that provide efficient access to County businesses and residences
- Access to natural gas in Central Garage and West Point areas
- An industrial park as well as industrial and commercial space on Routes 360 and 30 available for industries and businesses, including shell buildings and vacant land
- A school system with rigorous instruction and a rich curriculum
- Strong median family and household incomes to support new businesses
- Natural and cultural sites including the Mattaponi and Pamunkey Reservations and Zoar
- State Park, that complement the scenic rivers and rural areas, and West Point, with its historic atmosphere and neighborhood setting, that are all conducive to tourism
- The active involvement of the members of the Chamber of Commerce in the community and such community events as the Central Garage Cruise In and the Crab Carnival in West Point

#### Weaknesses

- Designation as a Groundwater Management Area by the Virginia Department of Environmental Quality ("DEQ") restricts ability to withdraw significant amounts of ground water
- Inadequate supplemental resources due to no future agreement with DEQ for additional drinking water, wells, or intake from the Mattaponi or Pamunkey Rivers

- Small industrial and commercial base which results in higher real estate taxes or less money available for services
- Inadequate internet and cell phone service
- Delayed response times for ambulance services
- Limited public transportation
- Lack of anchor stores, resulting in much shopping outside the County
- Competition with Mechanicsville, Tappahannock, Williamsburg, and Gloucester for consumer retail business

#### Opportunities

- Source of water from Mattaponi or Pamunkey Rivers
- Sufficient natural and cultural resources to grow a tourist trade
- Abundance of land
- Continuous suburban expansion, Richmond region is growing

#### Threats

- Limitations to withdrawals from wells and above ground water resources; the resources may be tapped by other localities, limiting King William withdrawal
- Great recession, higher gas prices, long commute, and trend away from exurban areas back toward urban and suburban areas
- Lack of coalescence of industries
- Small commercial and industrial base have resulting in high real estate taxes
- Lack of action on regional issues
- Central Garage and West Point are in competition with Mechanicsville, Tappahannock, Gloucester, and Williamsburg for shoppers

## Plan Road Map

The plan is divided into sections, each focused on a specific topic. For example, there is a section titled "Population and Housing" which addresses population growth and the County's housing stock, and "Natural Resources," which looks at rivers, forests, and mineral deposits. Within each section, the first part is an inventory of existing conditions and compilation of research, such as the current population figures and their demographics, or in the case of the "Housing" section, the total number of homes, home age, location, and type. The second part of each section looks to the future, forecasting growth, change, or expected pressures which must be addressed. Finally, each section ends with goals and implementation strategies. A goal is a broad statement of policy, such as, in the case of Housing, "to provide a variety of safe, decent, affordable, and quality housing opportunities for all current and future citizens of the County." This is followed by one or more implementation strategies, which are specific methods to achieve the goal, an example being "Identify a variety of funding sources to help low and moderate income citizens to gain access to decent and standard housing opportunities."

### Population

The study of population and growth patterns in King William County provides an essential foundation for long range planning and planning of capital improvements including schools, waterlines and sewers, recreation facilities, and transportation facilities. This section contains text and exhibits which describe the past and present nature of the County population and projections of future growth.

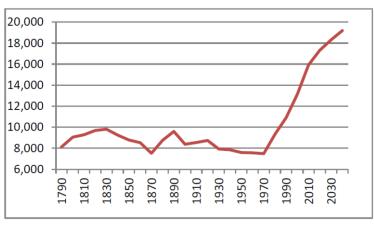


Figure 1: Population 1790-2030

Age	% Change 2000-2010
15-24	-0.9
25-34	14.6
35-44	36.9
45-54	18.4
55-64	15.5
65-74	10.8

The population for nearly the first two-hundred years of the County's history held relatively steady, fluctuating at 9,000 people. Starting around the 1980s, the County experienced record population growth as high as 25% a year, with the current population now standing at just over 16,000. Projections estimate that within the range of this Comp Plan (30 years) the population will approach 20,000.

*Figure 2: % Change 2000-2010* How the County, through use of its land, housing stock, roads, schools, economy, laws, and policies, will accommodate an additional 4,000 persons over that period requires careful long term planning to happen in a manner that is financially and environmentally responsible, makes the best use of its existing resources and harnesses new resources and talents of a growing population, all while maintaining its unique attributes and rural character.

The total number of persons living in the County only tells one part of the story; an equally important factor is how that total population is constructed. In the last census period, persons aged 35-44, a group representing the available workforce, as well as major consumers with disposable income, saw the biggest increase. Further, this population segment is often pre-or early retirement, suggesting a future market for senior services and changing preferences in housing as they age, reflecting both nationwide and statewide trends toward an older population. This increase in the age of the population stems from a decrease in the birth rate.

Fewer children are being born, therefore the general population grows older with each passing year, and the number of older persons coming to the County increases. However, the younger

age groups are decreasing or growing at a lower rate. A national trend can also be seen in younger people migrating back toward the urban cities. The County needs to ensure it is able to maintain the next generation of citizens, either by keeping existing youth who currently live in King William and choose to live in the County when old enough to live on their own, or attract new, first-time King William residents. Younger persons consider many aspects when choosing where to live,

RACE		
One Race	15,567	97.7
White	12,297	77.2
Black or African American	2,819	17.7
American Indian and	231	1.4
Alaska Native		
Asian	118	0.7
Other	99	0.6
Two or More Races	368	2.3

#### Figure 3: Racial demographics

including job prospects, school systems, recreational amenities, quality affordable housing, and high speed internet access.

	2020		2030		2040	
	Female	Male	Female	Male	Female	Male
Under 5 years	549	513	582	543	594	555
5 to 9 years	540	567	579	607	600	630
10 to 14 years	540	588	567	617	606	660
15 to 19 years	546	553	535	542	579	586
20 to 24 years	371	394	365	388	387	411
25 to 29 years	573	530	587	543	580	537
30 to 34 years	633	581	621	570	618	567
35 to 39 years	613	556	706	640	730	662
40 to 44 years	530	541	649	663	642	657
45 to 49 years	614	550	641	575	745	668
50 to 54 years	632	628	563	560	697	692
55 to 59 years	744	612	625	514	659	542
60 to 64 years	593	587	577	572	520	515
65 to 69 years	483	473	590	578	500	490
70 to 74 years	380	352	482	446	474	438
75 to 79 years	237	220	327	303	403	373
80 to 84 years	156	97	244	153	313	195
85 years and over	162	72	183	81	253	113
	8,896	8,414	9,423	8,895	9,900	9,291
	17,310		18,318		19,191	

#### Population Projections by Age and Gender

Source: Virginia Employment Commission.

#### Figure 4: Pop. Projections by Age/Gender

The average household size has been gradually decreasing from 2.85 persons per household in 1990, to 2.65 today.

By analyzing the population's gender characteristics and age groupings it is possible to evaluate anticipated needs for community facility requirements, commercial services, and housing demand. By assuming the same household size going forward (2.65 persons per household) and using population projections for King William County made by the Virginia Employment

Commission to 2020 and 2030, the estimated number of additional households in King William by 2020 will be about 550. Using the same dataset to calculate additional household formation between 2020 and 2030 yields about 750 new households for that decade.

By examining the buildable lots currently subdivided but not yet built or permitted in the County (as of January 2016), one can come up with an estimate of how many more lots will be needed in the coming decades to accommodate the estimated increase in households. As of January 2016 there were 1,001 subdivided (but not built) lots in King William County, meaning the County can meet its 2020 population demand with its existing lot stock. 300 additional lots would be needed by 2030 to accommodate the County's projected growth in population. Some of the growth will likely be accomplished by multi-family development, with more than one household per lot. However as 99% of the County's growth to this point has been in individual single-family dwellings, it is assumed that type of housing will continue to be the dominant type of housing for future growth.

Estimated additional households, 2010 to 2020		Available lots as of Jan 2016	Remaining vacant lots
	550	1001	451
Estimated additional		Projected available lots as of	<b>Remaining vacant</b>
households, 2020 to 2030		2020	lots
	750	451	-299

*Figure 5: Population growth and lot availability* 

### Housing

Adequate, safe, and affordable housing is a basic community need. Sufficient housing in good condition provides desirable living conditions and has a higher value. In addition, adequate housing can be a determining factor in attracting new industry. When industry relocates, it often brings new workers into a community. If sufficient and appealing housing exists, it facilitates the relocation of new personnel. While the provision of housing units is largely provided by the private sector,



Image 2: Single family dwelling

including Image 2: Single family dwelling builders, developers, realtors, bankers, and others, the local government, its ordinances, and policies play an important role in making sure the needs are met, and guiding what gets built, and where. Residential development in the County is regulated by its Zoning Ordinance, Subdivision Ordinance, and the locally adopted Virginia Uniform Statewide Building Code, which sets standards for the construction, alteration, adoption, repair, removal, use, location, occupancy, and maintenance of all buildings.

Housing in King William is dominated by the medium-sized single family home (King William Building Report, 2016). However, considering the current trends of rising household costs and shrinking household size, it is likely there will be an increased demand for multi-family units and manufactured homes. The Colonial Square Apartment complex is the only notable existing multifamily development in the County. Several other multi-family projects have been approved over the years, but as of 2016 no additional units have been constructed.

Manufactured homes reflect an effort to provide housing that is more affordable than the average single-family dwelling. Manufactured homes do represent a potential solution for at least part of the affordable housing demand. However, as a housing strategy they present a variety of fiscal and aesthetic trade-offs, including potential long term value depreciation of the structures and the potential cumulative visual impact that scattered, unplanned units can have on the County's scenic, rural landscape. The number of mobile homes in the County increased from 345 in 1990 to 486 in 2010, after dropping to 283 in 2000 (King William Planning Annual Reports, 1990-2010).

The total number of housing units in King William County increased from 4,193 in 1990 to 6,327 in 2010. Also, the number of occupied housing units increased from 3,834 in 1990 to 5,909 in 2010. These increases, coupled with improvements to structures with deficiencies noted in 1990, point to a general improvement in the County's housing stock.

Торіс	# of HUs	% of total HUs
Total housing units	6,327	100%
Occupied housing		
units	5,909	93%
Vacant housing units	418	7%
Median home value	\$198,100	
Median monthly		
rent	\$771	
Renter-occupied		
units	860	14%
Owner-occupied		
units	5,049	80%

Figure 6: Housing unit statistics

There are a number of variables that can indicate a dwelling unit is substandard; it is common practice to use "lacking complete plumbing facilities" to approximate the number of substandard units (US Census, 2015). The potential fallacy of this method relates to the fact that a unit may have all plumbing facilities but still be substandard, which is relevant in a rural

area such as King William County, where a large percentage of the houses are not served by public water and sewer facilities. Of the County's 4,846 occupied housing units in 2000, 114 (2.4%) lacked complete plumbing facilities while 94 (1.9%) lacked complete kitchen facilities. 164 (3.4%) did not have telephone service in 2000. 258 (5.3%) did not have a vehicle available at the unit. Most occupied housing units in 2000 relied on electricity for heating.

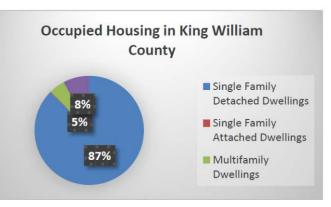


Figure 7: Percent of occupied housing

Currently, King William has only one apartment complex, Colonial Square Apartments, located near the Central Garage area, which has 32 two-bedroom units that range in monthly rent from \$695-\$765. The apartments have been always close to fully leased/occupied since the current company acquired the units in 1998, demonstrating the demand for multifamily housing on a small scale is certainly present in the County. As King William continues to grow, it will be important to offer a mix of housing to support the individual lifestyle preferences of new and current residents.

HOUSING OCCUPANCY		
Total housing units	6,522	100.0
Occupied housing units	5,979	91.7
Vacant housing units	543	8.3
For rent	48	0.7
Rented, not occupied	5	0.1
For sale only	117	1.8
Sold, not occupied	30	0.5
For seasonal, recreational, or	91	1.4
occasional use		
All other vacancies	252	3.9

Figure 8: Housing occupancy

Between 2008 and 2012, median owner costs in King William were \$1,545 monthly for owneroccupied housing units with a mortgage. 21% of occupied housing units in the County do not have a mortgage associated with the dwelling. Their median monthly costs were much lower, around \$411 per month (American Community Survey, 2015). King William County has a diverse population base, and thus a need for different housing types. The need for rental housing and housing for a variety of income groups (including the elderly) should be considered by future developers. The predominant form of housing available in

King William County is a single family detached home. An issue facing the County is the gap that exists between what is or can be built, and what many of the elderly, lower income residents, and newly-formed families are able to afford. The cost of some single-family detached dwellings may be too high for people within these groups. The County may seek to encourage flexibility in housing types in areas suitable for concentration of the population base, especially important as the County seeks to retain its next generation of citizens and home owners, currently of school age.

# Goals and Implementation Strategies: Population and Housing

#### Goal:

To provide a variety of safe, decent, affordable, and quality housing opportunities for all current and future citizens of the County.

#### Implementation strategies:

- 1) Annual reviews of both local and regional population and demographic data to identify changes in population trends, which may cause changes in demands.
- 2) Address unsafe housing conditions through code enforcement.
- 3) Identify a variety of funding sources to help low and moderate income citizens gain access to decent and standard housing opportunities.
- 4) Identify areas suitable for future residential development.
- 5) Collaborate with Bay Aging and other assistance groups to determine demands and resources.
- 6) Establish a local Habitat for Humanity group.

#### Goal:

To encourage the development of a variety of housing types to accommodate current and future citizens of varying ages, stations in life, and income levels.

#### Implementation Strategies:

- 1) Encourage diversity in housing stock to provide for a range in the type, size and cost of housing available.
- 2) Study the housing needs of emerging millennials to retain and attract the next generation of citizens.
- 3) Develop an appropriate mix of affordable owner and rental housing opportunities to accommodate economic growth and various personal preferences, including single-family detached, duplex, and multifamily housing units.
- Study the housing needs of our aging population to ensure their needs are met and they are able to remain within the County if they choose, maintaining a high standard of living.
- 5) Consider revisions to County Ordinances that permit options for accessory housing/secondary housing ("granny flats," med cottages, etc.) for family members requiring care.

## **ENVIRONMENT**

#### Waterways

The majority of King William's borders are formed by the waters of the Mattaponi and Pamunkey Rivers, which meet at the Town of West Point to form the York River. These rivers provide recreational opportunities, a diverse natural habitat for a variety of wildlife, and may one day offer an option for future water sources.

The Mattaponi starts life as four rivers which combined give it its name, being the Mat, Ta, Po, and Ni out of Spotsylvania County, which converge



Image 3: Rivers

in Caroline County to form the Mattaponi. As it winds through King William it forms the border between King and Queen Counties, combining with the Pamunkey at West Point to form the York River. The Mattaponi is a slow moving tidal river which offers great canoeing and kayaking opportunities as well as ample freshwater fishing opportunities for a variety of popular species. However, public access to the river is limited to the following:



Image 4: Mattaponi River

• Aylett Landing, located just east of Route 360 on the Mattaponi, includes a limited boat launch ramp and space for bank fishing and nature study.

• West Point/Glass Island Landing, located within the Town of West Point on Glass Island on the upstream side of Route 33. This site includes a boat launch ramp, bank fishing, and picnic space.

The South and North Anna rivers converge at the boundaries of Hanover and Caroline Counties to form the Pamunkey. As the river winds through King William it forms the border between Hanover and New Kent Counties, combining with the Mattaponi at West Point to form the York River. The Pamunkey is a slow moving river, offering some canoeing and kayaking opportunities; however it is relatively constricted by trees, debris, and shallowness in its upper reaches. The Pamunkey offers ample freshwater fishing for a variety of popular species. Like the Mattaponi, the Pamunkey features limited public access points.

- Lester Manor Landing, a boat launching ramp for small boats, is located on the Pamunkey River at the end of Route 633.
- Canoe/skiff landings at the end of Route 602 and at the mouth of Herring Creek (Zoar State Forest).

Underwater grasses, called Submerged Aquatic Vegetation (SAV), are found mostly in shallow

waters of protected coves and creeks that are not subject to severe tidal and wind action (VMRC, 2000). Underwater grasses become nurseries for fin and shellfish as well as habitats and refuges for waterfowl. They also act as a filter to surface water as it enters water bodies with perennial flow and act as a buffer against tidal action. In low energy situations, underwater grasses provide a substantial defense against shoreline erosion. At the state level, Virginia's Marine Resources Commission (VMRC) has primary responsibility for managing SAV. VMRC's Habitat Management Division issues permits for structures on or under state waters that may

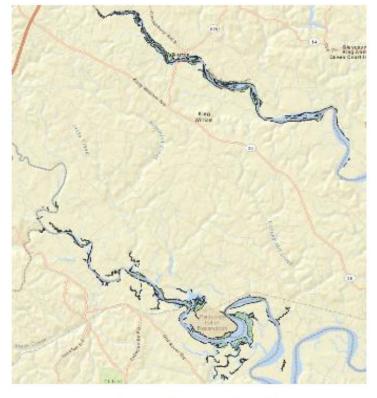


Image 5: Pamunkey River

affect or impinge upon SAV and takes into account detrimental effects before issuing or denying permits. At the local level, the County is responsible for land use decisions that impact the flow of excess nutrients and sediments resulting from housing and commercial development that may impair the health of underwater grasses.

Both rivers are classified as "worthy for further study for suitability" by the Department of Conservation and Recreation for Scenic River designation. Virginia Scenic Rivers Program's intent is to identify, designate, and help protect rivers and streams that possess outstanding

scenic, recreational, historic, and natural characteristics of statewide significance for future generations (DCR, 2016).

The Mattaponi and Pamunkey Rivers are tidal to just a few miles above Route 360. Tidal marshes are found along the Mattaponi River from its mouth to the village of Aylett, approximately 31 river miles upstream from West Point. On the Pamunkey, tidal marshes and wetlands occur from West Point to a few miles downstream from Route 360, about 45 river miles from West Point. There is a total of 5,905 acres of tidal marshes in King William County of which 2,623 are on the Mattaponi and 3,282 on the Pamunkey rivers, respectively. Marshes provide a number of important functions; they produce various types of marsh plants which, when decayed, provides food for marine life. Next, marshes provide habitats for waterfowl and wildlife as well as form an erosion buffer, derived from the vegetation's capacity to absorb and dissipate wave energy. Additionally, marshes help control water quality by filtering out sediments while also serving as a flood buffer through the action of the peat substratum to absorb and release large amounts of water. The meandering nature of the two rivers, which are bordered by extensive marshes, helps reduce erosion rates along these river shores. Exposure to wind-generated waves is small because of the narrow width and meandering nature of the two rivers. Erosion takes place on the outside of the river bends where the fast lands are not protected by marsh. These sites are also the most likely to experience development due to their high elevation. By reducing vegetative ground cover and removing trees with roots that stabilize the soil, development can accelerate erosion.

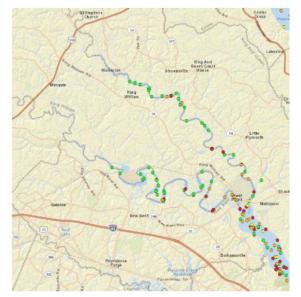


Image 6: DEQ sample sites "Degraded," or "Severely Degraded."

The Virginia Department of Environmental Quality (DEQ) sampled and rated the Benthic Index of Biotic Integrity in multiple sites along the rivers. This refers to the benthic invertebrate community, which is a group of organisms that live on or in the bottom sediments. The benthic community includes a wide variety of organisms including clams, oysters, small shrimp-like crustaceans, and the blood and clam worms often used as bait. The presence of benthic invertebrates is a good indication of a water's health and ability to sustain organisms which rely on these invertebrates for food. The majority of locations sampled met the goals, however several were rated as "Marginal," Lower portions of both rivers are listed as "Impaired" by DEQ. The Pamunkey is listed as impaired due to its low concentration of Dissolved Oxygen. The Mattaponi's impairment listing is due to increased nutrient loads.

The County is also crossed by a great number of smaller streams, wetlands, and swamps, many of which feed into the County's two major rivers. These water features

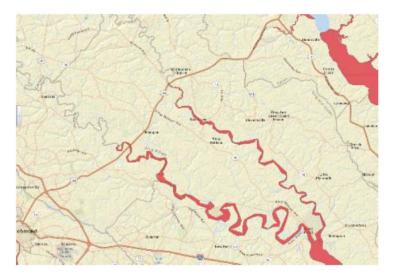


Image 7: Impairment areas

also contain Resource Protection Areas (RPAs) as defined by the Chesapeake Bay Preservation Act. RPAs are defined as tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands, water bodies with perennial flow, tidal shores, and other lands



Image 8: RPA stream buffer

which provide for the removal, reduction, or assimilation of sediments, nutrients, and potentially harmful or toxic substances in runoff entering the Bay and its tributaries (DCR, 2010). The area around the RPA is an enforced buffer-area not less than 100 feet in width which must be located adjacent to and landward of RPAs and along both sides of any water body with perennial flow. The only permitted uses in RPAs are redevelopment of existing uses, water dependent uses such as piers, public utilities, railways, and roadways, water wells, passive recreation uses, and historic preservation or archaeological activities. Resource Management Areas (RMAs), as established by

King William County, contain all areas of the County that are not classified as Resource Protection Areas. The RMA includes lands which have the potential to cause significant water quality degradation if improperly used for development. Any use permitted under the County's zoning ordinances is permitted in the RMA; provided all development meets performance criteria set forth in the Bay Act Regulations

#### **Flood-Prone Areas**

Floodplains are low-lying land areas adjacent to rivers, water bodies with perennial flow, creeks, and other water bodies subject to periodic flooding when precipitation causes the

volume of water to exceed the capacity of the waterway. The amount of flood damage is also

affected by the extent of development within a floodplain because development can interfere with many of the natural functions floodplains serve. Coastal areas and areas bordering major rivers are vulnerable to tidal flooding from major storms such as hurricanes and northeasters. These types of storms produce large amounts of precipitation and high winds, which push large volumes of water against the shore. The Middle Peninsula



Image 9: Development flooded

occasionally experiences major storms and flooding. While the impact of such storms have had a greater impact on the communities with direct exposure to the Chesapeake Bay, they stand as a threat to low lying areas within King William County that are subject to tidal action.

Very little development has occurred within the floodplains outside the Town of West Point. Most development occurred before the flood zone regulations were adopted. An owner may still build within a floodplain if they meet certain flood-proofing criteria and engineering designs, although when homes are financed with insured loans, a lending institution requires insurance, for which premiums recently increased drastically due to the Biggert Waters Act (FloodSmart, 2015). Protection against damage from development in floodplains may still be needed since much of the desired building area is along shorelines known to be in the floodplains. The County has adopted floodplain regulations pursuant to the National Flood Insurance Program as part of its system of ordinances for building and development. The regulatory flood protection measures are included in various codes and ordinances, which regulate some aspect of development within floodplains, including the: State Uniform Building Code, County's Floodplain Management Ordinance, Subdivision Ordinance, and Chesapeake Bay Preservation Ordinance. The County's Floodplain Management Ordinance was enacted in May 1989 and received a major overhaul in 2014. The general provision of the ordinance includes regulation of uses, activities, and development which will cause unacceptable increases in flood heights, velocities, and frequencies; restriction of prohibition of certain uses, activities and development within areas subject to flooding and requirement of protection or flood proofing.

In 2014 the County adopted updated flood maps and the flood zone management ordinance. The new floodplain areas or ordinance, coupled with major changes in the National Flood Insurance Program, will mean development within or near flood prone areas will require careful planning to protect life and property from damage, as well as avoiding costly premiums in the NFIP program. The program will no longer subsidize development in flood prone areas, with development's insurance costs now being based on actual risk. FEMA's Community Rating System is a voluntary program which may help reduce the increased flood insurance premiums select residents will likely see. Under the CRS, flood insurance premium rates are discounted to reward community actions that meet the three goals of the CRS, which are: (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management.

#### **Potable water**

Groundwater is the primary source of drinking water for nearly all rural areas within the region, and the only source currently used in King William County. In 2010, total withdrawal from major sites within the County averaged 18,721,300 gallons per day, excluding WestRock. WestRock, formerly RockTenn operates a paper mill in West Point and 16 wells within King William County and the Town of West Point, accounting for the majority of the withdrawals.

The remaining use serves residential and commercial developments within the County including the Town of West Point. According to a VIMS report, approximately 29 percent of the housing units within King William County were served by a centrally administered waterworks system; all, except that



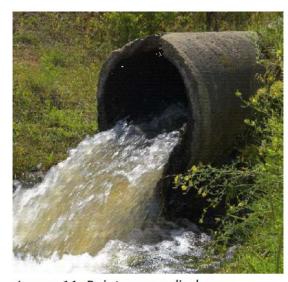
Image 10: Farm spigot system

serving the irrigation system at the West Point Country Club, from groundwater sources.

Water supply in rural areas is heavily dependent on water that infiltrates the ground. There, water is stored between layers of sand, gravel, and rocks called "aquifers." Three types of aquifers are present on the Middle Peninsula. The water table aquifer is the closest to the surface and is the source of most residential drinking water because it can be accessed by shallow wells. This aquifer also supplies groundwater to some institutions, farms, and other small users but it is impractical as a source of industrial or municipal water supply. The water table aquifer ranges in depth to the top of the aquifer from 50 to 140 feet. A four-inch well will yield five to 30 gallons of water per minute (gpm). The upper artesian aquifer is at the next lower level, approximately 50 feet thick and a reliable source of groundwater for subdivisions,

institutional, and agricultural users. This aquifer can yield up to 350 gallons per minute, running to a depth of 160 feet. The principal artesian aquifer is in the Patuxent formation and extends down to the basement rock complex. This aquifer has a very large capacity, rated in the five to fifty million gallons per day category. Industrial withdrawals account for most of the water taken from this aquifer system.

The protection of the aquifer systems cannot be overemphasized as a planning issue. While deeper aquifers provide the greatest potential resource for large water consumption, these aquifers are recharged by water that infiltrates through the water table aquifer. Although the recharging takes place considerably upstream from the source of removal, it is important for downstream users that the water table aquifer is protected from pollution resulting from the use of the surface. However, recharging of the aquifer can take hundreds of years, thus any impact is difficult to address quickly.



Groundwater contamination comes from a wide variety of sources. Point-source pollution (i.e. straight out of a pipe) is easiest to identify, mitigate, and monitor. However a great deal of contamination comes from non-point sources, which can be difficult to identify, mitigate and monitor. Virginia's Groundwater Protection Steering Committee has assigned top priority to the following sources of groundwater contamination. Underground storage tanks are a source of groundwater contamination that has increased steadily in recent years. EPA studies indicate that a third or more of the underground

Image 11: Point source discharge

storage tanks eventually leak. Groundwater pollution by petroleum products stored in underground tanks is a very serious problem that often occurs in the vicinity of places selling motor fuels. Newly installed storage tanks are required in Virginia to meet certain design, construction, and monitoring standards in order to prevent leaks and overflows. DEQ oversees and regulates liquid petroleum storage tanks of 1,000 gallons or greater, some of which are underground storage tanks (UST). DEQ routinely monitors these facilities and maintains an extensive database and detailed map showing sites.

Landfills contain various types of substances, chemicals, hazardous wastes, paint, and other materials that may move through the ground and pollute the water table and lower aquifers.

Although King William County does not operate a landfill, it is within the interest of the County to be aware of potential contamination sources that might affect the local water supply. They handle wastes that contaminate groundwater if infiltrated into the ground.

Septic tank systems represent a major threat to groundwater when improperly functioning. A common problem caused by septic tanks is the contamination of individual wells. Groundwater contamination can result from septic tank fields being installed in soil that enable the effluent to move through the soil too fast for the bacteria to digest the impurities. Alternately, the system can fail, with around a dozen failed systems getting reported each year (King William County, 2015).

The Chesapeake Bay Preservation Act requires that a back-up drain field is searched for anytime new development takes place. This can ensure, in the event of a septic tank failure, a suitable area for the replacement system has already been identified, potentially speeding up the process of abandoning the failed system and decreasing its risk of contamination. This, however, does not deal with the thousands of septic tanks in place before the regulation became effective or was enforced, except when owners of those properties begin new development and trigger the reserve search requirements. The County began more rigorously enforcing the reserve drain field area requirement in 2012 as part of any on-site disposal system, resulting in the designation of many reserve drain field areas on properties.

Fertilizers used widely in farming, forestry, and lawn maintenance present a complex problem relative to groundwater. Although they offer significant benefits in production through runoff and infiltration, they can contaminate both surface and groundwater. Unfortunately, there is no flat rule for handling these chemicals, since the extent of contamination caused by them is related to several factors, including the rate of application, decomposition rate, water solubility of the substance, nature of the soil, and depth to groundwater. The problem is augmented by the fact that even very low concentrations of certain chemicals may accumulate in the food chain over time. Pesticides have some of the same pros and cons as fertilizers. As agriculture is a major part of the local economy, the use and regulation of fertilizers should be continuously considered to optimally balance the ability of farmers to produce, while reducing the impact upon the waters. Maximum contaminant levels for approximately a dozen pesticides were adopted by the EPA under the Safe Drinking Water Act. The Federal Insecticide, Fungicide, and Rodenticide Act as well as the Toxic Substances Act contain provisions authorizing the EPA and the State of Virginia to protect groundwater from pesticide contamination. Virginia passed the Pesticide Control Act in 1989, establishing the Pesticide Control Board, which is authorized to regulate the registration, labeling, handling, and use of pesticides.

King William features a high water table in many parts of the County. The high water table is most prevalent in the lower elevations of the County along the two rivers and major creeks or water bodies with perennial flow that drain the higher lands. Areas with elevations lower than 50 feet have higher water tables than the highlands, with high concentrations in the middle part and on the Pamunkey River side of the County. The higher grounds in the mid to western part of the County along the Routes 360 and 30 corridors are less affected by high water tables.

Because this is the area where most of the new development is taking place, the risk of contaminating groundwater is not as high as it is in the lower elevations. The threat to groundwater comes from installing septic tanks over high water tables. Accordingly, development which requires septic tanks should be monitored very closely to avoid conflict with the water table.

#### Forests

King William County is part of approximately 112,000 acres of great forest land that once covered most of the east coast of North America; of which is about 32,000 acres of pine, and the remaining 80,000 acres of other coniferous species combined with oak, hickory, holly, and numerous other deciduous species to form a beautiful habitat for both wildlife and humans.



The County also contains the Zoar State Forest, a nearly 400-acre forest owned and

Image 12: Managed timber

operated by the Virginia Department of Forestry, used to grow timber and agricultural crops, maintain habitat for various species of wildlife, and to provide educational and recreational opportunities.

The forests are a major source of air cleansing due to the process of "recycling" oxygen from carbon dioxide, and also serve as the mainstay for the prevention of erosion and help natural manage storm water. Financially, they are a major asset to the County's economy with its timber and wood-products industries, which have been promoting sound conservation practices for many years. In 2015, there were 62 reported timber harvests occurring on approximately 3,330 acres whereas in 2014 there were 58 reported timber harvests on about

4,900 acres. They provide buffer from winter cold and summer heat, as well as wind and noise. Finally, the forests provide a habitat to the abundant wildlife and flora of the County.

This desire for a rural lifestyle close to nature is a major reason why many new residents are choosing King William County for their home and is something that many lifelong residents cherish about the landscape.

#### Minerals

Geology in King William consists of gravel, sand, silt, and clay, elements that have long provided

for a number of mining operations in the County, some of which continue today.

The Nestle-Purina facility, located in central King William, excavates clay as a raw material, which is used at an onsite facility to produce cat litter. King William Sand & Gravel Co. permitted a pit north of Aylett in 2007 with mining operations expected to begin in 2016. Aylett Sand & Gravel and Aggregate Industries both operate current sand



Image 13: Nestle Purina mine

and gravel mines in the County's northeast. Currently there are twelve sites approved for mining by DMME within the County and five abandoned mines.

Diatomaceous earth occurs in King William County, but there has been no commercial production. A sample of diatomaceous clay material from the Pamunkey River bank, southeast of Manquin, on the "Pipe-in-tree" farm was tested by the U.S. Bureau of Mines and it may be suitable as a raw material for lightweight aggregate. Three samples of clay materials were taken, tested, and evaluated to have a potential for raw material in the manufacture of face brick and garden pottery. One sample from a road cut, southeast of Palls in the south-central part of the County, was found suitable for face brick. Two samples, taken west of Etna Mills in the northwestern part of the County, and southwest of Manquin in the central part of the County, were found suitable for garden pottery.

It is likely that growth in the County's mining industry in the near future will come from expansion of existing facilities, rather than permitting of new mining projects.

# Goals and Implementation Strategies: Environment

#### Goal:

Develop strategies for reducing the impact of development on sensitive shoreline/marsh and wetland habitat areas.

#### **Implementation Strategies:**

- Enforce erosion and sediment control, storm water management, and regulations governing the development of wetlands to protect the health of the County's waterways and the Chesapeake Bay watershed.
- 2) Revise County ordinances to ensure an organized, clear, and fair process for development in and around environmentally sensitive areas that takes into account extent of impact and includes clear guidelines for mitigation.
- Offer alternative solutions to development in environmentally sensitive areas; encourage transfer of development from areas less suitable for development to areas designated for additional growth and density.
- 4) Develop education and outreach programs to inform new residents of the regulations related to RPAs.

#### Goal:

Develop more opportunities for public use of the County's natural waterways.

#### Implementation Strategies:

- Mobilize interested parties in the County to put together a proposal for additional public access points along the major waterways; utilize available grant funding and land banking services to implement proposal.
- 2) Capitalize on the economic development potential of water-based recreation and programming.
- 3) Through the Middle Peninsula Public Access Authority, develop land holdings in King William for public use.
- 4) Pursue grants from groups like DGIF, DEQ, NFWF, etc. to improve existing facilities.
- 5) Consider improvements to the County-owned water-front parcel along the Pamunkey.

#### Goal:

Preserve and enhance the natural vegetative riparian buffers along the County's waterways to filter pollution and decrease the potential for erosion and sedimentation.

#### Implementation Strategies:

- 1) Involve local groups such as the Mattaponi and Pamunkey Rivers Associations to spearhead and implement re-planting and re-vegetation efforts.
- 1) Revise the County ordinance to clarify re-vegetation requirements post-development along shorelines and in wetland areas.

#### Goal:

Protect life and property while averting dangers from severe storms and floods in low-lying and flood-prone areas of the County.

#### **Implementation Strategies:**

- 1) Update the regional Hazard Mitigation Plan.
- 2) Participate in the National Flood Insurance Community Rating System (CRS) program to reduce flood risk in the County and provide King William residents the opportunity to have discounted flood insurance premiums.
- 2) Revise County ordinances and Future Land Use Map to discourage development in hazard-prone areas and transfer development and density to more suitable areas.
- 3) Work with FEMA, the Virginia Department of Conservation and Recreation, and VDEM to monitor changes in flood risks and methods to mitigate.

#### Goal:

Preserve availability of safe, high-quality potable water for the County's current and future residents and commercial users.

#### Implementation Strategies:

- 1) Continue to require reserve septic drain fields as part of an on-site disposal system as a condition for development and re- development.
- 2) Expand municipal water and sewer systems to reduce the need for individual well and septic systems in the County.
- 3) As the municipal system expands, amend County ordinances to require larger lot zoning as a condition for having an individual septic sewage treatment system.
- 4) Enforce limits on groundwater withdrawals and encourage use of non-potable/ graywater sources for industrial purpose.

- 5) Encourage property owners to explore rainwater-capture and graywater recycling systems for their homes and businesses.
- 6) Explore feasibility of converting sand and gravel quarries into surface water impoundments for public water supply.
- 6) Communicate with neighboring localities and regional partners on alternative water sources.
- 7) Consider adopting requirements for upgrading fixtures to low-flow units upon sale of a home.
- 8) Prohibit use of treated potable water for irrigation.
- 9) Work with state officials to ensure groundwater limitations are equitable.
- 10) Update the County's water/sewer service area maps.
- 11) Update mandatory utility connection requirements for service areas.

#### Goal:

Preserve and enhance large forested areas of the County for their ecological, recreational, and aesthetic value; encourage responsible forestry and woodland management practices.

#### Implementation Strategies:

- Create a more direct communication system between the Department of Forestry and County staff to ensure the County is aware of all ongoing logging and forestry operations.
- Revise County ordinances to include more specific guidelines regarding tree clearing and clear-cutting for new development; ensure developers and builders are aware of strategies for minimizing the clearing of trees and vegetation for new projects.
- 3) Amend County ordinances to include a tree-preservation ordinance for valuable, old growth trees and vegetation. Include more specific guidelines for re-vegetation postdevelopment/redevelopment to encourage the use of native and regionally-appropriate plant species, as recommended by the Department of Conservation and Recreation.
- 4) Review Forestry Land Use tax exemption.
- 5) Encourage use of AFID grants to determine alternative commercial uses for local timber.

#### Goal:

Protect and enhance habitat for native, threatened, and endangered species in the County.

#### Implementation Strategies:

 Assist the Fish and Wildlife Service and other state and federal agencies in identifying and protecting threatened and endangered species with their habitats in King William County.

- 2) As often as possible, encourage the clustering of development to prevent habitat fragmentation and ensure contiguity between habitat areas.
- 3) Educate residents and the development community regarding threatened and endangered species and habitat conservations.

#### Goal:

Promote environmentally-sound practices that comply with all local, state, and federal regulations in mining the County's valuable mineral resources.

#### Implementation Strategies:

- Work with the Department of Mines, Minerals, and Energy to encourage communication and collaboration between private industries, the County, and all state and federal agencies involved in the permitting and operating of mines and miningrelated industries.
- Amend County ordinances and Future Land Use Map to encourage the location of mining and mining industries in areas away from homes, schools, businesses, and environmentally-sensitive areas.
- 3) Revise County ordinances to ensure that the permitting and development process for mining operations is clear, fair, and organized

# **WORKFORCE & ECONOMY**

Having a skilled and well-educated labor force is important not only for attracting new business and industry to a locality, but also for ensuring the overall welfare of its population. If a community's workforce is not well-equipped for jobs that are available, the community will be more likely to have higher rates of crime, unemployment, and dependence on both social services and governmental support.

42% of King William's residents over the age of 25 have at least a high school diploma. The next largest group, 23%, have had some college, but have not completed their secondary education. About 14% of residents

#### King William & West Point's Top 10 Employers

- 1. WestRock
- 2. King William County Schools
- 3. Nestle-Purina
- 4. Town of West Point Schools
- 5. King William County Administration
- 6. Food Lion
- 7. Virginia Log Company
- 8. Riverside Regional Medical Center
- 9. McDonald's
- 10. Augusta Lumber, LLC

#### Figure 9: Top 10 employers

have their bachelor's degree, and 5% have additional education beyond their undergraduate degree. Educational attainment is an important measure of the health of a locality's labor force, but their job skills and training, which are more difficult to measure, are equally, if not more important. An individual may have multiple degrees, but if their education and skill set does not match jobs that are actually available, they will have difficulty earning a living locally.

Workforce Demographics • Percentage of people who live and work in the county • Percentage of people who work in the county and live elsewhere • Percentage of people who work in the county and live elsewhere • Count • emplo Censul

Employment sectors with the highest percentage of employees in King William County are

#### Figure 10: Workforce demographics

educational services, health care, and social assistance, followed by manufacturing, then construction. Only 28% of the workforce that is employed in King William also lives in the County. In other words, 72% of the people employed in the County live elsewhere (US Census, 2010). Having better access to continuing and adult education services for King William residents could help train more people

who live in King William for the types of jobs that are available in the County, and better match the County's labor force to local available jobs.

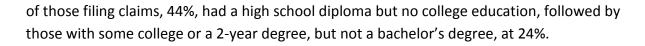
		# of	Percentage of
Sector	Source	people	Labor Force
Educational services, and health care and social	2010 ACS		
assistance	5YR DP03	1,177	14%
	2010 ACS		
Manufacturing	5YR DP03	1,122	13%
	2010 ACS		
Construction	5YR DP03	992	12%
	2010 ACS		
Retail trade	5YR DP03	938	11%
Finance and insurance, and real estate and rental and	2010 ACS		
Leasing	5YR DP03	708	8%
Professional, scientific, and management, and	2010 ACS		
administrative and waste management services	5YR DP03	639	8%
Arts, entertainment, and recreation, and	2010 ACS		
accommodation and food services	5YR DP03	507	6%
	2010 ACS		
Transportation and warehousing and utilities	5YR DP03	449	5%
	2010 ACS		
Public administration	5YR DP03	437	5%
	2010 ACS		
Other services, except public administration	5YR DP03	358	4%

Figure 11: Top 10 Employment Sectors

#### Unemployment

The rate of unemployment in King William has steadily decreased since 2010, where it peaked at 7.1%. It dropped to 6.4% in 2011, and then 5.9% in 2012. The non-seasonally adjusted unemployment rate in the County was down to 5.2% (Bureau of Labor Statistics, 2015). If current trends continue, however, it will still take several years for unemployment in the County to reach pre-recession levels.

Out of the unemployed residents in King William County who applied for unemployment insurance (whose characteristics were tracked by the Virginia Employment Commission), the sector with the highest unemployment was arts, entertainment, and recreation, with about 9.5% of unemployment insurance claimants, followed closely by construction, with 8.5% of claimants. The age cohort with the most unemployment insurance claims in the County were people between the ages of 55 and 64, followed closely by the 25-34-year-old age group. Most



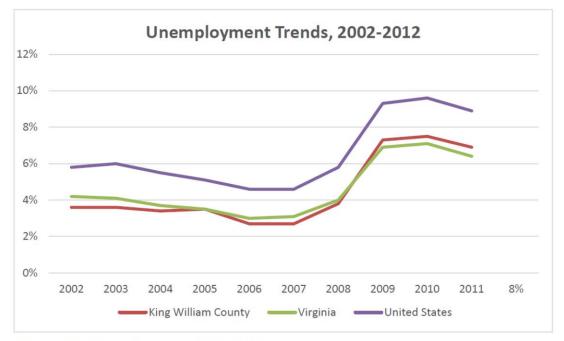


Figure 12: Unemployment 2002-2011

#### Manufacturing and Industry

Rural communities have a unique advantage when looking to attract more manufacturing and industry: available land that is usually more plentiful and affordable than in a denser city or urban area. Manufacturing and industry supply local jobs while bringing new investment and capital to an area. However, they can also degrade the natural environment and create negative externalities, negatively affecting adjacent landowners. It is



Image 14: Commerce Park sign

important for a County to designate areas that are appropriate for these kinds of land uses, to minimize the negative effects and capitalize on the positive economic benefits. Additionally, manufacturers looking for a location tend to prefer places that have clear and well-defined

zoning and planning laws, to minimize confusion and risk on their part when choosing a new site.

An example of manufacturing in the County is the King William Nestle-Purina plant, which also contains a clay mining operation. They are the third largest employer for County workers, and export and ship goods all over the world, bringing capital from other places that can be returned to the local economy.

Alliance Group WestRock, which owns and manages the paper mill in the Town of West Point, is the largest employer of County residents. There has been a paper mill in West Point since 1918, but, despite the age of the mill, it is considered a "conforming use." Nevertheless, with current zoning and environmental regulations, it would be difficult to permit a similar business today. This is one of many reasons why many rural and exurban communities are switching their focus from trying to attract heavy, land- intensive manufacturing and industry to encouraging more self-contained and less noxious types of industrial uses that require less in heavy infrastructure and start-up capital.

The King William Commerce Park, which broke ground in 2006, offers "flex space" that can and does accommodate uses as diverse as a day care, an auto body shop, a Christmas ornament manufacturer, and a hair salon. Many economists are pointing to a smaller, craft-based industry as the future of manufacturing in the United States. With smart planning and creative thinking, King William could position itself as a very attractive location for these types of industries. Smart branding, marketing, and management of the Commerce Park would be a great first step in encouraging start-ups and small-scale, craft-based manufacturers to locate in the County.

Local business development is equally important, particularly businesses that provide goods and services to a wider population beyond the local economy. These types of businesses have what are called "multiplier" effects, meaning they can catalyze the creation of jobs in other sectors of a local economy, in addition to the jobs created directly by that business.

#### Live/Work Units and "Cottage Industries:" The New-Old Model

In many larger cities across the U.S. there has been increased interest in encouraging what is essentially a very ancient model—the live/work unit. In its most basic form, as it existed for centuries in countries across the globe, the live/work unit equates to a shop/commercial use (bakery, dry goods store, fabric shop, etc.) on the ground floor and a living space/apartment on the second. With the advent of the internet, "working from home" is once again becoming more prevalent, although in a very different way than our ancestors "worked from home."

Working from home and/or selling/manufacturing products from home (commonly referred to as a "cottage industry") is gaining popularity, and it presents a unique zoning challenge.

Many localities have adopted zoning that severely restricts residents' ability to have a homebased business; restrictions on signage, traffic, and so on can make starting a cottage industry-difficult or even nearly impossible. Many of these regulations exist for good reason, to protect the quiet, residential nature of neighborhoods, but they can also restrict the opportunity for residents to start a successful business with relatively low overhead/startup costs that fits in with their schedule/lifestyle. Home-based businesses can be an important income generator to families with small children, who can't afford daycare or other childcare services. This "new-old" model is forcing localities to take a close look at their planning and zoning regulations and find ways to incorporate flexibility and adaptability into their ordinances, allowing residents to start home-based businesses without compromising the character and safety of their neighborhoods.

#### **Retail and Services**

The vast majority of convenient retail options, restaurants, and services available to County residents are clustered in the Central Garage and West Point areas and along the 360 corridor. The County's only large-chain grocery store, Food Lion, as well as most of its fast food and restaurant dining options, are located in Central Garage. These are examples of "local serving" businesses, meaning they mostly sell goods and services to the local population. Certain types of stores, like Target or Wal-Mart, serve a larger, regional population.

Most large retail and dining chains use an algorithm that takes into account multiple socioeconomic factors, including local and regional population size and density, median household income for that population, and current supply of comparable retail and dining options, to determine viable locations for their stores. If the location is seen as economically viable, factors like existing transportation and public utility infrastructure, local planning and zoning regulations, and political climate are examined before decisions are made to locate there. Similar to industry, most retail brands prefer to locate in places with well-defined planning and zoning regulations to minimize potential legal risk and maximize the benefits of the location.

#### Agriculture

The land in King William County devotes a totaled 46,065 acres to farms. This total represents a



25% decrease from the 2002 total of 61,370 acres, which is consistent with a decline in farmland experienced over the past thirty years. The overall number of farms remained virtually unchanged, going from 135 in 2002 to 136 in 2007, however the average size farm decreased from 455 in 2002, to 339 in 2007 (Agriculture Census, 2012).

Although many of the indicators of farming's vitality in King William County have decreased,

Image15: Queenfield Farm the market value of agricultural products sold in 2007 increased 13% from approximately \$14 million in 2002 to over \$16 million in 2007.

Crop sales accounted for 86% of the market value, an increase from 76% in 1997. Livestock sales accounted for the remaining 14% of the market value. The market value of agricultural products sold on average per farm increased slightly from \$106,628 in 2002 to \$119,749 in 2007.

Overall government payments for farming were reduced by nearly half between 2002 and 2007, dropping from nearly \$1 million to just over \$500,000. However the average per farm payment increased to nearly \$20,000.

The largest agricultural products by acreage are soybeans, corn, and wheat, followed by forage.

Limited livestock and poultry production occurs in King William County, with cattle accounting for approximately 75% of livestock value and poultry and hog farming both accounting for about 2% each.

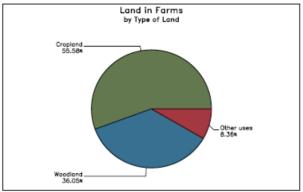


Figure 13: Land in farms

58% of principal operators of farms do not classify farming as their primary occupation. King William County has four farms certified by the Virginia Century Farm Program recognized for having been owned by the same family for at least 100 consecutive years, being lived on or actually farmed by a descendent of the original Owner, and gross over \$2,500 annually from

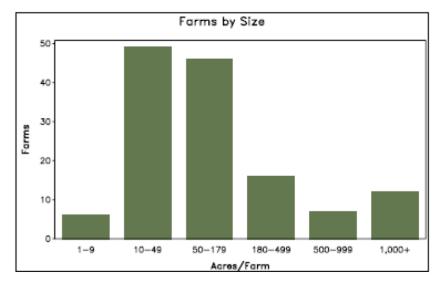


Figure 14: Farms by size

the sale of farm products. These farms are known as Cownes, Riverview Farm, Sloe Grove Farm, and Top Hill Farm.

# Goals and Implementation Strategies: Workforce and Economy

#### Goal:

Ensure the County's workforce has access to training and education for the types of jobs that are available within the County and region-wide.

#### **Implementation Strategies:**

- 1) In collaboration with King William County schools, encourage the creation of a Rappahannock Community College satellite campus in King William.
- 2) Work with local community and business organizations to increase the availability of training and workforce development at low or no cost to County residents.
- 3) Educate County residents on the types of jobs that are available locally and within the region; with social programs and local not-for-profit organizations to ensure they have access to opportunity.
- 4) Develop a program/campaign that incentivizes local businesses to hire locally.

#### Goal:

Maintain, expand, and foster the growth of a viable, diverse economic base in order to lessen the tax burden on individual property owners and provide employment opportunities for the County's present and future citizens.

### Implementation Strategies:

- 1) Aim to increase real estate tax revenue split from 6% commercial/94% residential to 10% commercial/ 90% residential by 2020.
- 2) Involve citizens, business owners, the Economic Development Authority, and other local and regional stakeholders in a marketing and branding campaign for the County to increase awareness of King William as an ideal location for new and expanding businesses.
- 3) Revise County ordinances to expand and clarify appropriate by-right commercial and light manufacturing uses in the County and clarify and streamline the development process for non-contentious business and commercial uses.
- 4) Amend the zoning ordinance to create a Light Industrial zoning category.
- 5) Set administrative policy to streamline and organize the permitting and approvals process for applicants interested in building or expanding a business in King William.
- 6) Foster communication and collaboration among permitting authorities (VDOT, DEQ,

- 7) DMME, Three Rivers Health Department, Department of Agriculture, etc.).
- 8) Revise County ordinances to ensure that the permitting and development process for heavy industry and manufacturing operations is clear, fair, and organized.
- 7) Amend County ordinances and Future Land Use Map to encourage the location of heavy manufacturing and industry in areas away from homes, schools, businesses, and environmentally-sensitive areas.

#### Goal:

Attract new commercial enterprises and expand existing ones, both in the retail and service sector, to serve the County's needs and create new employment opportunities in these fields.

#### **Implementation Strategies**

- Work with the Economic Development Authority and local business owners to offer enhanced business development and "incubator" services for start-up and expanding businesses.
- 2) Make information readily available via the County website or other media for individuals and companies interested in starting or locating a business in King William.
- Amend County ordinances to include more flexible business and commercial zoning, and signage regulations to clarify and streamline permitting process for home-based businesses and cottage industries.

#### Goal:

Protect, enhance, and expand opportunities for existing and future agricultural enterprises and industries in the County.

#### Implementation Strategies:

- 1) Work with VDACS and citizens who own and are employed by agricultural operations in the County to support better agricultural planning and management through grants and programs.
- Revise County ordinances to encourage new and innovative types of agricultural enterprises to locate in the County through clear guidelines and a streamlined permitting process.
- 3) Collaborate with citizen groups, business owners, and other local stakeholders to brainstorm ideas for promoting agricultural products and tourism in the County.

## **COMMUNITY FACILITIES**

Community facilities provide the physical, social, and cultural support structure for the health, safety, and well-being of a community's residents. Having a well-organized and well-maintained network of community facilities and services is essential, not only for the welfare of current residents, but also for catalyzing future population growth and development in King William County.

#### Communications

One of the foundational building blocks of a strong, healthy community is a network of reliable communications services, particularly in today's digital age.

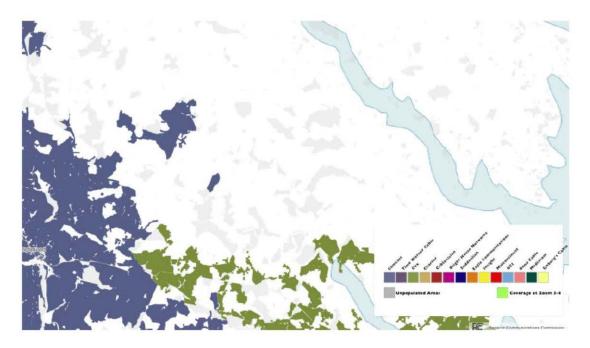


Image 16: Broadband connectivity

King William County is currently underserved by access to high-speed broadband internet service, compared to areas in closer proximity to the Richmond and Hampton Roads metro regions. Access to high-speed internet is a necessity in order to attract both residents and businesses, who may depend on such access for their livelihood.

Several national service providers have become aware of the gaps in cell phone and internet coverage in the County, and have expressed interest in placing new communications towers in King William. The County is currently in the process of drafting an ordinance to address the

increasing number of applications for new communications towers. This will allow the County to hear and consider proposals for new tower placement in a fair and consistent manner, in keeping with the County's goals and objectives for future development and connectivity.

#### **Utility Services**

The majority of homes in King William County are on individual well and septic systems. As the County grows, and certain areas become denser and more heavily populated, this could pose a threat to the environment and public health and welfare. Individual well and septic systems are only appropriate for scattered, rural development; once development density increases, there is an increased risk to pollution of potable water sources and the natural environment due to outdated or failing septic systems. Recently, the County began requiring that property owners who wish to add on to their homes in manner that will increase the volume of waste being processed by their systems locate a reserve drain field as part of an on-site disposal system in the event of a septic failure.

The County is currently in the process of mapping and surveying its current public water and sewer system, in order to assess existing services and plan for future expansion. The current system, which services the Central Garage area at the intersection of U.S. 360 and Route 30, is managed by the Hampton Roads Sanitation District.

Offering access to an organized, well-maintained public water and sewer system is not only more environmentally sound than individual well and septic, but also encourages economic growth and development. Many businesses and industrial operations will not locate to areas that do not offer a comprehensive public water and sewer system to serve day-to-day needs.

The County is currently served by two different power companies, Rappahannock Electric Cooperative and Dominion Virginia Power. Both companies offer energy audit services at discounted rates to homes and businesses looking to reduce energy expenditures and costs.

Dominion has added to its portfolio of sustainable energy alternatives in recent years, and hopes to source 15% of its total energy from sustainable sources by 2025. This will likely lead to an expansion in solar farms in rural areas.

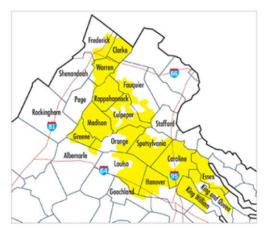


Image 17: REC Service Area

#### **Education System**

The King William County Public School system consists of Cool Spring Primary, serving grades

pre-K through second; Acquinton Elementary, containing grades three through five; Hamilton Holmes Middle, serving grades sixth through eighth; and King William High School, which educates students in ninth through twelfth grades. King William County Public Schools currently employs 329 teachers, bus drivers, staff, and personnel (King William Schools, 2015). Overall student enrollment increased steadily between the 2003-2004 and 2011-2012 school



the 2003-2004 and 2011-2012 school *Image 18: King William students* years. Yearly attendance for all schools in King William County has been at or above 93% on average since the 2008-2009 school year.

King William County schools met all of the required AMOs (Annual Measurable Objectives) in math and reading and Federal Accountability Requirements. The King William County Public School division is 1 of the 18 (out of the 132 school divisions in the state) that has met all federal No Child Left Behind benchmarks. King William High School has maintained an on-time graduation rate of 93.3 percent, ranking it in the top percentages in the state. All King William County Public Schools are fully accredited.

King William County Public Schools recently completed their 2013-2019 Comprehensive Plan. The Capital Improvements Plan for the schools, contained in the Comprehensive Plan, recommends construction of a new school building around 2018. The study will examine the age of school buildings and school capacity, including the size of cafeterias and gyms, and the size and number of classrooms, which will be used to inform future need.

#### Adult Education and Continuing Education Services

Adult educational services and workforce development opportunities are essential for giving King William residents opportunities to increase their skills, develop their careers, and provide the County with a competitive and skilled workforce. For a locality like King William, having a well-educated and skilled labor force helps to attract businesses and investment, as companies are more likely to locate in places where there is a larger pool of qualified workers to choose from.

Currently, the Middle Peninsula Adult Education Center, located in the Acquinton Elementary School building, provides GED and adult education services to the residents of King William, Gloucester, Essex, King & Queen, Middlesex, Matthews, and West Point.

There are no community colleges in King William County. The most convenient community college from the eastern part of the County is Rappahannock Community College, located in Saluda, Virginia, which offers traditional college courses, as well as workforce development education and training. RCC has also started offering selected evening classes at King William High School. J. Sargent Reynolds, located in Goochland County, Virginia, with a satellite campus in the City of Richmond, is more accessible for residents in the western portion of the County. It also offers continuing education and workforce development training opportunities.

#### Libraries



Image 19: King William Library

The Pamunkey Regional Library System operates two branches in the County, one at Upper King William and one in West Point. Access to the Virginia State Library is available through all of these facilities. The Upper King William Library is located in Central Garage at 6941 Sharon Road. The library moved into this 4,000 square foot facility in 2002 and is open 40 hours per week. There are currently no plans to

expand either library facility; however, the library system set a goal of increasing hours of operation at each facility to 60 hours per week.

#### **Emergency Services**

King William County's emergency services (fire and EMS) are provided by 3 stations which reside in the County and 2 stations which provide automatic mutual aid in our County from King and Queen County. The 3 stations in King William County provide both fire and EMS. Of the 2 stations outside of the County, one provides fire services and the other provides EMS services.



Image 20: King William Fire engine

All fire services in the County are provided by volunteers and a vast majority of the EMS services are provided by volunteers. The County is currently working to improve data collection and analysis on response times and missed responses in order to improve the overall quality of emergency services and equip emergency responders to serve a population that is both increasing and aging.

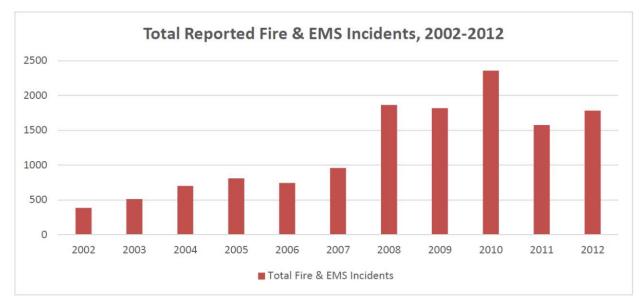


Figure 15: Incidents

Law enforcement and Animal Control in the County is handled by the King William Sheriff's Department. King William County Sheriff's Department currently has 17 sworn law enforcement deputies, three animal control deputies, and 21 other support staff including security deputies, dispatchers, and office personnel. The Sheriff's Department also offers victim/witness assistance services along with the Commonwealth Attorney's office. In recent years, the Department has updated their communications systems to be able to communicate more efficiently and effectively, including enhanced 911, which allows the dispatch center to receive wireless calls, and a new state-of- the-art 800 megahertz radio system with Countywide coverage. The department has also begun using Live Scan, a fingerprint scanning system that provides quicker background information on suspected criminals than previous methods.

The number of reported crimes in King William County has steadily decreased since 2008, despite a slight increase in population. King William also has the lowest number of reported crimes per 500 residents out of all surrounding counties. It is important the County continues focusing on crime prevention and public awareness to make King William a safe and attractive place for current and potential new residents.

#### **Hospitals and Health Care Services**

The most accessible regional hospitals are Riverside Walter Reed Hospital in Gloucester, Riverside Hospital in Tappahannock, and Bon Secours Memorial Regional Medical Center in Mechanicsville/Hanover. The Richmond metro area has several large medical service facilities,

including the Virginia		King		National					
Commonwealth University	Health indicator	William	Virginia	benchmark					
Medical Center. The King	Premature death (in years								
William County	of potential life lost)	7,441	6,362	5,317					
Health Department, part of	Instances of low birth								
the Virginia Department of	weight (% of live births)	7.4%	8.30%	6%					
Health's Three Rivers District,	Teen birth rate (per 1,000								
is located in the County	females ages 15-19)	31	32	21					
Administrative Services	Adult smoking	19%	18%	13%					
	Adult obesity	19%	18%	13%					
Complex and offers health	Adult physical inactivity	29%	24%	21%					
care, family planning,	Reported excessive								
community health education,	drinking	12%	16%	7%					
and immunizations/screenings	Motor vehicle crash death								
for many common conditions.	rate (deaths per 100,000)	18	11	10					
The Health Department office Figure 16: Health indicators									

in King William has one full-time nurse on staff.

The average number of physicians in the US is approximately 1.5 for every 500 persons. In Virginia, there are 1.2 physicians for every 500 people. Including dentists and nurse practitioners, King William has fewer than 15 medical professionals practicing full-time in the County, or approximately 1 doctor for every 1,000 residents, less than half of the state average. Particularly as more and more residents decide to "age in place," it is vital that the residents of King William County have access to quality medical care (American Association of Medical Colleges, 2012).

King William County is ranked 45<sup>th</sup> out of 133 Virginia counties in the County health data compilation "County Health Rankings and Roadmaps." The County does slightly better than the rest of the state in health benchmarks such as the percentage of babies born with low birth weights, alcohol abuse/excessive drinking, and teen birth rates. However, the County is behind state benchmarks in the areas of obesity, physical inactivity, and premature death. Having better access to health care services and health education would help King William ensure a healthier future for all of its residents (Robert Wood Johnson Foundation, 2015).

#### **Correctional Institutions**

There are currently no correctional facilities in King William County. Most of the County's incarcerated are held in facilities Caroline County or Richmond County. Haynesville Correctional Center, the major regional facility, is in Richmond County and houses around 1,140 inmates on a given day. An associated male field unit, Haynesville Unit # 17, houses about 110 men on a given day. Haynesville Correctional is considered a "Security Level 2" facility, meaning that the inmates have no history of escape attempts in the last 5 years, are eligible for parole if they hold life sentences, and have had no "disruptive behavior" for the last 24 months. A smaller facility in Caroline County, Caroline Correctional # 2, is also male field unit, which houses 140 men on a given day. The field unit facilities are considered a "Security Level 1," meaning that the inmates cannot be charged with Murder I or II, cannot be sex offenders or guilty of kidnapping or abductions, and have no escape history or history of disruptive behavior for at least past 24 months (VADOC, 2016).

The Middle Peninsula Regional Security Center in Saluda, VA is a state-of-the-art facility comprised of five (5) member jurisdictions; Essex County, King and Queen County, King William County, Middlesex County and Mathews County. The facility has a rated capacity for 121 inmates

#### **Government Services and Public Buildings**

#### **Board of Supervisors**

The Board is a five-member body with each member elected for a four-year term. Each member represents the district in which they reside, which is drawn to contain approximately 3,000 citizens. The Board is empowered to make all legislative land-use decisions for the County. The Board may delegate non-legislative matters to other boards, commissions and staff members, some of which are described below.

#### **Planning Commission**

The Planning Commission is a five-member body appointed by the Board of Supervisors to staggered 4-year terms. Four of the citizen members are represented as "at-large" members in addition to one Board of Supervisor member, all of which perform outside of West Point, which has their own land use ordinances and Planning Commission. The Planning Commission reviews land-use matters and makes recommendations to the Board of Supervisors. They also approve preliminary subdivision plats, and may grant exceptions to requirements of the Subdivision Ordinance. The Planning Commission is also responsible for making recommendations on any updates to the Comprehensive Plan and capital improvements program, and makes

recommendations for zoning and subdivision ordinances. The Planning Commission reviews the Comprehensive Plan from time to time.

#### Staff

Daily operations of King William County government are managed by a County Administrator, appointed by the Board of Supervisors. The Community Development Department handles administrative planning matters including zoning, building code, environmental regulation, mapping, and serves as staff to various boards, including the Planning Commission, Board of Zoning Appeals ("BZA") and Historic Preservation and Architectural Review Board ("HPARB").

#### **Buildings and grounds**

Most of King William County's governmental and public buildings and services are clustered around the historic courthouse located on Route 30, including the County Administration, Building, Health Department, and Juvenile Probation Division Office. The new courthouse, completed in 2006, is less than a half mile to the east of the administrative complex and also houses the King William Sheriff's Department.

County government structure in Virginia usually includes an elected body of representatives,



one from each district, that represent the residents of a County. They are referred to as the

Board of Supervisors, and hold monthly public meetings to decide on matters of public concern facing the County. In King William County, there are 5 Board members, who work closely with the County

#### Image 21: McAllister Building

Administrator. The County Administrator is appointed by the Board to manage the day-to-day business of ensuring that the County functions properly and effectively in serving its residents. The King William County Administrative Building houses the County Administrator's Office, as well as the Finance, Planning & Building, Parks & Recreation, and Public Works departments, the Emergency Services Coordinator, the Commissioner of the Revenue's Office, the Registrar's Office, and the Treasurer's Office. The Virginia Cooperative Extension Office for King William and King & Queen Counties, which provides educational services in agriculture, natural resources, and community viability, among others, is also housed in the County's Administration Building.

The Courts Building, built in 2004 just east of the Administration Building and historic 1725 courthouse, houses the 9th District Circuit Court, General District Court, Juvenile and Domestic Court, Commonwealth Attorneys Office, Circuit Court Clerk's Office, and Sheriff's Office.

Cooperation and communication between residents and all levels of their government and elected officials, and between individual governmental departments and programs, is essential to ensuring a government that supports and enhances the health, safety, and welfare of all of its residents, and puts their hard-earned tax dollars to work in the most efficient and effective way possible.

#### **Tax Structure**

Tax revenues in King William County are broken into three broad categories. King William County local tax rates were as follows:

Real Estate:	\$0.92/100 assessed value
Personal Property:	\$3.65/100 assessed value
Machinery and Tools:	\$2.25/100 assessed value



Figure 17: Tax revenue

A small percentage of revenue (0.04%) also comes from mines and minerals in the County. Prior to the implementation of the split levy with King William and the Town of West Point, the total amount of real estate taxes collected was \$110,850,678. About \$637,952 of those taxes collected were from commercial properties, putting the percentage of real estate taxes collected in the

County from commercial properties at around of 6%. The remaining 94% of real estate taxes come from residential and agricultural properties.

#### Budget

The yearly budget for King William County is largely dependent on real estate and personal property taxes. Operating grants are the next largest source of revenue, followed by other taxes, which include sales and business license taxes. According to the King William County Comprehensive Annual Financial Report, business license tax revenue in the County increased

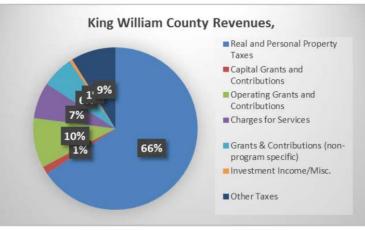


Figure 18: Revenues

by \$67,000, largely due to stronger economic growth as the County continues to recover from the recession of 2008.

The County's largest expenditure is education. Forty-six percent of yearly County government spending goes toward the school system. The next largest spending category is public safety, which includes funding for the volunteer fire department and the County's police force. Health and welfare, which funds the Social Services Department, is the third largest expenditure.

Balancing the costs of providing a quality public education, protecting the public health and welfare, and maintaining infrastructure and basic services with keeping taxes low, in order to ensure that King William is an affordable place to locate for residents and businesses, is a challenging task. However, in any public or private endeavor, investment is essential for

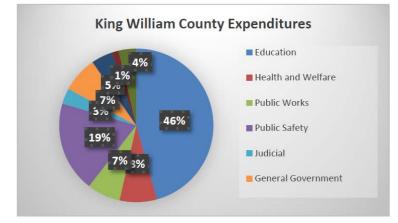


Figure 19: Expenditures

generating capital later. Prudent investment in public services can make a place more attractive to new residents, businesses, and industry, and often pays off later in the form of a larger tax base. Provided that spending is kept in check, having a broader tax base distributes costs across more taxpayers, thus decreasing the burden on the individual home or small business owner.

#### **Social Services**

The King William County Department of Social Services provides services to children, individuals, families, and the elderly through administration of multiple federal and state assistance programs, including SNAP (food stamps), Temporary Assistance for Needy Families (TANF), and Virginia Initiative for Employment not Welfare (VIEW). Social Services also offers child and adult protective services, an emergency assistance fund for fires and natural disasters, and child day care subsidies.

Additionally, the Department of Social Services provides job training and assistance through the

VIEW program for families on TANF. Ensuring a wellorganized and efficient support network for struggling individuals and families in the County is key for giving all of King William's residents the opportunity to be healthy and productive members of their community.

The number of households in King William County that participate in the SNAP

Indicators of Child Welfare in King William County, 2007-2011									
Indicator*	2007	2008	2009	2010	2011				
Number of children in									
TANF-UP and VIEW-UP									
cases	23	16	4	24	87				
Number of children in KW									
receiving childcare									
subsidies	61	53	56	59	<mark>8</mark> 9				
Percentage of students									
qualifying for free or									
reduced-price lunch	29%	33%	36%	34%	60%				
Rates of reported child									
abuse/neglect per 1,000									
children	1.3	1	1.7	0	0.5				

Figure 20: Child welfare indicators

program has increased significantly since 2007. As of 2011, 19% of households in King William County relied on SNAP to supplement their income. There were relatively low rates of reported cases of child abuse and neglect in the County (fewer than 2 children in 1,000 since 2007), but a relatively high percentage of school-age children eligible for a free or reduced-price lunch (60% of students in 2011), meaning that a relatively high number of students live below or close to the poverty line. In the five-County area that includes Hanover, King and Queen, Caroline, and New Kent Counties, King William had the highest percentage of children on a free or reduced-price lunch. The next highest was Caroline County, with 51.6% of school-aged children eligible for free or reduced-price lunch. (Annie E. Casey, 2015).

### **Parks and Recreation**

As rural areas like King William County continue to develop, the amount of open space and land that is available for recreational use shrinks. Having a healthy network of parks and public open

space not only helps preserve habitats and provide recreational space, but can also be an economic driver and a selling point to encourage economic growth. Increasingly, large companies in the U.S. are considering quality of life factors in their decisions on where to locate offices.

Aspects such as public parks, quality schools, and access to cultural and educational opportunities for their employees are considered when a company is looking for locations for satellite offices, plants, and even headquarters.



The King William County Parks and Recreation department *Image 22: KW County Rec Park* manages the King William County Recreational Park. The Recreational Park has ball fields, a tennis court, and an indoor space available for classes and events. The Park's master plan, completed in 2003, calls for a new 23,000 square foot community center, t-ball fields, and a covered pavilion.



Image 23: 2003 King William Recreation Park Master Plan

Sandy Point State Forest, located approximately 13 miles southeast of the Central Garage area of King William County, is a 2,043 state forest that offers recreational opportunities for the County's residents and visitors. It is the County's largest recreational asset. Sandy Point has

three miles of trails and access to tidal and non-tidal wetlands, streams, and the Mattaponi River. Like all State Forests in Virginia, Sandy Point is self-supporting through timber harvesting, and part of the income from that also goes to the County's general fund.

The Zoar State Forest is another state managed forest in King William County, located in the

Aylett area. The Zoar is 378 acres and offers hiking and biking trails, picnic facilities, and allows public access to the Mattaponi River for fishing and boating.

Additionally, income from timber that is harvested from the Zoar, in accordance with sustainable forestry practices, is used to support the management and stewardship of the forest. One-quarter of this income is returned to the County, and is put in the County's general fund.



Image 24: Dept. of Forestry Office at Zoar State Forest.

## The Virginia Outdoors Plan

The 2013 Virginia Outdoors Plan from the Virginia Department of Conservation and Recreation (DCR) outlines goals and strategies for King William County and the region in the Region 18: Middle Peninsula section of the plan. According to the 2011 Virginia Outdoors Demand Survey taken by DCR, opening up more public access to waterfronts and developing more hiking and fitness trails are top priorities for the Middle Peninsula. Having access to swimming lessons was also cited as an important recreational amenity. Residents of the Middle Peninsula who took part in the survey were also concerned with lack of walkability in some communities.

Goals that were proposed for King William County and immediately adjacent areas include:

- Improve the old Mattaponi River bridge site (Route F-600) including installation of a public-access pier in King and Queen County, which borders King William County.
- Local and regional agencies and organizations should continue support for the Mattaponi and Pamunkey rivers water trails connecting with York River water trails.
- The Virginia Department of Transportation and local government should consider development of access points for car-top boat launching and crabbing along the Pamunkey River.

- The Virginia Department of Forestry should expand recreational opportunities and road improvements for year-round vehicular access to boating and water-related activities at Sandy Point State Forest.
- The VA DOF should continue development of a demonstration model farm, improve hunting and fishing opportunities, and expand conservation and passive recreational activities at Zoar State Forest.

The plan also proposes portion designation of the Mattaponi and Pamunkey as State Scenic Rivers, including the sections of the Mattaponi River from Route 628 to Monday Bridge and from Aylett to West Point, and the segments of the Pamunkey River from the King William County-Caroline County line to Route 614 and from Pampatike Landing to the York River.

## **Cultural Heritage & Tourism**

#### The Mattaponi & The Pamunkey

King William County is home to two Native American reservations. The Mattaponi reservation, located on 150 acres along the Mattaponi River, is home to the state-recognized Mattaponi tribe. The federally recognized Pamunkey reservation, located on a peninsula jutting into the Pamunkey River, covers approximately 1,200 acres of land in the southern portion of the County.

The Mattaponi and the Pamunkey, originally part of the Powhatan confederation of tribes in the 16th century, continue to retain their distinct cultural identity. Every year, the Mattaponi tribe holds a popular and well-attended pow-wow on their reservation. The Pamunkey continue to practice a unique pottery tradition handed down from generation to generation. There are museums on both reservations dedicated to showcasing their unique histories and traditions. Although the reservations have separate jurisdictional boundaries, they are part of the larger King William community and are unique assets to the region.

### **Tourist Attractions**

The County's proximity to the historic and recreational sites of Williamsburg, Richmond, and Chesapeake Bay brings thousands of visitors through the County each year. The museums at the Mattaponi and Pamunkey Indian Reservations attract many tourists to the County each year. With heritage tourism on the rise the County's rich history and abundance of exceptional colonial and antebellum homes should continue to be a draw. The County's boating and natural recreational amenities are another attraction for tourists looking to explore the diverse natural landscape of Virginia's coastal plain region. Relatively low tourism numbers may well be a sign of an under-utilized income resource for the County. The limited market for automotive/gas, restaurants, and lack of hotel/motel facilities will undoubtedly expand with the County's population growth provided sound planning steps are taken to ensure appropriate locations.

Traveler spending as reported by the Virginia Tourism Corporation has increased from just over \$5 million in 2000 to nearly \$9 million in 2012. The number employed by the travel industry in the County also increased from 44 to 89 employees in the same period.

## **Community Organizations**

Strong community organizations help connect the citizens of the County. Having healthy

community support networks is often one of the most important factors in making a community a place that people want to stay within to grow their families and businesses.

King William County has more than 50 active churches, community groups, clubs, and organizations that are involved in a wide range of activities and endeavors, many of which involve reaching out to disadvantaged or underserved members of the community.



Image 25: KW church

Community organizations make up a large part of a place's social capital, and are a great, often untapped, resource for sharing information about a place's people, history, and cultural heritage. They can also provide fertile ground for sharing ideas and encouraging entrepreneurship and cooperation (VT Extension Office, 2015).

The Upper King William Senior Center, currently only open one day per week, offers a recreation space for activities geared towards King William's older residents. Having an active senior community center will become even more important as the County's senior citizen demographic continues to grow. Older people are often at a greater risk of becoming isolated, particularly if they lose driving capabilities. It is vital to their health and well-being for them to have connections to the greater community.

#### Solid Waste

Safe, convenient, and environmentally sound methods for disposing of solid waste products is an often-overlooked but key component of a healthy and sustainable community. Not having safe and convenient waste disposal services will not only compromise public health and welfare, but discourage businesses and industries from locating in a particular place. Locating landfills and waste-disposal centers may be a politically unpopular topic, but it is necessary for localities to address current and future capacity for waste disposal before it becomes an issue.

Solid waste disposal in King William County is managed by The Virginia Peninsulas Public Service Authority (VPPSA). There are four waste disposal "convenience centers" located throughout\ King William that accept residential waste in the form of cardboard, metal, glass, plastic, and mixed paper for recycling, as well as household waste, which can be disposed of at no charge. Since the closure of the King William County Landfill site in 1993, commercial enterprises in King William have been responsible for their own waste disposal. Curbside pickup for residences is also only available through private haulers. Since 2008, overall waste collected at VPPSA convenience centers has decreased, despite steady population growth in the County, largely due to the economic recession. VPPSA predicts modest growth in waste generation as the County's population continues to increase.

Despite the overall decrease in waste quantities in the County's recent years, the Central Garage convenience center facility is at capacity, and has been experiencing traffic issues. In comparison, the three other centers could easily handle a higher volume of waste than they are currently taking in, but their locations make them inconvenient for residents in the Central Garage area.

VPPSA hauls the waste from the convenience centers to landfills in King and Queen and Gloucester Counties. The King and Queen landfill, based on reporting from the Virginia Department of Environmental Quality, has a remaining life of 26 years. The Middle Peninsula Landfill and Recycling Facility in Gloucester has an expected life of 91 years; however, this estimate could be shortened by a rapid increase in population in the Middle Peninsula and/or the eventual closure of other landfills like the one in King and Queen County.

# Goals and Implementation Strategies: Community Facilities

## Goal:

Facilitate the development of advanced communication technologies within the County, particularly high speed internet and cellular telephone service.

#### **Implementation Strategies:**

1) Encourage broadband internet providers to put in the infrastructure to provide much needed high-speed internet in the County to homes and businesses.

#### Goal:

Continue to strive for excellence in the King William County Public School system.

#### **Implementation Strategies:**

1) Provide support and services necessary to implement the King William County Public Schools Comprehensive Plan and capital improvements goals.

#### Goal:

Continue to improve effectiveness and response times of emergency responders in the County.

#### **Implementation Strategies:**

1) Explore options to address staffing and budgetary challenges within the County's Fire and Rescue squads.

2) Revise County ordinances to include guidance for improved emergency services and access to new development and redevelopment.

3) Facilitate cooperation and communication among service providers.

### Goal:

Continue to provide social welfare and health services to County individuals and families in need.

#### **Implementation Strategies:**

1) Encourage additional support and funding for services and activities focused around senior citizens in the County as the population continues to age.

2) Work with local citizen groups and not-for-profit organizations to recruit more healthcare providers to locate in the County; encourage the location of a drugstore or similar use in the County that offers basic clinical services.

## Goal:

Continue to provide law enforcement services that protect the health, safety, and property of the citizens of King William County.

## Implementation Strategies:

1) Assist the Sheriff's Office in achieving their goal of siting a new impound lot and building to store seized/ impounded vehicles and other items of evidentiary purposes.

2) Continue to encourage land use and development practices that encourage citizen safety, health, and welfare.

### Goal:

Ensure that the King William County government upholds its commitment to its citizens to provide quality services transparently, efficiently, expediently, and effectively.

## Implementation Strategies:

1) Continue to examine and revise tax code where appropriate in order to maximize the return on investment that County taxpayers see from their tax dollars.

2) Continue to improve communication between political leaders, governmental departments, and citizens.

3) Increase opportunities for citizen involvement through a variety of media sources and public engagements.

## Goal:

Continue to provide opportunities for recreation and enjoyment of parks and open space in the County for all residents.

## **Implementation Strategies**

 Undertake a comprehensive evaluation of programs and services offered; utilize this information to create a 5-year plan for Parks and Recreation in the County that will continue to serve current residents, as well as accommodate future growth and demographic changes.
 Increase visibility of programming and activities offered; coordinate with local businesses and the Economic Development Authority to promote Parks and Recreational offerings as part of the "package" of benefits that comes with being a King William resident/business owner. King William's rich and colorful history makes up a significant part of its unique cultural identity and sense of place.

### Goal:

Ensure that King William County's history is documented and preserved for the enjoyment and study of future generations.

## **Implementation Strategies**

1) Involve the King William County Historical Society and other interested parties in preserving the County's history through participation in programs offered by the Virginia Department of Historic Resources, such as architectural surveys and historic registries.

## Goal:

Promote and expand tourism and tourism-supported businesses in King William County.

## Implementation Strategies:

1) Reach out to individual property owners of historically significant sites and work together to coordinate open houses or tours to draw tourism.

2) Increase internet and media visibility of King William as a tourism destination, highlighting the presence of state parks, Native American reservations, and other unique features of the County.

3) Amend County ordinances to encourage certain tourism-related businesses as by-right uses.

# TRANSPORTATION

King William County, a largely rural area, has transportation needs concerning safety and efficiency that are of paramount importance as distances are often necessary to travel for daily trips to work, shopping, and recreation. People want to transport themselves and their goods in the shortest period of time with the knowledge that they will arrive safely at their destination. This section addresses these and other transportation concerns in the County. In analyzing transportation facilities there are several factors that should be considered. Safety and efficiency are of paramount concern for any transportation system. Another concern is the relationship between the transportation system and land use. Certain land uses, such as industrial, require greater transportation facilities than others. Also, the location of transportation facilities can determine the use of land. Finally, it is important that the perceived transportation needs and desires of County residents be met.

#### Roads

The main elements of the transportation system, roads and highways, should be coordinated, located, and designed to carry the bulk of County traffic so that other roads can be designed to serve local traffic. The major thoroughfare system connects all of the planned development areas and forms the transportation framework which supports the land use development pattern. Rail, air, and water transportation facilities also form part of the transportation system. Since the main responsibility for maintenance and construction of roads and highways lies with the Virginia Department of Transportation (VDOT), it is not necessary that the transportation plan be particularly detailed. Details of design and location depend on traffic volumes, topography, land use, and other factors which will be examined in specific studies by or for the Department. A summary analysis of the transportation system is a necessary and useful element of the Comprehensive Plan; it will assist the County in its discussions with the Department relative to location of facilities and priorities of construction.

The existing public road system consists of primary and secondary state roads. Nearly all of the County's primary and secondary roads are hard surfaced. Primary roads are numbered less than "600." Secondary roads carry numbers 600 or higher. U.S. Highway 360 (or U.S. 360) runs through the northwest sector of King William County and through the villages of Aylett, Central Garage, and Manquin. Virginia Primary Highway Route 30 (or Route 30) runs northwest-southeast, essentially bisecting the County. Virginia Primary Route 33 crosses through the Town of West Point at the southern end of the County. U.S. 360 provides access to Interstate 295 and Virginia Route 17; Route 30 provides access to Interstate 95; and Route 33 provides access to

Interstate 64 and Route 17. U.S. 360, Route 30, and Route 33 handle both through and local traffic.

This has created the inevitable transportation conflict. The goal of a road serving through-County traffic is to provide safe transportation at the highest possible speed for traveling vehicles and trailer trucks. Such roads are designed to be straight and practical, with few control devices and with few access points. On the other hand, the goal of a road serving local traffic is to provide safe access at lower speeds to the adjacent land users. Such a road has numerous curb cuts, median crossovers, and traffic control devices. Commercial land users generally prefer locations on high volume roadways, but with slower traffic speed limits so drivers can observe signs and storefronts. The result is almost always a congested "strip" created by slow-moving traffic, making numerous turns on and off the roadway and contributes to the use of some secondary routes as "cut through" roads.

Secondary roadways are designed to carry local traffic within and around communities and neighborhoods and to provide access to property, while some secondary roads carry traffic directly to primary highways. Many of these roads carry approximately 1,000 average daily vehicle trips or more, especially in or near the incorporated towns or population centers, sections not designed for this level of heavy traffic volume. The Department of Transportation annually updates a Six-Year Improvement Program; under this document, planned spending for transportation projects proposed for construction or study are outlined for the next six fiscal years.

The Secondary-Six Year Plan is overseen by the County for prioritizing projects that the Board of Supervisors then selects to receive a portion of the transportation funds to complete those improvements.

The Secondary Improvement Budget has limited available funds. Secondary roads carrying significant traffic volumes include State Route 618 (Acquinton Church Road). A consideration often overlooked is the image a main throughway creates. Good maintenance, attractive landscaping, well-regulated signs, and storefront appearance present a positive image of the County to transients and citizens alike.

Some themes, such as strip development along roads, are land use-related but have a significant impact on the transportation system as well, since increases in the number of ingress and egress points along roads impacts traffic flow. The Code of Virginia authorizes counties to recommend to VDOT that a road be taken into the secondary system as a rural addition. Streets added to the state system shall be constructed to VDOT's standards for the traffic served and

part of a locality's secondary road allocation goes for this purpose. Eligible projects may also be considered to receive allocated State funds on a dollar-for-dollar basis to match the locality's contribution after applying for revenue sharing funds and being selected by the Commonwealth Transportation Board. The revenue sharing program allows the County to provide 50% matching amounts for those upgrades or new construction of roads and qualifying streets.

Highway improvement priorities are continually being reviewed, as the King William County Secondary System Six-Year Plan is updated on an annual basis.

Though King William County has not participated in this revenue sharing program in the past, King William County can apply to VDOT for funds to be used to construct roads to serve industrial development. The program is a valuable economic and industrial development incentive tool.

#### **Highway Functional Classification Plan**

Highway functional classification is a grouping of highways into systems according to the character of service they are intended to provide. Virginia Department of Transportation definitions for the rural road classifications are as follows (Statewide Highway Plan, 2010):

**Principal Arterial** – These highways provide an integrated network of roads that connect principal metropolitan areas and serve such as statewide and interstate travel. Route 360 and Route 33 in King William County are examples of this.

**Minor Arterial** – These highways link cities and large towns and provide an integrated network for intrastate and inter-County service. They supplement the principal arterial system so that geographic areas are within a reasonable distance of an arterial highway. They are intended as routes that have minimum interference to through movement. Route 30 is an example of a Minor Arterial Highway.

**Major Collector** – These highways provide service to any County seat, large towns, or other major traffic generators not served by the arterial system. They provide links to the higher classified routes and serve as important intra-County travel corridors. In King William County, Routes 600 and 604 are examples of Major Collectors.

**Minor Collector** – These highways collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. They provide service to small communities and link important local traffic generators with the rural areas. In King William County, Routes 606 and 632 are examples of Minor Collectors.

**Loca**l – These roads provide access to adjacent land and serve travel of short distances as compared to the higher systems. Examples include all routes that do not fall into the above categories.

#### **Traffic Volumes**

Daily traffic volume estimates on major roadway segments in King William County for 2008-2011 can be seen in this map. The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along roads and highways. From these data, estimates of the average number of vehicles that travel each segment of road are calculated.



Image 26: Traffic counts

#### Maintenance

The Virginia Department of Transportation (VDOT) maintains and provides maintenance funds for the majority of the County's road system. The criterion for the amount of funding depends on whether a road is classified as primary or secondary. Primary roads are a statewide network connecting cities, towns, and other points of interest. They include all roads with state and federal route numbers below 600 and numbered roads that serve as extensions to primary roads. All other public roads in the area are secondary roads.

There are nine (9) construction districts in the State. The County of King William is included in the Fredericksburg District. This District covers Caroline, Essex, Gloucester, King and Queen, King George, King William, Lancaster, Mathews, Middlesex, Northumberland, Richmond, Spotsylvania, Stafford and Westmoreland Counties, as well as the Towns of Bowling Green, Colonial Beach, Irvington, Kilmarnock, Montross, Port Royal, Tappahannock, Urbanna, Warsaw, West Point and White Stone, and the City of Fredericksburg.

### **Accessible Transportation Facilities**

#### 1. Park n' Ride

The County currently has one VDOT Park & Ride Lot, located at the intersection of Sharon Road and Route 360. The lot features 16 spaces, is graveled, and has no handicapped spaces or lighting. The Valero gas station



Image 27: Central Garage Park n' Ride

at the intersection of Routes 360 and 30 has developed as an informal park n' ride for a similar number of cars.

## 2. Rail

Freight service is provided by Norfolk- Southern Corporation. AMTRAK service is available in Richmond and Williamsburg.

## 3. Water

The York River, with a channel depth of 22 feet, is navigable up to West Point. The Pamunkey and Mattaponi Rivers are navigable with channel depths from 7 to 12 feet.

## 4. Air

A number of commercial airlines offer daily flights, including freight service, out of Richmond International Airport (34 miles). Commercial flights are also available from the Williamsburg / Newport News International Airport (57 miles). Additionally, the Middle Peninsula Regional Airport in neighboring King and Queen County is a general aviation airport with a 3,700-foot runway.

## **Transportation Plans**

As most transportation infrastructure is administered through the state, there are several transportation plans that serve the locality and the region.

The Virginia Department of Transportation (VDOT) and the Middle Peninsula Planning District Commission (MPPDC) partnered to evaluate the region's transportation system and to recommend a range of transportation improvements that best satisfy existing and future needs.

The Comprehensive Plan must be consistent with VTRANS 2040 - the Commonwealth's longrange multimodal transportation plan - http://www.vtrans.org/vtrans2040.asp - which focuses on the needs of the Commonwealth's statewide network of Corridors of Statewide Significance, the multimodal regional networks that support travel within metropolitan regions, and improvements to promote locally designated Urban Development Areas (UDAs).

- The County does not have a Corridor of Statewide Significance. However, the County is influenced, and has influence on, the following Corridors of Statewide Significance: the I-95 corridor of statewide significance, the I-64 Corridor and the Route 17 Corridor.
- 2. The County is not a part of a Regional Network. However, it influenced by, and may have influence on, the Richmond Regional Network and the Hampton Roads Regional Network.

3. Currently, there is a single UDA in the County, the Central Garage UDA, at the intersection of Route 360 and Route 30.

The Comp Plan must also be consistent with "significant projects" on the latest VDOT Six Year Improvement Plan. Any future transportation projects mentioned in the Comp Plan should be compatible with projects currently in the SYIP.

Consistency with "CTB Route Locations" applies to specially designated corridors (such as Corridors of Statewide Significance) and is not applicable to King William County, at this time (so consistency is met).

## Six-Year Improvement Program (SYIP)

The Six-Year Improvement Program (SYIP) is a document that outlines planned spending for transportation projects proposed for construction development or study for the next six years. The SYIP is updated annually and is the means by which the Commonweath Transportation Board (CTB) meets its statutory obligation under the Code of Virginia to allocate funds to interstate, primary, secondary, and urban highway systems, public transit, ports, and airports and other programs for the immediate fiscal year.

The SYIP also identifies planned program funding for the succeeding five fiscal years. The CTB allocates funds for the first fiscal year of the SYIP but the remaining five years are estimates of future allocations. Fiscal years start on July 1 and end on June 30.

The CTB updates the SYIP each year as revenue estimates are updated, priorities are revised, project schedules and costs change, and study results are known. The CTB allocates funds to projects through its numerous funding programs including: State of Good Repair, Smart Scale, Safety, Bridge, Revenue Sharing, etc.

In general, along with program eligibility requirements, the Board aims to maximize the use of federal funds, allocate funds consistent with planned obligations and expenditures, redirect inactive balances on projects, and fully fund projects through construction. Development of the SYIP begins in the fall and the Virginia Department of Transportation hosts a series of meetings seeking public comment with various other multi-modal transportation agencies. Each spring, a draft SYIP is presented to the CTB and made available for public comment. There are also a series of public hearings scheduled to obtain input on the draft SYIP.

## Secondary System King William County Construction Program Estimated Allocations

Fund	FY2017	FY2018 FY2019 FY2020		FY2020	FY2021	FY2022	Total	
CTB Formula - Unpaved State	\$38,103	\$44,930	\$51,685	\$49,673	\$0	\$0	\$184,391	
Secondary Unpaved Roads	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TeleFee	\$51,066	\$51,066	\$51,066	\$51,066	\$51,066	\$51,066	\$306,396	
District Grant - Unpaved	\$0	\$0	\$0	\$0	\$69,745	\$69,745	\$139,490	
Total	\$89,169	\$95,996	\$102,751	\$100,739	\$120,811	\$120,811	\$630,277	

Board Approval Date:

Residency Administrator

Date

\_\_\_\_\_\_

County Administrator

Date

District: Fredericksburg

#### SECONDARY SYSTEM CONSTRUCTION PROGRAM (in dollars)

County: King William County

Route	Road Name	Estimated Cost Previous			2017-18 through 2021-22 Additional PROJECTED FISCAL YEAR ALLOCATIONS						Balance to Traffic Count		
PPMS ID	Project #			Funding	Funding					-		complete	Scope of Work
Accomplishment	Description				Required							ostripioto	FHWA #
Type of Funds	FROM			SSYP Funding	Nequileu	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22		Comments
				Ŭ		2010-17	2017-10	2010-19	2019-20	2020-21	2021-22		Comments
Type of Project	то			Other Funding									
Priority #	Length		Date	Total									
Rt.1003	Chelsea Ave.	PE	\$10,000 ¢0	¢05.000		ŕo	¢0	¢0.	¢0	¢0	¢0		
106180 STATE	1003050P13 ROUTE 1003 - SURFACE TREAT	RW CON	\$0 \$90,000	\$25,982 \$74,018		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		Resurfacing
	0.37 Mi. N. Rte. 1014	Total	\$100,000		\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		16005
No Plan	ESM		<i><b>Q</b></i> ,	¢100,000	ţ	<i>v</i> ·	ψ <b>ι</b>	<b>v</b> ·	ţ.	ţ			
0001.00	0.0	7/1	/2018										
Rt.0613	Dunluce Road	PE	\$2,000										
101407	0613050575	RW	\$0	\$55,406		\$60,898	\$47,720	\$0	\$0	\$0	\$0	44.004	Reconstruction w/o Added Capacity
STATE	RTE 613 Dunluce Road	CON	\$223,626	\$72,693		\$0	\$0	\$0	\$0	\$0	\$0		
	RTE 618	Total	\$225,626	\$128,099	\$97,527	\$60,898	\$0 \$47,720	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		16004
No Plan	1.0 Mi E RTE 618		+,	÷,		+,	•••••						
0002.00	1.0	8/1	/2016										
Rt.0600	West River Road	PE	\$170,000										
106179	0600050589	RW	\$101,038	\$258,267		\$8,246	\$49,986	\$71,721	\$49,986	\$49,294	\$0		Reconstruction w/o Added Capacity
RAAP CONTRACT	ROUTE 600 - TURN LANE	CON	\$228,962	\$12,500		\$0	\$0	\$0	\$0	\$0	\$0		14004
	Int. Rte 360 WBL	Total	\$500,000	\$270,767	\$229,233	\$8,246	\$49,986	\$71,721	\$49,986	\$49,294	\$0		
Minimum Plan	0.076 Mi. North Int. Rte 360 WBL												
0003.00	0.1	7/1	/2019										
Rt.4005		PE	\$0										0
99950	1204005	RW	\$0	\$9,000		\$0	\$0	\$29,950	\$49,673	\$692	\$0		Preliminary Engineering
_	COUNTYWIDE ENGINEERING &	CON	\$250,000	\$0		\$0	\$0	\$0	\$0	\$0	\$0		16015
S	VARIOUS LOCATIONS IN	Total	\$250,000	\$9,000	\$241,000	\$0	\$0	\$29,950	\$49,673	\$692	\$0		MINOR SURVEY & PRELIMINARY
	VARIOUS LOCATION IN COUNTY												ENGINEERING FOR BUDGET ITEM AND INCIDENTAL TYPE WORK.
0005.00		3/1	/2011										
Rt.4007		PE	\$0										0
99737		RW	\$0	\$58,471		\$0	\$1,080	\$1,080	\$1,080	\$1,080	\$51,066		Safety
S	COUNTYWIDE TRAFFIC	CON Total	\$250,000 <b>\$250,000</b>	\$0 \$58,471	\$191,529	\$0 \$0	\$0 \$1,080	\$0 \$1,080	\$0 \$1,080	\$0 \$1,080	\$0 \$51,066		16021
0	VARIOUS LOCATIONS IN	rotar	φ230,000	\$ <b>30,</b> 471	ψ131, <b>3</b> 23	40	φ1,000	\$1,000	φ1,000	\$1,000	<i>431,000</i>		TRAFFIC SERVICES INCLUDE SECONDARY SPEED ZONES, SPE
	COUNTY												STUDIES, OTHER NEW SECONDAI
0006.00			/2011										SIGNS
Rt.4008 99892	1204008	PE	\$0 ©0	¢0.040		<u>^</u>	<u>^</u>	<i></i>	<u></u>	600 7 IF	ACO 745		0
33032	1204008 COUNTYWIDE RIGHT OF WAY	RW CON	\$0 \$250,000	\$9,243 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$69,745 \$0	\$69,745 \$0		Right of Way
S	VARIOUS LOCATIONS IN	Total	\$250,000 \$250,000		\$240,757		\$0 \$0	\$0 \$0	\$0 \$0	-			
	VARIOUS LOCATIONS IN		,	÷-,•	·,· •·	<i>**</i>	<i>*•</i>		**	,,. io	,,.	l	USE WHEN IMPARTICAL TO OPEN PROJECT: ATTORNEY FEES and
0007.00	COUNTY	A 10	0/2011										ACQUISITION COST.
	ļ		0/2011										
Rt.0608 New UPC TBD	RTE 608	PE RW				\$0	\$0	\$0	\$0	\$0	\$0		
	Hazelwood Road	CON				\$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0			Bridge Replacement w/o Added
		Total	\$185,000		\$185,000		\$0	\$0	\$0	\$0			14011
												-	

## **Recommended Projects for King William County**

Primary System Projects in Recommended Priority Order

Route 30, King William Road, From 0.5 Mile NW Town Limits, Town of West Point to Route 636, VFW Road.

Length: 0.8 Mi. Traffic: 5400 VPD Functional Class: Rural Minor Arterial

Service: Provides access between King William County and Town of West Point as well as access from King William to Counties in the Middle Peninsula and to Route 64 in New Kent County. Serves as a vital link for residential and commercial traffic.

Existing Conditions: Low areas or "dips" in the roadway subject to frequent flooding, cutting off access between the County and the Town as well as emergency access for storm-related emergencies.

Recommended Improvements: Replace existing drainage structures to handle storm frequency and raise grade of Route 30 through low areas.

Route 30 King William Road from 0.1 mi. SE Route 677, Recycle Road to 0.2 mi. NW Route 611 Venter Road.

Length: 2.0mi. +/- Traffic: 5400 VPD Functional Class: Rural Minor Arterial

Existing Conditions: Misalignment of through lanes and no separation of through/left turn lanes at intersection with Route 360. Inadequate left/right turn lanes for access to transfer station on Route 677 resulting in excessive backups during peak traffic hours. Inadequate turn lanes are apparent for access to subdivisions between Route 360 and Route 611. The area is identified for major commercial/residential development in future land use plan.

Proposed Improvements: Improve to four lane divided with 16' raised median, curb and gutter, sidewalks/bike lanes on 100' right of way, align through lanes through Route 360 intersection, and provide separate right/left turn lanes.

Route 360, Richmond-Tappahannock Highway, from Hanover County line to King and Queen County line Length: 8.43 mi. Traffic: 18,000 VPD to 12,000 VPD Functional Class: Rural Other Principal Arterial Existing Conditions: Inconsistent and inadequate paved shoulder widths, misaligned median crossovers, inadequate or non-existent left turn lanes, inadequate right turn lanes.

Proposed Improvements: Provide traffic engineering study to identify shoulder/ crossover/turn lane improvements throughout corridor and identify criteria for development of required improvements.

## Secondary System Projects in Recommended Priority Order

Route 605, Old Newcastle Road/Manfield Road, from 0.5 mi. SE Route 360 to 0.8 mi.NW Route 360Length: 1.3 mi.Traffic: 210 VPD-1700 VPDFunctional Class: Rural Major Collector

Existing Conditions: Intersections not aligned, narrow two lane roadways with narrow shoulders, poor horizontal and vertical alignment, uncontrolled access to existing commercial development. Two major subdivisions proposed on Route 605.

Proposed Improvements: Reconstruct and realign Old Newcastle Road to align with Manfield Road, improve to 2-12' lanes with 8' shoulders, 4' paved on 60' right of way, provide turn lanes at Route 360 intersection with curb and gutter to control access to existing commercial development.

Route 608 Globe Road/Route 608 Upshaw Road at Intersection Route 30, King William Road to 0.4 mi. NW on Globe Road and 0.4 mi. NE on Upshaw Road. Length: 0.8 mi. Traffic: 530 VPD – 400 VPD Functional Class: Rural Major Collector

Existing Conditions: Intersections of Globe Road and Upshaw Road intersect at intersection with Route 30 with Upshaw Road intersecting at approximately a 30 deg. angle with Route 30 creating potentially hazardous condition exacerbated by poor site conditions. Both roads have narrow pavement and narrow shoulders with poor alignment.

Proposed Improvements: Relocate Upshaw Road to intersect with Globe Road 500' +/- NW of Route 30, realign Globe Road intersection with Route 30 and improve both roadways to 2-12' lanes with 6' shoulders on 60' right of way.

Route 600, West River Road, from Route 360, Richmond–Tappahannock Highway to 1.88 Mi. NW Route 360.

Length: 1.88 mi. Traffic: 1700 VPD including 13% multi axle trucks. Functional Class: Rural Major Collector Existing Conditions: Narrow lanes on poor vertical and horizontal alignment, narrow shoulders, poor access control at Route 360; intersection with Route 608, Commins Road too close to Route 360 intersection, inadequate turn lanes at Route 360.

Proposed Improvements: Review for possible relocation of Route 608 further away from route 360 to enable adequate turn lanes at both Route 360 and Route 608. From Route 360 to 0.4 mi. NW Route 360, construct to 2-lanes with curb and gutter with left turn and right turn lanes at Route 360 and turn lanes at Route 608, on 50' right of way. Improve remainder to 2-12' lanes with 8' shoulders, 4' paved on 60' right of way.

### Other Recommended Transportation Improvements for SYIP

Rail Access: Develop study and recommendations for alternatives to providing freight rail access for existing and future industrial development.

Park n' Ride: Improve the existing parking ride lot on Sharon Road by paving, landscaping, adding signage and trash cans. This lot will also need to be expanded to serve additional capacity.

Consider locations for a second park n' ride lot.

Work with businesses to utilize underused commercial parking areas as park n' ride lots.

## **Smart Scale Projects**

With the Central Garage Rt. 360/30 intersection Smart Scale project approved, this list shall include other projects worthy of consideration for future Smart Scale applications.

Sharon Road/Rt. 30 intersection: With the completion of Smart Scale improvements at the major intersection in Central Garage, this will be the next priority project. The intersection and curb cuts should be reworked to maximize the improvements made at the Rt. 360/30 intersection.

East River Road/Rt. 30 intersection: With improvements complete to the W. River Road/Rt. 360 intersection on the opposite side of Rt. 360, this side of the intersection will be the next priority for improvements.

Globe Road/Rt. 30 intersection: Consider strategies to re-align or improve this awkward intersection.

# Goals and Implementation Strategies: Transportation

## Goal:

Provide a safe, orderly transportation network with adequate roads and bridges appropriate for present and future needs.

#### **Implementation Strategies:**

1) Coordinate with VDOT to establish clear maintenance agreements and guidelines for Countymaintained roads.

2) Coordinate with VDOT to ensure all public roads within the County are being built to the same high quality standards.

3) Coordinate with VDOT to ensure that all roads built as part of new development are part of a larger organized and coherent transportation network.

#### Goal:

Provide residents with a variety of multimodal transportation options to ensure that every resident has an available mode of transportation to employment, education, and services.

### **Implementation Strategies**

1) Continue to work with Bay Aging and other similar organizations to provide busing services to seniors and individuals with disabilities.

2) Work with VDOT to advertise and expand carpooling and rideshare programs and facilities.

3) Improve the existing Park n' Ride lot on Sharon Road with paving, landscaping, adding signage and trash cans.

4) Expand existing Park n' Ride lot for additional capacity.

5) Add second Park n' Ride lot location

6) Work with businesses to establish Park n' Ride areas in underused parking lots

### Goal:

New development should make the necessary improvements to ensure the transportation network is not significantly degraded in quality of roadway, safety or efficiency of travel.

### **Implementation Strategies**

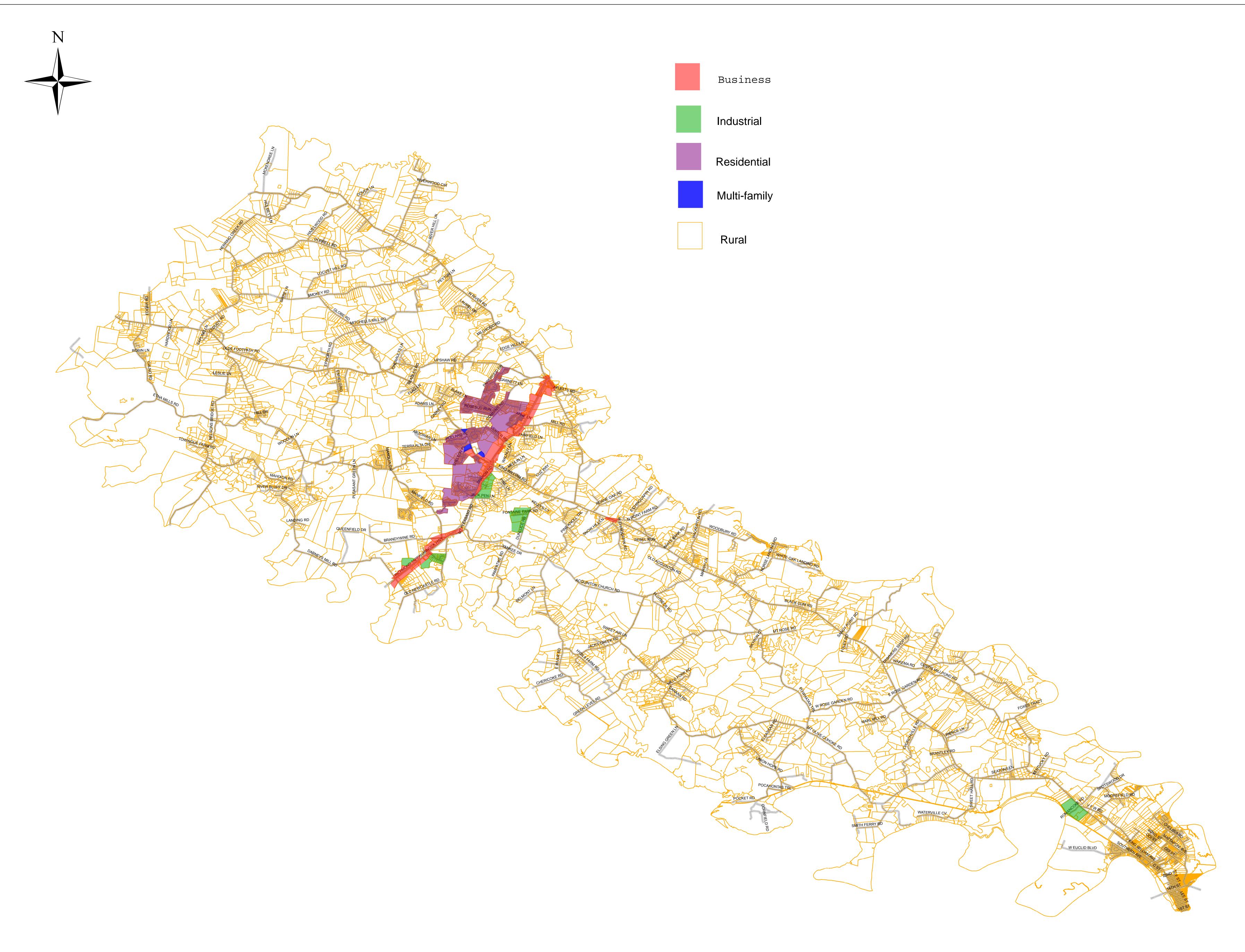
1) Request VDOT review on all development applications, not just those required to be reviewed by law.

2) Revise ordinances to require road maintenance agreements be recorded with all new subdivisions utilizing private roads or driveways.

3) Revise ordinances to reduce the amount of strip residential development

4) Revise ordinances to require shared driveways on new subdivision lots

5) New development projects should not be supported if the after development road segment will be classified below a Service Level D.



8,750 17,500 0



## References

#### List of images

- Image 1: King William County, VA, mapsofworld.com
- Image 2: Single family dwelling, R-CI Builders
- Image 3: Rivers, USGS
- Image 4: Mattaponi River, King William County
- Image 5: Pamunkey River, USGS
- Image 6: DEQ sample sites, DEQ
- Image 7: Impairment areas, DEQ
- Image 8: RPA stream buffer, EPA
- Image 9: Development flooded, FEMA
- Image 10: Farm spigot, EPA
- Image 11: Point source discharge, EPA
- Image 12: Managed timber, DOF
- Image 13: Nestle Purina mine, Google Earth
- Image 14: Commerce Park sign, King William County
- Image 15: Queenfield Farm, King William County
- Image 16: Broadband connectivity, FCC
- Image 17: REC Service Area, REC
- Image 18: King William students, King William School Board
- Image 19: King William Library, King William Library
- Image 20: King William Fire engine, VA Fire News
- Image 21: McAllister Building, King William County
- Image 22: KW County Rec Park, Google Earth
- Image 23: 2003 King William Recreation Park Master Plan, King William County
- Image 24: Dept. of Forestry Office at Zoar State Forest, DOF
- Image 25: KW Church, King William County
- Image 26: Traffic counts, VDOT
- Image 27: Central Garage Park n' Ride, Google Earth

## **List of Figures**

Figure 1: Population 1790-2030

- Figure 2: % Age Group Change 2000-2010
- Figure 3: Racial demographics
- Figure 4: Pop. Projections by Age/Gender
- Figure 5: Population growth and lot availability
- Figure 6: Housing unit statistics
- Figure 7: Percent of occupied housing
- Figure 8: Housing occupancy
- Figure 9: Top 10 employers
- Figure 10: Workforce demographics
- Figure 11: Top 10 Employment Sectors
- Figure 12: Unemployment 2002-2011
- Figure 13: Land in farms
- Figure 14: Farms by Size
- Figure 15: Incidents
- Figure 16: Health Indicators
- Figure 17: Tax Revenue
- Figure 18: Revenues
- Figure 19: Expenditures
- Figure 20: Child welfare indicators