
CHAPTER 12: IMPLEMENTATION

Planning is a continuous process; therefore completion of the Comprehensive Plan should not be viewed as the end of the project. In addition to providing an overview of existing conditions, the previous chapters assessed the needs of Henrico County as they relate to seven (7) elements of the Comprehensive Plan: land use; community character; planning and economic focus areas; natural resources; recreation, parks, open space and cultural resources; transportation; and public facilities and utilities. This chapter merges the goals, objectives and policies identified in the separate plan chapters into a cohesive implementation strategy to direct growth and development in the county for the next twenty (20) years.

The policies and recommendations in this Plan can be implemented through a multitude of techniques and measures. The county currently has some of these tools in place, although the adoption and implementation of the Plan would involve amending them. Implementation of the Plan may also involve the development of new tools to help the county achieve its vision as established in Chapter 4: The Vision, Goals & Objectives. This chapter summarizes these measures.

EXISTING IMPLEMENTATION TOOLS

The implementation tools the county currently has in place include:

- The *Zoning Ordinance* (Chapter 24 of the *County Code*)
- Zoning Overlay Districts
- The *Subdivision Ordinance* (Chapter 19 of the *County Code*)
- The *Erosion and Sediment Control Ordinance* (Chapter 10 of the *County Code*)
- Stormwater Management Ordinance
- National Pollutant Discharge Elimination System (NPDES)
- Capital Improvement Program

ZONING ORDINANCE

The *Code of Virginia* permits jurisdictions to adopt a *Zoning Ordinance* (§ 15.2-2285) which regulates the use of land and buildings, the location of uses, the size (height, area and bulk) of structures, and other aspects of development. The *Zoning Ordinance* consists of both text and the zoning boundary maps. The text provides the specific requirements of each of the zoning classifications and the maps show the existing zoning for all land within the county.

Zoning Overlay Districts

The county currently employs zoning overlay districts to regulate development in the far W. Broad Street corridor and in the airport area.

This implementation tool may be used in the future to address various site development concerns in several of the identified Special Focus Areas in Chapter 7: Planning & Economic Focus Areas. Zoning Overlay Districts involve a two-tiered regulatory approach. Basic standards are set forth for the underlying

zoning and additional regulatory standards apply for the specifically established overlay zone. Overlay zones are particularly useful in locations of special public interest in specific geographic areas, which do not necessarily coincide with the underlying zoning boundaries.

SUBDIVISION ORDINANCE

The adoption of a subdivision ordinance is mandated by the *Code of Virginia* (§ 15.2-2240). The subdivision process is required to assure the orderly division of land and its subsequent development. The County of Henrico *Subdivision Ordinance* controls the division of land for the purpose of transfer of ownership, the erection of a building or structure, and the dedication of public roadways to the county.

EROSION AND SEDIMENT CONTROL ORDINANCE

The Commonwealth of Virginia requires localities to adopt an erosion and sediment control program (§10.1-562). The county's ordinance regulates erosion and the transportation of sediment from construction sites using recommended devices and construction methods to protect downstream waterbodies and adjacent property.

STORMWATER MANAGEMENT ORDINANCE

A stormwater management ordinance may be adopted by localities per the *Code of Virginia* (§10.1-603.3). The county's ordinance regulates the discharge of materials other than stormwater to the storm system by spills, dumping or disposal without a Virginia Pollutant Discharge Elimination System permit.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

The NPDES, an Environmental Protection Agency (EPA) permit program which took effect in 1972, is responsible for significant improvements in the quality of our nation's waters. Henrico has a permit with both the State of Virginia and the EPA which allows the county to discharge stormwater into our rivers. This permit also has guidelines for improvements which the county implements on an on-going basis such as stormwater Best Management Practices (BMPs), stream restorations, stream cleanings and many others.

CAPITAL IMPROVEMENT PROGRAM (CIP)

The county annually prepares a Capital Improvement Program. The most recent program was prepared in Fiscal Year 2006-2007. This program details the capital improvements to be made through FY 2010-2011. The CIP provides specific guidance on the location and construction of new public facilities and improvements and expansions to existing facilities. Water and sewer, roadways, parks, schools, and other public buildings are among the facilities addressed in both the CIP and this Comprehensive Plan. The recommendations in this Plan pertaining to public facilities should be used to help guide the development of future CIPs, recognizing that the recommendations in this Plan address maintenance of the county's current levels of service as the county's population and employment continue to grow. Close coordination of future CIP efforts with the recommendations of the Plan are key to the successful implementation of this Comprehensive Plan.

ADDITIONAL IMPLEMENTATION TOOLS

In addition to the implementation tools the county currently has in place, the following tools are recommended to assist in future decision making, keeping with the spirit of this Plan.

- The *Design Guidelines Manual* will include general advisory guidelines for design quality in new development. These guidelines will be developed in conjunction with the recommendations in this Plan to help articulate the county’s vision for the future.
- The *Public Utilities Plan* will detail the necessary improvements to the sewer and water facilities in the county to accommodate growth at build-out.
- The *Public Facilities Handbook* will identify general areas of the county where new facilities will likely be needed as development continues. The general locations will be identified in conjunction with forecasted demand for future public facilities detailed in Chapter 11: Public Facilities & Utilities, to help in the selection of future sites for schools, libraries, police facilities and fire stations.
- *The Zoning Ordinance Assessment* will include a full analysis of the county’s development ordinances noting where updates or amendments are necessary to effectively implement the recommendations of the Plan. This memo will serve as a basis for follow-up amendments to the *Zoning Ordinance*.

THE ACTION ITEMS WORK PROGRAM AND MATRICES

In addition to the tools listed above, this chapter also identifies key planning actions, initiatives, ordinance and code changes, public improvements and other programs and projects the county should pursue to achieve the long-range development pattern proposed in this Plan. Most of the implementation of the Comprehensive Plan will occur on a day-to-day basis as county staff and elected and appointed officials make decisions regarding rezoning requests, subdivision developments, proposed site plans and the provision of public improvements and facilities.

The Action Items Work Program includes the prioritized efforts the county should undertake to implement the Plan. The matrix shows the action item and the department(s) responsible for carrying out the action.

The following matrices (Policy Matrix and Implementation Matrix) detail specific actions that should be taken to implement the recommendations and policies of the Plan. Some of these items have parallel language to specific policies contained in chapters throughout this Plan, while others provide more general guidance on further actions to be taken by the county and its various departments.

Table I-1: ACTION ITEMS WORK PROGRAM

Action Item	Responsible Agency or Department
Revise the <i>Zoning Ordinance</i> as needed to implement goals and objectives of the Comprehensive Plan. Use the results of the forthcoming <i>Zoning Ordinance Assessment</i> to identify specific changes.	Planning
Revise the <i>Subdivision Ordinance</i> as needed to implement goals and objectives of the Comprehensive Plan. Use the results of the forthcoming <i>Zoning Ordinance Assessment</i> to identify specific changes.	Planning
Draft criteria for the submission of fiscal impact analyses for land use proposals.	Planning & Finance
Prioritize and study the Planning and Economic Focus Areas by those with the greatest development pressure.	Community Revitalization & Planning
Develop noise abatement guidelines for construction.	Building Inspections
Develop a plan to promote trip reduction and congestion management methods.	Public Works
Develop and maintain a map illustrating future service areas for new parks and recreation facilities.	Recreation and Parks
Update the <i>Inventory of Early Architecture</i> document.	Recreation and Parks
Draft comprehensive standards for the development and installation of wireless communications infrastructure including collecting the build-out coverage grid for wireless service providers.	Planning
Develop urban prototypes for public facilities.	Planning & General Services
Develop programs to encourage affordable housing.	Community Revitalization
Monitor the funding of new programs (transportation and other infrastructure) made available through the State, and re-evaluate impact fees.	Planning & Public Works
Develop guidelines to encourage sustainable development.	Planning
Develop programs to increase tourism opportunities.	Recreation and Parks & Planning
Update data and run the Transportation Model annually.	Public Works
Update data and run the Fiscal Model annually.	Finance

THE POLICY MATRIX

The Policy Matrix lists the consolidated general policies from the Plan. Various departments should refer to this matrix when evaluating development proposals. These actions are generally administrative in nature and may include tasks the departments are currently doing or new practices that could be implemented relatively quickly. These actions are usually an on-going effort and do not require a significant amount of resources to accomplish. The policies in the Matrix are reiterated from the various chapters of the Plan and organized by chapter in the order they appear.

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
	Policy	Responsible Agency or Department
1	Ensure public facilities are in place or will be available to adequately serve and support new development. Only approve new development upon demonstration that adequate public facilities, as established in this Plan, are or will be available at the time of completion to maintain the desired levels of service.	Planning in conjunction with various departments
2	Encourage the design of new development to be compatible with and complementary to existing land uses. Incompatible uses should not be closely located. Site design and buffering should be used to the maximum extent feasible to reduce the impacts on adjacent properties, especially between residential and nonresidential areas.	Planning
3	Encourage the design of new development, whether public or private, to be respectful of identified historic or natural resources. Incorporate the preservation and restoration of existing features to the maximum extent feasible.	Planning & Recreation and Parks
4	Encourage new development to be designed to provide interconnectivity with existing and future developments through the use of stub streets.	Public Works & Planning
5	Ensure subdivision and site layouts of new development are planned in consideration of the future use (as recommended by this Plan) of currently undeveloped land in the general vicinity to create interconnected neighborhoods.	Planning
6	Encourage compatible infill, redevelopment and development in proximity to existing development and services when appropriate to avoid “leap frog” growth patterns which may result in higher service costs.	Planning & Community Revitalization
7	Discourage strip development along existing or new thoroughfares. This practice creates an undesirable development pattern and causes traffic and access issues, as well as preventing access from major corridors to large tracts of land that may be developed at a later time.	Planning
8	Continue to incorporate environmental quality protection measures into the development review process, particularly related to runoff, stream protection, air quality and noise.	Public Works & Planning
9	Encourage developments to be designed to minimize adverse environmental and fiscal impacts.	Planning & Finance

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
	Policy	Responsible Agency or Department
10	Promote the integration of Best Management Practices (BMPs) and other stormwater management techniques established by the county into the design of new development and redevelopment to ensure that individual developments ultimately function as an integrated system.	Public Works & Planning
11	Encourage developments to be designed to minimize disruption to life and property resulting from erosion and flooding.	Planning & Public Works
12	Encourage the preservation of private open space by supporting the use of conservation and open space easements to preserve land use in each Land Use Group/Classification, provided such easements do not adversely impact planned infrastructure or the pattern of development in the area.	Planning
Rural		
1	Promote a continuation of the historic rural pattern, including farms, pasture land, and preserved natural and historic sites as the desired character for these areas. Accommodate new residential development but encourage it to occur on either very large lots, or in a conservation subdivision format, as described in Chapter 6: Community Character.	Planning
2	Since access to public sewer and water may be limited in Rural areas, new residential development proposals in these areas should be reviewed to assess the suitability of on-site water and sewage treatment.	Planning, Public Utilities & Health
3	Encourage the use of regulatory measures such as stream setbacks to place a priority on preserving and protecting environmentally sensitive features such as stream corridors, wetlands and other features contributing to water quality in Henrico County and Virginia.	Planning & Public Works
4	Promote the idea of agriculture as a desirable use, subject to potential change and transition to other more intense uses. While the open nature of agriculture is enjoyed by many, and the open space is a valued community amenity, discourage the view of agriculture as permanent open space, and do not expect farmers to carry the burden of providing this amenity.	Planning
5	Encourage creative, unique and niche forms of agriculture such as farmers' markets, agri-tourism and value-added opportunities.	Henrico County Extension Service & Planning
6	Encourage the use of agricultural science-based Best Management Practices to minimize erosion and groundwater and surface water contamination.	Henrico County Extension Service, Henricopolis Soil and Water Conservation District & U.S. Department of Agriculture - Natural Resources Conservation Service
7	Encourage low-density rural residential development to areas that minimize conflicts between residential and agricultural land uses and maintain rural character of the county.	Planning

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
Policy		Responsible Agency or Department
Residential		
1	Promote high quality development through compliance with site plan review and the <i>Design Guidelines Manual</i> , particularly related to landscaping; traffic and pedestrian circulation; signage; and building design, placement and orientation.	Planning
2	Focus on promoting a high quality of life for residents by providing safety and stability within the neighborhoods.	Planning
3	Encourage a variety of compatible housing options. While large single-family homes are desirable, so are other types of housing which are compatible with the demands of non-traditional families, such as smaller homes or condominiums for young professionals or “empty nesters.” A range of ownership or rental opportunities is also encouraged.	Planning
4	Avoid encroachment of nonresidential uses in the Residential areas. Use transitional uses, open space, and creative site configurations to buffer and reduce the impact of nonresidential uses in Residential areas.	Planning
5	Use the road network in Residential areas to promote safety and connectivity with existing and future development. Rather than focusing traffic on a few arterial or collector streets, more “through streets” are encouraged to disperse traffic and to reduce its isolated impacts at certain points.	Planning
6	Encourage sidewalks and other pedestrian facilities in new developments. Connections to other neighborhoods and key destinations such as schools, libraries and parks are also encouraged.	Planning & Public Works
7	Promote development at densities which can be supported by the natural site conditions, availability of public facilities and the transportation network.	Various Departments
8	Use environmental quality reviews in the development review process, particularly related to runoff and stream protection.	Public Works
9	Discourage residential uses within areas that project a seventy (70) DNL or more intense noise level.	Planning
10	Multi-family homes should enhance the overall land use pattern through their proximity to arterial roadways, shopping areas and primary service areas.	Planning
11	Encourage residential units in vertical, Mixed-Use developments to promote housing opportunities near existing and future employment centers.	Planning
12	Evenly distribute housing for the elderly and disabled throughout the county in proximity to locations with concentrations of services.	Planning
13	Encourage an adequate supply of rental properties, which are well maintained and promote the stability of the overall community.	Planning

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
	Policy	Responsible Agency or Department
14	Encourage programs that promote homeownership and vitality in the community for a range of income levels.	Planning & Community Revitalization
Mixed-Use		
1	Mixed-Use developments are targeted for large tracts of land which should be developed in phases or at one time under an approved master plan for the site.	Planning
2	Mixed-Use developments may be appropriate, pursuant to an approved master plan, on infill or redevelopment sites to intensify land uses in areas where public facilities are currently available.	Planning
3	Encourage all Mixed-Use developments to meet the quality standards in the <i>Design Guidelines Manual</i> or as adopted by the county, related to site layout; building configuration, materials, massing, shape and height; landscaping; signage; parking lot aesthetics and functional design; pedestrian circulation; lighting; stormwater management; environmental protection; mass transit access; and other criteria.	Planning
4	Encourage the development of an overall architectural theme for each Mixed-Use project to create a unique community character.	Planning
5	Encourage the incorporation of public open spaces in Mixed-Use developments. Promote the design of informal passive spaces and formal or active open spaces, for example plazas, parks, walking/jogging trails, to function as integrated and functional elements of the overall development. Passive open space used to complement the built environment and preserve natural features is also encouraged.	Planning
6	Encourage pedestrian orientation as the emphasis of Mixed-Use developments when designing buildings and public spaces. Discourage the accommodation of the automobile as a prominent land use or dominant visible feature. Promote structured parking to preserve land area within Mixed-Use developments for open space or more economically beneficial uses.	Planning
7	Promote the careful planning and management of traffic circulation and access so each Mixed-Use development operates as a coordinated circulation system. A strong interconnected street network is essential to the function of Mixed-Use areas. These systems need not be a typical grid but may retain some curvilinear characteristics with sufficient crossroads and access locations to promote adequate levels of service as specified in this Plan.	Public Works & Planning
8	Coordinate the intensity of Mixed-Use developments with provision of adequate public facilities. When possible, sites for new public facilities are encouraged to be incorporated into the overall design of the Mixed-Use development. Uses such as schools, libraries, post offices and safety service offices are compatible elements to include within a Mixed-Use development.	Planning, Public Works, Henrico County Public Schools, Libraries, Police, Fire & Public Utilities
9	Mixed-Use developments should endeavor to maximize investments made by the public and private sectors.	Finance, Planning, Public Works & Public Utilities
10	Use the <i>Design Guidelines Manual</i> recommendations for Mixed-Use developments to encourage opportunities for economic development.	Planning

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
	Policy	Responsible Agency or Department
11	Encourage the preservation and incorporation of unique or sensitive environmental features into the overall design of Mixed-Use developments.	Planning & Public Works
12	Strongly encourage vertical mixed uses in Urban Mixed-Use and Traditional Neighborhood Developments. Individual structures should include commercial uses on the lower stories, offices on secondary stories and residential uses on upper stories.	Planning
Office/Service/Industrial		
1	Strongly encourage new development in Office/Service/Industrial areas to meet quality standards related to site layout; building configuration, materials, massing, shape and height; landscaping; signage; parking lot aesthetics and functional design; pedestrian circulation; lighting; stormwater management; environmental protection; mass transit access; and others.	Planning & Public Works
2	When possible, encourage master planning for development of new Office/Service/Industrial areas.	Planning
3	Office/Service/Industrial areas should have convenient access to, and when possible, visibility from the regional transportation systems including highways, airport and rail.	Planning
4	Encourage vehicular access to be designed to maximize efficiency and minimize negative level of service impacts on the surrounding road network.	Planning & Public Works
5	Promote the accommodation of a range of employment opportunities from local businesses and regional employers in the county, as both are important to the fiscal well-being of the county.	Planning & Economic Development
6	Encourage employment-generating uses to reuse or intensify existing land areas designated for Office/Service/Industrial uses, when appropriate.	Planning & Economic Development
7	Encourage the mitigation of the potential environmental impacts of Office/Service/Industrial uses through appropriate site design, restorative landscaping, stormwater management and proper management of potentially hazardous technologies through the county's permitting system, in regard to air and water quality.	Planning & Public Works
8	Strategically locate Office/Service/Industrial areas with access to other support services and amenities for employees such as restaurants, day care centers and personal services. Promote the location of these complementary uses in close proximity to Office/Service/Industrial areas, or integrated into a coordinated master plan for a development site.	Planning
9	When Office/Service/Industrial areas are located adjacent to existing or proposed residential development, encourage the use of appropriate landscaping and buffering to reduce the impacts of development on the adjacent residential areas.	Planning

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
Policy		Responsible Agency or Department
Retail/Commercial		
1	Strongly encourage all Retail/Commercial development to meet quality standards related to site layout; building configuration, materials, massing shape and height; landscaping; signage; parking lot aesthetics and functional design; vehicular and pedestrian circulation; lighting; stormwater management; environmental protection; mass transit access and others.	Planning & Public Works
2	Discourage and avoid the strip development of major thoroughfares with new Retail/Commercial development. Promote concentrations of Retail/Commercial uses in well-designed centers that apply appropriate access management techniques as the preferred configuration.	Planning & Public Works
3	Access management should be vital to the success of Retail/Commercial uses. Access points should be designed to provide adequate visibility for businesses while mitigating negative impacts on the levels of service on the roadways.	Planning & Public Works
4	When existing Retail/Commercial areas are redeveloped, give special attention to access management and site configuration to minimize traffic impacts often associated with strip development.	Planning, Community Revitalization & Public Works
5	Promote the location of new Retail/Commercial development in a manner consistent with population projections and characteristics. Encourage access to grocery stores and services for populations using mass transit and/or pedestrian access.	Planning
6	Strongly encourage redevelopment of existing Retail/Commercial areas which have become less competitive or obsolete due to market changes. Redevelopment should be encouraged to use existing public facility availability, prevent vacant structures, and continue providing Retail/Commercial services to established neighborhoods in the county.	Planning & Community Revitalization
7	New development in Retail/Commercial areas should utilize effective buffers, screening, and site design to minimize potential conflicts with surrounding residential uses.	Planning
Civic		
1	Use the policies and recommendations in Chapter 11: Public Facilities & Utilities of this Plan as a guide for locating new government and public facilities.	Planning in conjunction with various departments
2	Encourage all development in Civic areas to meet quality standards related to site layout; building configuration, materials, massing, shape and height; landscaping; signage; parking lot aesthetics and functional design; vehicular and pedestrian circulation; lighting; stormwater management; environmental protection; mass transit access; and others to set a good example for private development.	Planning & Public Works
3	To reduce conflict with surrounding uses, promote the location of Civic uses on sites large enough to accommodate the use and provide adequate buffers between adjacent uses.	Planning

TABLE I-2: POLICY MATRIX

CH 5: Land Use		
	Policy	Responsible Agency or Department
4	When feasible, Civic uses should respect and incorporate natural, historic and cultural resources into the design of the site.	Planning & Recreation and Parks

TABLE I-2: POLICY MATRIX

Ch 6: Community Character		
	Policy	Responsible Agency or Department
1	Encourage positive activities with a significant number of people in the space. More people in an area means more eyes on the street. Areas of high positive activity are generally safer environments.	Police & Planning
2	Encourage visibility of public and semi-public areas from private areas. Well-lit areas and building design that allow for constant surveillance of semi-public and public areas from the road, sidewalk and other buildings discourages potential threats.	Police & Planning
3	Encourage clear delineation of private and public spaces. The use of landscaping and structural elements to clearly demarcate private spaces discourages intruders from entering into public areas by eliminating confusion between the public and private spaces.	Police & Planning

TABLE I-2: POLICY MATRIX

Ch 8: Natural Resources		
	Policy	Responsible Agency or Department
1	Promote the protection of Chesapeake Bay Preservation Areas from development that may have an adverse environmental impact on the Chesapeake Bay ecosystem.	Planning & Public Works
2	Require assessment and survey of on-site environmental conditions to identify specific environmental status and resources.	Planning & Public Works
3	Require mapping of environmentally sensitive lands for individual sites, including floodplains, aquifer recharge areas, wetlands, steep slopes, woodlands and natural habitat areas in addition to areas generally identified as Chesapeake Bay Preservation Areas in this Plan.	Planning & Public Works
4	Require the design and construction of developments to meet the surface and groundwater quality standards established by the Virginia Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance in the <i>Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 10-20-10 et seq.)</i>	Public Works
5	Evaluate land development or disturbing activities for compliance with the requirements of Chapter 10, Environment, of the <i>County Code</i> .	Public Works
6	Monitor shoreline development to ensure proper erosion control methods are employed.	Public Works
7	Require regular or periodic maintenance of Best Management Practices (BMPs) used for the management of stormwater to ensure their continued function and removal of pollutants.	Public Works
8	Use the standards established in the <i>Henrico County Environmental Program Manual</i> as a guide for the design of BMPs.	Public Works
9	Encourage alternative development practices which minimize impervious surfaces while still being consistent with the permitted uses to reduce the impacts of stormwater runoff.	Planning & Public Works
10	Require soil testing when development is proposed in areas without public sewer, to ensure the site can support on-site septic systems.	Planning, Health & Public Utilities
11	Discourage on-site septic systems which may adversely impact the water quality of aquifers or State waters.	
12	Promote restoration of land areas containing mineral deposits after being mined to keep with future development plans and to protect existing development.	Planning & Public Works
13	Require the location of all sealed mines be provided to the county for future reference.	Planning
14	Encourage alternative development practices which can lessen the adverse impact to air and water quality.	Planning & Public Works
15	Encourage public and private cooperation in the preservation and use of environmentally sensitive areas for public open space, or park and recreation activities with minimal impact on environmentally valuable sites.	Planning & Recreation and Parks

TABLE I-2: POLICY MATRIX

Ch 8: Natural Resources		
	Policy	Responsible Agency or Department
16	Promote the preservation and enhancement of the scenic, historic, natural and open space qualities of the James River and Chickahominy River Corridors in balance with economic development.	Recreation and Parks & Planning
17	Provide access to the James and Chickahominy Rivers through public and private locations. Public access to the rivers could include public park locations and the public amenities associated with large master-planned developments.	Planning & Recreation and Parks
18	Protect the quality of the Camp Holly Springs and Diamond Springs recharge area to the extent reasonably practicable.	Planning & Public Works

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources		
Policy	Responsible Agency or Department	
Quality of Life		
1	Design and develop a system of parks, natural and historic resources, facilities and programs to meet the needs of a broad array of users.	Recreation and Parks
	a. Solicit the input of potential users in the planning and development of the parks and open space system.	Recreation and Parks
	b. Use demographic trends, recreational trends and standards, results of needs assessments, historic and cultural resources protection standards, and other available information to design a system that anticipates and addresses future needs.	Recreation and Parks
	c. Develop parks, facilities and programs that serve segments of the population with special needs.	Recreation and Parks
Siting and Acquisition		
1	Encourage advance acquisition of land for parks throughout the county, especially in rapidly developing areas.	Recreation and Parks & Real Property
	a. Identify areas where additional land is needed to meet the future needs of county residents.	Recreation and Parks
	b. Determine areas where additional land is available and determine whether available sites are suitable.	Recreation and Parks
	c. Allocate adequate funding for the acquisition and development of parks, open spaces and natural and historical resources.	Recreation and Parks
	d. Acquire sites through purchase, donation, lease, or other means as appropriate.	Real Property
	e. Conduct and maintain a county-wide comprehensive inventory of natural and historic resources to guide conservation and preservation efforts in the identification and potential acquisition of sites.	Recreation and Parks
2	Phase the development of the park and recreation system to respond to service demand and population growth.	Recreation and Parks
	a. Develop a standard for acquisition and development of open space and recreational facilities based on national and State standards, demographic trends, recreational trends and standards, the results of needs assessments, historic, cultural, and natural resource protection standards, and citizen input.	Recreation and Parks
	b. Explore the desirability of accepting land for parks, open space, and possibly other public facilities and infrastructure during the development process.	Recreation and Parks

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	<ul style="list-style-type: none"> c. Explore mechanisms to encourage the dedication of more and higher quality open space. d. Encourage developers to dedicate parks and open space to the county, provide on-site recreation facilities managed and maintained by neighborhood associations, and/or preserve historic and natural resources through cluster development techniques for the future residents of the community. 	<p>Recreation and Parks</p> <p>Recreation and Parks</p>
3	<p>Actively pursue a wide range of alternative sources of revenue/funding for programs and facilities, such as gifts of land or direct funding for acquisition and development or preservation of open space, parks and recreational facilities and natural and historic resources where they are in the county's best interests.</p> <ul style="list-style-type: none"> a. Use established criteria to evaluate proposed gifts for park development to determine whether the proposed gifts would complement the existing and planned park system. b. Pursue State and Federal funds, where appropriate, to assist in acquisition and development of parks, natural and historic resources, and open space and recreational facilities. c. Explore opportunities for public-private collaboration to provide cultural, arts and recreational facilities. d. Pursue Recreation Access Roadway funds, Community Development Block Grants, Land and Water Conservation Funds, Virginia Trail Funds, and other potential sources of funding to reduce the local cost of acquisition and/or facility construction. e. Explore the feasibility of operating certain facilities and programs on a self-supporting basis, provided these facilities do not compete unfairly with private sector providers. 	<p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p>
4	<p>Seek opportunities to convert undeveloped property or property owned, but no longer used, by county, city, State and Federal governments to parks and recreational use.</p> <ul style="list-style-type: none"> a. Work with other departments or agencies to determine the feasibility of converting available, publicly-owned property to park or recreational uses as property becomes available. b. Only pursue conversion of properties that would be beneficial to the parks and recreation system or recommended program use. 	<p>Recreation and Parks & Henrico County Public Schools</p> <p>Recreation and Parks & Henrico County Public Schools, in conjunction with various departments</p> <p>Recreation and Parks</p>
5	<p>Seek opportunities to provide open space and recreational uses in conjunction with major public and Semi-Public facilities.</p> <ul style="list-style-type: none"> a. Continue to work with Henrico County Public Schools, other county agencies and public and semi-public 	<p>Recreation and Parks & Henrico County Public Schools</p> <p>Recreation and Parks in conjunction with various</p>

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	<p>organizations to share recreational facilities for planned activities through memoranda of understanding.</p> <p>b. Continue to seek opportunities for joint land acquisition with the Henrico County School Board and other agencies.</p>	<p>departments</p> <p>Recreation and Parks & Henrico County Public Schools, in conjunction with various departments</p>
Balance		
1	Use the level of service standards as a means of identifying deficiencies and providing resource-based and school-based facilities throughout the county.	Recreation and Parks
2	<p>Strive to ensure that every household has access to adequate park, recreation and leisure opportunities.</p> <p>a. Develop an implementation plan that identifies and prioritizes additional acquisition, development and renovation projects to overcome any perceived shortfalls in levels of service and provide for a balanced system.</p> <p>b. Continue to seek appropriate co-location opportunities with the School Board and other county agencies in providing park and open space opportunities close to Residential areas.</p> <p>c. Provide recreation center facilities flexible enough to meet the specialized needs of populations to be served.</p>	<p>Recreation and Parks & Henrico County Public Schools</p> <p>Recreation and Parks</p> <p>Recreation and Parks & Henrico County Public Schools in conjunction with various departments</p> <p>Recreation and Parks</p>
Economic Development		
1	<p>Recognize that the primary justification for investing in open space, parks, recreation, and natural and historic resources is to ensure a high quality of life for county residents, but that the availability of these features may also be attractive to visitors and businesses considering visiting or relocating to the county.</p> <p>a. Continue to market the county's open space, parks, recreation, natural and historic resources as attractive amenities to economic development prospects.</p> <p>b. Encourage the private sector to provide certain specialized facilities that may be attractive to some industrial and economic development prospects.</p>	<p>Recreation and Parks</p> <p>Recreation and Parks & Economic Development</p> <p>Recreation and Parks & Economic Development</p>
2	<p>Adopt measures to establish the distinctiveness of major transportation corridors that contain open space or historic resources.</p> <p>a. Explore opportunities for overlay districts and other measures to improve and differentiate the visual appearance of entryways into distinct areas of the county. Such measures could include landscaping, distinct signage, streetscape buffers, impact controls, and design standards. Target roadways that serve as the main transportation corridors into and through the county.</p>	<p>Recreation and Parks, Planning & Public Works</p> <p>Recreation and Parks, Planning & Public Works</p>

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	<ul style="list-style-type: none"> b. Study the appearance and function of other entryways into the county, such as the train station on Staples Mill Road and Richmond International Airport. 	Recreation and Parks, Planning & Public Works
3	<p>Increase efforts to actively promote tourism.</p> <ul style="list-style-type: none"> a. Study ways to increase tourism, such as establishing a museum and/or visitors' center, or joining forces with existing visitor centers in the area, to encourage increased visitation to Henrico attractions. b. Study the feasibility of attracting more regional and national tournaments to Henrico's parks, athletic facilities, and golf courses. c. Encourage private development that makes Henrico a destination for tourism and capitalizes on historical and cultural resources in the county. 	<p>Recreation and Parks & Economic Development</p> <p>Recreation and Parks & Economic Development</p> <p>Recreation and Parks & Economic Development</p> <p>Recreation and Parks & Economic Development</p>
Design for User Safety and Compatibility		
1	<p>Incorporate the concepts and strategies of CPTED (Crime Prevention Through Environmental Design) in existing and proposed park facilities as feasible and desirable.</p> <ul style="list-style-type: none"> a. Continue to use the Crime Prevention Unit within the Division of Police for review and redesign of existing and proposed recreation facilities. b. Undertake safety assessments of the county's parks in coordination with the Division of Police. 	<p>Recreation and Parks & Police</p> <p>Recreation and Parks & Police</p> <p>Recreation and Parks & Police</p>
2	<p>Adopt practices that encourage safety on an ongoing basis.</p> <ul style="list-style-type: none"> a. Identify and address concerns and/or safety problems as soon as they occur. This could be accomplished through diligent maintenance of park properties, a speedy cleanup of any vandalized areas or the notification of proper authorities in the case of an emergency. b. Encourage county residents, neighborhoods and businesses located near a park facility to look at parks as their own and take "ownership" of the site or events at or near the site through the Division's existing Park Watch program. c. Recognize the need for police and/or county security to have access to facilities and provide such access. Continue to identify and pursue the use of technology (automated entry systems) to enhance park safety and improve access for the public. Seek additional opportunities for police, fire and emergency services personnel to become familiar with the location and layout of parks. 	<p>Recreation and Parks & Police</p> <p>Recreation and Parks & Police</p> <p>Recreation and Parks & Police</p> <p>Recreation and Parks, Police, Fire & EMS</p>

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	<ul style="list-style-type: none"> d. Post the hours of operation and other rules for the park at all access points into park facilities. These access points should also include walkways and bike paths. e. Provide adequate and appropriate lighting for each park facility. f. Coordinate with the Division of Police to assess the safety of potential park-school connections and to identify measures to improve safety. g. Establish design criteria for joint school/park facilities to ensure that park users can get to park areas. 	<p>Recreation and Parks & Police</p> <p>Recreation and Parks</p> <p>Recreation and Parks & Police</p> <p>Recreation and Parks, Henrico County Public Schools & General Services</p>
3	<p>Adopt design measures and management practices that help parks and recreation facilities fit into the surrounding community.</p> <ul style="list-style-type: none"> a. Continue efforts to seek citizen input during the master planning process for new facilities and seek appropriate input during phased development using civic associations, neighborhood watch groups, block associations, special interest user groups, and county residents at large. b. Protect both parks and adjacent neighborhoods through deliberate design and use of physical buffers to include landscaping and appropriate fencing as necessary to distinguish park boundaries from adjacent private property. c. Whenever possible, establish legitimate and safe access to park facilities from adjacent neighborhoods. Access design should ensure that park limits are clearly demarcated so park users will not be drawn onto adjacent private property. d. When master planning parks, anticipate and minimize possible points of conflict or concern regarding facility lighting, noise and traffic. 	<p>Recreation and Parks</p> <p>Recreation and Parks, Community Revitalization, Public Relations & Media Services</p> <p>Recreation and Parks & Planning</p> <p>Recreation and Parks & Planning</p> <p>Recreation and Parks, Planning & Public Works</p>
4	<p>Continue to maintain parks to a high level of cleanliness and attractiveness in order to encourage use and good stewardship among users and neighbors.</p> <ul style="list-style-type: none"> a. Ensure sufficient staffing and resources to perform necessary maintenance. b. Use community volunteer organizations to help maintain facilities. Encourage the "adoption" of parks to supplement maintenance efforts. 	<p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p>
Resource/Heritage Protection		
1	<p>Seek funding and other mechanisms to protect and preserve vital resources.</p>	<p>Recreation and Parks</p>

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	<ul style="list-style-type: none"> a. Protect designated and proposed scenic highways and rivers in order to preserve their special qualities. b. Participate in Federal, State, and local programs that offer grants for the preservation of historic and natural resources. These funds are available for county-wide historical and natural preservation plans, surveys and historic rehabilitation projects. c. Pursue partnerships with organizations like Keep Henrico Beautiful to participate in joint projects to protect resources and enhance communities. d. Acquire appropriate sites as a means to protect both historic and natural resources as they become available. 	<p>Recreation and Parks & Planning</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p>
2	<p>Maintain a sense of historical continuity through the preservation of sites, buildings, structures and objects important to our heritage.</p> <ul style="list-style-type: none"> a. Promote comprehensive historical and archeological preservation planning in coordination with public facilities, land use, transportation and private development efforts. b. Develop criteria for determining which sites are worthy of protection. c. Develop incentives for preserving historic sites/structures in their original settings. d. Support Federal and State legislation that promotes historic and cultural preservation and development while respecting private property rights. e. Encourage private property owners to nominate noteworthy sites and/or structures to the Virginia and/or National Register of Historic Places. Apply for designation of eligible county-owned sites. f. Seek Federal and State funds to provide public access to historic sites and structures that are open to the public. Encourage developers to provide access to historic sites and structures as part of the development process. g. Encourage owners of property included on the <i>Virginia Register</i> to consider the <i>Virginia Historic Landmark Commission's Historic Easement Program</i>. h. Adopt standards for the preservation, reuse, and management of county-owned historic resources and sites. i. Continue to assist developers during the planning process through appropriate recommendations for the 	<p>Recreation and Parks</p> <p>Recreation and Parks, General Services, Planning & Public Works</p> <p>Recreation and Parks</p> <p>Recreation and Parks</p> <p>Recreation and Parks & Planning</p> <p>Recreation and Parks</p> <p>Recreation and Parks & Planning</p> <p>Recreation and Parks</p> <p>Recreation and Parks & General Services</p> <p>Recreation and Parks & Planning</p>

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources

	Policy	Responsible Agency or Department
	protection and interpretations of significant historic resources. j. Encourage development of a museum system that could serve as a cultural resource and focal point for community heritage. k. Explore public/private partnerships in the creation and development of a Henrico County museum. l. Regularly update the <i>Inventory of Early Architecture</i> .	Recreation and Parks Recreation and Parks Recreation and Parks
3	Encourage residents and tourists to visit historic and cultural sites open to the public. a. Highlight historic and cultural resources in the county through tourism promotional literature, direct marketing and advertising. b. Identify potential visitors to historic and cultural resources in the county through citizen and consumer surveys, direct marketing appeals and direct advertising. c. Identify sites and resources protected by other governmental agencies or groups and promote these resources as tourist attractions in promotional literature, direct marketing and advertising.	Recreation and Parks Recreation and Parks Recreation and Parks Recreation and Parks
Accessibility		
1	Establish access to park facilities on lands owned by the county or on lands dedicated specifically for the purpose of bicycle and pedestrian access. a. Undertake an inventory of sidewalks maintained by the county to determine which parks are already served by sidewalks. b. Study the feasibility of requiring the construction of sidewalks within one (1) mile of county parks as adjacent lands are developed. c. Pursue additional public access to the James River and Chickahominy River. d. Ensure a high degree of access within parks for all parks users.	Recreation and Parks & Public Works Public Works Recreation and Parks & Public Works Recreation and Parks Recreation and Parks
Programs and Facilities		
1	Continue to review and assess program offerings and objectives using citizen input, program trends and county population trends to ensure they continue to meet the needs of the entire community. Develop new programs as necessary.	Recreation and Parks

TABLE I-2: POLICY MATRIX

Ch 9: Recreation, Parks, Open Space & Cultural Resources	
Policy	Responsible Agency or Department
<ul style="list-style-type: none"> a. Develop countywide full service recreation centers to meet the needs of an ever growing and changing population. b. Continue to seek partnerships and cooperative arrangements with private sector and other levels of government to move into new program areas and develop innovative facilities. 	<p>Recreation and Parks</p> <p>Recreation and Parks</p>

TABLE I-2: POLICY MATRIX

Ch 10: Transportation		
Policy		Responsible Agency or Department
Pedestrian Facilities		
1	Encourage new developments to install sidewalks and other pedestrian facilities. Connections to other neighborhoods and key destinations such as schools, libraries, parks etc., are also encouraged.	Public Works & Planning
2	Require sidewalks and other pedestrian pathways along all new and reconstructed major thoroughfares (see Major Thoroughfare Plan Map) excluding interstate highways and other controlled-access roads.	Public Works & Planning
Bicycle Facilities		
1	Facilitate bicycle travel along all planned and existing designated long-distance bicycle routes in the County through use of signage, shared lanes, bike lanes and shared use paths.	Public Works & Planning
2	Consider the accommodation of bicycles in the planning and design of all major road projects where feasible.	Public Works & Planning
3	Encourage bicycle accommodations in conjunction with new development.	Public Works & Planning
4	Consider the development of a county-wide bicycle plan in order to identify and evaluate potential locations for bicycle facilities.	Public Works & Planning
Bus Service		
1	Continue to monitor citizen satisfaction with GRTC service and ensure a bus system that provides adequate service to the residents of the county.	Public Works
Passenger Train Service		
1	Participate in regional efforts to monitor and evaluate the potential demand for passenger train and light rail service within the county pursuant to regional studies and encourage service that benefits the general welfare of county residents and businesses.	Public Works & Planning
2	Consider potential station locations in the design of Mixed-Use developments particularly in areas where preferred routes have been identified.	Public Works & Planning
Rail Cargo Service		
1	Continue to participate in regional efforts to evaluate potential investments of State and Federal funds to improve rail cargo facilities in the region and encourage service that benefit the general welfare of the county residents and businesses.	Public Works & Planning
Air Travel Service		
1	Continue to have representation on the Capital Region Airport Commission.	Henrico County

TABLE I-2: POLICY MATRIX

Ch 10: Transportation		
2	Monitor and regulate land use and zoning in areas near the airport for compatibility in order to support current and future.	Planning
Policy		Responsible Agency or Department
Road Facilities		
1	Monitor levels of service to identify changes in traffic congestion and evaluate alternative counter-measures to maintain or improve traffic conditions in the county.	Public Works
2	Consider right-in/right-out only driveways at strategic locations for their potential to lessen traffic volumes and improve levels of service at nearby critical intersections.	Public Works
3	Continue to coordinate traffic signal timing plans along strategic corridors. State and Federal transportation funds are available for signal coordination upgrades because of demonstrated benefits to motorists and the general public through air quality improvements. The corridors should continue to be evaluated as dictated by changes in background traffic volumes and traffic generated by new development.	Public Works
Transportation-Related Land Use Policies		
1	Consider the roadway spacing guide presented in Table T-4: Roadway Spacing Guide as the county evaluates applications for new development.	Public Works
2	Ensure public facilities are in place or planned to be available to adequately serve and support new development. Only approve new development upon demonstration that adequate public facilities, as established in this Plan, are or will be available at the time of completion to maintain desired levels of service.	Planning in conjunction with various departments
3	Design new development to provide interconnectivity with existing and future developments through the use of stub streets.	Public Works & Planning
4	Discourage strip development along existing or new thoroughfares. This practice creates an undesirable development pattern and causes traffic and access issues, as well as preventing access from major corridors to large tracts of land that may be developed at a later time.	Planning & Public Works
5	Promote high-quality development through compliance with site plan review and the <i>Design Guidelines Manual</i> , particularly related to landscaping, traffic and pedestrian circulation, signage and building design, placement and orientation.	Planning & Public Works
6	Focus on promoting a high quality of life for residents by providing safety and stability within neighborhoods.	Planning & Police
7	Use the road network in Residential areas to promote safety and connectivity with existing and future development. Rather than focusing traffic on a few arterial or collector streets, more “through streets” are encouraged to disperse traffic and to reduce its isolated impacts at certain points.	Planning & Public Works

TABLE I-2: POLICY MATRIX

Ch 10: Transportation		
8	Encourage pedestrian orientation as the emphasis of Mixed-Use developments when designing buildings and public spaces. Discourage the accommodation of the automobile as a prominent land use or dominant visible feature. Promote structured parking to preserve land area within Mixed-Use developments for open space or more economically beneficial uses.	Planning & Public Works
9	Promote the careful planning and management of traffic circulation and access so each Mixed-Use development operates as a coordinated circulation system. A strong interconnected street network is essential to the function of Mixed-Use areas. These systems need not be a typical grid but may retain some curvilinear characteristics with sufficient crossroads and access locations to promote adequate levels of service as specified in this Plan.	Public Works & Planning
10	Provide convenient access to, and when possible, visibility from the regional transportation systems including highways, airport and rail for Office/Service/Industrial areas. Vehicular access should be designed to maximize efficiency and minimize negative levels of service impacts on the surrounding road network.	Planning
11	Discourage and avoid the strip development of major thoroughfares with new Retail/Commercial development. Promote concentrations of Retail/Commercial uses in well-designed centers that apply appropriate access management techniques as the preferred configuration.	Planning & Public Works
12	Encourage access management for the success of Retail/Commercial uses. Access points should be designed to provide adequate visibility for businesses while mitigating negative impact on the levels of service on the roadways.	Planning & Public Works
13	Give special attention to access management and site configuration when existing Retail/Commercial areas are redeveloped to minimize traffic impacts often associated with strip development.	Planning & Public Works

TABLE I-2: POLICY MATRIX

Ch 11: Public Facilities & Utilities		
Policy	Responsible Agency or Department	
General Facility Policies		
1	Consider the location of new public facilities to be substantially in accord with this Plan when addressing the locational standards and policies of this chapter for general planning purposes.	Planning
2	Avoid locating facilities, such as schools, that may be negatively impacted by noise within the airport noise contours as defined in Chapter 8: Natural Resources.	General Services & Planning
3	Encourage co-location and multi-purpose use of existing and future public facility sites.	General Services in conjunction with various departments
4	Mitigate adverse visual, noise and odor impacts associated with future public facilities to the greatest extent possible in order to maintain the county's attractive living environment.	General Services
5	Locate and design public facilities in a manner that minimizes disruption to established land uses.	General Services & Planning
6	Use appropriate, high-quality designs so public facilities can portray a sense of community pride and identification, thereby setting a positive example for private development within the county.	General Services
7	Centrally locate new public facilities to make them accessible by the local roadway network to the largest possible concentrations of population and employment areas, in addition to addressing response times and levels of service.	General Services in conjunction with various departments
8	Coordinate the development of improvements to public facilities with the phasing of private development.	General Services in conjunction with various departments
9	Design and build upgrades and/or improvements made in conjunction with private development to standards which are adequate to meet build-out needs under the Plan's land use recommendations, not just the mid-range needs of a specific development. Additionally, coordinate the development and expansion of public facilities to ensure upgrades benefit as many nearby property owners as possible who are not currently being served.	General Services in conjunction with various departments
10	Identify and consider the possible need for modification to, or expanded capacity of, existing public facilities when reviewing redevelopment, intensification or infill development proposals.	General Services in conjunction with various departments
11	Identify appropriate sites for public facilities in growing areas of the county, and pursue acquisition of these sites in advance of development pressures.	General Services in conjunction with various departments
12	Encourage new developments to include pedestrian access via sidewalks and paths to public facilities, such as schools, libraries and parks.	Planning & Public Works
13	Encourage new development in areas where public water and sewer are available to connect into the system.	Planning & Public Utilities

TABLE I-2: POLICY MATRIX

Ch 11: Public Facilities & Utilities		
Policy	Responsible Agency or Department	
School Sites		
1	Integrate school sites into neighborhoods, providing pedestrian access and promote walking to reduce the roadway impacts. This policy is particularly important for elementary and middle schools in Traditional Neighborhood Developments and Urban Mixed-Use areas.	Henrico County Public Schools
2	Locate schools in primarily Residential areas to be in close proximity to the students' homes.	Henrico County Public Schools
3	Promote site design ensuring availability of adequate land area for faculty parking and emergency access.	Henrico County Public Schools
4	Design all public school facilities to meet or exceed State and Federal standards for universal accessibility.	Henrico County Public Schools
Fire/Rescue		
1	Promote the inclusion of fire/rescue stations as one of the civic elements in the design and development of Traditional Neighborhood Developments and in Urban Mixed-Use areas to provide adequate service to these more densely populated areas.	General Services & Fire
Police		
1	Maintain an active exchange of information between the Division of Police and the Department of Planning to address future needs for police services in the county.	Police & Planning
2	When possible, use existing space for new district headquarters to reduce the start-up costs associated with establishing a new district command.	General Services & Police
Libraries		
1	Add additional square footage to existing library space in areas of the county anticipated to increase in population.	Libraries & General Services
2	Encourage the inclusion of libraries as one of the civic elements in the design and development of Traditional Neighborhood Developments and in Urban Mixed-Use areas to provide adequate service to these more densely populated areas.	Planning & Libraries
Utilities (Water and Sewer)		
1	Support improvements recommended in the <i>Public Utilities Plan</i> .	Public Utilities
2	Continue the construction of water and sewer lines to serve growing areas of the county.	Public Utilities
3	Developers should be responsible for funding the expansion of sewer and water lines to serve new development.	Public Utilities & Planning
4	In instances when the <i>Public Utilities Plan</i> indicates a necessary capacity greater than that which is needed to serve new development, the facility should be built to handle the capacity stated in the plan. The developer should receive credits for the additional capacity, which can be used for future developments or transferred to another developer.	Public Utilities

TABLE I-2: POLICY MATRIX

Ch 11: Public Facilities & Utilities

	Policy	Responsible Agency or Department
5	Redevelopment and infill projects are desirable when consistent with Chapter 5: Land Use and Chapter 7: Planning & Economic Focus Areas, and are to be approached with caution from the provision of utilities. The county and developers should recognize there may be limitations to the capacity of existing sewer and water facilities in these areas.	Public Utilities
6	Encourage new development adjacent to existing lines to tie into the sewer and water systems in the most efficient way possible. It may be necessary to loop water lines to provide redundancy within the system.	Public Utilities

Wireless Communication Technology

1	Discourage towers in areas zoned or planned for residential uses.	Planning
2	Discourage towers in private cemeteries.	Planning
3	Encourage stealth tower design when towers are requested adjacent to or in close proximity to existing Residential areas or areas recommended for residential use in Chapter 5: Land Use.	Planning
4	<p>Only consider new locations for towers when co-location or replacement of existing towers is not adequate and feasible. The order of preference for land use categories when considering a new site is industrial, commercial, or agricultural not utilized for residential purposes.</p> <ul style="list-style-type: none"> a. Consider county-owned, State-owned, or Federal properties and facilities to encourage proper siting of wireless communications towers provided: <ul style="list-style-type: none"> i. The use and character of public properties and adjacent properties is not adversely impacted; ii. The proposed telecommunications facilities are consistent with other elements of the Comprehensive Plan and <i>Zoning Ordinance</i>; and iii. Appropriate approvals and agreements are reached with the public agency’s boards, or authorities. 	<p>Planning</p> <p>Planning</p> <p>Planning</p> <p>Planning</p>
5	New telecommunications sites in areas zoned or planned for industrial, commercial or agricultural properties with no residences should be initially constructed or designed to be extended to a height of one-hundred ninety-nine (199) feet. Reduced tower height may be more appropriate in sensitive locations.	Planning
6	If co-location opportunities are not possible, encourage siting of towers at locations within wooded areas or remote sites away from residential structures. While such locations may not obscure from view the entirety of the tower, they may reduce the visual impact.	Planning
7	Locate towers at the lowest possible point along ridgelines.	Planning
8	Ensure new towers or antenna structures do not block the county’s microwave paths or interfere with the county’s public safety radio system.	Planning
9	Discourage the location of towers within 1,400 feet of New Market Road (Route 5) unless an acceptable stealth-tower design is utilized.	Planning
10	Encourage, where appropriate, the placement of antennas on existing structures including but not limited to existing towers, utility poles, water tanks, building rooftops, and other tall structures.	Planning

TABLE I-2: POLICY MATRIX

Ch 11: Public Facilities & Utilities		
	Policy	Responsible Agency or Department
11	Encourage, where appropriate, the upgrade or replacement of lower towers with taller towers designed to maximize co-location opportunities.	Planning
12	Expedite the permitting of wireless communication towers that have minimal visual impacts and meet all regulatory standards.	Planning
13	Ensure ground-mounted equipment does not generate noise in excess of fifty (50) decibels at the property line of the parcel on which the tower is located.	Planning
14	Encourage the consideration of stealth-tower designs for all applications.	Planning
15	Use monopoles rather than lattice towers.	Planning
16	Limit clearing of the sites to allow existing mature vegetation to remain for visual screening.	Planning
17	Screen security fencing and visible tower locations from public view. A row of evergreen trees a minimum of eight (8) feet tall and a maximum of ten (10) feet apart, and a continuous hedge at least twenty (20) inches in height in front of the tree line should be planted around the perimeter of the fence.	Planning
18	Discourage lighting and painting of a tower unless required by the FAA. Construct towers at reduced height to eliminate FAA lighting requirements. Limit flashing strobe lights to requirements by the FAA.	Planning
19	When lighting is required on equipment shelters, shield and orient it inward so as to not project on surrounding properties.	Planning
20	Finish equipment shelters in earth-tone colors and provide appropriate screening.	Planning
21	When antennas are attached to an existing building, blend them with the existing structure.	Planning
22	Use the requirements of the Department of Public Works to evaluate access to the site.	Public Works
23	Use flush-mounted or stealth antennas in visible or sensitive locations.	Planning

THE IMPLEMENTATION MATRIX

The **Implementation Matrix** highlights the recommendations that the county should take to ensure that the general goals, objectives and policies identified in the Plan are put into action. In many cases these recommendations are either on-going in various departments or are given a high priority as they are direct ways to ensure the implementation of the Plan. Beyond the recommendation, the matrix also identifies the agency or department proposed to be responsible for carrying out the action and the time period in which the action should occur.

TABLE I-3: IMPLEMENTATION MATRIX

CH 5: Land Use			Action Term ¹			
Action		Responsible Agency or Department	On-going	Short-Term	Mid-Term	Long-Term
1	Revise the <i>Zoning Ordinance, Subdivision Ordinance</i> and related regulations as needed to implement the goals, objectives and policies of the Comprehensive Plan.	Planning		✘		
2	Develop and implement innovative zoning and subdivision regulations to facilitate cohesive large-tract planned development. New zoning and subdivision regulations will be necessary to effectively implement the recommendations associated with the rural residential/prime agriculture, suburban mixed-use and traditional neighborhood development.	Planning		✘		
3	Establish and implement criteria that provide guidance on when a development should be required to include a fiscal impact analysis at the Plan of Development, subdivision, rezoning or use permit stage.	Finance & Planning		✘		
4	Develop policies and procedures to encourage infill and redevelopment. When vacant land in the vicinity is currently zoned for the desired use, rezoning should be discouraged.	Planning & Community Revitalization	✘			
5	Continue to place a priority on preserving and protecting environmentally sensitive features such as stream corridors, wetlands and other areas contributing to water quality in Henrico County and Virginia.	Planning & Public Works	✘			
6	Maintain and regularly update the countywide geographic information system to provide assistance in making land use decisions.	Planning, Information Technology & Public Works (GIS)	✘			
7	Review Chapter 5: Land Use and the Future Land Use Map on an annual basis to determine the need for amendments.	Planning	✘			
8	Monitor the conditions of housing stock in the county. Encourage the maintenance, and when necessary, the demolition of units which are unsafe. Continue to participate in the CDBG program.	Community Revitalization	✘			
9	Establish and maintain joint-planning relationships with adjacent jurisdictions.	Planning in conjunction with various departments	✘			
10	Continue intra-governmental cooperation in all areas dealing with land use and development.	Planning	✘			

¹ Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long-Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

			Action Term ¹			
			On-going	Short-Term	Mid-Term	Long-Term
Action		Responsible Agency or Department				
11	Use the Future Land Use Map, Land Use Categories, and Keystone Policies to guide rezoning recommendations in terms of density and types of uses.	Planning	✘			
12	Review all Board of Zoning Appeals, Planning Commission and Board of Supervisors applications to determine their consistency with the Comprehensive Plan.	Planning	✘			
13	Require a feasibility study which addresses the health, safety and welfare of the community as a part of rezoning applications for all TND, SMX and shopping center sites that are not shown on the adopted Future Land Use Map.	Planning		✘		
14	Use the Plan of Development review process to ensure proper attention is given to site design to minimize any adverse effects of new development on existing development.	Planning	✘			
15	Encourage home ownership programs.	Community Revitalization	✘			
16	Participate in housing programs which promote the vitality of the community.	Community Revitalization	✘			

TABLE I-3: IMPLEMENTATION MATRIX

		Ch 7: Planning and Economic Focus Areas			
		Action Term ²			
Action	Responsible Agency or Department	On-going	Short-Term	Mid-Term	Long-Term
1	Prioritize the Existing Character Protection Areas by those with the greatest development pressure and where appropriate, create overlay districts as described in the action recommendations for that area, to protect the unique and existing character.		✘		
2	Require the submission of master plans for development approval of the Mixed-Use areas designated on the Future Land Use Map and particularly the Special Focus Areas identified in Chapter 7.		✘		
3	Continue to monitor the Neighborhood Enhancement Study Areas identified in Chapter 7 to determine when action is necessary.	✘			
4	Develop a program to evaluate the need for action in the Reinvestment/Redevelopment Opportunity Areas, and monitor the areas identified in Chapter 7 to determine when or if reinvestment or redevelopment is required. The process for developing improvement strategies for these areas is included in the Special Focus Areas Study Tool Box in Chapter 7.			✘	
5	Continue to investigate new sources of external funding to assist in improvement and redevelopment efforts within areas of the county.	✘			
6	Continue to work directly with business leaders and encourage their business's continuance and growth in the county.	✘			
7	Promote the economic development of the county by preserving the areas identified as Prime Economic Development Areas for employment and revenue generating uses by discouraging rezoning or development practices that would result in residential development in these locations.	✘			
8	Continue to promote the benefits of the Enterprise Zone.	✘			
9	Continue to work with public and private agencies to publicize the advantage of locating businesses in Henrico County and the Richmond area.	✘			

² Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long-Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

		Responsible Agency or Department	Action Term ²			
			On-going	Short-Term	Mid-Term	Long-Term
Action						
10	Promote the use of bonds available through the Industrial Development Authority, State Industrial Access Funds, Community Development Block Grants and other funding programs to attract economic development.	Economic Development Authority & Finance	✘			

TABLE I-3: IMPLEMENTATION MATRIX

Ch 8: Natural Resources			Action Term ³			
Action	Responsible Agency or Department	On-going	Short-Term	Mid-Term	Long-Term	
1	Require connection to public water and sewer in areas of potential groundwater contamination.	✘				
2	Maintain the erosion and sediment control, zoning, and subdivision ordinances to properly manage the development of flood prone and wetland areas in accordance with the objectives and policies of this Plan.	✘				
3	Manage and control environmentally hazardous technologies through the zoning regulations and permitting.	✘				
4	Require conspicuous statements on all subdivision plats to alert prospective purchasers of pre-existing conditions (on-site or in proximity) which may be hazardous or affect the use and enjoyment of the property, (i.e., noise, mined areas, floodplains, wetlands, and Chesapeake Bay Preservation Areas).	✘				
5	Regulate heights and structures in airport approach zones in accordance with Federal Aviation Administration (FAA) standards.	✘				
6	Work with the Virginia General Assembly to improve building construction standards to reduce noise impact and develop noise abatement construction standards in the county Building Code.		✘			
7	Maintain and enforce appropriate stormwater management regulations to meet the requirements of the Chesapeake Bay Preservation Act.	✘				
8	Continue to enforce stormwater management BMP regulations for all land disturbing activities.	✘				
9	Monitor State and Federal regulations regarding the Chesapeake Bay and other natural resources, and update local policies accordingly and continue to cooperate with local, State, and Federal agencies to address environmental issues.	✘				
10	Continue to enforce required maintenance of BMP to ensure their continued function and removal of pollutants.	✘				

³ Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

		Ch 8: Natural Resources				
Action	Responsible Agency or Department	Action Term ³				
		On-going	Short-Term	Mid-Term	Long-Term	
11	Continue to enforce a program to review existing BMP facilities for such things as retrofit potential, possible illegal connections to storm sewer, oil/water separator and trash racks maintenance.	Public Works	✘			
12	Encourage the rezoning of properties in the 100-year floodplain to the "C-1" Conservation District as may be designed to implement this plan, in order to protect these environmentally sensitive areas and to minimize stormwater control problems.	Planning	✘			
13	Maintain the program requiring five-year pump outs of on-site waste treatment systems.	Public Works	✘			
14	Continue and improve basic guidelines for natural resource protection, including proposing a method of preserving upland habitat in developing areas, stabilizing disturbed areas and slopes, maintaining shade cover over creeks and water bodies, and maintaining floodplains as natural habitat areas.	Public Works	✘			
15	Continue to promote trip reduction, and congestion management methods including but not limited to: mass transportation; carpooling, flex time; free transit passes vs. free parking; and alternative fuel vehicle fleets, to reduce non-point source pollutants to the air, soil and water.	Public Works			✘	
16	Continue to implement a program to encourage protection and maintenance of environmental quality.	Planning & Public Works	✘			
17	Develop and implement a program to encourage private property owners to utilize innovative environmental protection strategies on private property.	Public Works & Planning				✘
18	Identify and pursue opportunities for the public acquisition, protection and preservation of natural resources.	Recreation and Parks	✘			
19	Establish and implement criteria that provide guidance on when a development should be required to include an environmental impact analysis at the POD, subdivision, rezoning, or use permit stage.	Planning & Public Works		✘		
20	Actively participate in ongoing environmental resource studies affecting the county.	Planning in conjunction with various departments	✘			
21	Insure the county's flood insurance program is regularly updated to maintain data and mapping and use this information to assess proposed development.	Public Works	✘			
22	Continue to review all applications for extraction of mineral resources to prevent irreversible damage to the environment and to ensure reclamation for future development.	Planning & Public Works	✘			

TABLE I-3: IMPLEMENTATION MATRIX

Ch 8: Natural Resources			Action Term ³			
Action		Responsible Agency or Department	On-going	Short-Term	Mid-Term	Long-Term
23	Promote recycling of renewable resources by supporting local recycling efforts.	Public Utilities & Central Virginia Waste Management Authority	✘			
24	Enforce soil erosion and sediment control ordinances with frequent inspection of construction sites.	Building Construction & Inspection	✘			
25	Require all BMPs to meet the guidelines established in the <i>Henrico County Environmental Program Manual</i> .	Planning, Permit Center & Public Works	✘			
26	Require stormwater quality management and maintenance for all new and redevelopment sites.	Public Works	✘			

TABLE I-3: IMPLEMENTATION MATRIX

Ch 9: Recreation, Parks, Open Space, and Cultural Resources

Action	Responsible Agency or Department	Action Term ⁴			
		On-going	Short-Term	Mid-Term	Long-Term
1	Adopt measures to establish the distinctiveness of major transportation corridors that contain open space or historic resources. (See Chapter 7: Planning & Economic Focus Areas for some identified corridors.)	Recreation and Parks & Planning		✘	
2	Adopt design measures and management practices that help parks and recreation facilities fit into the surrounding community.	Recreation and Parks, Community Revitalization & Planning		✘	
3	Develop and maintain a map illustrating future service areas for new park and recreation facilities based on maintaining high levels of service for existing development and new growth. This map should be reviewed and updated if necessary on a biannual basis. The map can be found in the <i>Public Facilities Handbook</i> .	Recreation and Parks & Planning		✘	
4	Prioritize recreation, park, and open space projects based on population growth, citizen input, and the locations of needed future service areas.	Recreation and Parks		✘	
5	Maintain a current comprehensive listing of historical and archaeological sites within the county (<i>Inventory of Early Architecture</i>), and use this list in the review of all projects receiving State and/or Federal funding.	Recreation and Parks	✘		
6	Monitor Federal and State legislation related to historic and cultural preservation and development and implement as appropriate.	Recreation and Parks	✘		
7	Identify and pursue funding options for the public acquisition, protection and preservation of natural, historic and cultural resources and park land when in the county's best interest.	Recreation and Parks	✘		
8	Encourage the advance acquisition of land for parks throughout the county utilizing the future service areas map.	Recreation and Parks & Planning	✘		
9	Seek opportunities to convert undeveloped property or property owned, but no longer used, by county, State, and Federal governments to parks and recreational use.	Recreation and Parks & Planning	✘		
10	Use the level of service standards as a means of identifying deficiencies and providing resource-based and school-based facilities throughout the county.	Recreation and Parks, Henrico County Public Schools & Planning	✘		
11	Design recreation and park facilities for user safety and compatibility.	Recreation and Parks	✘		

⁴ Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

		Responsible Agency or Department	Action Term ⁴			
			On-going	Short-Term	Mid-Term	Long-Term
Ch 9: Recreation, Parks, Open Space, and Cultural Resources						
Action						
12	Incorporate the concepts and strategies of CPTED (Crime Prevention Through Environmental Design) in existing and proposed park facilities as feasible and desirable.	Recreation and Parks & Police	✘			
13	Continue to review and assess program offerings and objectives using citizen input, program trends, and county population trends to ensure they continue to meet the needs of the entire community. Develop new programs as necessary.	Recreation and Parks	✘			
14	Use the policies and recommendations included in Chapter 9 to maintain and enhance the recreation, park and open space system in the county.	Recreation and Parks	✘			
15	Promote public awareness of the importance of sites and structures with historic or cultural significance.	Recreation and Parks	✘			
16	Support efforts to develop public cultural facilities incorporating historical or archaeological sites or structures.	Recreation and Parks	✘			
17	Support efforts to promote heritage tourism.	Recreation and Parks	✘			
18	Support property owners who are seeking Federal and State funds for the preservation of historic sites or structures.	Recreation and Parks	✘			

TABLE I-3: IMPLEMENTATION MATRIX

		Ch 10: Transportation			
Action	Responsible Agency or Department	Action Term ⁵			
		On-going	Short-Term	Mid-Term	Long-Term
1	Establish and implement criteria that provide guidance on when a development should be required to include a traffic impact analysis and/or an interchange impact analysis at the plan of development, subdivision, rezoning or use permit stage.		✘		
2	Continue to encourage right-of-way dedication in the Plan of Development and proffer processes. Particular focus should be placed on establishing right-of-way for the planned roads identified on the Major Thoroughfare Plan Map included in Chapter 10 and on file in Planning and Public Works.	✘			
3	Reduce congestion on the road network by applying the design solutions detailed in the <i>Transportation Systems Management Manual</i> .	✘			
4	Continue to monitor citizen satisfaction with GRTC service and ensure a bus system that provides adequate service to the residents of the county.	✘			
5	Monitor levels of service to identify changes in traffic congestion and evaluate alternative counter-measures to maintain or improve traffic conditions in the county.	✘			
6	Continue to coordinate traffic signal timing plans along strategic corridors.	✘			
7	Follow the recommendations of Chapter 10 in the design and development of new transportation facilities associated with roadway improvements, pedestrian facilities, and other modes of transportation.	✘			
8	Monitor and update the Major Thoroughfare Plan Map every five (5) years if necessary.	✘			
9	Encourage intergovernmental coordination with other jurisdictions within the region when considering designs for transportation facilities that will have an impact on the overall region.	✘			

⁵ Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

			Action Term ⁶			
			On-going	Short-Term	Mid-Term	Long-Term
Action		Responsible Agency or Department				
1	Require new development to tie into public water and sewer where it is available.	Planning & Public Utilities	✘			
2	Establish and institute a procedure for evaluating gifts of land, easements or funds for development of public facilities. Donations should only be accepted if they are in the best interest of the county.	Planning & Real Property in conjunction with various departments			✘	
3	Monitor the growth patterns and trends in the county on an annual basis to ensure the educational needs of the community are being met	Planning & Henrico County Public Schools	✘			
4	Encourage school site co-location with recreational and park facilities.	Planning & Henrico County Public Schools	✘			
5	Develop an urban prototype for public facilities to take advantage of different site opportunities in the Urban Mixed-Use and Traditional Neighborhood Development areas proposed in the Future Land Use Map.	General Services & Planning		✘		
6	Encourage acquisition of land for schools in advance of development pressure when possible.	Henrico County Public Schools	✘			
7	Continue the use of the CADADAM system to assist the county in the identification of general locations for future fire station sites by applying the data from the Transportation Model, Chapter 10: Transportation and Chapter 5: Land Use.	Fire & Rescue in conjunction with various departments	✘			
8	Evaluate the feasibility and appropriateness of extending water and sewer service to areas of the county under development.	Public Utilities		✘		
9	Continue to maintain a comprehensive inventory of existing telecommunication infrastructure to help identify future co-location opportunities and provide information to other County Departments.	Planning	✘			
10	After obtaining anticipated county-wide build-out coverage grids from all wireless service providers, initiate technical evaluation of the County's wireless network to identify an optimal build-out strategy which maximizes locational efficiency and minimizes overall visual impacts.	Planning			✘	

⁶ Short-Term = 1-2 Years; Mid-Term = 3-5 Years; Long Term = 5+ Years

TABLE I-3: IMPLEMENTATION MATRIX

Chapter 11: Public Facilities & Utilities			Action Term ⁶			
Action	Responsible Agency or Department	On-going	Short-Term	Mid-Term	Long-Term	
11	Update comprehensive standards for the development and installation of wireless communications infrastructure based on results from the county-wide study.			✘		
12	Continue to coordinate with adjoining localities when a wireless tower request is proposed near the county boundaries.	✘				
13	Consider the development of a countywide network analysis to help achieve greater efficiency in the placement of wireless communication infrastructure.			✘		
14	Obtain industry and citizen input on the future development of local wireless communications regulations.	✘				
15	Coordinate with adjacent municipalities on projects that may have regional impacts on public service and facilities.	✘				
16	Use the <i>Public Facilities Handbook</i> to identify and acquire sites for future public facilities.	✘				
17	Use the information in the Comprehensive Plan and the <i>Public Facilities Handbook</i> to coordinate the provision of public services/facilities with private development.	✘				
18	Use the recommendations and guidance in the Comprehensive Plan to complete an annual review of the Capital Improvement Program.	✘				

