

PUBLIC FACILITIES

Introduction

Public facilities are required to support the services and functions provided by James City County and its associated public and private agencies. These facilities support the development of the community and help to ensure quality of life for its citizens. They are a powerful statement of the expectations a community has for itself. James City County currently provides very high quality facilities and it is the County's intent to maintain and improve that level of service. Public facilities are divided into five major categories: public education, public safety, public health, general County government, and public utilities. A sixth category, parks and recreation, is discussed later in the Comprehensive Plan, while public transit is included in the Transportation Section of the Plan.

Existing and Proposed Public Facilities

A complete analysis of existing public facilities was completed as part of the Comprehensive Plan revision and appears in the Public Facilities Technical Report. Below is a list of existing and proposed facilities, as of the fall of 2008, for each of the five major categories. See the maps later in this section for the locations of these facilities.

Public Education

1. Public Schools (*Operated jointly by the City of Williamsburg & James City County*)
 - Eight elementary schools (a 9th school is slated to open in 2010)
 - Three middle schools (a 4th school is slated to open in 2010)
 - Three high schools
 - School Administration Building
 - Public Schools Operation Center
 - Student Services Building
 - Alternative Education Center
2. Adult Education
 - Thomas Nelson Community College (TNCC)
 - TNCC Historic Triangle Campus (Warhill Site)
3. Career and Technical Education
 - New Horizons Regional Education Center (NHREC)
4. Library Services (*Operated by contract with the City of Williamsburg & James City County*)
 - Williamsburg Regional Library (Williamsburg and James City County locations)

Public Safety

1. Fire Protection and Emergency Medical Services
 - Five James City County fire stations
 - James City/Bruton Volunteer Fire Department
 - Fire Training Facility
2. Emergency Communications Center (ECC)
3. Emergency Operations Center (EOC)
4. Law Enforcement and Corrections
 - Law Enforcement Center (a new LEC is slated to open in 2011)
 - Virginia Peninsula Regional Jail
 - The Merrimac (Middle Peninsula) Juvenile Detention Center (regionally operated)

- Crossroads Community Youth Home (regionally operated)
5. Courts
 - Williamsburg-James City County Courthouse
 - Court Support Services

Public Health

1. Refuse Collection and Disposal
 - Solid Waste Transfer Station
 - Tewning Road, Jolly Pond Road, and Toano Convenience Centers
2. Heritage Humane Society Animal Shelter (regionally operated)

General County Government

1. County Government Office Complex
2. Satellite Services Office
3. Human Services Center
4. Maintenance Facility
5. Legacy Hall
6. Norge Train Depot
7. County Communications
8. Other County Offices (Discovery Center, Ironbound Village, etc.)

Public Utilities (Operated by James City Service Authority (JCSA) unless otherwise noted)

1. Central Water System
2. Groundwater Desalinization Water Treatment Facility
3. Maintenance Facility
4. Sewage Collection System
5. Hampton Roads Sanitation District (HRSD) Williamsburg Wastewater Treatment Plant
6. Independent water systems

Facility Needs

James City County's public facilities and services are based on level of service guidelines and anticipated demographic and growth trends. The purpose of this section is to discuss those standards and provide specific guidance on the following:

- Balancing growth with the provision of public facilities and services;
- Establishing appropriate criteria for the design and location of new public facilities;
- Outlining service guidelines to indicate the need for new facilities; and
- Specifying goals, strategies and actions to govern the efficient provision of public facilities.

The Capital Improvement Program (CIP) is the primary guide for facility development over a given five-year period. The CIP includes an evaluation of projects according to priority, estimated cost, and funding availability, and programs them into a schedule. The CIP is based on the guidelines outlined by the Comprehensive Plan and uses those guidelines to implement a balanced approach to actual County facility development.

The CIP also increases the efficiency of facility development. Programming capital facilities over time promotes better use of the County's limited financial resources and helps coordinate public and private development. In addition, the programming process improves communication between County, regional, and state agencies. By looking beyond the needs and limitations of the current fiscal year, capital programming enables public bodies to maintain an effective level of service while transitioning between the present and future population.

Following a project's inclusion in the CIP, construction decisions are brought into the County budget process. Projects are re-evaluated on an annual basis in light of fiscal constraints and legislative mandates. Changes in services provided by the private sector and changes in federal and state policies affect the construction of public facilities as well. New project, asset, and funding management tools may be explored as the County seeks to add efficiency and transparency to the capital funding and budget processes.

Design of New Public Facilities

The existing public facilities owned by James City County are a source of pride for citizens and county staff members alike. New facilities should be held to high standards of cost-effectiveness, functional and operational efficiency, energy efficiency, green building design, durability, and, where applicable, aesthetic appeal, so that they complement existing facilities and serve the long-term needs of the County.

The construction of new facilities should be consistent with projected needs and costs. Recurring costs, notably the funds required to maintain and provide staff for the buildings, should also be accounted for in the final "price tag" of a facility. Renovating or expanding a facility may be less costly than constructing a new building, so plans for new facilities should accommodate future additions. New facilities should also be capable of containing multiple County departments and agencies. These considerations are key steps in making the facilities of James City County sustainable, which is discussed in more detail below.

Communications

An open broadband network is an important component of a sustainable community, serving as a platform for economic growth and efficient delivery of County services while stimulating creative solutions to issues such as traffic congestion, healthcare and education. James City County recognizes that planning and taking pro-active measures can leverage the power of broadband for its citizens and businesses.

Service Plans

Service plans bridge the gap between the Comprehensive Plan and current public facilities planning. Service plans coordinate the location and design of public facilities to the Comprehensive Plan's land use, community character, and transportation guidelines. A good example is the James City Service Authority's 1998 Water and Sewer Master Plan, which is now supplemented by various software models to reflect ongoing supply, demand, and policy changes in the County. The Parks and Recreation Division takes a similar approach. Other James City County departments and agencies may consider developing service plans to facilitate the implementation of cost-effective public facilities as outlined in the Comprehensive Plan.

Community Sustainability Spotlight

James City County is committed to providing services and facilities that meet the needs of its citizens, both now and into the future. To this end, the County has begun to incorporate sustainable design elements into all of its projects and to encourage the same in projects undertaken by the private sector. Elements such as conserving open and green space, reducing impervious surfaces, improving energy efficiency, providing geothermal heating and cooling technologies, utilizing alternative energy sources and environmentally safe building materials, standardizing facility designs that include opportunities for expansion and multiple configurations, exploring new techniques in stormwater management, and other approaches have become common in County construction and renovation. The County actively looks to share facilities and functions, while using better technology and recycling to generate energy savings and retrofit old, inefficient systems with more environmentally-friendly, resource-conscious systems.

Citizen Commentary

Citizens of James City County generally rate the County's public facilities very favorably. In the *National Research Center, Inc. (ICMA)* survey, 51% of respondents rated the County's public schools, and 52% of respondents ranked the County's libraries, as "good." Both the County's schools and libraries rated higher than the national benchmarks set for these services. Crime prevention, fire protection, and water and sewer services received similar high marks.

The *Virginia Tech Center for Survey Research* survey echoed citizens' positive feelings toward schools and libraries. Of those who responded, 65.9% found the schools to be "excellent" or "good." For libraries, 51.7% of respondents gave a rating of "excellent," while only 0.5% responded with a "poor" rating. The Public Safety portion of the survey found that 90.7% of respondents felt "very safe" or "somewhat safe" after dark.

In the Community Conversations, citizens indicated satisfaction with existing services, including area schools, libraries, and public safety facilities. These facilities were often mentioned specifically as benefits to living in James City County. Comments regarding schools generally expressed a desire to maintain the County's high quality of education and to limit classroom sizes. Many comments also called for additional vocational training opportunities.

Public Facility and Service Guidelines

The following guidelines are intended to be used to help direct the development and operation of public facilities both now and into the future. They provide thresholds for measuring the impacts of growth with respect to creating new facilities, maintaining and improving the quality of service delivery to the general public, and providing a practical way for citizens to balance performance with fiscal limitations. Ultimately, facility and service guidelines are a statement of the expectations residents have for their government services.

Citizens may sometimes question the value they are receiving for their tax dollars. County departments face the dual challenge of improving services to taxpayers while dealing with increasing fiscal constraints and declining revenue and sources of funding. These challenges have become a permanent part of the local government landscape.

James City County endeavors to operate its public facilities as outlined in these guidelines to achieve the following goals:

- The quantity and quality of facilities will be maintained in relation to the population size and demand.
- The provision of public facilities remains an expression of what citizens need, desire, and are willing to financially support.
- Public facilities are located in close proximity to the greatest possible number of people and are provided proportionally to the number of people served.
- New facilities or facility expansions are located where most needed or required.
- Local community objectives and activities are supported by encouraging the full utilization of all public facilities, including the development of joint and multi-use facilities for use by different County agencies, the development of shared facilities, and the development of public/private partnerships.

The public facility and service guidelines are derived from a combination of sources. Many of the guidelines were established after reviewing standards set by federal, state, and other local plans. Some reflect the limits established by other independent agencies and boards such as the State Library Board. Each individual County department and public agency directly affected by these standards was also consulted regarding the relevance and effectiveness of the existing service guidelines. These community guidelines are unique to James City County, and are a product of research and analysis by the department heads, Planning staff, and administration.

Education: Public Schools

- For all measures of performance, the effective capacity rather than the designed capacity of each specific school should be used.
- For new suburban school sites,* the following guidelines apply. These include space allowances for recreation considerations (both school and community needs including sports fields) and other community activities:

Elementary:

- At least 27 developable acres** for a school with a 500-700 student design capacity;
- Optimally located within a two-mile radius of least 80% of the students

Middle School:

- At least 38 developable acres** for a school with a 700-900 student design capacity;
- Optimally located within an eight-mile radius of at least 80% of the students

High School:

- At least 52 developable acres** for a school with a 1,200-1,400 student design capacity;
- Optimally located within a ten-mile radius of at least 80% of the students

*Urban (or neighborhood) school sites will typically be located on much smaller parcels, usually in more densely developed areas inside the Primary Service Area. The size and composition of

these sites will necessarily be determined by the specific needs to be accommodated and the space available.

**When designing new educational facilities, the square feet per student standard for elementary, middle, and high schools should be considered to ensure efficient and appropriate use and size of design space during planning.

Education: Adult and Vocational Education

Adult Education:

- For each 20 basic and technical skills courses, plan for four to six medium size (less than 50 students per course) classrooms and one computer lab for each computer course.
- Plan for two meeting/conference rooms for each joint and large size (50 or more students) course offered.

Career and Technical Education:

- Plan space for approximately 10% of the current high school enrollment of the Williamsburg-James City County School District to participate in off-campus programs.
- Before the construction of new facilities or the redesign of existing facilities, evaluate the effectiveness of the current offerings of the Williamsburg-James City County Schools' career and technical training facilities, current and planned TNCC technical training facilities, and current and planned New Horizon's Woodside Lane facilities, as well as private sector participatory training opportunities.

Education: Library Services

- No more than 15 minutes drive time to a library location
- Five books per capita
- 1.0 square feet of library space per capita

Public Safety: Fire Protection and Emergency Medical Services

- Provide response times of six minutes or less within service areas that generate 365 or more emergency incidents per year.
- Provide a fire station for areas that generate 365 or more emergency incidents per year in order to provide an eight minute or less response time in areas not currently meeting the response time standard.
- Provide an additional response unit for any existing unit that is not available for more than five hours per day (on an annual average).

Public Safety: Law Enforcement

- Provide a police field office in all future fire stations. Field offices should be at least 250 square feet.
- Construct any new police stations on a minimum of two acres in order to provide the necessary minimum station square footage for civilian personnel, sworn officers, equipment, and department and visitor vehicles.
- Maintain an average response time of eight minutes for high priority calls.
- Any new police stations should be located in areas that allow police to meet community service needs with good access to all parts of the service area, and provide adequate parking for police, employees, and visitors.

Public Safety: Corrections

- Juvenile Detention Facilities - 20 bed spaces per 50,000 population and 20,000 square feet per 50,000 population

Public Health: Refuse Collection and Disposal

- Maintain sufficient waste disposal facilities to accommodate an average disposal rate of 7.5 pounds of waste per person per day.
- All County facilities should be equipped with appropriate recycling receptacles and mechanisms to reduce the solid waste stream produced in day-to-day operations.

General County Government

- 90% of residents within ten miles of a County office for paying taxes, tags, licenses, etc.

Public Utilities: Water and Sewer

- The provision of all water and sewer system facilities should be consistent with the James City Service Authority's Regulations Governing Utility Service, Design and Acceptance Criteria for Water and Sanitary Sewer Systems, Standards and Specifications for Pump Stations, and Hampton Roads Regional Technical Standards.

County-Wide and Regional Facilities

- Many services have been, and will continue to be, provided cooperatively on a regional basis. Where appropriate, James City County should make arrangements to expand such services. It is not the intent of these guidelines to duplicate regional public facilities or private facilities (e.g., golf courses) where such facilities are deemed to be meeting the needs of James City County residents.

Goals, Strategies, and Actions for Public Facilities

Goal:

1. Commit to and provide a high level and quality of public facilities and services.

Strategies and Actions:

1.1. Design, locate, and utilize public facilities and services more efficiently.

- 1.1.1. Encourage full utilization of all public facilities including joint use by different County agencies, to support local community objectives and activities.
- 1.1.2. Acquire land for, efficiently design, and construct new public facilities in a manner that facilitates future expansion and promotes the maximum utility of resources to meet future capacity needs.
- 1.1.3. Design facilities and services for efficient and cost-effective operations over the expected life of the facilities or programs.
- 1.1.4. Develop public facilities as components of regional programs where feasible.

- 1.1.5. Construct new facilities consistent with anticipated needs and County fiscal constraints by continuing to:
 - a. Utilize tools such as life-cycle costing and value engineering (as applicable) to develop the most cost effective facilities. Accept higher construction costs only if the projected operating costs make the facility more cost effective over time;
 - b. Develop a long-term maintenance program to ensure adequate maintenance of existing and proposed facilities;
 - c. Locate new facilities in such a way as to provide convenient service to the greatest number of County residents or service consumers;
 - d. Obtain control of public facility sites that will be required by future growth and development;
 - e. Implement detailed Service Plans for all County public facility providing departments, divisions and agencies. Service Plans should include commentary, analysis, and policy recommendations for linking the location and design of their respective public facilities to the County's Comprehensive Plan land use and urban design policies. Further, the Service Plan should include evaluations of performance with respect to the service and facilities guidelines for each public facility.
- 1.1.6. Apply appropriate zoning, land use and other adopted County criteria when evaluating public facility sites and uses.
- 1.1.7. Assist with the public education and promotion of existing public services, including career and technical education opportunities.
- 1.1.8. Explore ways to integrate the various data resources, programs, and systems of the County such that data may be more readily shared and accessed between departments and divisions. Develop minimum standards for data storage that ensure that data is produced and safely stored in compatible formats.
- 1.1.9. Encourage the provision and location of preschool programs and classrooms throughout the County utilizing government sponsored programs, public schools, private schools, private businesses, churches, and where appropriate, home-based preschools.
- 1.2. **Adequately fund or finance public facilities and efficiently utilize available funding resources.**

- 1.2.1. Review annually the adequacy of existing public and private resources to finance needed qualifying public facilities through the County's Capital Improvement Program and annual budget process.
- 1.2.2. Identify specific public/private partnership opportunities to provide funding for new and existing public facilities.
- 1.2.3. Evaluate current fiscal policies to determine if they optimize the County's ability to fund needed qualifying public facilities.

1.3. Balance growth and development with the provision of public facilities.

- 1.3.1. Ensure that development occurs concurrently with the adequacy and accessibility of existing facilities and is phased in accordance with the provision of new facilities and services.
- 1.3.2. Consider additional Adequate Public Facilities Policies and/or Level of Service Standards to complement the Adequate Public Facilities Test policy for schools already in place.
- 1.3.3. Where feasible, encourage development of public facilities and the provision of public services within the Primary Service Area (PSA) as defined on the Comprehensive Plan Land Use Map.
- 1.3.4. Maintain and construct facilities in accordance with expected levels of service objectives and fiscal limitations.
- 1.3.5. Apply public facility standards to identify facility requirements associated with level of need, appropriate quantity, size and relationship to population and growth areas.

1.4. Design, construct, and operate public facilities in a sustainable manner.

- 1.4.1. Utilize energy efficient heating, cooling, ventilation, lighting, (and similar) systems and designs for newly constructed facilities, and where feasible, for renovations of existing County facilities. Innovation and technology (such as that found in geothermal heating and cooling systems, green roofs, and solar panels) should similarly be employed where feasible, and where appropriate levels of long-term sustainability, cost savings, efficiency, and durability can be clearly expected or demonstrated.
- 1.4.2. Build all new County Buildings and facilities to meet or exceed Silver LEED (Leadership in Energy and Environmental Design) (or industry similar or successor) standard wherever applicable. The Silver LEED (or industry similar or successor) standard should also be sought for renovation projects whenever feasible. Adopt a specific County policy governing the application of

sustainable building standards to County built and occupied facilities and buildings.

- 1.4.3. Where practical, utilize Low-Impact Development (LID) designs for newly constructed facilities, and where feasible, for renovations of existing County facilities.
- 1.4.4. Utilize energy efficient vehicles and equipment when they are available and when not otherwise limited by fiscal or functionality considerations.
- 1.4.5. Evaluate all proposed public facilities for potential impacts, and provide buffering and mitigation equal to, or greater than (when practical), that required under County ordinances.

1.5. Ensure the safety and security of public facilities and buildings.

- 1.5.1. Evaluate the security of County facilities and buildings from internal and external threats to better ensure the safety of citizens, visitors, and County staff, and to better protect County assets, sensitive data and data systems, the public water supply, and property.
- 1.5.2. During renovation or new construction, structurally improve the ability of appropriate public facilities and buildings to better withstand physical perils (such as high wind, explosion, flooding, etc.) to enable them to serve as shelters or otherwise continue operating in times of crisis, emergency, or severe weather.
- 1.5.3. Locate and design new public facilities with consideration of CPTED (Crime Prevention Through Environmental Design) principles to protect both County facilities and the people utilizing them. Use CPTED principles when renovating facilities wherever applicable and practical.
- 1.5.4. Prepare and maintain detailed emergency preparedness plans to protect the County's citizens, facilities, and infrastructure.

1.6 Promote County-wide and regional access to high-speed digital services that meet or exceed the National Broadband Strategy and other advanced technology. (See also: Community Character Section.)

- 1.6.1 Support the development of a County-wide or regional broadband deployment policy and plan, to include consideration of the guidelines, references, and recommendations in the Commonwealth of Virginia Community Broadband Tool-Kit.
- 1.6.2 Form a citizen-based Broadband Advisory Committee to assist and advise the County on development and implementation of a community broadband plan.