

## **PUBLIC FACILITIES (DRAFT-CLEAN VERSION)**

### **INTRODUCTION**

Public facilities and utilities provide the basic critical infrastructure for a community and they provide services that improve the quality of life for all residents. This includes the infrastructure to support such services as police, fire and rescue, the court system, libraries, public schools, parks and recreation, transportation, health and human service providers, and utilities such as water, waste water, telecommunication and electrical, among others.

The Public Facilities element of the Policy Plan is used by the County during the review of a new or expanding facility to ensure the proposed facility aligns with the objectives and policies of the Comprehensive Plan. Generally, these policies provide for a transparent and equitable planning process with the community, and ensure that facilities will provide quality access to services for all residents, be compatible with the surrounding area and uses, meet the facility needs for service providers, and align with other countywide strategic goals and policies.

The vigorous growth of Fairfax County has been paralleled by increased demands for public services and facilities. The county's present system of public facilities demonstrates a high commitment to service provision and the community's expectations of such. However, as the infrastructure in developed portions of the county ages, there will be increased competition between newer and older areas for facility dollars. Therefore, it will become increasingly important that future development occurs in concert with the provision of adequate public facilities, if the existing level of service is to be maintained in a fiscally sound manner.

### **PUBLIC FACILITY REVIEW PROCESS**

The primary mechanisms for applying this guidance and ensuring a well-balanced and adequate public facility system is through the Capital Improvement Program (CIP), the 2232 Public Facility Review process, and review of Plan Amendments and Rezonings.

The CIP is the County's five-year roadmap for creating, maintaining and funding present and future capital infrastructure requirements. The CIP serves as a planning instrument to identify needed capital projects and coordinate the financing and timing of improvements. The CIP provides the framework for the County Executive and the County Board of Supervisors with respect to managing bond sales, investment planning and project planning. Fairfax County's CIP includes not only a 5-year plan but a future outlook that includes the potential long-term requirements beyond the current 5-year period. The CIP is evaluated each year, with individual departments proposing new projects or adjusting current projects within the program. The CIP is presented to the Planning Commission annually through a workshop with agencies and public hearings. After completing its review of the Program, the Planning Commission forwards its recommendations to the Board of Supervisors for consideration and CIP adoption.

The 2232 Public Facility Review process is required to meet Va. Code 15.2-2232 and is used for the Planning Commission to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Comprehensive Plan. Applications for 2232 review are reviewed by various agencies for alignment with the Comprehensive Plan. After review, staff will make a recommendation to the Planning Commission for approval of the new or expanded facility. After the 2232 is approved, the proposal will be administratively reviewed for site and building plan permits, as needed.

## COUNTYWIDE OBJECTIVES AND POLICIES

The following general objectives apply to the county's public facility planning effort as a whole and specific functional program areas in particular. These objectives should be viewed as the key principles for establishing a facility network which is responsive to the county's ability to pay, community expectations, the public health, safety and general welfare, and neighborhood and land use considerations.

**Objective 1: Locate new facilities to meet the needs of service providers and provide convenient service to residents.**

- Policy a. Site facilities appropriately to the area they are intended to serve.
- Policy b. Reduce service area overlap between similar facilities, unless overlap is necessary to correct service deficiencies.
- Policy c. Site facilities in accordance with locational standards that maintain accepted levels of service while reducing duplication or underutilization.
- Policy d. Ensure that minimum populations or service thresholds are projected to be met before facility construction is undertaken.
- Policy e. Facilities that provide on-site services to the public should be located near transit, where possible, with the necessary pedestrian infrastructure to safely allow users to access the facility.
- Policy f. When selecting and approving a new facility, alternate sites should be considered to demonstrate the selected location is the most suitable site.
- Policy g. Buildings that are being considered for decommissioning, demolition, or placement out of service, and that have reached 50 years of age, or are known to have architectural, cultural, or historical importance, should be evaluated for their potential significance and eligibility for listing in the *County Inventory of Historic Sites*. If found eligible for Inventory listing, an effort should be made to preserve the building with its current use or adaptively reuse the building. If no feasible adaptive reuse is found, then the building should be thoroughly documented prior to demolition.

**Objective 2: Plan, fund, construct and maintain facilities in accord with expected levels of service objectives and fiscal limitations.**

- Policy a. Program the establishment of facilities through the county's CIP
- Policy b. Before acceptance into the CIP, all projects should be reviewed to ensure they align with the policies, objectives and goals of the Comprehensive Plan.
- Policy c. Follow adopted public facility standards to identify facility requirements associated with level of need, appropriate quantity and size, and relationship to population.

- Policy d. When planning and funding facilities, consider equitable distribution of facilities to meet the different needs of individuals and communities.
- Policy e. Prioritize projects that align with an agency’s adopted strategic plans, needs assessments and/or master plans. These projects should align with the Countywide Strategic Plan and Comprehensive Plan.
- Policy f. Encourage the use of metrics and data to assess the need for new or expanded facility development as part of the review of the CIP and review established CIP project criteria.
- Policy g. The Department of Planning and Development and the Department of Management and Budget should work to identify links between the CIP, County infrastructure, service needs, and land use planning. The linkage would reflect anticipated and funded CIP projects in the Comprehensive Plan. These links will help inform the public, assist in public facilities review, and facilitate a better understanding of the CIP as a tool to implement the Comprehensive Plan
- Policy h. Ensure adequate maintenance of existing facilities.
- Policy i. Staff should review established maintenance classifications and prioritization levels for assessing facility and infrastructure conditions and ensure that the highest priority infrastructure replacement and upgrade project needs are identified by each agency and FCPS annually. The CIP should provide the Board with a clear and County-wide integrated view of the scale and scope of unmet infrastructure replacement and upgrade needs.

**Objective 3: Balance the provision of public facilities with growth and development.**

- Policy a. Construct new facilities or expansions of existing facilities, where appropriate in size and quantity consistent with projected needs.
- Policy b. Ensure that adequate facility space and services are available, programmed in the CIP, or provided by new development, before increasing planned intensities through revision of the Comprehensive Plan.
- Policy c. Assess the adequacy of and need for public facilities during the rezoning process.
- Policy d. Phase increases in development intensity with the establishment of necessary facilities, when rezoning to higher intensities is to occur prior to the establishment or programming of adequate facilities.
- Policy e. Designate and reserve future public facility sites that will be required for future growth and development.
- Policy f. Ensure that when existing public facility sites are no longer needed for their original use, the sites are reserved, to the extent possible and prudent, for other public uses.
- Policy g. Identify and acquire, as fiscally possible, sites for public facilities in advance of demand either through purchase or dedication.

- Policy h. Encourage provision of buildings or land for public facilities as needs are identified.
- Policy i. Prioritize public facility and infrastructure investment and development in growth areas such as urban centers, transit station areas, suburban centers, and revitalization districts.

**Objective 4: Consider the impact of public facilities on adjacent planned and existing land uses.**

- Policy a. Locate public facilities in areas of compatible land use when possible, if service efficiency and cost effectiveness can be achieved. Siting facilities in areas of different land uses is acceptable and at times required, to provide centrally located public facilities which are critical to the public interest.
- Policy b. Design facilities to celebrate and enhance the community identity and existing or planned character of the surrounding area.
- Policy c. Ensure that public facilities are properly screened and buffered in order to mitigate visual impact on existing or planned adjacent development of a different use or nature.
- Policy d. Ensure that site size and development conforms with all requirements of the Fairfax County Zoning Ordinance and exceeds site acreage requirements, as possible, to achieve maximum compatibility with surrounding land uses.

**Objective 5: Acquire sites which are appropriate for the facility's specific purpose. Apply acceptable criteria when evaluating public facility sites.**

- Policy a. Consider accessibility in siting facilities. In general, public facilities should be near primary arterial roads. Exceptions to this locational principle include facilities with a pedestrian orientation, such as a neighborhood park or school where local roads are the preferred immediate access.
- Policy b. Locate facilities on sites which have adequate acreage for short-term needs but can also accommodate expansion.
- Policy c. Avoid areas of environmental sensitivity except where site acquisition is in support of open space. Additionally, avoid areas vulnerable to environmental and climate-related hazards, including areas vulnerable to current and future flooding. Flooding vulnerability should include both urban and riverine flooding considerations.
- Policy d. Evaluate engineering considerations, such as slopes and soils and other factors pertinent to knowing the extent of the site's development cost.
- Policy e. Locate, as possible, facilities on sites with public water and sewer.
- Policy f. When planning and coordinating PPEA or public-private partnership projects, the Department of Planning and Development should be involved as early as

possible in the process to ensure the proposed project aligns with the goals, objectives and policies of the Comprehensive Plan.

- Policy g. Locate facilities on sites where existing vegetation is capable of providing a natural buffer, natural shading and cooling, stormwater absorption and enhancing building design. Preservation of existing vegetation should be prioritized when designing the location facility and infrastructure placement.

**Objective 6: Design, retrofit and maintain public facilities and sites in an environmentally-sensitive manner.**

- Policy a. Apply low impact development (LID) practices and natural landscaping methods with the goal of minimizing resource consumption, reducing stormwater runoff and flooding, decreasing life-cycle maintenance requirements, increasing the habitat value of each site, and increasing soil and plant health. Consider factors including costs, health, safety/security, and the broader context of facility and site needs (e.g., recreational uses). Design and coordinate county infrastructure projects, such as trails, sanitary sewer lines, stormwater management infrastructure, and stream restorations, to minimize disturbance of natural habitats and to minimize the limits of clearing and grading. Design and maintain utility corridors as natural areas to the extent practicable.

- Policy b. Where opportunities arise in consideration of the factors identified in Policy a above, retrofit and maintain existing facilities and sites with natural landscaping and LID methods/practices.

- Policy c. Ensure that natural landscaping and LID practices are monitored and maintained such that they will remain viable over time. Species should be native or adapted (non-invasive, climate-resilient) species.

- Policy d. Apply green building practices within the design of public facilities. Public facilities should be built and operated in alignment with the Fairfax County Operation Energy Strategy (OES) and the Sustainable Development Policy for Capital Projects.

- Policy e. Apply climate-resilient design practices to the design of public facilities to ensure long-term resilience to climate hazards such as flooding, severe storms, and extreme heat.

**Objective 7: Prioritize the co-location of facilities to better meet consumer services and provide the most efficient use of available land.**

- Policy a. Co-location of facilities should be prioritized when there are opportunities for agencies to share resources, provide overlapping services or when there is a benefit for residents to gain access to multiple services at one location.

- Policy b. Co-located facilities should be reviewed to determine if additional security and privacy features are included in the design of the facility to ensure that all individual facilities maintain their necessary operating integrity.

- Policy c. Affordable housing and childcare should be considered and prioritized in conjunction with new facility development or included in the co-location of other public facilities where appropriate.
- Policy d. Memorandums of understating and/or shared maintenance agreements should be established before the opening of a co-located facility.
- Policy e. Create healthier environments through the use of county properties by encouraging the incorporation or co-location of amenities for all ages and abilities that support healthy and active lifestyles.
- Policy f. Encourage a more urban design approach to facility development, such as increased vertical uses. Facilities should be designed, when possible, to have the ability to expand vertically when expansion of services in the future may be needed.
- Policy g. Encourage the development of satellite offices or shared space for use by multiple agencies in order to provide better access, throughout the county, to employees and residents.

## THE PUBLIC FACILITIES ELEMENT

The following guidelines provide policies and standards for the following factors:

Location - where should facilities be located in order to provide accessibility, support planned land uses, and adequately address the needs of the service providers.

Character and Extent - the scope of the facility which should be constructed in relation to the population, the appropriate facility size, and design requirements to achieve compatibility with the surrounding area and environmental sustainability.

Other - factors which must be addressed to provide an acceptable level of service or community or user benefit.

## EDUCATION

Fairfax County residents are offered a full and varied range of educational opportunities through the county's public school system and the presence of both Northern Virginia Community College and George Mason University.

### PUBLIC SCHOOLS

#### INTRODUCTION

Fairfax County Public Schools (FCPS) is the major provider of education in the county. FCPS, which has been nationally recognized for excellence, is one of the largest school systems in the nation and has a wide range of educational facilities that accommodate instructional programs for county students from kindergarten through grade 12. In addition to accommodating educational programs, school facilities are used to meet the county's recreational and cultural needs through programming by the Fairfax County Department of Neighborhood and Community Services. Facilities are provided to serve the following levels of education:

- Elementary ..... kindergarten to grades 5/6
- Middle ..... grades 6/7 and 8
- Secondary ..... grades 7 through 12
- High ..... grades 9 through 12

Additionally, FCPS offers several unique instructional, nontraditional, and special education programs in their facilities. Instructional programs include FCPS Pre-Kindergarten (PreK), Advanced Academic Programs, High School Advanced Placement, International Baccalaureate Diploma Program, and High School Academy. Nontraditional programs include Fairfax County Adult High School; Achievement, Integrity, and Maturity program; Alternative Learning Centers; Nontraditional Career Readiness Academy; Transition Support Resource Center; and Adult and Community Education. Special education programs are a specially designed instruction to meet the unique needs of children with impairments or disabilities. Special education services may include, but are not limited to, preschool autism, intellectual disabilities, deaf or hard of hearing, blind and visually impaired, or physical disabilities. A continuum of services is available at every school and comprehensive services are provided at selected sites. FCPS facilities are also used to support the School Age Child Care (SACC) Program that is sponsored by the Fairfax County Office of Children. SACC provides school-based before and after school care for

elementary school children. Additionally, a continued priority is expanding the availability of space to serve PreK.

The Constitution of Virginia delegates the supervision of public schools to the school board of each locality. Virginia school boards are not county agencies. The Virginia Supreme Court consistently has acknowledged that the power to select school sites and to determine how school properties are used is essential to the School Board's supervisory role.

The fundamental element in capital facility planning for public schools is determining future memberships, a complex procedure which continues to be refined. The school system employs multiple methodologies for projecting student populations.

FCPS strives for effective facility planning to mitigate costs associated with over-estimates and ensure adequate physical space for students and programs. The need for new school construction or capacity enhancements is considered to address capacity deficits or accommodate future needs in response to growth. Capacity is the number of students a school can support when the restriction of program of studies is applied. Capacity is measured differently for the elementary, middle, and high school levels. For all school levels, both a design capacity and program capacity is calculated. Design capacity reflects the capacity of a building as it was originally constructed. Newly constructed and renovated facilities are designed in accordance with approved education and safety specifications. Program capacity refers to the number of students a facility can accommodate based on the current programs at a school. Unlike design capacity, the program capacity changes each school year depending on programs allocated to a facility and how the space is utilized.

Student membership projections, coupled with capacity estimates and facility standards, provide the framework for capital facility planning. Locational criteria assist in site planning, identification, and selection.

It is a continuous challenge to maintain and improve the county's high standards for educational facilities. In addition to keeping pace with technological advances and demographic fluctuations, FCPS must acquire school sites or buildings in an ever-tightening real estate market. Land and building acquisition, construction of schools or lease of buildings will compete with other community facilities for available land and funding resources. Due to limited funding and the number of available parcels that meet standard acreage requirements, FCPS will need to consider school sites in an urban context or on parcels of limited size. While providing for new facilities is expected to be a major focus for FCPS, it is becoming increasingly apparent that the rehabilitation of existing facilities will compete for limited facility funding. Therefore, every effort should be made to ensure that projects cost-effectively meet FCPS requirements.

### Location

**Objective 8:** **Acquire sites for schools or educational facilities through negotiation, dedication, or purchase. This may include the siting of schools or facilities in high density areas or on parcels of limited size.**

Policy a. Locate schools on parcels meeting the optimum number of general locational criteria. Sites should be evaluated by the following factors:

- Encourages multimodal transportation with safe and convenient accessibility to pedestrian, bicycle, and road networks;

- Contains bike lanes and network through quiet neighborhood streets;
- Avoids high traffic roads by being in areas with lower traffic volume and speed;
- Implements traffic calming infrastructure within the school walk zone;
- Transit best supports the community being served by the school facility;
- Floor Area Ratio (FAR) to accommodate expansion, when the school is originally sized below the maximum efficiency standard for that type of school;
- Compatibility with adjoining planned and existing development;
- Aesthetically pleasing physical qualities with appropriate engineering features (e.g. soils, topography);
- Are located in close proximity to other public facilities, such as police and fire and rescue services, public parks and libraries.

Policy b. Locate school sites, when situated in areas conducive to pedestrian traffic, to take advantage of maximum walking distances of one mile for elementary schools and one and a half miles for middle schools, high schools, and secondary schools.

Policy c. Locate schools when possible and appropriate, where they can be served by public water and sewer. When elementary schools must be located in non-sewered areas in order to serve their target student population, well and septic can be utilized if no other alternative is available.

Policy d. When land dedications cannot be obtained, acquire school sites or identify other innovative approaches to meet school facility needs to ensure availability of both the preferred location and the necessary site features. Plan for acquisitions through the Capital Improvement Program and the Comprehensive Plan.

Policy e. Encourage site dedications that provide sufficient FAR to meet locational criteria.

Policy f. Coordinate the acquisition and design of the site's active recreation areas with the Fairfax County Park Authority and other agencies. This will ensure maximum opportunities for co-location and efficient use of recreational and other facilities.

Policy g. Encourage commitments for school renovations and additional capacity as part of the development and redevelopment process.

Policy h. Encourage the identification and creation of spaces with flexible design that can meet education needs.

**Objective 9: Distribute administration and maintenance facilities to conveniently serve the areas they support where possible and appropriate.**

Policy a. Locate Area Administration buildings in the school areas they serve.

- Policy b. Locate maintenance and operation facilities to afford greater convenience, efficiency and reduction of travel time.

Character and Extent

**Objective 10: Locate schools on sites which meet or exceed minimum state size guidelines where possible and appropriate.**

- Policy b. Consider innovative urban design, for parcels limited in size and/or in high-density areas that may not meet with minimum state size guidelines.
- Policy c. Consider sites or buildings that allow for flexibility in school facility types. School facilities may include a traditional or nontraditional school, or buildings that provide special education programs, administrative space, and/or other support functions.

**Objective 11: Design schools and educational facilities to allow for optimal site utilization while providing optimum service to, and compatibility with, the local community.**

- Policy a. Design and construct schools in accordance with approved education and safety specifications.
- Policy b. Design schools to maximize a site's utility, while providing for safety and aesthetics.
- Provide for possible future expansion and allow for efficient flow of traffic to, from, and within the school site.
  - Provide stacking space and circulation for school buses, student drop off, onsite bus parking, when possible and off-street parking, as required.
  - Provide staging area for the kiss and ride, as required.
  - Minimize the impact of school traffic on local road networks.
  - Provide balance of parking spaces to include staff, visitors, and, as appropriate, students.
- Policy c. Locate schools in or near residential areas, mixed use/community-serving retail areas, and/or near transit routes where available to optimize the resulting safety and convenience for students, residents, and commuters. When possible and appropriate, schools should not be located where there are barriers to pedestrian and bicycle travel.
- Policy d. Provide for compatibility between schools and adjacent properties with appropriate screening and fencing, in accordance with the Fairfax County Zoning Ordinance. When designing and constructing schools, preserve as much mature native or non-invasive, adapted vegetation as possible.
- Policy e. Design buildings for educational purposes so that intensity and character are compatible with surrounding planned and existing development.

- Policy f. Consider Area Plan design guidelines, as appropriate, for schools and buildings for educational purposes.
- Policy g. Consider co-location of different levels of education and other types of programs, with the option of shared facilities such as cafeteria, gymnasium, auditorium, library, and administrative offices.
- Policy h. Encourage co-location of FCPS and Fairfax County facilities and land, as applicable based on compatibility with each other.
- Policy i. Locate schools no closer than 1,000 feet of access-controlled highways and/or major arterial roads, when possible and appropriate.

**Objective 12: Consider adaptive reuse of buildings for public schools and educational purposes.**

- Policy a. Consider properties such as office, commercial, or other buildings for conversion to education facilities.
- Policy b. Consider commercial sites to offer FCPS programs or other uses which may include, but are not limited to, administration, operational and maintenance uses or school bus parking spaces.
- Policy c. Consider alternative spaces for outdoor recreation, such as converted rooftops and underutilized surface parking lots. Coordinate with the Fairfax County Park Authority or other organizations for efficient use of recreational facilities for both school and community use.
- Policy d. For reuse of buildings, select buildings that provide access, safety, security, and meets play space requirements.

**Objective 13: Encourage optimization of existing schools and other facilities, whenever possible and appropriate, to support educational and community objectives.**

- Policy a. Build additions, when possible and appropriate, to minimize the need for new facilities. Analyze carefully the costs and benefits associated with construction of an addition as compared to a new facility.
- Policy b. Consider the expansion of existing school facilities identified on the Comprehensive Plan map as a feature shown of the Comprehensive Plan provided the proposed expansion has received prior approval by a public bond referendum, is included in the county's currently adopted Capital Improvement Program, and does not significantly impact the character of the existing facility, its compatibility with the surrounding area, and adherence to the Zoning Ordinance and Comprehensive Plan guidance.
- Policy c. Provide temporary facilities as required to respond to short term student population accommodation needs.

- Policy d. Encourage parity between older and newer schools and facilities through renovation. Design and construct schools in accordance with approved education and safety specifications. Consider expected future utilization rates when proposing renovation projects.
- Policy e. Continue the practice of serving local communities for scouting, senior citizen programs, and other neighborhood based activities through the use of school facilities. Provide access to school grounds for community use of recreational facilities.
- Policy f. Continue the practice of working in collaboration with the Fairfax County Office for Children and other organizations for the provision of space for before and after-school childcare services.
- Policy g. Continue the practice of allowing the Park Authority and other organizations to utilize sites before school construction begins.
- Policy h. Obtain formal agreements with appropriate stakeholders when identifying interim uses of school sites prior to school construction and include the scope, criteria, and duration. Review the agreements in conjunction with Fairfax County and FCPS CIP schedules.
- Policy i. Ensure FCPS is part of the identification or change in use of school and other facilities to support education and community objectives.
- Policy j. Provide space for other public service needs, when possible and appropriate, in underutilized schools.
- Policy k. Consider co-location of multiple education facilities on school sites.

**Objective 14: Ensure the mitigation of impacts to school facilities caused by growth in residential development through provision of proffers, conditions, contributions, commitments, and land dedication.**

- Policy a. Offset residential development impacts to school facilities based on the recommendations provided in the Land Use element of the countywide Policy Plan.
- Policy b. FCPS recommend provisions for contributions, where appropriate. Contributions could be more traditional in nature, such as dedication of a school site, or might include more innovative urban design solutions such as locating school facilities with parks or within buildings serving other uses.
- Policy c. Recommend a fair share contribution for development applications that propose residential use, where appropriate, so that applications contribute to land acquisition and construction cost to address the school needs that are generated if they are unable to provide a site or building for reuse.
- Policy d. Seek dedications for school facilities, land or building(s), in advance of approval of new residential development applications in order to maintain and improve the county's high standards for educational facilities and to not impact

current levels of service provided by the public school system. FCPS collaborate with Fairfax County and applicant(s) to identify site(s).

- Policy e. Ensure that Comprehensive Plan land use amendment proposals for higher residential densities include recommendations for the provision of school facilities, as applicable, to offset the impacts of increased residential density.

## HIGHER EDUCATION

### INTRODUCTION

Fairfax County encourages and supports institutions of higher learning in order to promote intellectual development and educational opportunities for all students, and to provide resources which benefit the community as a whole.

Fairfax County's two public institutions of higher learning, George Mason University (GMU), a four-year university, and Northern Virginia Community College (NVCC), a two-year college, are both state funded. NVCC is also funded (for capital only) by the local jurisdictions where campuses are located. Funding provided by these jurisdictions is calculated according to population, and in Fairfax County, the percentage share is determined annually.

### Character and Extent

**Objective 15: Ensure that development of higher educational facilities is consistent with the goals of the Comprehensive Plan.**

- Policy a. Encourage the state to phase facility construction in conjunction with area road improvements.
- Policy b. Encourage the state to construct new facilities to be compatible with and supportive of adjacent land uses.
- Policy c. Encourage the state to construct new facilities in an environmentally responsible manner.

**Objective 16: Expand services and facilities of higher education commensurate with regional demands and expectations in areas that are conveniently located for students and effectively concentrated for educational efficiencies.**

- Policy a. Expand services to the community through the community college. Support NVCC's efforts which continue to provide undergraduate and continuing educational instruction, study, and research, and the use of a community center for meetings and cultural events.
- Policy b. Encourage the state to achieve GMU's plans for additional educational facilities and services, in a manner which is consistent with the Comprehensive Plan and the county's road and facility systems. Ensure that the implementation of these plans respect adjacent planned and developed land uses.

## LIBRARIES

### INTRODUCTION

The mission of the Fairfax County Public Library is to build community and promote literacies through programing, community spaces, technologies, and collections of educational and recreational resources in a variety of formats, thus enhancing individual and community life. To achieve fulfillment of this mission the Library will continue to:

- Provide a network of facilities that offer library services responding to the needs of the community in which each library is located and systemwide mechanisms to share resources among branches.
- To select, obtain, process and provide access to materials that meet the educational, recreational, and informational needs of Fairfax County residents.
- To provide convenient, remote or off-site access to library services for county residents that is free of time and location constraints.

The library system is comprised of two categories of libraries based primarily on facility size.

- Regional Libraries are the largest facilities with approximately 25,000 to 45,000 square feet.
- Community Libraries range in size from 13,000 to 20,000 square feet.

Expanding technological capabilities have enabled both categories to offer comprehensive collection of materials, services and programs to their local community as well as to support the informational needs of all county users on a coordinated and shared basis.

Fairfax County Public Library provides library services to the City of Fairfax. Services to the hard of hearing, visually and residents with disabilities are provided by Access Services located at the Government Center.

The Library's strategic plan provides that the array of services, collection and staffing specialties available throughout the system support five strategic goals, each with its own strategic focus.

- Expand access to library services
- Foster an environment of innovation
- Design events and services that engage our diverse and dynamic community
- Integrate technology that will enhance and expand the library experience
- Provide literacy services and materials across age ranges

In accordance with One-Fairfax, individual libraries focus on the demographics of their communities and promote equity when planning and delivering programs and services to their diverse populations.

In addition, new technologies for information delivery are placing new demands on library services. Existing libraries renovated and redesigned to maximize the use of information technologies. New facilities need to be designed to incorporate new technologies and address the demands those technologies place on facility infrastructure. These new designs take advantage of remote access capabilities that enable users to access library services from anywhere using a variety of devices and provide new opportunities to deliver information services in non-traditional ways.

The Library Board of Trustees recognizes that current fiscal limitations restrict the achievement of the Virginia standard of .6 square foot of library space per resident or of the Board's own standard of .5 square foot adopted in 1984. As of July, 2020, there were approximately .43 square feet of library space per resident. With a population that continues to grow, this is projected to shrink to .38 square feet by 2035 even with the addition of the Kingstowne Regional Library that was in the planning phase as of 2022.

### Location

**Objective 17: Locate library facilities to provide service to the greatest number of persons within designated service areas, and provide high visibility, safe and easy access, and ample size for the building, parking areas, landscaping and future expansion.**

- Policy a. Locate new construction of the libraries in growing portions of the county and promote expansion of existing facilities in stable areas in order to maintain the planning standard of .5 square feet of library space per resident.
- Policy b. Library facilities on sites that are centrally located in terms of service area, population distribution and distance. Specifically, library locations should be prioritized so that they are integrated into the community, if possible, near community centers with high levels of pedestrian, bicycle and transit access.
- Policy c. Locate library facilities near major thoroughfares in order to maximize visibility. In general, regional libraries should have the highest degree of exposure and be located on or near arterial roads. All libraries should be easily accessible to the residents immediately served and regional libraries should be accessible to libraries for which they provide support services. Identification of traffic patterns and proximity to other libraries are vital in locating library sites. Proximity to high school/intermediate school sites can be considered provided other library criteria are met.
- Policy d. Ensure that access to a facility is from a feeder or collector road directly to a major thoroughfare. This eliminates dangerous turning patterns and unnecessary curb cuts to heavily traveled roads.
- Policy e. Locate libraries in proximity to or within commercial-retail areas as this promotes visibility, land use compatibility, and convenience because many library visits are in combination with shopping and work travel.
- Policy f. Promote co-location of libraries with other County services so users can combine library visits with accessing other County resources and services promoting visibility and convenience.

Character and Extent

**Objective 18: Library facilities should be compatible with adjacent land uses and with the character of the surrounding community and should be sized to provide adequate space for the population to be served.**

Policy a. Ensure that a library facility is designed compatibly with the character of its surrounding area.

Policy b. Acquire sites for libraries that will be large enough for future expansion, should additional facilities be needed. In general, a site area of 3 to 5 acres is preferred for a regional facility and 2 to 3 acres for a community facility. The standard for site size as determined by County staff combines the land needed for the structure plus the land needed for parking requirements.

Policy c. The total library system should provide at least .5 square foot of library space per resident. Accordingly, ensure that the population of each library district is served with adequate facilities, based upon the following size and population standards:

- Size: In general, regional libraries should be between 25,000 and 45,000 square feet. Community libraries should be between 13,000 and 20,000 square feet.
- Service population: As a function of sub-Census tracts within each library service area, the size and demographic makeup of a service population varies slightly from year to year. Regional libraries serve populations of between 45,000 and 115,000. Community libraries serve populations between 16,000 and 62,000 depending on the density of the particular service area.
- Service area: All libraries have service areas that vary slightly from year to year depending on drive time. While the vast majority of residents are within a 10-minute drive of a library, no resident is more than a 15-minute drive from their nearest public library. For mini libraries the nature of the service area is more as a subset of the closest regional or community library given the level of library service.

## PUBLIC SAFETY

### INTRODUCTION

The provision of public safety services is basic to an orderly society and the protection and safeguarding of the health and safety of county residents. For the most part, these functions in the county are the responsibility of the Police Department, Fire and Rescue Department, Office of Sheriff, Department of Emergency Management and Security (DEMS) the Circuit and General District Court System and the Animal Services Division.

**Objective 19: Maintain and expand training facilities for public safety officials, including but not limited to police officers, deputy sheriffs, fire and medical emergency personnel and animal wardens.**

Policy a. Expand when necessary the Public Safety Academy for sworn police officers and deputy sheriffs based on needs analyses for these protective agencies.

Policy b. Expand the Fire and Rescue Training Academy based on a needs analysis for this facility of the Fire and Rescue Department.

**Objective 20: Enhance the operations elements facilities to properly support the duties of sworn law enforcement officials, fire and emergency personnel and animal protection officers.**

Policy a. Provide and locate the facilities that will have the most optimum effect for public safety telecommunications necessary for the rapid dispatch of police units, fire and rescue units and animal wardens to the scene of citizen or other agency requests for assistance.

Policy b. Locate telecommunications facilities and equipment associated with public safety agencies in accordance with communication utility standards presented in the "Public Utilities" section of the Comprehensive Plan.

Policy c. Locate new public safety facilities in order that adequate space remains on site for future expansions and that public safety agencies which relate closely in their activities or clients are located in close proximity to one another with shared utilization to the extent possible.

Policy d. Support the expansion of Judicial Center Complex to better serve the needs of the court system and other public safety and human services..

## POLICE

### INTRODUCTION

Due to the nature of the majority of police work, which involves mobile patrol operations, the greatest need for facility space has been and will be for administrative, operational support and training functions. There are no nationally accepted standards for such facilities.

Similarly, there are no nationally accepted service area standards for police patrol areas. Due to the flexible and decentralized nature of police work, the day to day demands on police personnel change and local deficiencies can readily be alleviated through reassignment of officers and vehicles between station and patrol areas.

### Location

**Objective 21: Locate police stations and facilities so as to provide the most efficient and expeditious law enforcement/protective service to the county as a whole and to the individual police districts.**

- Policy a. Locate new police stations near the geographical center of the service area; preferably not in residential areas, but adjacent to commercial areas; compatible with adjoining areas; on a major road with good access to all parts of the service area; and adequate parking for police, employees and visitors.
- Policy b. Plan for new police substations in growing areas of the county.
- Policy c. Plan for a new enhanced training campus to be co-located with Emergency Vehicle Operation, Firing Range, and K9 facilities.
- Policy d. Evaluate the need for locating a centralized police vehicle storage center, to provide a secure area for vehicles involved in fatal accident investigations, surveillance vehicle storage, and police vehicle preparation. This facility should be centrally located in a commercial area in the county and have adequate security.
- Policy e. Evaluate and support any identified need for a new Administrative Headquarters or Detectives Bureau facility.
- Policy f. Evaluate and support any identified need for an Officer Wellness and Incident Support Services (ISS) facilities.

### Character and Extent

**Objective 22: Maintain or establish facilities that allow Police Department personnel to operate at maximum effectiveness.**

- Policy a. Plan, locate and construct new police facilities based on 40 square feet per sworn officer per shift.

- Policy b. Size stations to meet the expected level of police service required to protect people and property located in the service area. Encourage the use of natural landscape elements such as trees, berms, and other privacy screens to limit direct line of site.
- Policy c. Construct new police stations on a minimum of three acres in order to provide the necessary minimum station square footage for civilian personnel, sworn officers, equipment, department and visitor vehicles.
- Policy d. Construct new police stations on a minimum of six acres when co-located with one other public facility such as a governmental center for a supervisor district or a fire and rescue station.

## FIRE AND RESCUE

### INTRODUCTION

Fire and rescue stations in the county are located to provide maximum coverage based on a total response time of seven minutes, which is further defined as a five-minute travel response and two-minute preparation time from the time the emergency call is received. This response goal is critical to providing effective fire suppression as well as emergency medical services. Provision of service recognizes economical constraints and certain basic guidelines, however, increased requests for service and significant traffic volume create delays which may impede the attainment of this goal. The county's adopted *Fire and Rescue Station Location Master Plan* assumes that stations can be located to enable a seven-minute response time to at least 95 percent of the county's population. All projected stations in the Master Plan have been constructed as well as an additional fire station in the Tysons area. Currently, the response time goal can be reached approximately 90 percent of the time and 93 percent of the time when including mutual aid fire stations from neighboring jurisdictions. As population increases in the county, it is anticipated that the 95 percent goal will be achieved.

The fundamental element in facility planning is determining future demand for emergency services. The initial methodology defined in the *Fire and Rescue Station Location Master Plan* has been enhanced with the use of data analytics. While providing new facilities to meet increasing demand is expected to be a primary focus for the Fire and Rescue Department, it is apparent that existing facilities require additions and rehabilitation to accommodate necessary emergency response equipment. Continued analysis of resource utilization may result in redeployment or additional equipment in heavier demand areas.

### Location

**Objective 23: Establish and maintain at a minimum, a seven-minute total response time coverage for fire and rescue emergencies to at least 95 per cent of the county's population. (See Figure 3.)**

- Policy a. Plan, locate and construct new fire stations based on the standards and guidelines and when the following conditions are met:
- The projected service area of a new station has a population density of 1,000 persons per square mile;

- The projected service area is greater than two square miles;
- The projected service area is estimated to experience an activity level of 730 calls annually or an average of two per day; and

Policy b. Locate new fire and rescue stations at the most strategic point in a proposed service area to achieve a seven-minute total response time coverage to all points of the area and/or provide the most optimum service to that area based on locational criteria to include the following:

- Locate stations close to intersections where there is no problem with highway access;
- Avoid locating stations directly on heavily traveled major arteries; rather, locate on a parallel road or cross road with a traffic signal with pre-emption capability at a nearby intersection for efficient egress/ingress;
- Locate stations on relatively flat topography and provide the opportunity to buffer the station from adjoining properties;
- Locate stations on the side where the greatest hazard or higher incident activity exists, where there is either a man-made or natural obstacle such as a railroad or river; and
- Locate stations to minimize service area overlap. When there is unavoidable overlap with other existing service area, the new station should be located so that any service overlap benefits the high density areas and alleviates the response requirements of other high activity areas.

Policy c. In addition to the regular review of fire station needs, plan and implement operational policies which enhance the ability of fire and emergency medical personnel to meet a seven-minute total response time from existing stations.

Character and Extent

**Objective 24:** While adhering to constructing new full service fire stations of a minimum 14,000 square feet, all efforts should be made to construct new stations to be compatible with the surrounding community.

Policy a. New fire stations should consider the following site/design guidelines:

- Be constructed on sites of approximately two acres;
- Be designed to be compatible with the character of the surrounding area.

## SHERIFF

### INTRODUCTION

The Sheriff's Office provides services to the residents of Fairfax County, Fairfax City, and towns of Herndon and Vienna by operating a secure and humane Adult Detention Center; providing security for the Judicial Complex; and executing civil law process on behalf of the courts.

**Objective 26: Meet the State Department of Corrections rated capacity standards for Average Daily Population at the Adult Detention Center (ADC) and provide for sentenced offenders not incarcerated at the ADC.**

Policy a. The county should utilize excess unused space in the ADC, until such time that it is needed for its intended purpose. Based on financial considerations and/or the temporary needs of other county agencies, such space could be effectively utilized by leasing to other county or outside agencies.

Policy b. Continue to follow guidelines, standards and procedures for jail renovations and additions as established by the American Corrections Association for any additions to the ADC.

Policy c. Continue to study, plan and construct alternative adult correctional programs and facilities. These programs and facilities are for sentenced non-violent adult offenders which require minimum security detention facilities. New facilities of this type should be located at the Judicial Complex. Locations in residential areas should be avoided. Use the *American Corrections Association's* guidelines and standards for the design and size of any new facilities.

Policy d. In the planning of new correctional facilities, assess and consider options which are, or represent, alternatives to incarceration.

**Objective 27: Provide facilities for inmates to serve their sentence with opportunities not otherwise available in confinement to include: work release, education programs, rehabilitative programs in the community, and weekend community service as alternatives to incarceration.**

Policy a. Establish a plan for the County to include facility, site and location standards for alternative incarceration programs.

## COURTS

### INTRODUCTION

The court system, comprised of the 19th Judicial Circuit Court and the General District Courts, primarily involve the administration and enforcement of justice based on civil and criminal laws of the Commonwealth of Virginia. These court's facilities are primarily located on the Judicial Complex in Fairfax City in the Fairfax County Courthouse. General District Court also operates court out of the Town of Herndon, the Town of Vienna, and the City of Alexandria. Magistrates occupy space in the Adult Detention Center and a substation in Mount Vernon.

#### Location

**Objective 28: Maintain a central location for the main court system for the County to be convenient to all County residents.**

Policy a. Plan and locate new or expanded facilities at the Judicial Center/Courthouse Complex so that centrality of this service is preserved and that other related criminal justice agencies existing at the complex remain in close proximity.

#### Character and Extent

**Objective 29: Maintain the efficient and expedient processing and adjudication of cases of the 19th Judicial Circuit Court and General District Court of Fairfax County by providing the necessary facilities to accomplish such actions.**

Policy a. Plan and construct additional court space in accordance with needs analyses and avoid deferring expansion to a point where unsatisfactory conditions exist.

Policy b. Prioritize the courts' needs for location within the courthouse while also supporting co-location of other non-core court functions within the Judicial Complex through the *Judicial Complex Master Plan*.

Policy c. Continue to follow guidelines and standards for renovation and additions consistent with the Supreme Court of Virginia Office of the Executive Secretary – *Virginia Courthouse Facility Guidelines*.

Policy d. Adapt and modernize facilities to embrace new scalable technologies that optimize services delivery and improve access to justice for all residents.

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**ANIMAL SERVICES DIVISION AND THE DEPARTMENT OF ANIMAL SHELTERING**

**INTRODUCTION**

The Animal Services Division of the Fairfax County Police Department safeguards the residents of the county against stray and unwanted animals; protect residents and animals from certain animal diseases, enforce the state and local animal related laws and ordinances, and address issues concerning wildlife.

Location

**Objective 30: Provide for convenience of Animal Services Division services to all county residents by maintaining the current shelter locations on West Ox Road and the Lorton Campus.**

Character and Extent

**Objective 31: Continue to provide convenient pet adoptions, licensing, vaccinations, and education services to county residents and the necessary facilities for managing all phases of Animal Services Division and safety.**

Policy a. Plan and renovate the existing West Ox Road Animal Shelter facility to accommodate the current need for expanded parking, as well as future staff and animal needs. The renovated facility should, if possible, include a high clearance parking deck and a second floor on the building.

## UTILITIES AND SERVICES

The provision of utility infrastructure is essential to development. Homes and businesses cannot function without water, electricity and a system of waste disposal. Other services, such as telephones, communication towers, and cable television, are highly preferable in a region which thrives on the rapid exchange of information. Additionally, the county government constructs drainage systems to correct drainage problems and maintains extensive garage and maintenance facilities for county vehicles.

The following utilities and services are addressed in this section:

- Water Supply
- Sanitary Sewer
- Solid Waste
- Drainage Systems and Improvements
- County Vehicle Maintenance Facilities
- Public Utilities
  - gas
  - electric
  - telephone
- Communication Towers

## WATER SUPPLY

### INTRODUCTION

Residents of Fairfax County receive public water service from the Fairfax County Water Authority, the Towns of Vienna and Herndon, while operating their own water distribution systems, purchase water from Fairfax Water. In terms of building major capital facilities to meet water supply needs, the towns are dependent of these two water agencies. According to 2022 estimates, ninety-seven percent of Fairfax County residents are served by Fairfax Water and the remaining three percent of the residents receive water from private wells.

### Location

**Objective 32: Locate sites for adequate and appropriate facilities to treat, transmit and distribute a safe and adequate potable water supply, to conform to the land use goals of the Comprehensive Plan.**

- Policy a. Elevated water storage tanks and standpipes should be grouped together, designed to harmonize with surrounding development, and be screened as much as possible.
- Policy b. Locate booster pumping stations, wherever feasible, in well-buffered, attractively designed structures.
- Policy c. Encourage the early acquisition of sites for distribution and storage facilities where development activities are imminent. This must be done before the area develops, so that neighborhood disruption and costs are minimized.

- Policy d. Locate water lines to minimize impacts on environmental features such as stream valleys, wetlands, and forested areas.

Character and Extent

**Objective 33: Plan and provide for facilities to treat, transmit and distribute a safe and adequate potable water supply.**

- Policy a. Maintain sufficient water treatment and distribution capacity to meet customer demands. Update demand projections on a periodic basis to reflect current consumption trending, peaking factor data, and service area population and employment forecasts.

- Policy b. Coordinate all Fairfax Water projects by continuing the Water Facilities Agreement between the Board of Supervisors and the Fairfax Water which requires:

- Fairfax County Board’s review and approval of the Fairfax Water’s Capital Improvement Program (CIP) as part of the county's CIP;
- Fairfax County Board’s approval of proposed water facilities including water mains greater than 24" in diameter in accordance with Section 15.2-2232 of the *Code of Virginia*, as amended; and
- Notification to individual Board of Supervisors members and the Chairman of water main extensions 24" or less in diameter in their districts.

- Policy c. Pursue strategies to reduce the per capita consumption of water.

- Policy d. Promote opportunities, including formation of water districts, for extending access to water service to communities or areas within Fairfax County that are threatened by failure of private wells and are without public water service as long as such districts do not require the Fairfax Water to contribute more than provided for under Fairfax Water’s Bad Well Policy, dated June 3, 2021, which specifies the conditions and terms for financial assistance.

## SANITARY SEWER

### INTRODUCTION

Fairfax County provides sanitary sewer through a system of over 3,100 miles of sewer lines, 64 pumping stations and one treatment plant owned and operated by the county, the Norman M. Cole, Jr. Pollution Control Plant. Additional treatment capacity is provided by contractual agreement with the District of Columbia, the Alexandria Sanitation Authority, Arlington County and the Upper Occoquan Sewage Authority.

It is important that the location and timing of sanitary sewer facility construction be supported by specific public facility standards and Plan recommendations.

#### Location

**Objective 34: Provide public sewer in accord with the approved sewer service area and the Statement of Policy Regarding Sewage Disposal.**

- Policy a. Limit expansion of the approved sewer service area to areas which are planned for uses which require such infrastructure and which are contiguous to the existing approved areas.
- Policy b. Locate sewer lines to minimize impact on environmental features such as stream valleys, wetlands, and forested areas.
- Policy c. Expansion of the approved sewer service area should not occur until other public infrastructure is available or funded, or programmed in the Capital Improvement Program and is adequate to support development of the area already approved for sewer and the area proposed for expansion.

#### Character and Extent

**Objective 35: Maintain a system of conveyance and treatment facilities that is responsive and compatible with the development and environmental goals of the county, and provide necessary renovations and improvements that will permit the entire system to function at a high level of efficiency.**

- Policy a. Plan and design sewer facilities in accordance with the Public Facility Manual (PFM).
- Policy b. Design and construct the overall sewer system so as to minimize the need for sanitary sewer pumping stations.
- Policy c. Schedule priorities in the planning and construction of sewerage systems so that actual plus committed sewage flow does not exceed the capacity of the treatment facilities.
- Policy d. Where existing development without public sewer is experiencing public health problems caused by failing septic or individual sewage disposal systems, consider the appropriateness of conventional public sewer, pump and haul or other methodologies to remedy public health hazards.

## SOLID WASTE AND RECYCLING

### INTRODUCTION

The mission of the Solid Waste Management Program (SWMP) is to protect the public interest through solid waste management planning and regulatory oversight of the County's refuse ordinances, and to provide efficient and effective collection, recycling, and disposal of solid waste for the community in an environmentally responsible manner.

Refuse collection and recycling services are available to residents and businesses either through private contractors or services provided by county collection forces. Currently the county operates two permitted solid waste management disposal facilities, the I-95 Landfill Complex and the I-66 Transfer Station, both of which include ancillary operations such as landfill gas collection and energy recovery, brush grinding,- and vehicle parking.

A Recycling and Disposal Center is maintained at each of these sites which allows residents to recycle selected components of their waste and dispose of the remaining non-recyclable materials. The county also operates a facility in the Newington area for parking and maintenance of refuse collection vehicles that serve county Sanitary Districts.

The Covanta Fairfax energy-from-waste facility, owned and operated by Covanta Fairfax, LLC, is located at the I-95 Landfill Complex and serves as the County's primary resource for waste management. The plant began commercial operations in 1990, has a design capacity of 3,000 tons per day and generates approximately 80MW of electricity, which is sold to a local utility.

SWMP's waste reduction and recycling program has met or exceeded the state-mandated recycling goal (25 percent) since its enactment.

### Location

**Objective 36: Provide conveniently located solid waste management facilities and operations, while ensuring that these facilities area compatible with adjacent land uses. (See Figure 5.)**

- Policy a. Continue to modify the I-95 Landfill Complex and the I-66 Transfer Station as necessary to ensure compliance with federal and state regulations, as well as accommodating the needs of the community.
- Policy b. Add facility enhancements at the I-66 Transfer Station and I-95 Landfill to allow environmentally sound and efficient collection, recycling, transfer and disposal of refuse and recyclable materials. Maintain access to the I-66 Facility from West Ox Road and the I-95 Facility from Furnace Road.
- Policy c. Maintain recycling drop-off centers to serve residential and business customers.
- Policy d. Apply public and worker safety, traffic, and environmental protection criteria to the selection of future sites for the collection, recycling, transfer, and disposal of waste and recyclable materials.
- Policy e. Continue landfill gas collection/processing systems at the I-66 facility and I-95 complex to allow utilization of decomposition gases for beneficial purposes.

Character and Extent

**Objective 37: Provide an efficient, cost effective, and environmentally sound, comprehensive solid waste management system that meets the current and future needs of the county.**

- Policy a. Complete new 20-year Solid Waste Management Plan for the county as required by state regulations.
- Policy b. Prior to the expansion of waste management facilities, comprehensively consider the costs, benefits and effects of other alternatives including recycling and waste reduction for the protection of the public health, public safety, the environment, and natural resources.
- Policy c. Encourage public/private partnerships for environmentally safe and economically sound collection, recycling, and disposal.
- Policy d. Maintain the mandatory countywide collection of yard debris for recycling.
- Policy e. Provide for a consistent level of cost effective service for refuse and recyclables collection throughout the county.
- Policy f. Maintain the I-95 Landfill Complex to provide adequate ash disposal capacity.
- Policy g. Use cost-effective, environmentally-conscious technologies and industry best management practice in solid waste management to protect and/or improve the county's environmental quality.
- Policy h. Provide for environmentally safe and economically sound, collection, recycling, and disposal of household and Very Small Quantity Generator (VSQG) hazardous waste to prevent pollution in the county.

**Objective 38: Provide a waste reduction and recycling program readily available to all, that meets the current and future needs of the County.**

- Policy a. Continue the county's solid waste management system, promoting a strong preference for the practices of waste reduction and recycling consistent with the established solid waste management hierarchy. The program currently includes specialty materials and recycling drop-off centers, yard debris management, curbside collection of designated recyclable materials, scrap metal recycling and commercial and institutional recycling of designated materials.
- Policy b. Continue to promote waste reduction recycling and hazardous waste collection programs.

## STORMWATER MANAGEMENT

### INTRODUCTION

Rapidly urbanizing watersheds present a myriad of potential problems for the county's drainage system. Construction activity can generate sediment at hundreds of times the normal rate. Impervious pavements increase both the volume of stormwater runoff and the magnitude of peak flood flows. Runoff from urban areas is often highly polluted with pesticide and nutrients as well as oils and toxic metals. The net result of these problems is that water quality is seriously degraded, property damage is excessive and in many instances the aesthetic quality of natural areas is destroyed. Urban flooding is the top climatic vulnerability for Fairfax County, due to the combination of increasing impervious surface, inadequate stormwater management and drainage facilities, and increasing intensity of precipitation events.

#### Location

**Objective 39: Provide for a comprehensive drainage improvement and stormwater management program to maximize property protection and environmental benefits throughout the watershed.**

- Policy a. Locate stormwater control facilities to correct problems that affect the greatest number of persons or structures.
- Policy b. Locate drainage structures and Best Management Practices (BMPs) in conjunction with new development to minimize future problems.
- Policy c. New facilities should conform to the County's Watershed Management Plans to implement structural improvements for stormwater facility retrofits and the installation of green stormwater infrastructure.
- Policy d. Locate regional stormwater management facilities where feasible throughout the county to maximize pollutant removal, streambank erosion protection, and flood control.

#### Character and Extent

**Objective 40: Provide a system of drainage facilities that prevents or minimizes structure flooding, stream degradation and traffic disruption in an efficient, cost effective and environmentally sound manner.**

- Policy a. Continue enforcement of the county's ordinance for erosion and siltation control.
- Policy b. Continue to regulate development on filling land within the 100 year floodplain.
- Policy c. Continue to implement the county's Regional Stormwater Management and Master Drainage Plans.
- Policy d. Encourage a regional approach to stormwater management in developing and in redeveloping sites.

- Policy e. Expand existing programs to implement best management practices (BMPs) in all areas of the county not currently served by BMPs.

## VEHICLE MAINTENANCE FACILITIES

### INTRODUCTION

Maintenance and repair services to the county's automotive and equipment fleet are provided by the Department of Vehicle Services (DVS) in maintenance facilities located throughout the county. Related to the DVS maintenance facilities are more specialized types of repair/service facilities, such as the radio repair/installation facility operating at the Jermantown Road Facility, and the Fairfax County Fire and Rescue Department (FCFRD) Apparatus Maintenance and Repair Facility located at the Newington and West Ox maintenance facilities.

#### Location

**Objective 41: Ensure that county vehicle maintenance facilities are located on adequate and appropriate sites.**

- Policy a. Locate any new facility in proximity to the center of its designated service area, which is a determined geographic region based on fleet distribution.
- Policy b. Ensure that access to each facility is oriented to a arterial roads.
- Policy c. Plan for an additional vehicle maintenance facility, preferably in the northwestern area of the county.

#### Character and Extent

**Objective 42: Consider established design and service area standards when planning new county vehicle maintenance facilities.**

- Policy a. Provide screening and buffering around each facility in excess of Zoning Ordinance requirements in order to minimize the impact of this use.
- Policy b. Ensure that all facilities protect the water quality of nearby water courses by providing the most efficient stormwater Best Management Practices (BMPs) to control run-off from building and parking areas.

## ELECTRICAL AND LAND-LINE UTILITY SERVICES

### INTRODUCTION

Electrical and land-line utility services include electrical, communication and cable facilities, which are provided through a wired infrastructure and viewed, for the most part, as absolute necessities. The need for electrical, communication, and cable facilities accelerates commensurate with development. As the need for sites increases, so does the scarcity of appropriate land for construction of these facilities. The objectives and policies set forth in this section provide guidance on siting and design issues and are to be used in evaluating land use applications. They should not be interpreted as superseding or amending any requirements of the Zoning Ordinance or other local, state and federal law pertaining to these issues.

**Objective 43: Locate electrical and land-line service facilities to provide maximum service levels as unobtrusively as possible. (See Figure 7.)**

- Policy a. Avoid areas of environmental sensitivity.
- Policy b. Collocate facilities such as distribution and transmission poles, switching and hub centers and electrical substations whenever feasible and appropriate to minimize visual and neighborhood impacts.
- Policy c. Plan for existing and future needs of facilities in conjunction with emerging development designs, including the needs of residents and business for broadband infrastructure.
- Policy d. Provide adequate acreage for expansion of substations, hub centers and equipment areas and maintain levels of screening to accommodate expansion.
- Policy e. Locate future switching and hub centers, equipment areas, and electrical substations on sites, which shield nearby residences from noise, while affording privacy and safety.
- Policy f. Construct underground transmission and distribution lines, whenever possible, along existing or planned utility or road rights-of-way, preferably on lot lines which will least disturb future development of the site.
- Policy g. Locate future above-ground transmission lines along railroad rights-of-way, where possible, and when in keeping with adjacent development. Placement of transmission lines should not compromise the objectives of the Comprehensive Plan. Visual impact should be a key element in the evaluation of proposed transmission line locations.
- Policy h. Regulate new development where permissible to minimize unnecessary human exposure to unhealthful impacts of low level electromagnetic fields from electrical transmission lines.
- Policy i. Utilize existing towers and poles to support electrical and land-line utility services whenever possible, to reduce the need for new towers and poles. However, avoid overloading existing towers and poles with related equipment.

- Policy j. Locate new towers required to support electrical and land-line utility services in areas of commercial or industrial land uses. Locate in residential areas only when other, more suitable land uses are not available, and on parcels, that afford natural screening adjacent to nearby structures or planned land uses.

**Objective 44: Meet service area requirements with a minimum of facilities and ensure that those facilities are designed to minimize impacts on adjacent properties.**

- Policy a. Provide justification for the proposed facility's need. Specify alternative actions and justify why the proposed location and type of facility is the least disruptive.
- Policy b. Mitigate the visual impact of switching and hub centers, equipment areas and electrical substations from adjacent development. Land with existing mature vegetation is preferable, as are access roads which obscure entrances, berms which provide screening, and slopes that provide localized lower elevations.
- Policy c. Locate transmission and distribution lines underground, whenever possible.
- Policy d. Conceal, screen or site ground transformers and distribution boxes to reduce their visual presence and potential for clutter.
- Policy e. Provide for the appropriate screening and buffering of proposed facilities.
- Policy f. Design and site proposed facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.
- Policy g. Provide safety measures in design and construction of towers used to support electrical and land-line utility services. Provide a fall radius of at least one third the height of guyed towers.
- Policy h. Avoid interference with radio, television, and telecommunications receivers of the public.
- Policy i. Assure that radiation levels, individually and cumulatively, will be maintained at acceptable levels.

## WIRELESS TELECOMMUNICATION SERVICES

Wireless telecommunication services provide for the wireless transmission of voice and data and include cellular and personal communications services (PCS), paging and wireless Internet services and mobile radio communication. These services operate from wireless networks that depend on antenna devices and related equipment to transmit from a sender to one or more receivers. Such services are viewed as public utility service providers that benefit the community and its economic growth and vitality. To further the goal of achieving digital access and literacy for all residents, the County encourages build-out of a wireless network across all areas of the County.

For the purposes of this policy, a **telecommunications facility** is defined as a facility, site, or location that contains one (1) or more antenna, telecommunications towers or monopoles, a distributed antenna system (DAS), small cell, or micro-cell, alternative support structures, satellite dish antennas, other similar communication devices, and related equipment and site improvements used for transmitting, receiving, or relaying wireless telecommunications signals. The term is also inclusive of wireless facility as defined in the Virginia Code.

The objectives and policies set forth in this section provide guidance on siting and design issues used in evaluating land use applications. They should not be interpreted as superseding or amending any requirements of the Zoning Ordinance or other applicable local, state, or federal laws pertaining to these issues.

### GENERAL GUIDELINES

**Objective 45:** In order to provide a network of wireless telecommunication systems and to achieve opportunities for the co-location of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include any antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

- Policy a. Co-locate wireless telecommunications facilities whenever feasible and appropriate to minimize visual and neighborhood impacts.
- Policy b. When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the wireless telecommunication facilities and minimize their visual impact on surrounding areas.
- Policy c. Utilize existing structures to support wireless telecommunications services whenever possible, to reduce the need for new towers and poles. However, avoid overloading existing structures with related equipment.
- Policy d. Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.

- Policy e. Ensure that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.
- Policy f. When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.
- Policy g. Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.
- Policy h. Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.
- Policy i. Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.
- Policy j. Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.
- Policy k. Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.
- Policy l. Design and site proposed telecommunication facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

**Objective 46: Design proposed wireless telecommunication facilities to mitigate visual impact and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area.**

- Policy a. Disguise or camouflage the appearance of proposed wireless telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in a similar context and belong to the setting where placed

- Policy b. Design proposed wireless telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.
- Policy c. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance.
- Policy d. Mitigate the visual impact of proposed wireless telecommunication facilities and their equipment by using effective design options appropriate to the site such as:
- Design, site, and/or landscape the proposed facility to minimize impacts on the character of the area;
  - Locate proposed wireless telecommunication facilities near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting for the proposed structure provided such location does not adversely impact sensitive environmental resources, including root systems, or cause fragmentation of forested communities. When viewed in context, consider perspective views, relative topography, and other factors, to mitigate the visual presence and prominence of the structure;
  - Blend proposed wireless telecommunication facilities with an existing pattern of tall structures;
  - Obscure or block the views of proposed wireless telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible.

## FEATURE SHOWN GUIDELINES

**Objective 47:** With Planning Commission approval, wireless telecommunication facilities proposed on existing or replacement structures, or new poles of 50 feet or less in height and designed to support small cell facilities, that do not meet the Administrative Review or Deemed Approved Guidelines but are otherwise consistent with Plan guidance may be processed without a public hearing as a “feature shown” of the Comprehensive Plan when in conformance with the following policies:

- Policy a. In determining that proposed telecommunication facilities are a feature shown of the Comprehensive Plan, ensure that the following general factors are met:
- The proposed installation has no material adverse impact on the visual quality or character of the general area in which it is to be placed, including any surrounding residential properties;

- The proposed installation is located and designed to blend with the structure on which it is placed, such as flush-mounting antennas or screening the antennas and equipment as appropriate to the site;
- The proposed installation, when in a grouping of other similar structures, is consistent with the pattern of those surrounding structures;
- Related equipment cabinets or shelters located on the ground or on a rooftop are appropriately screened or placed to obscure their visibility from surrounding properties;
- Building rooftop antennas are either flush mounted to surface walls, screened or placed to not be visible from the surrounding area unless the antenna has a minimal visual impact if installed above the roofline;
- Access to the proposed installation for purposes of maintenance has no material adverse impact on adjoining properties.

#### ADMINISTRATIVE REVIEW GUIDELINES

**Objective 48:** Consider the co-location, replacement, or modification of antennas, and their associated equipment to be an Administrative Review “feature shown” of the Comprehensive Plan requiring no Planning Commission review when the co-location, replacement or modification of, antennas, and the related equipment is in full conformance with all Fairfax County Zoning Ordinance provisions and the following applicable policies:

Policy a. Locate wireless telecommunication facilities on existing structures in accordance with the following standards:

- The antenna is placed directly in front of the structure’s surface, including the surfaces of the penthouse and other structures on building’s roof;
- No part of the antenna shall extend above the surface of the building or tank on which it is placed and no part of the antenna’s mounting shall extend more than 6 inches above the surface of the building on which it is placed;
- The antenna and its mounting are of a color or finish that closely matches and blends with the surface on which they are placed.
- The generator or equipment cabinet or shelter is either:
  - Located inside the building, building penthouse or inside the building parking structure on a level other than the roof;
  - Located on the ground and enclosed within a structure that is attached to the building and constructed of the material that is the same as, or visually the same as, the color and pattern of the building;

- Located on the ground behind a solid fence, wall, berm, or planted hedge, or combination thereof, as required by the Zoning Ordinance; or,
- Located on the roof of the building immediately adjacent to its penthouse or other structure on the roof, screened by a material of the same, or visually the same, color or pattern and no taller than the adjacent rooftop structure.

Policy b. Consider a new monopoles or towers greater than 50 feet in height to be a feature shown of the Comprehensive Plan if located in major utility transmission easements or rights-of-way; and if the easement or right-of-way is at least 100 feet wide and not used for underground gas transmission lines, and if the following guidelines are met:

- The monopole or tower is placed at least 35 feet inside the transmission easement;
- The monopole or tower is placed at least 200 feet from any existing residence;
- The monopole or tower is placed at least 200 feet from the right-of-way of any existing public road.

**Objective 49: Consider the placement of new structures 50 feet or less in height and designed to support small cell facilities to be an Administrative Review feature shown of the Comprehensive Plan requiring no Planning Commission review when the location and character of the new structure is in full conformance with all Fairfax County Zoning Ordinance provisions and the following applicable policies:**

- Policy a. Locate to avoid interference with public safety communications or operations.
- Policy b. Locate to avoid areas of environmental sensitivity, such as steep slopes 15% or greater, floodplains, wetlands, environmental quality corridors (EQC), and resource protection areas.
- Policy c. Locate to avoid disturbing the critical root zone of existing trees as defined in the Fairfax County Public Facilities Manual.
- Policy d. Locate so as to not impede pedestrian, bicycle, or vehicular travel by not obstructing walkways, driveways, entrances or other means of travel.
- Policy e. Locate so as to not impede or obstruct pedestrian, bicycle, or vehicular travel.
- Policy f. The pole design should conform to the aesthetics of existing adjacent streetlights or utility poles and/or conform to existing area or district specific urban design guidelines or manuals (ex. Tysons Urban Design Guidelines).
- Policy g. Locate the pole in conformance with existing area or district specific urban design guidelines or manuals and/or Standard Pole Locations as defined in the

Fairfax County Public Facilities Manual and restore any disturbed streetscape after installation.

- Policy h. In areas where there are no existing adjacent streetlights, utility poles, or district specific urban design guidelines or manuals, new poles should be designed to look the same as or substantially similar to existing poles elsewhere in the same zoning district.
- Policy i. Locate new structures 50 feet or less in height within the bounds of a historic overlay district only if infeasible to co-locate associated wireless telecommunication facilities on existing structures or to locate new structures outside of the historic overlay district or in the public right-of-way.
- Policy j. When placing in a historic overlay district:
- Site the structure so as to not be located along the frontage of a historic building, deemed historic on a federal, state, or local level; and
  - Site the structure so as not to be on an existing structure located on, adjacent to, or visible from a major thoroughfare, historic byway, road listed or determined to be eligible for listing in the National Register, or a contributing or historic property in a County Historic District.
- Policy k. Locate proposed wireless telecommunication facilities so that views of and vistas from architecturally and/or historically significant structures, landscapes, or cultural resources are not impaired or diminished.

## DEEMED APPROVED GUIDELINES

**Objective 50:** New wireless telecommunication facilities will be deemed a “feature shown” of the Comprehensive Plan requiring no Administrative Review or Planning Commission review when the location and character of the new structure is in full conformance with all Fairfax County Zoning Ordinance provisions and the following applicable policies:

- Policy a. Co-locate wireless telecommunication facilities, including small cell wireless facilities, on existing structures.
- Policy b: In determining that a proposed wireless telecommunication facility is a “feature shown” of the Comprehensive Plan, ensure that the following general factors are met:
- The proposed installation is located and designed to blend with the structure on which it is placed such as flush-mounting antennas, screening the antennas and equipment as appropriate to the site, or using other measures to mitigate visual impact;

- Related generators or equipment cabinets or shelters located on the ground or on a rooftop should be screened or placed to obscure their visibility from surrounding properties to the extent possible;
- Building rooftop antennas should be either flush mounted to surface walls, camouflaged, screened or placed to not be visible from the surrounding area unless the antenna has a minimal visual impact if installed above the roofline;
- Access to the proposed installation for purposes of maintenance has minimal visual impact on adjoining properties.

Policy c. When co-locating or replacing existing antennas on rooftops:

- Flush-mount antennas and use antennas of a color or finish that closely match and blend with existing structures when possible;
- Screen or otherwise camouflage pole-mounted antennas.