

# Capital Improvement Programming

## Introduction

Capital improvement programming is a guide toward the efficient and effective provision of public facilities. Programming capital facilities over time can promote better use of the County's limited financial resources and assist in the coordination of public and private development. In addition, the programming process is valuable as a means of coordinating and taking advantage of joint planning and development of facilities where possible. By looking beyond year-to-year budgeting and projecting what, where, when and how capital investments should be made, capital programming enables public organizations to maintain an effective level of service for both the present and future population.

## The Capital Improvement Program ("CIP")

The result of this continuing programming process is the Capital Improvement Program - the CIP - which is the County's five-year roadmap for creating, maintaining, and funding present and future infrastructure requirements. The Capital Improvement Program addresses the County's needs relating to the acquisition, expansion and rehabilitation of facilities and systems. The CIP serves as a planning instrument to identify needed capital projects and coordinate the financing and timing of improvements in a way that maximizes the return to the public. It provides a planned and programmed approach to utilizing the County's financial resources in the most responsive and efficient manner to meet its service and facility needs. It serves as a "blueprint" for the future of the community and is a dynamic tool, not a static document.

The underlying strategy of the CIP is to plan for land acquisition, construction, and maintenance of public facilities necessary for the safe and efficient provision of public services in accordance with broad policies and objectives adopted in the County's Comprehensive Plan. A critical element of a balanced CIP is the provision of funds to both preserve or enhance existing facilities and provide new assets to respond to changing service needs and community growth. While the program serves as a long-range plan, it is reviewed and revised annually based on current circumstances and opportunities. Priorities may be changed due to funding opportunities or circumstances that cause a more rapid deterioration of an asset. Projects may be revised for significant costing variances.

The CIP is primarily a planning document. As such, it is subject to change each year as the needs of the community become more defined and projects move closer to final implementation. The adoption of the Capital Improvement Program is neither a commitment to a particular project nor a limitation to a particular cost. As a basic tool for scheduling anticipated capital projects and capital financing, the CIP is a key element in planning and controlling future debt service requirements. For this reason, the CIP includes some projects where needs have been defined, but specific solutions or funding amounts have not been identified.

When adopted, the CIP provides the framework for the County Executive, the Planning Commission, and the Board of Supervisors for managing bond sales, and conducting project and investment planning. Fairfax County's CIP includes not only a 5-year plan but a future outlook that includes a glance at the potential long-term requirements beyond the current 5-year period.

## CIP Linkages

The comprehensive capital project planning process has three essential components:

- The Comprehensive Plan (Long-term Element, 20-25 years)
- The Capital Improvement Program (Mid-term Element, 5-10 years)
- The Capital Budget (Short-term Element, 1 year)

The Comprehensive Plan is a component of the planning process, or a generalized model of the future, that expresses policy directions for a 20-25 year period. The Comprehensive Plan and the CIP are mutually supportive - the Plan identifies those areas suitable for development, as well as the public investment they will require, and the CIP translates those requirements into capital projects designed to support the goals and policies of the Comprehensive Plan. This ensures that necessary public facilities are planned in a time frame concurrent with private development. By providing a realistic schedule for the provision of facilities, orderly development in the best interests of the citizens of Fairfax County can be achieved.

Many projects recommended for implementation in the Plan are not included in the five-year CIP period, but may be incorporated into the CIP as existing needs are met and additional growth occurs. The extent to which growth either does or does not occur in a given area will influence both the timing and scope of capital projects. While it is a desired goal to minimize public facility deficiencies, it is equally desirable that only those projects with an identified need be constructed.

The Annual Capital Budget serves to appropriate funds for specific facilities, equipment, and improvements. For projects supported by the General Fund, the first year included in the CIP reflects the approved annual capital budget funding level. Funding for subsequent years in the program are included for planning purposes only and do not receive ultimate expenditure authority until they are analyzed and incorporated into the annual Capital Budget and approved by the Board of Supervisors. In general, General Obligation Bond funded projects and projects supported by other financing, are reflected in the 5-year program with the cashflow required for spending reflected in each year. The CIP is a "rolling" process and subsequent year items in the CIP are evaluated annually and advanced each fiscal year.

## The Legal Basis for the CIP

The CIP is prepared pursuant to Article 5 of Section 15.2-2239 of the Code of Virginia, as amended, which reads:

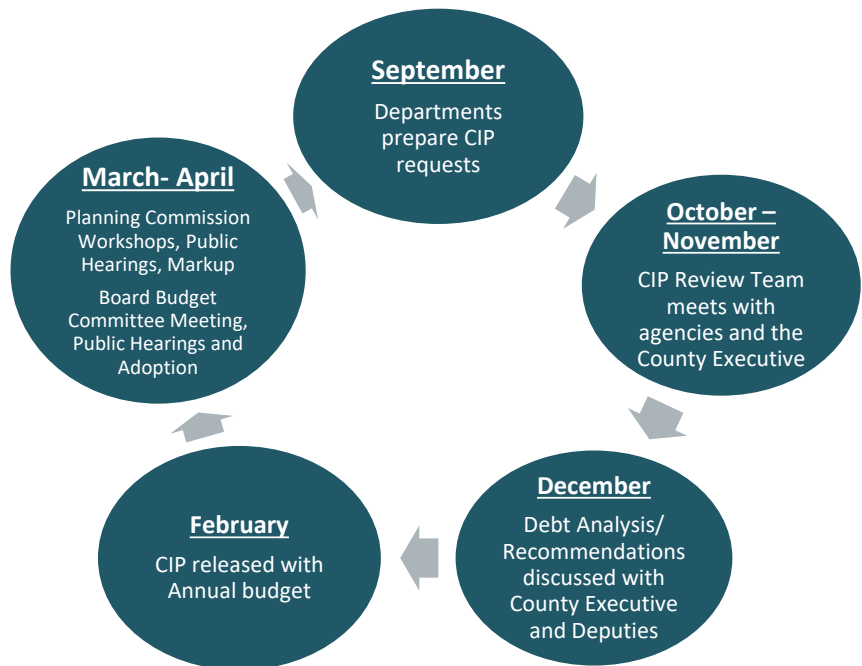
"A local planning commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body, or to the chief administrative officer or other official charged with preparation of the budget for the locality, at such time as it or he shall direct. The capital improvement program shall include the commission's recommendations and estimates of cost of the facilities and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments and interested citizens and organizations and shall hold such public hearings as it deems necessary."

## The CIP Process

The capital program and budget are the result of an ongoing infrastructure planning process. Infrastructure planning decisions must be made with regard to both existing and new facilities and equipment. For existing facilities, the planning process addresses appropriate capital renewal strategies and repair-versus-replacement of facilities. New service demands are also considered as they often affect capital facility requirements. Planning for the five-year Capital Improvement Program period, and the subsequent five years, includes linking the Public Facilities Plan portion of the Comprehensive Plan to the capital requirements, conducting needs assessments and allowing for flexibility to take advantage of opportunities for capital investment.

Recommendations for the appropriate funding and phasing of projects are coordinated with the respective agencies and the County Executive's Office, and an Advertised Program is developed. The Advertised Capital Improvement Program is presented to the Fairfax County Planning Commission in March, at which time a workshop with agencies and public hearings are held. After completing its review of the Advertised Program, the Planning Commission forwards its recommendations to the Board of Supervisors for consideration. The Board of Supervisors holds public hearings on the Advertised CIP, concurrent with the County's Annual Budget hearings, then adjusts and adopts the Program in April.

## The CIP Calendar



## The CIP Review Team

A CIP Review team is responsible annually for reviewing capital project requests and providing recommendations to the County Executive. This team is comprised of technical staff from the Office of the County Executive, the Department of Management and Budget, the Department of Planning and Development and the Department of Public Works and Environmental Services. This team also conducts an in-depth analysis of the impact of the Capital Program on cash flow and bonding requirements, as well as the County's ability to finance, process, design and ultimately maintain projects. The team meets regularly throughout the year.

The overall goal of the CIP Review Team is to develop CIP recommendations that:

- Preserve the past, by investing in the continued upgrade of County assets and infrastructure;
- Protect the present with improvements to County facilities; and
- Plan for the future.

## Principles of Sound Capital Improvement Planning

Projects most often are forwarded to the team by a sponsoring department, which is responsible for their implementation. In proposing a five-year capital plan, the CIP Team considers the feasibility of all proposed capital projects by evaluating their necessity, priority, location, cost and method of financing, availability of federal and state aid and the necessary investment in the County's infrastructure. The CIP is developed annually using the following 10 Principles of Capital Improvement Planning.

1. The Board of Supervisors' goals and the adopted Comprehensive Plan, specifically the Land Use Plan and the Policy Plan, are the basis for capital planning in Fairfax County. The Capital Improvement Program (CIP) shall execute the goals and objectives of the adopted Comprehensive Plan for Fairfax County.
2. Pursuant to Section 15.2-2239 of the [Code of Virginia](#), the Planning Commission shall review and recommend annually the County's Capital Improvement Program based on the adopted Comprehensive Plan for the consideration of the governing body. Public participation in the CIP process is essential and shall continue to be encouraged.
3. Criteria consistent with the Comprehensive Plan, and with the principles stated herein, shall be established to guide the selection and prioritization of CIP projects.
4. The development of the CIP shall be guided by the principles of life cycle planning to ensure that long-term maintenance, renewal, and replacement requirements are adequately addressed to protect the County's investment and maximize the useful life of facilities. The County shall allocate an appropriate amount of its general operating, special revenue, enterprise, and other funds to finance ongoing infrastructure maintenance, renewal, and replacement of facilities. Facilities are defined to include all fixed installations constructed and/or maintained with public funds, including buildings and structures, utilities, and related improvements.
5. The CIP shall include the fiscal impact of each project and identify unfunded capital requirements to adequately anticipate resource requirements and capacity to provide services beyond the planning period.
6. The CIP shall support the County's efforts to promote economic vitality and high quality of life. The CIP should recognize the revenue generating and/or cost avoiding value of making public

infrastructure improvements to spur private reinvestment and revitalization in support of County land use policy.

7. The CIP shall support the County's efforts to encourage the development of affordable and effective multi-use public facilities as feasible.
8. The CIP shall be developed to provide facilities that are cost effective, consistent with appropriate best practice standards, community standards and expectations of useful life.
9. The County will endeavor to execute the projects as approved and scheduled in the CIP. Value Engineering principles will continue to be applied to appropriate capital projects. Changes in project scope, cost and scheduling will be subject to close scrutiny.
10. The CIP shall be guided by the County's adopted Ten Principles of Sound Financial Management.

## Capital Project Evaluation Questions

### Project Urgency

- What are the most urgent projects and why?
- Is the project needed to respond to state or federal mandates?
- Will the project improve unsatisfactory environmental, health and safety conditions?
- What will happen if the project is not built?
- Does the project accommodate increases in demand for service?

### Project Readiness

- Are project-related research and planning completed?
- Are all approvals, permits or similar requirements ready?
- Have affected citizens received notice and briefings?
- Are the appropriate departments ready to move on the project?
- Is the project compatible with the implementation of the other proposed projects?

### Project Phasing

- Is the project suitable for separating into different phases?
- Is the project timing affected because funds are not readily available from outside sources?
- Does the project have a net impact on the operating budget and on which Fiscal Years?
- Does the project preserve previous capital investments or restore a capital facility to adequate operating condition?

### Planning Questions

- Is the project consistent with the Comprehensive Plan?
- Can projects of similar use or purpose be co-located at one location?
- Does the project increase the efficiency of the service delivery?
- What are the number and types of persons likely to benefit from the project?
- Will any groups be adversely affected by the project?
- What geographic areas does the project serve?
- Does the project promote equity?

As capital projects are identified, the above evaluation questions are used as an assessment tool in concert with the Criteria for Recommending Future Capital Projects regarding the immediate, near term, long term, or future timing of project implementation.

## Criteria for Recommending Capital Projects

The following criteria are intended to guide decision making and may be adjusted as necessary. All capital projects must support the goals established by the Board of Supervisors and the adopted Comprehensive Plan and conform to specified standards mentioned in the Plan. Other County or best practice standards may be cited so long as they are not in conflict with the Comprehensive Plan or Board directives. Projects are categorized based on priority and recommended for appropriate funding sources (i.e., general funds, bonds, special revenue funds) according to their criticality or other standards as recommended by the staff, Board of Supervisors, School Board, Planning Commission, or other advisory body. Actual project commencement and completion are subject to identification of resources and annual appropriation by the Board of Supervisors.

### Near Term

Projects are anticipated to be moved to the 5-year plan within 1–3 years. Many of these projects are scheduled for funding as part of the County Bond Referendum Plan. Examples of such projects may exhibit the following criteria:

- Eliminate an immediate threat to personal and public safety.
- Alleviate immediate threats to property or the environment.
- Respond to a court order or comply with approved Federal or State legislation.
- Have significant Federal/State commitment or significant private sector investment.
- Preserve existing resources or realize significant return on investment.
- Preserve previous capital investment or restore capital facilities to adequate operating condition.
- Respond to Federal or State mandates in compliance with extended implementation schedules.
- Generate significant revenue, are self-supporting or generate cost avoidance (return on investment and/or improved efficiency).
- Alleviate existing overcrowded conditions that directly contribute to the deterioration of quality public services.
- Generate private reinvestment and revitalization.
- Have significant public expectations as demonstrated by development proffers or other Board action.
- Support the County's efforts to encourage development of affordable and effective multi-use public facilities.
- Promote equity.

### Long Term

Projects may be moved to the 5 Year plan within 4–5 years. Some of these projects are scheduled in the County Bond Referendum Plan and some are included in the Future Projects Lists and Details. Examples of such projects may exhibit the following criteria:

- Accommodate projected increases in demand for public services and facilities.
- Maintain support for public services identified by citizens or appointed Boards and Commissions as a priority in furtherance of the goals and objectives established by the Comprehensive Plan.
- Meet new program goals or respond to new technology.
- Fulfill long term plans to preserve capital investments.

## One Fairfax



The CIP evaluation process is evolving to include not only infrastructure conditions, regulatory mandates, and project readiness factors, but County values which will be identified through the Strategic Planning process and other social factors, such as equity and economic opportunity. The CIP project prioritization process will strive to include the One Fairfax Initiative in all decision making.

One Fairfax is a joint social and racial equity policy of the Fairfax County Board of Supervisors and School Board. It commits the county and schools to intentionally consider equity when making policies or delivering programs and services. It's a declaration that all residents deserve an equitable opportunity to succeed—regardless of their race, color, sex, nationality, sexual orientation, religion, disability, income or where they live. Each Fairfax County Government agency has established committees comprised of employees who are committed to applying an equity lens to all programs across the County.

## Fairfax County Draft Strategic Plan

County staff have been engaged in a strategic planning effort to focus on community-based outcomes and priorities, and to "Shape the Future Together." The countywide strategic planning effort is critical for the future to focus County priorities, addressing the needs of our growing community, changing our directed service delivery model and balancing finances. The community strategic plan approach, which clearly defines and measures goals, supplemented by a renewed focus on data, will be designed to frame the conversations about future opportunities. The development of the Budget and the CIP will support the mission of the strategic plan and support a more enhanced alignment of resources and strategies. It is envisioned that Fairfax County will be guided by a set of overarching principles which will influence how the county makes decisions, sets policies, allocates resources, implements strategies, and measures results. The six guiding principles proposed include: Access, Affordability, Collaboration and Engagement, Innovation, Placemaking, and Sustainability. These guiding principles will help achieve the nine priority area outcomes outlined in this strategic plan. The nine priority areas proposed in draft form are as follows:

- Cultural and Recreational Opportunities
- Economic Opportunity
- Effective and Efficient Government
- Empowerment and Support for Residents Facing Vulnerability
- Health and Environment
- Housing and Neighborhood Livability
- Lifelong Education and Learning
- Mobility and Transportation
- Safety and Security



## Common Definitions

The Infrastructure Financing Committee (IFC), a joint School Board/County Board Committee, established in April 2013, approved the use of common definitions for various capital projects, operational maintenance, and infrastructure replacement and upgrades. These definitions are used in the development of both the County and FCPS Capital Improvement Programs.

### Operations and Maintenance

The recurring, day-to-day, periodic, or scheduled maintenance/repairs required to preserve, control deterioration, and provide for the basic operation of a facility. This type of maintenance is routine, recurring, and is based on frequency schedules, responding to service requests, or through periodic inspection and correction efforts. Operations and Maintenance efforts are an essential part of the ongoing care and up-keep of any facility. Operations and Maintenance is typically funded through operational budgets. Examples of Operations and Maintenance include:

- Janitorial – custodial services, trash removal
- Electrical – power malfunctions, replacement light bulbs, elevator/escalator repairs
- Plumbing – dripping faucets, clogged pipes
- Painting – painting walls
- Carpentry – broken doors, ceiling tile replacement, replacement windows
- Mechanical systems – replacing filters, belts on HVAC equipment
- Replacement – gym floors, carpet tiles, roof top HVAC components, field lighting
- Upgrades – some improvements to meet American with Disability Act (ADA) standards

### Infrastructure Replacement and Upgrades

Infrastructure Replacement and Upgrades refers to the planned replacement of building subsystems that have reached the end of their useful life. These systems, once replaced, will have an average life cycle of 20 years or more. Without significant reinvestment in facility subsystems, older facilities can fall into a state of ever-decreasing condition and functionality, and the maintenance and repair costs necessary to operate the facilities increase. Currently these types of Infrastructure Replacement and Upgrades are funded within operational budgets or financed using municipal bonds. Examples of Infrastructure Replacement and Upgrades include:

- Roof Replacement
- Electrical System Replacement
- HVAC Replacements
- Plumbing Systems Replacements
- Replacement Windows
- Parking Lot Resurfacing
- Fire Alarm System Replacements
- Sprinkler Systems
- Emergency Generator Replacements
- Elevator Replacement



## Components of the CIP

### Renovations

Renovations are performed on a facility in order to replace all subsystems which have outlived their useful life, as well as alter, modernize, expand, or remodel the existing space. Renovations also may improve or modernize the operations and functions of the facility and bring it up to current code standards. Renovations are typically financed through municipal bonds.

### New Construction

New Construction refers to the construction of a new facility or expansion of an existing facility with no other renovation work performed on the existing building. New Construction is typically financed through municipal bonds.

### Current Project Lists

The CIP includes a comprehensive listing of all projects contained in the 5-Year CIP Period. The lists of projects in the 5-Year CIP Period are available by function and by Supervisor District.

### Public Private Partnerships

This section of the Capital Improvement Program (CIP) consolidates all projects partially or wholly financed through partnership agreements. Most of these partnerships are with private entities, however, some may include regional, state, or federal partners. The capital facilities referred to in this section represent multiple program areas but may not have been previously included in the CIP, as one of the advantages of the Public Private Partnership (P3) process is to accomplish the construction of needed facilities sooner than the normal process and funding availability would allow. Procurements involving some form of partnership with private or public entities have provided great benefits to the County in education, transportation, public safety, and other functions. Projects with these types of partnerships are presented in this section to provide a more comprehensive view of partnership activity in the County. Since the passage of the Public Private Partnership for Educational Facilities and Infrastructure Act (PPEA) in 2002, the County has been engaged in various analyses and negotiations of significant capital projects, both solicited and unsolicited.

### Countywide Infrastructure Replacement and Upgrades

This section provides a compilation of the Infrastructure Replacement and Upgrade requirements associated with the various program areas contained in the Capital Improvement Program (CIP). Infrastructure Replacement and Upgrades is the planned replacement of building subsystems such as roofs, electrical systems, HVAC systems and plumbing systems that have reached the end of their useful life. As the County infrastructure ages, more frequent replacement and upgrades are required. Fairfax County's inventory of infrastructure includes not only government buildings, but housing units, miles of walkways and sewer pipe and many facilities such as residential facilities and fire stations that operate 24/7, 365 days per year. Infrastructure replacement and upgrades are prioritized based on life safety concerns, repair history and availability of replacement parts.

### Environmental Sustainability

This section describes Environmental Improvement Projects approved as part of the Environmental Improvement Program (EIP), projects approved as part of the Board of Supervisors' Operational Energy Strategy and the on-going sustainability policy for building construction.

# Capital Improvement Programming

## Functional Program Areas

Each functional area contains program goals. Within most functional area, separate sections denote current initiatives and issues, links to the Comprehensive Plan and specific project descriptions. Because of the length of time required to plan, design and construct capital projects, the CIP encompasses historic and anticipated future costs for each project. Specifically identified are the costs for the current fiscal year (the Capital Budget), and anticipated costs for each of the four succeeding fiscal years. These five years, the current budgeted or expended amounts, and the anticipated future costs, provide the total estimated cost of each project. Following the project descriptions and justification statements, a cost summary chart has been included which depicts each project's timeline. These funding schedules indicate the total cost of each project and the amounts scheduled over the five-year CIP period. In addition, these tables show the source of funding for each project. Many of the functional program areas also contain a County map that identifies locations for those projects with a selected or fixed site.

## Future Project Lists and Details

The CIP also includes a listing of future potential projects "Beyond the 5-Year CIP Period". Lists are also available by function and by Supervisor District. For each potential project beyond the 5-year period, a Project Detail Sheet has been developed which includes the description and justification for the project, and potential operational costs (if known). These Detail Sheets include cost estimates which are based on preliminary project descriptions provided by the requesting agency, and include all estimated costs for land acquisition, permits and inspections, project management and project engineering, consultant design, construction, utilities, fixed equipment, and information technology infrastructure. No preliminary scoping and concept work has been completed for these projects and estimates are often estimated in today's dollars. Therefore, each estimate is considered an "Estimate - No Scope, No Inflation" (ENSNI).

## Potential Shared-Use Opportunities List

This list is provided to facilitate the planning of potential shared Fairfax County Public School (FCPS) and Fairfax County Government facilities. Lists are available by Supervisory District and by year.

## Operational Budget Impacts of the CIP

This section of the CIP provides rough estimates for operational costs associated with current and future CIP projects. These estimates are in FY 2022 dollars, with no inflation applied. It is anticipated that all of these budget estimates will be reviewed in more detail as facility conceptual designs are completed.

## Evolution of a Capital Project

The following diagram depicts the evolution of a capital project from inception to approval in the CIP, to construction completion. Project concepts and facility planning are developed in response to need and identification in the Comprehensive Plan. In addition, projects can be initiated by citizen groups or the Board of Supervisors. Capital project requests are submitted by County agencies and reviewed by the CIP team, the County Executive, the Planning Commission, and the Board of Supervisors. Once a project has been included in the CIP and approved in the annual budget the following phases are executed:

- **Project Development:** The County identifies project requirements and defines a project's work scope by conducting feasibility studies, data collection, preliminary design, cost estimates and assessments of alternatives.
- **Land Acquisition:** Alternative sites are evaluated, and acquisition of land occurs. Costs incurred include purchase, easements, and right-of-way costs. This can also include surveys, appraisals, environmental audits, permitting, legal costs, maps, charts, aerial photography, and other costs.
- **Design Phases – Architectural Consulting, Schematic Design and Design Development:** Programmatic review and negotiations are conducted with architectural consultants. The design of the project is initiated in accordance with the scope of work set forth in the project development phase. These phases include professional consultant work, legal and technical documentation, constructability review, data collection, advertising, assessment of alternatives related to project design, construction management services and bid reviews. Before construction can occur, many projects will require review at various County levels to establish the extent and exact location of the facility. This review in some cases involves a public hearing before the County Planning Commission pursuant to Section 15.2-2232 of the Code of Virginia, as amended, to determine whether the project is substantially in accord with the County's adopted Comprehensive Plan. After this review stage the specific requirements and details of each project can be finalized. Also, in order to place heightened awareness on security, an inter-departmental team is identified to provide guidance on security issues at proposed new County facilities. As such, the principals of Crime Prevention through Environmental Design are applied in the design phase of all future County facilities.
- **Construction Phases:** This includes all construction related tasks required to place a project in service. This may include final design, project construction contracts, professional and technical assistance, advertising, legal and technical documentation costs, inspection, testing, permitting and utility coordination. At the conclusion of these phases, the project is complete and ready for operation.

County staff administer all of these project phases including in-house project management, contract supervision, technical reviews, construction management, construction inspection, technical specifications, surveying and mapping.

# Capital Improvement Program Evolution of Projects

