

Office of Capital Facilities

► Agency Mission

To provide planning, design, land acquisition, and construction services for the implementation of capital construction projects within available funding resources and approved time frames. We strive to provide Fairfax County with quality and cost effective building and infrastructure projects in a timely manner through teamwork in design, land acquisition, construction, and administrative support. We work collaboratively with our customers to provide excellent public service.

► Trends/Issues

Key Accomplishments

The Capital Improvement Program continues to be vigorous in its execution. During FY 2001, a total of 41 projects was completed at an investment of over \$47 million. We administered 16 construction funds with FY 2001 appropriations of \$189 million. During FY 2001, 95 percent of construction projects were completed on time and 92 percent were completed within budget. Construction cost growth of projects amounted to 2 percent.

The current FY 2002 construction program includes the following major projects: Noman M. Cole Pollution Control Plant Expansion to 67 million gallons per day, West Springfield Police Station, Mount Vernon Police Station, Braddock District Supervisor's Office, Burke Volunteer Fire Station, Judicial Center Parking Garage, South County Center, Oakton Fire Station Addition, Fire Station Safety Improvements, Sully District Police Station, Police Forensics Facility, Newington Maintenance Facility, Herndon-Monroe Park and Ride Canopy, Adult Detention Center Renovations, Jefferson Manor, Wiehle Avenue Phase III, Pohick Road Connector, Route 123 Widening, various spot improvements to roads, bus shelters, walkways, drainage projects, and sanitary extension and improvements.

Since 1997, we completed projects totaling over \$295 million which include:

- Major building projects totaling over \$157 million:
 - North Point Fire Station
 - Fire Station Improvements, Phases I and II
 - Administration Building Renovation, Noman M. Cole Pollution Control Plant
 - Laboratory, Noman M. Cole Pollution Control Plant
 - South Site Improvements, Noman M. Cole Pollution Control Plant
 - Great Falls Community Library
 - McLean Community Center; Susan B. Duval Art Studio
 - Reston Community Center Administration Renovation
 - Kingstowne Community Library

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- Adult Care Residence
- Adult Detention Center Expansion
- Herndon/Monroe Park and Ride
- Dual Diagnosis Facility
- George Mason Library Addition and Renovation
- Juvenile Detention Facility Expansion
- Police Training Facility and Live Fire Ranges
- Pre-Release Center Addition to the Adult Detention Center
- I-66 Transfer Station Expansion
- Major road construction projects totaling over \$66 million:
 - Wiehle Avenue Phase II – Reston Avenue to the Fairfax County Parkway
 - South Van Dorn/I-95 Phase I – Oakwood Road Relocated
 - South Van Dorn/I-95 Interchange Phase II – Ramp to Northbound I-95
 - Stringfellow Road
 - Fairfax County Parkway Noise Walls
 - Fairfax County Parkway – Route 123 to Hooes/Pohick Roads
 - Hayfield Road
- Other projects including trails, sidewalks, sanitary and storm water, and neighborhood improvements:
 - Brookland/Bush Hill Phase II, Ballou, Mt. Zephyr II, Gum Springs Phase III, Fairhaven Phase VI, Fairhaven Phase V, Baileys Crossroad Phase C Neighborhood Improvements
 - Annandale Streetscape – Columbia Pike Pilot Project, Rt. 1 Bus Shelters, Springfield Bus Shelters, Commercial Revitalization Projects
 - 36 Storm Drainage Projects
 - 27 Transportation Spot Improvement Projects
 - Landfill Phase IIA – 12 acres of double lined ash landfill at the I-95 Facility
 - 21 Walkway and Bus Shelter Projects
 - Columbia Pike Trail Bridge

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- 17 Sanitary Sewer Extension and Improvement Projects, including Gunston/Wiley Pump and Haul and Rehabilitation of Pumping Stations
- 12 Developer Default Projects
- In addition, we conducted value engineering reviews, resulting in an estimated savings of \$6.6 million for eight projects reviewed. We also improved service delivery through emerging technology:
 - Displayed advertisements for construction bids and architect/consultant information on the County's Internet site
 - Used GIS and Autocad to accelerate design of projects
 - Used GPS survey technology to facilitate designs
 - Developed and implemented database technology for plan review and comment tracking

Key challenges for Capital Facilities are to provide cost effective and timely completed construction projects using emerging technology for improved efficiency. The following initiatives have been implemented in order to improve project delivery and cost effectiveness.

Initiatives

The beginning of FY 2001 marked the formal reorganization of the Department of Public Works and Environmental Services. During FY 2001, the Capital Facilities business group formed Core Leadership and Management Teams to develop strategy plans, review business processes, and initiate a change in organizational culture to promote leadership at all levels of the organization. Members received a two-day training seminar in the High Performance Organization Management model. The Core Leadership Team worked in collaboration with all individuals in the business group to develop Guiding Principles: Vision, Mission, Values, and Philosophy. These principles form the basis of our leadership and management philosophy.

A business process redesign team was formed to analyze the process for design and construction of walkway projects. The Walkway Process Redesign Team submitted a report with recommendations for changes that will eliminate rework loops, maximize the use of resources across the business group, and reduce the total time required to complete walkway projects. During FY 2002, a team-based approach to project management will be implemented. A team of individuals with one representative from each division (Land Acquisition, Planning & Design Division, and Construction Management Division) will manage the project through all steps from project inception to project completion.

In FY 2002, additional business process redesign teams will be formed for transportation and stormwater projects to build on the team-based model developed for walkway projects.

We have initiated several pilot stream restoration projects in collaboration with the Stormwater Management Business Group. This emerging environmentally sensitive approach to stream restoration reflects the emphasis that DPWES places on its stewardship of the environment. In the building design area we are implementing a pilot project to incorporate the "Green Building" concept of design which maximizes energy efficiency and uses environmentally compatible recycled materials.

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Training

Over the past several years Capital Facilities has emphasized training of engineers in Value Engineering. Many of our staff are qualified in both Modules I and II of the Society of American Value Engineers. NACO recognized the County's initiative with an Achievement Award. In addition, we have encouraged cross training to broaden professional development. Recent training includes Leading, Educating and Developing (LEAD) Program Training, Autocad, MS Project, Supervisor Training, and new skills training. These initiatives are designed to improve effectiveness of staff in an ever-changing environment.

Issues

Increases in the population of Fairfax County create demands for additional services. New fire stations, libraries, and major renovations of existing facilities are needed to support the operation of the County Government and to provide essential services. The infrastructure of the County is aging. The cost of deferred construction continues to escalate due to the effect of inflation. Reinvestment is urgently needed to maintain the existing facilities and extend the useful life of the County's existing infrastructure. The Facilities Management Division is currently conducting an assessment of all County buildings to identify capital maintenance and major component replacement requirements and costs.

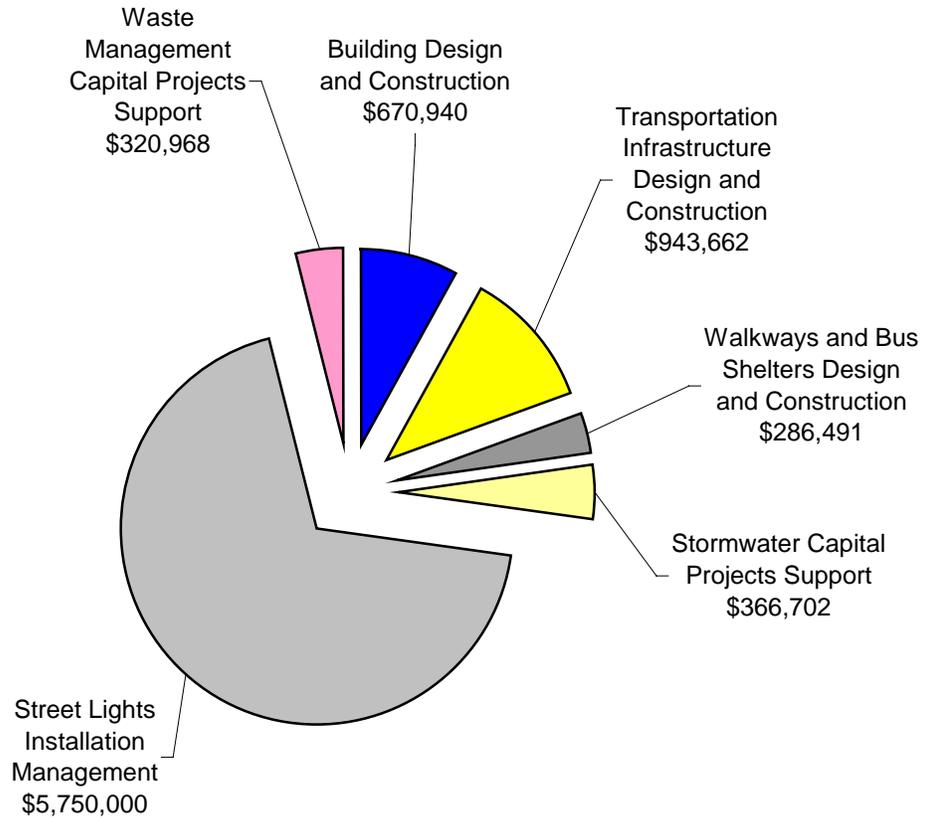
In addition to facilities, the following County programs are awaiting additional funding for identified future needs: streetlight installation program, neighborhood improvement program, transportation spot improvement program, walkway program, bus shelter program matching funds, and storm drainage construction.

Maintaining a consistent, robust Capital Improvement Program enables the Capital Facilities business area to retain valuable engineering expertise that is vital to the planning and execution of a variety of capital construction projects. The Capital Facilities business area is taking steps to maintain staff engineering expertise to support all areas of the Capital Improvement Program. Staff are reassigned to different program areas as needed to respond to changes in program needs and to provide valuable cross training. There is sufficient workload in the current Capital Improvement Program for staff in Capital Facilities to be fully engaged in design, land acquisition, and construction activities through Fiscal Year 2002. Projected workload for Fiscal Year 2003 and beyond is dependent on future Capital Improvement Program funding.

► Summary of All Agency CAPS

CAPS Number	CAPS Title	CAPS Net Cost	CAPS Number of Positions/SYE
26-01	Building Design and Construction	\$670,940	29/28.8
26-02	Stormwater Capital Projects Support	\$366,702	18/17.7
26-03	Street Lights Installation Management	\$5,750,000	3/3
26-04	Transportation Infrastructure Design and Construction	\$930,891	47/47.5
26-05	Walkways and Bus Shelters Design and Construction	\$286,491	14/13.9
26-06	Waste Management Capital Projects Support	\$320,968	19/19.1
TOTAL Agency		\$8,325,992	130/130

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Total FY 2002 Adopted Budget Expenditures = \$8,338,763

Total FY 2002 Adopted Budget Net Cost = \$8,325,992