Public Works Program Area Summary

Overview

The agencies in the Public Works program area have both an external and internal focus. They are responsible for designing and building County infrastructure, which goes beyond the scope of administrative buildings to specialized public facilities such as police and fire stations, libraries, bus shelters, road improvements, stormwater ponds and dams. Their job does not end when construction is completed, however. They operate and maintain each facility, and manage a renewal program to ensure that the County's assets are protected and can be fully used to benefit the public.

Funding for the majority of projects handled by these agencies is provided through general obligation bonds. The General Fund and grants make up most of the remaining sources. Growing demands for services including public safety, libraries, recreational facilities, courts, etc. are related to County population growth. While a large portion of this new growth has required the addition of facilities in the western part of the County, there are significant renewal and renovation requirements for facilities in the other areas of Fairfax County. This requires a careful balancing act to address priorities.

Strategic Direction

As part of the countywide focus on developing strategic plans during 2002-2003, the Department of Public Works and Environmental Services (DPWES), which encompasses the four agencies addressed in this program area, developed an organization-wide strategic plan. This plan addressed the department-wide mission, vision and values, and included an environmental scan, as well as defined strategies for achieving their goals and objectives. Each individual business area is also addressed with its own component plan. These strategic plans are linked to the overall County Core Purpose and Vision Elements. Common themes in all of the agencies in the Public Works program area include:

- Teamwork
- Collaboration with customers
- Technology
- Professional growth and staff development
- Customer service
- Preservation and improvement of the environment
- Streamlined processes for capital projects
- Stewardship of resources

COUNTY CORE PURPOSE

To protect and enrich the quality of life for the people, neighborhoods, and diverse communities of Fairfax County by:

- Maintaining Safe and Caring Communities
- Building Livable Spaces
- Practicing Environmental Stewardship
- Connecting People and Places
- Creating a Culture of Engagement
- Maintaining Healthy Economies
- Exercising Corporate Stewardship

In recent years, the Department of Public Works and Environmental Services has spent considerable time and effort to properly align its business areas and processes in order to ensure the most cost-effective service in light of the challenges they face. More on the strategic focus of each of the agencies in this program area can be found in the individual agency narratives that follow this section.

Linkage to County Vision Elements

While this program area supports all seven of the County Vision Elements, the following reflect the particular emphasis of these agencies:

- Practicing Environmental Stewardship
- Building Livable Communities
- Maintaining Safe and Caring Communities
- Connecting People and Places

Public Works agencies have considerable responsibility for **Practicing Environmental Stewardship.** Their commitment to this vision element extends from using energy performance contracts in existing buildings to improve their overall energy efficiency to piloting a new "green building" initiative. This involves the development of green building guidelines to use more environmentally-friendly construction techniques, expand the use of recycled materials, and provide more energy efficient buildings. New Energy Management Control Systems (EMCS) are being added to older buildings to allow for better control of heating and cooling systems, and less efficient HVAC and lighting systems are also being replaced. Both of these efforts further support the County's commitment to energy efficiency. Water quality is another environmental priority in this program area. Fairfax County is committed to the 2000 Chesapeake Bay Agreement focused on removing the bay from the U.S. Environmental Protection Agency's list of impaired waters by the year 2010. This requires a multi-pronged approach to manage and reduce the nutrient and sediment load, and involves the development of watershed management plans and models for estimating pollutant loadings to the County's receiving waters. On January 26, 2004, Fairfax County was recognized by the Chesapeake Bay Program, a partnership between the U.S. Environmental Protection Agency, Maryland, Pennsylvania, Virginia, the District of Columbia, the Chesapeake Bay Commission and participating citizen advisory groups, as a "Gold Chesapeake Bay Partner Community" based on the achievement of a set of benchmarks that support the protection and restoration of the Chesapeake Bay watershed. These benchmarks include improving water quality, promoting sound land use, protecting and restoring living resources and habitat, and engaging the community.

Funding in FY 2007 is concentrated in construction projects necessary to implement watershed management plans. The watershed planning process is anticipated to initiate an average of 300 water quality, storm drainage and flood control projects in each of the 30 watersheds. Approximately 40 percent or over $8 million of the $21.9 million dedicated to the Stormwater program in FY 2007 is assigned to various watershed implementation projects. An additional $6.7 million will support Infrastructure Maintenance and Replacement programs.

The County's stormwater system, which includes 1,400 miles of storm drainage conveyance systems, 45,000 stormwater drainage structures, and 1,100 stormwater management ponds, is strained by an aging infrastructure and rapid urbanization that has occurred over the last 20 years. This, in combination with state mandated higher water quality standards that must now be addressed by local governments, necessitates a more significant, multiyear investment in terms of funding and staff resources. The County's 30 watersheds are grouped into 15 watershed planning projects. The Little Hunting Creek Watershed Management Plan was completed in FY 2005. The Popes Head Creek Watershed Management Plan was completed in FY 2006 and by the end of FY 2006 nine more should be completed including Cameron Run, Cub Run/Bull Run, Difficult Run, Pimmit Run, Bull Neck Run, Scotts Run, Dead Run, and Turkey Run. As Watershed Management Plans are completed throughout the County, the list of stormwater control projects is updated. Implementation strategies and goals are developed on a watershed basis. As projects are implemented, revised funding requirements and strategies will be developed for the entire program.

In FY 2007 funding will also support requirements associated with the Municipal Separate Storm Sewer System (MS4) discharge permit, previously budgeted in Fund 308, Public Works Construction. The MS4 permit is part of the Clean Water Act of 1987 and requires water quality testing, watershed master planning, improvement programs, and development of a Geographic Information System (GIS)-based storm sewer system inventory. The current MS4 discharge permit was issued on January 24, 2002 for a five-year period, and requires renewal in January 2007 (FY 2007). By July 2006, the County should be notified of the new permit requirements and potential budgetary impacts. Permit activities may also be impacted by other state and federal mandates, including Total Maximum Daily Loads, the Chesapeake 2000 Agreement, and the Virginia Tributary Strategies. Historically this project has been funded in Fund 308, Public Works Construction. Beginning in FY 2007 all stormwater projects will be consolidated into three funds, including Fund 318 Stormwater Management Program; Fund 310, Storm Drainage Bond Construction, (which is supported by General Obligation Bonds approved by the voters in 1988); and Fund 316, Pro Rata Share Construction. This fund is supported by the Pro Rata Share Program, adopted in 1992, which requires one-time payments from developers of new developments to pay for a portion of the cost of off-site improvements. This consolidation will allow Stormwater Management to better allocate resources and track funding.

Public Works Program Area Summary

As would be expected, this program area contributes significantly to the County's **Building Livable Spaces** vision element. Fairfax County has a facility inventory of 155 buildings (excluding schools, parks, housing and human services residential facilities), with over 7.6 million square feet of space throughout the County. This inventory is expanding both with the addition of newly constructed facilities and by the acquisition of additional property. With such a large inventory, and the acquisition of additional facilities, it is critical that a planned program of repairs and restorations be maintained. In addition, the age of a major portion of this inventory of facilities is reaching a point where major reinvestments are required in the building subsystems.

In order to better define the County's capital renewal needs, a comprehensive facilities condition assessment was conducted on 92 selected Fairfax County facilities (approximately 4.2 million square feet of space), representative of older facilities anticipated to have the most capital renewal requirements in the near future. The assessment included a complete visual inspection of roofs and all mechanical and electrical components for each facility. Maintenance and repair deficiencies were identified and funding requirements identified. The results indicate a multi-million investment is needed over time. Specifically, the facility condition assessment indicated an estimated total of $80 million will be needed over the next ten years to repair facilities and meet expected repair and equipment replacement needs. In preparation for the FY 2007 budget, the Facilities Management Department (FMD) further refined and prioritized the comprehensive facility assessment lists and classified projects into four categories. Projects were classified as Category A: urgent/safety related, or endangering life and/or property; Category B: critical systems beyond their useful life or possible imminent failure; Category C: life-cycle repairs/replacements where repairs are no longer cost effective; and Category D: repairs needed for improvements if funding is available. Funding in the amount of $2,449,000 is included in Fund 317, Capital Renewal Construction in FY 2007 to address projects in categories A and B, those that present safety concerns or where critical systems are in danger of possible imminent failure. Funding is supported by the allocation of House Bill 599 State revenues received by the County. As future funding becomes available FMD can begin to address remaining requirements in each category.

Efforts to support the **Maintaining Safe and Caring Communities** vision element are less visible but equally critical. The County completed 4,000 square-feet of space planning and construction management for the Alternate Emergency Operations Center (AEOC), which was identified as one of the main shortcomings in the Hurricane Isabel After-Action Report. Physical security improvements at the Government Center were also implemented and staff will continue to implement additional security equipment upgrades as grant funding is received. To help address the concern in recent years about the West Nile virus, Stormwater Management staff were successfully trained and certified by the state to treat selected agency-maintained stormwater facilities in order to reduce the threat of this mosquito-borne disease. This agency also continued its dam safety and emergency response program to ensure the well-being of the public by inspecting dams in accordance with state and federal regulations.

Another key focus of this program area is **Connecting People and Places**. To support the public's mass transit access, the County entered into an agreement with the Virginia Department of Transportation (VDOT) to reduce the time to install federally-funded bus shelters. The agreement grants the County more authority in the implementation process, with fewer reviews and approvals by VDOT and the Federal Highway Administration (FHWA). Fairfax County also provides maintenance services for County transportation facilities, bus shelters and commercial revitalization districts through the use of an innovative performance-based contract that incorporates proactive inspections to quickly identify and correct deficiencies. Critical links to the area transportation network were also completed through projects coordinated by the Office of Capital Facilities. DPWES continues to complete design work on projects included in the Board of Supervisors' Four-Year Transportation Initiative and is currently managing approximately 18 projects as part of this effort.

Public Works Program Area Summary

Program Area Summary by Character

Category	FY 2005 Actual	FY 2006 Adopted Budget Plan	FY 2006 Revised Budget Plan	FY 2007 Advertised Budget Plan
Authorized Positions/Staff Years				
Regular	443/ 443	450/ 450	454/ 454	470/ 470
Expenditures:				
Personnel Services	$23,110,961	$26,037,481	$26,377,146	$28,289,043
Operating Expenses	46,533,102	45,679,336	47,494,001	50,779,594
Capital Equipment	431,252	255,300	362,242	465,200
Subtotal	**$70,075,315**	**$71,972,117**	**$74,233,389**	**$79,533,837**
Less:				
Recovered Costs	($16,866,463)	($14,983,541)	($15,323,206)	($15,795,334)
Total Expenditures	**$53,208,852**	**$56,988,576**	**$58,910,183**	**$63,738,503**
Income	**$3,529,189**	**$3,751,176**	**$3,649,268**	**$3,672,730**
Net Cost to the County	**$49,679,663**	**$53,237,400**	**$55,260,915**	**$60,065,773**

Program Area Summary by Agency

Category	FY 2005 Actual	FY 2006 Adopted Budget Plan	FY 2006 Revised Budget Plan	FY 2007 Advertised Budget Plan
Facilities Management Department	$36,120,038	$37,817,570	$38,800,255	$42,928,458
Business Planning and Support	318,787	381,183	381,183	409,698
Office of Capital Facilities	8,634,192	9,054,165	9,140,029	9,624,449
Stormwater Management	7,895,858	9,504,928	10,357,986	10,521,973
Unclassified Administrative Expenses	239,977	230,730	230,730	253,925
Total Expenditures	**$53,208,852**	**$56,988,576**	**$58,910,183**	**$63,738,503**

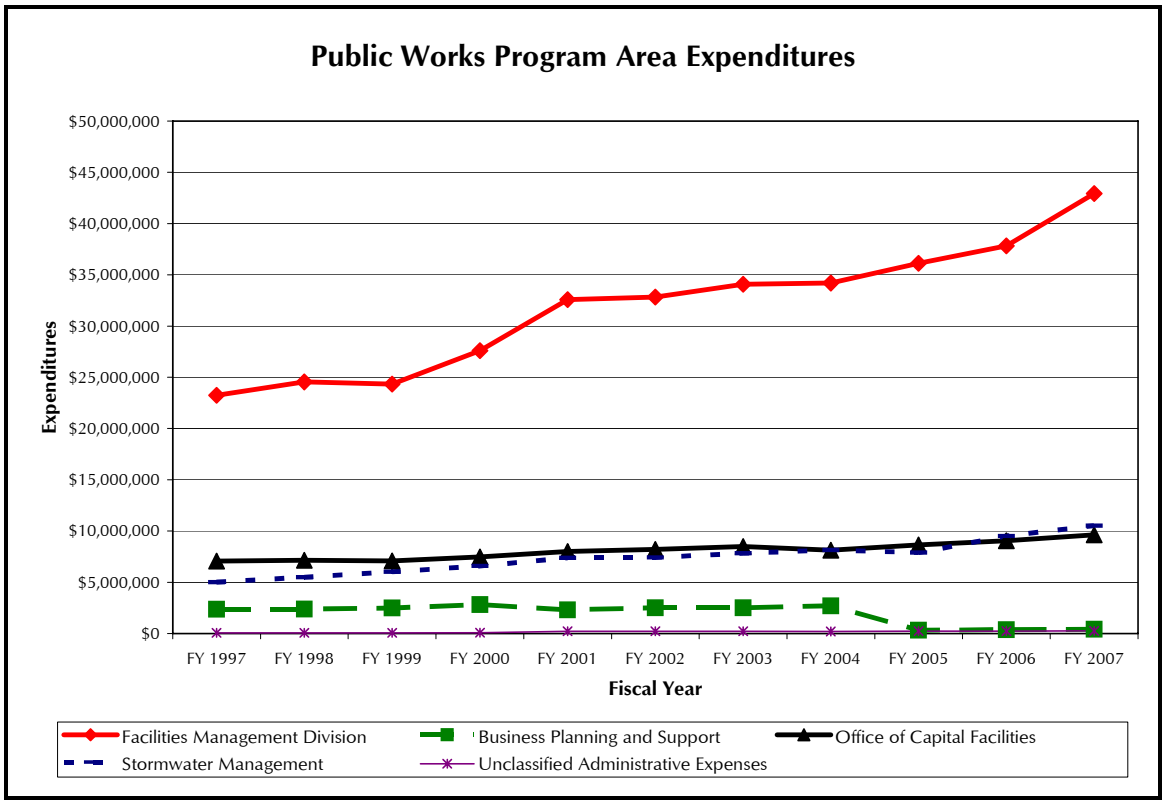
Budget Trends

For FY 2007, the recommended funding level of $63,738,503 for the Public Works program area comprises 5.5 percent of the total General Fund direct expenditures of $1,166,552,092. It also includes 470 or 4.0 percent of total authorized positions for FY 2007.

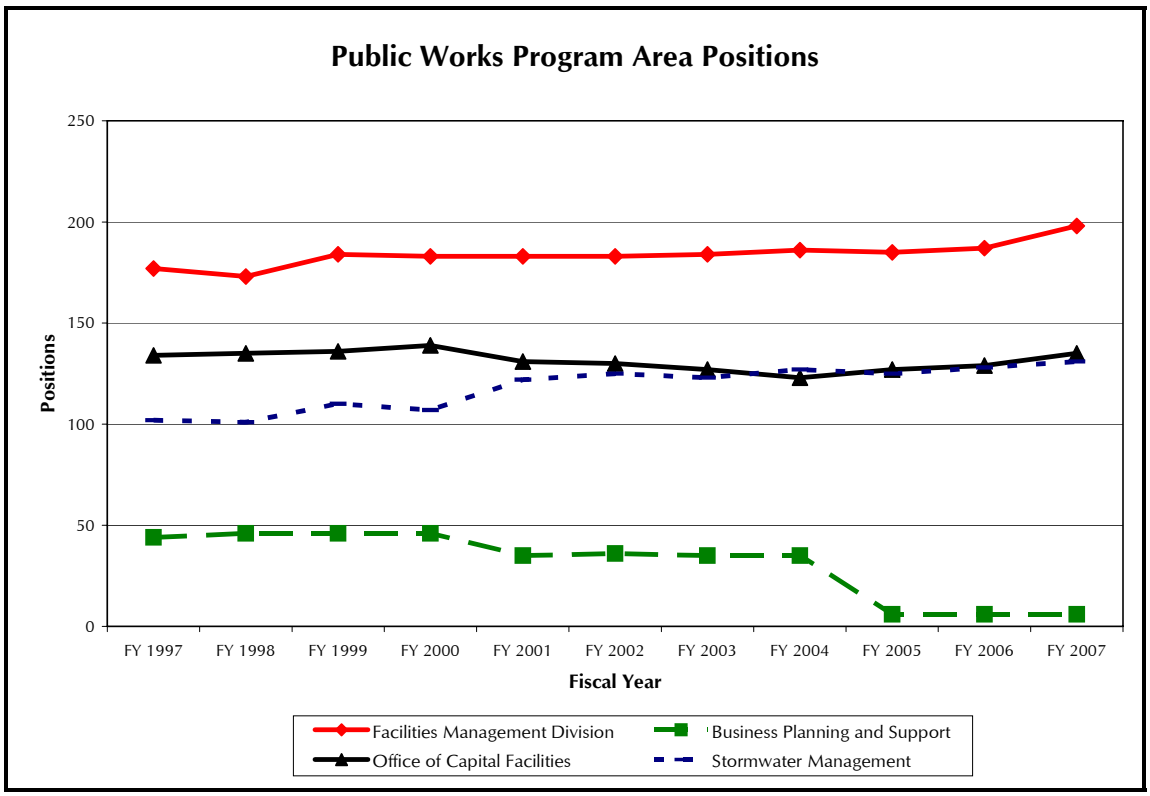
Overall, funding for the agencies within the Public Works program area has increased over the *FY 2006 Revised Budget Plan* by $4,828,320 or 8.2 percent to $63,738,503 in FY 2007. One significant factor contributing to this growth is an increase of $1,911,897 in Personnel Services. A total of 16/16.0 SYE new positions primarily accounts for this increase. Eleven of these new positions have been added in FMD to support new facilities. Of this total, 6 are necessary to provide maintenance and support for the Courthouse Expansion scheduled to open in April 2007, and 5 are necessary to provide maintenance and support for the Public Safety and Transportation Operations Center (PSTOC) scheduled to open in November 2007. Four positions are added in Capital Facilities with two positions addressing the increasing volume of developer projects going into default and the remaining two positions supporting the increased workload arising from watershed implementation plans. The remaining position in Stormwater Management will support the implementation of the watershed projects. Operating Expenses increase by $3,305,593 due to higher costs for energy, new facility operations and contractual requirements.

In FY 2007, the increases are partially offset by Recovered Costs in the amount of $15,795,334, an increase of $472,128 or 3.1 percent over the *FY 2006 Revised Budget Plan*. Expenditures are further offset by income in the amount of $3,672,730, making the net cost to the County for the Public Works program area $60,065,773 or 5.1 percent of total General Fund direct expenditures.

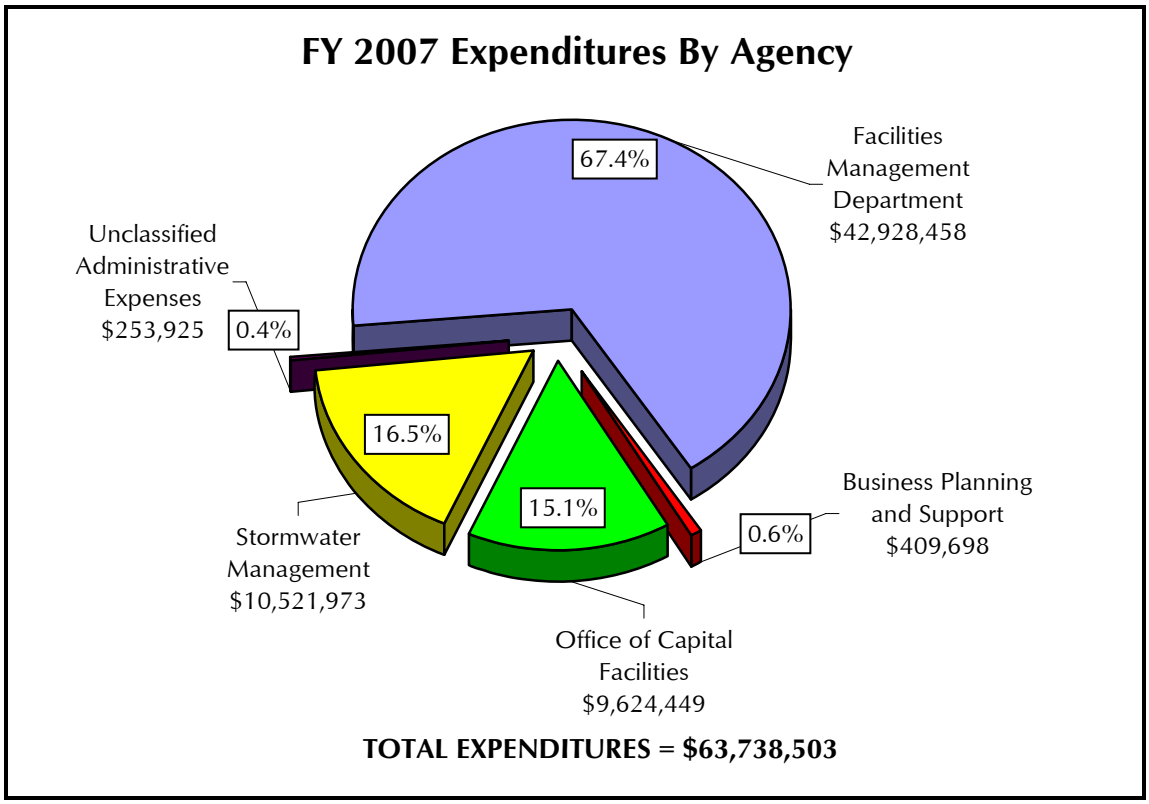
Trends in Expenditures and Positions

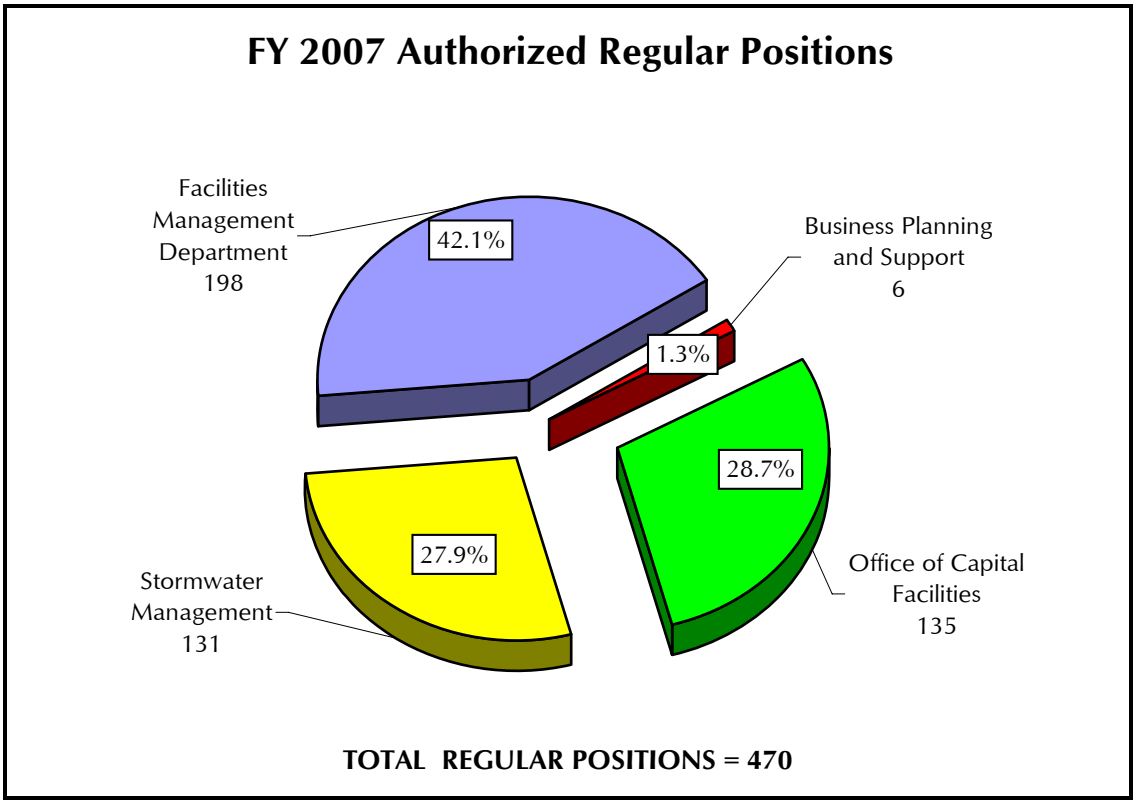


Decrease of funding and positions in Business Planning and Support from FY 2004 to FY 2005 reflects the transfer of positions from that agency in this program area to Land Development Services in the Community Development program area to more appropriately reflect the scope of their responsibilities.



FY 2007 Expenditures and Positions by Agency





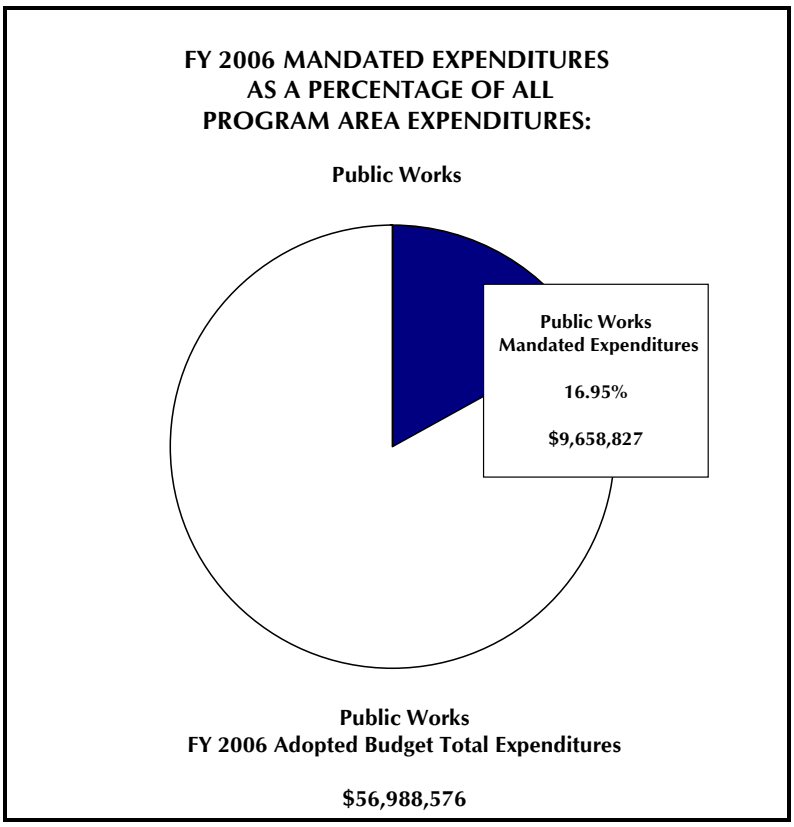
Federal and State Mandates

The federal and state mandates in the Public Works program area are concentrated in one particular agency, Stormwater Management. This agency is responsible for the County's stormwater infrastructure ensuring it meets many environmental mandates along the way.

The Stormwater Management agency has the authority for the National and Virginia State Pollutant Discharge Elimination System. Both require permits to discharge stormwater through the local storm sewer system into state waters. The permits require the County to monitor discharged stormwater for illegal discharge, improper dumping and to inspect all stormwater facilities, streams, and drainage systems with the goal of ensuring that both water quality and water quantity are controlled.

The agency also coordinates state mandated dam safety operation and maintenance certificates on the six dam sites located in the Pohick Creek Watershed. These sites are Lake Mercer, Lake Barton, Woodglen Lake, Lake Royal, Lake Braddock, and Huntsman Lake. The six dam sites listed above are formally inspected annually, via a joint inspection with agency staff and representatives of the Virginia Department of Conservation and Recreation's Division of Dam Safety, to identify any safety or operational area in need of corrective action. In addition, a biannual inspection is conducted by the County Dam Engineer, who has experience and expertise in dam construction.

In FY 2006, the agencies in this program area anticipate spending $9.7 million to comply with federal and state mandates, receiving $21,500 in revenue for a net cost to the County of $9.6 million. It should be noted that all revenue in this Program Area is derived from user fee/other revenue. No revenue is reported directly from the Commonwealth or federal government to support the state and federal mandates.



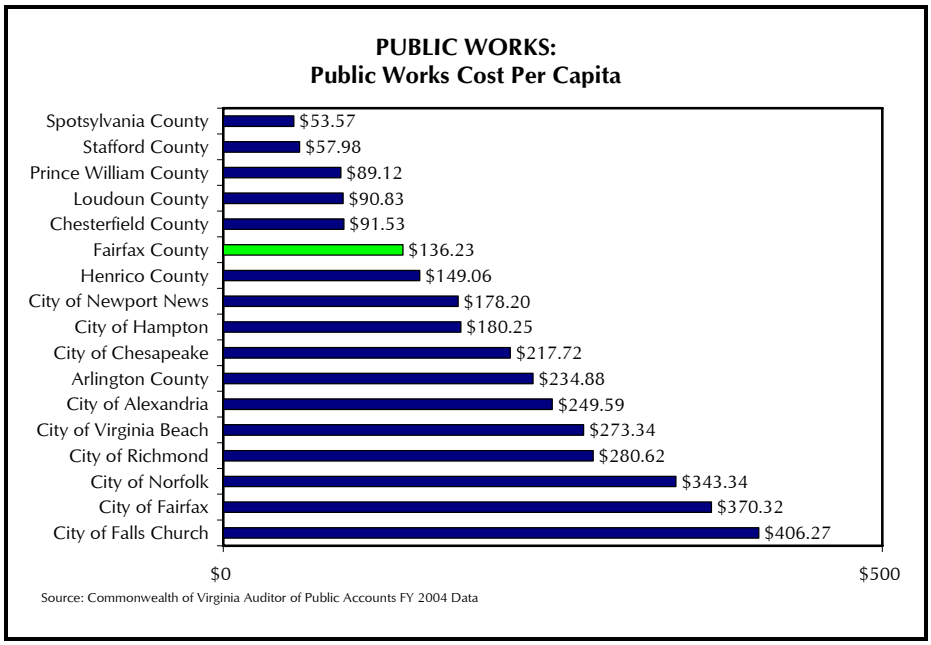
Benchmarking

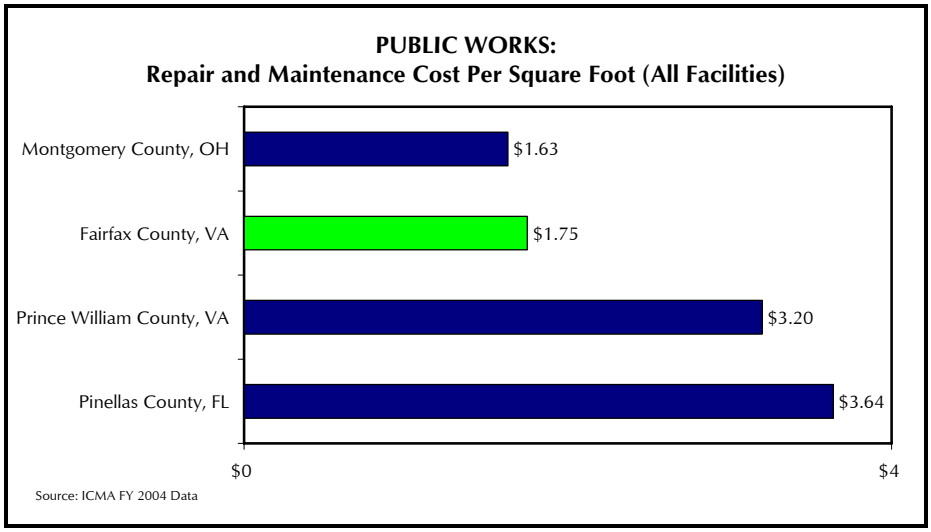
Since the FY 2005 Budget, benchmarking data have been included in the annual budget as a means of demonstrating accountability to the public for results achieved. These data are included in each of the Program Area Summaries in Volume 1 and now in Other Funds (Volume 2) as available. Fairfax County has participated in the International City/County Management Association's (ICMA) benchmarking effort since 2000. Approximately 100 cities and counties provide comparable data annually in a number of service areas. Not all jurisdictions provide data for every service area, however. For this program area, facilities management is one of the benchmarked service areas for which Fairfax County provides data. Participating local governments (cities, counties and towns) provide data on standard templates provided by ICMA in order to ensure consistency. ICMA then performs extensive data cleaning to ensure the greatest accuracy and comparability of data. As a result of the time for data collection and ICMA's rigorous data cleaning processes, information is always available with a one-year delay. FY 2004 data represent the latest available information. The graphs below generally show how Fairfax County compares to other large jurisdictions (population over 500,000). In cases where other Virginia cities or counties provided data, they are included as well.

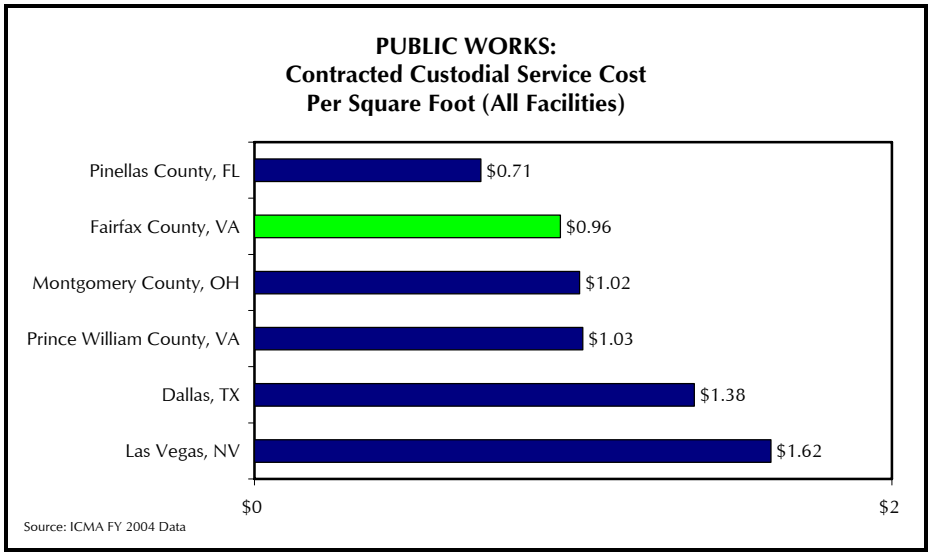
An important point to note in an effort such as this is that since participation is voluntary, the jurisdictions that provide data have shown they are committed to becoming/remaining high performance organizations. Therefore, comparisons made through this program should be considered in the context that the participants have self-selected and are inclined to be among the higher performers than a random sample among local governments nationwide. Performance is also affected by a number of variables including funding levels, weather, types of services provided, local preferences and the labor market. It is also important to note that not all jurisdictions respond to all questions. In some cases, the question or process is not applicable to a particular locality or data are not available. For those reasons, the universe of jurisdictions with which Fairfax County is compared is not always the same for each benchmark.

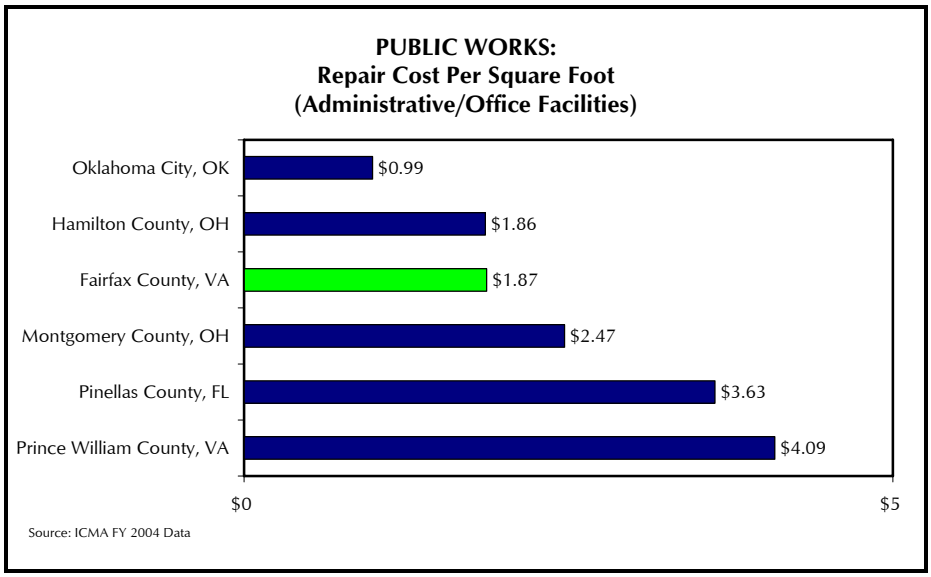
In addition, as part of an effort to identify additional benchmarks beyond the ICMA effort, data collected by the Auditor of Public Accounts (APA) for the Commonwealth of Virginia are also included here. Again, due to the time necessary for data collection and cleaning, FY 2004 represents the most recent year for which data are available. An advantage to including these benchmarks is the comparability. In Virginia, local governments follow stringent guidelines regarding the classification of program area expenses. Cost data are provided annually to the APA for review and compilation in an annual report. Since these data are not prepared by any one jurisdiction, their objectivity is less questionable than they would be if collected by one of the participants. In addition, a standard methodology is consistently followed, allowing comparison over time. For each of the program areas, these comparisons of cost per capita are the first benchmarks shown in these sections. As can be seen below, Fairfax County is very competitive in terms of cost per capita for the Public Works Program Area. Likewise, other cost per square foot show that Fairfax County is also competitive with other large jurisdictions that responded to the various template questions.

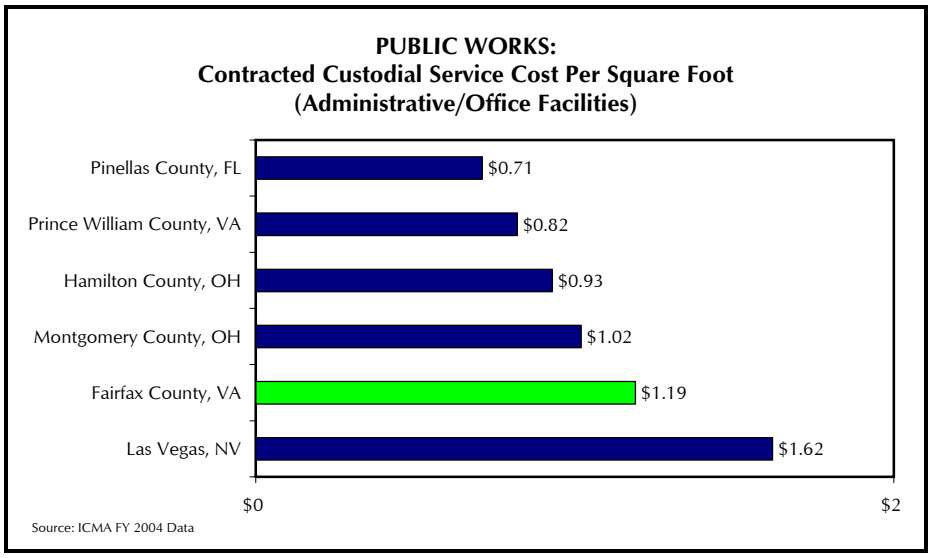
Public Works Program Area Summary

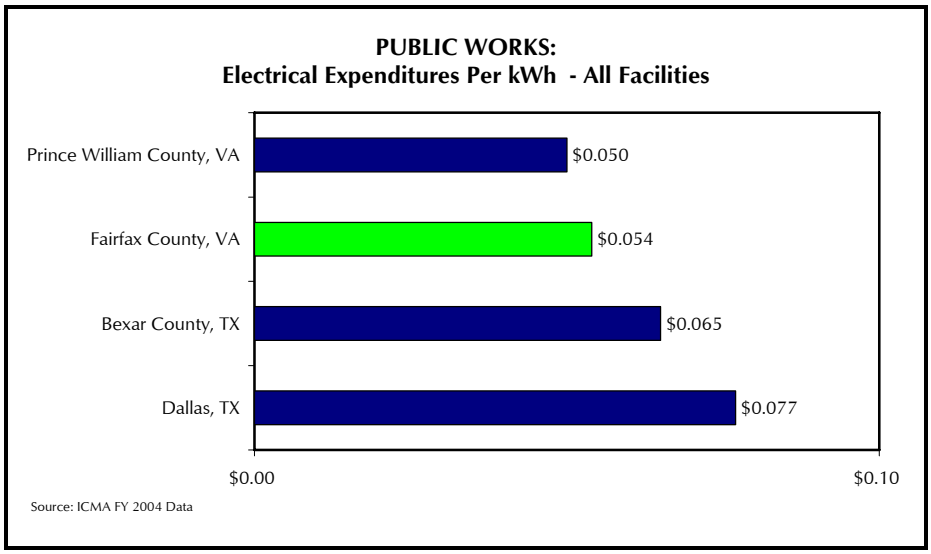


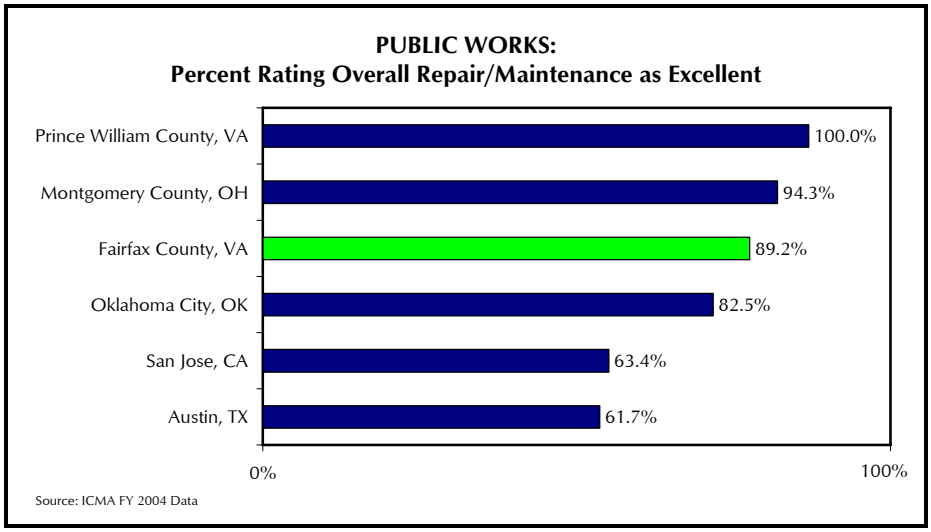





PUBLIC WORKS:
Repair Cost Per Square Foot
(Administrative/Office Facilities)
Oklahoma City, OK
$0.99
Hamilton County, OH
$1.86
Fairfax County, VA
$1.87
Montgomery County, OH
$2.47
Pinellas County, FL
$3.63
Prince William County, VA
$4.09
$0
$5
Source: ICMA FY 2004 Data


PUBLIC WORKS:
Contracted Custodial Service Cost Per Square Foot
(Administrative/Office Facilities)
Pinellas County, FL
$0.71
Prince William County, VA
$0.82
Hamilton County, OH
$0.93
Montgomery County, OH
$1.02
Fairfax County, VA
$1.19
Las Vegas, NV
$1.62
$0
$2
Source: ICMA FY 2004 Data


PUBLIC WORKS:
Electrical Expenditures Per kWh - All Facilities
Prince William County, VA
$0.050
Fairfax County, VA
$0.054
Bexar County, TX
$0.065
Dallas, TX
$0.077
$0.00
$0.10
Source: ICMA FY 2004 Data


PUBLIC WORKS:
Percent Rating Overall Repair/Maintenance as Excellent
Prince William County, VA
100.0%
Montgomery County, OH
94.3%
Fairfax County, VA
89.2%
Oklahoma City, OK
82.5%
San Jose, CA
63.4%
Austin, TX
61.7%
0%
100%
Source: ICMA FY 2004 Data