

# 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 the department faces. 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, as well as expanding building automation systems and using electric demand meters to improve overall energy efficiency, to continuing to develop the Green Building Program. The Green Building Program will improve

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the environmental characteristics of County facilities through the use of recycled materials, more energy efficient buildings, and more environmentally friendly construction techniques. DPWES agencies are specifically tailoring the Green Building Program to the needs of Fairfax County in a way that is practical and economical, yet also maintains the environmental intent of low impact development and Leadership in Energy and Environmental Design (LEED). The Fairfax Center and Crosspointe Fire Stations are now complete and are the County's first Green Buildings. In addition, the Facilities Management Department (FMD) entered into a three-year contract with Washington Gas Energy Services to purchase 5 percent of its electricity as wind energy in FY 2007 and FY 2008 and 10 percent in FY 2009, further supporting 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. The watershed planning program will complete a comprehensive master watershed plan for each of the 30 watersheds in Fairfax County by the Year 2010, in an effort to meet the County's commitment to the 2000 Chesapeake Bay Agreement. In addition, the watershed master plans provide a strong basis for management and control of stormwater runoff affecting the overall water quality and storm drainage conveyance in Fairfax County. By early FY 2009, watershed planning will be completed for approximately 55 percent of the County land area, while land characterization and modeling has been initiated for 45 percent of the remaining land area.

The County's stormwater system, which includes 1,800 miles of storm drainage conveyance systems, 45,000 stormwater drainage structures, 1,200 publicly maintained stormwater management ponds, and 2,400 privately maintained stormwater management ponds, is strained by an aging infrastructure and the continuous urbanization that has occurred in the County. These factors, 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 program objectives for FY 2009 include identification and prioritization of stormwater projects, and accelerated implementation on projects that have already been identified by Stormwater Management.

In FY 2009, funding will also support requirements associated with the federally mandated National Pollutant Discharge Elimination System (NPDES) program, or the Municipal Separate Storm Sewer System (MS4) permit. 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 MS4 permit is a five-year permit that regulates the discharge of local stormwater entering state waterways. The County is currently operating under an extension of the existing (MS4) discharge permit that expired in FY 2007 and negotiations for the new permit are underway. The permit renewal is anticipated to include increased regulatory requirements. In addition, the County is currently working with the Fairfax County Public Schools (FCPS) to assume the responsibility of the FCPS MS4 permit requirements. This consolidation effort will add approximately 225 additional stormwater management facilities to the County's existing inventory. Additional staff and resources have been provided to revise the County's current stormwater program and permit application process, complete the inventory of the School's facilities and initiate joint contracting programs. It is anticipated that developing a consolidated program will result in more effective delivery of services.

As part of the MS4 permit, the County conducts bio-assessment and bacteria monitoring to identify and correct non-stormwater discharges, such as illegal discharge and improper dumping, to state waters. The monitoring program is being expanded to provide statistical performance data for existing and new stormwater control structures. The statistical data will aid in future project design strategies and project implementation. In addition to the monitoring activities, the County performs physical stream assessments for an inventory of over 800 miles of streams and maintains the GIS hydrological layer of the stream network. This GIS layer was recently enhanced through the perennial stream identification project.

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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 170 buildings (excluding schools, parks, housing and human services residential facilities), with approximately 7.8 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. In addition, as the inventory of County facilities ages, it is important for the County to reinvest in these buildings and replace aging building equipment. FMD commissioned a building condition assessment and developed a ten-year capital renewal program based upon this assessment. Implemented in FY 2008 by FMD, this program is funded by the County's capital paydown program and by general obligation bonds. In FY 2007, 57 major capital renewal projects and dozens of small projects were completed totaling over \$12.0 million. Increased capital renewal activity is expected in FY 2008 and FY 2009. DPWES agencies also recently completed the construction of 120 capital projects, including the Crosspointe Fire Station, Katherine K. Hanley Family Shelter, Oakton Library and Waples Mill Road/Route 50 Intersection Improvements. The Pohick Sewer Trunk Line Upgrade project received a "Project of the Year" award from the Virginia, Maryland, and District of Columbia Chapter of the American Public Works Association (APWA). New initiatives for FY 2009 include refining and implementing pre-qualified competitive bid procedures to improve timely delivery, quality and cost effectiveness.

Efforts to support the **Maintaining Safe and Caring Communities** vision element are less visible but equally critical. The County hosted the first annual Emergency Open House at the Government Center with various County agencies. In collaboration with Risk Management, DPWES enhanced life safety systems by installing Automated External Defibrillators (AED) and proper signage in County-owned and leased facilities. In FY 2009 DPWES will develop a comprehensive countywide security program to include development of security incident reporting system, security awareness training and Security Architectural and Engineering guidelines. Agencies are also directing the development and implementation of a public education program with the regulated community that is proactive, promotes regulatory knowledge and compliance, and ensures a regulatory system that is equitable, sensible, and achievable.

In addition, as a result of the flooding that occurred in June 2006 in Fairfax County, in FY 2007 the Maintenance and Stormwater Management Division, in a combined effort with the Stormwater Planning Division, managed design and construction on approximately 14 flood control projects for houses that flooded and design on an additional 23 projects. It is anticipated that approximately 19 additional locations will be managed through the design phase in FY 2008 and an approximately 30 of the current and future projects in design will reach the construction completion phase in late FY 2008 to early FY 2009. The Stormwater Planning Division awarded a contract in FY 2007 to develop the flood monitoring and signalization project which provides electronic monitoring of excessive storm flows for high hazard dams, increasing the ability to provide early warning notification to down stream property owners in the event of unanticipated flooding events. The project may be fully operational in FY 2009.

Another key focus of this program area is **Connecting People and Places**. Fairfax County 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. DPWES agencies also recently completed 18 sidewalk/trail projects, and the installation of 18 bus shelters, bus benches and bus pads countywide. Several more bus shelter sites will be under construction in FY 2008 into FY 2009. Critical links to the area transportation network were also completed through projects coordinated by the Office of Capital Facilities. Public Works agencies also continue to enhance outreach efforts to inform residents and vendors about proposed and ongoing projects through the County Web site. New information added to the Web site includes the publication of a quarterly status report to inform residents about ongoing capital construction projects. In FY 2008, the addition a Geographic Information System (GIS) map of capital project locations will further assist residents in finding information.

A number of activities supporting transportation improvements and pedestrian access are transitioning from the DPWES program area to a Special Revenue Fund (Vol. 2) in FY 2009. Fund 124, County and Regional Transportation Projects will begin to consolidate multiple aspects of County transportation under one management structure. This fund will merge the current activities, program, and staff of the County's Department of Transportation with the staff of the Department of Public Works and Environmental (DPWES) who currently support planning and design related to roadway improvements. The merging of all staffing

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functions and programs in support of transportation permits an integrated seamless system for addressing a current and growing list of transportation capital projects and efforts to improve traffic flow, transit and general mobility of Fairfax County residents. The consolidation is necessary to support a more than doubling of the annual project base due to new transportation funding under House Bill 3202, and to effectively prioritize, plan, manage and spend current and new transportation funds to be received on an annual basis. In FY 2009 18/18.0 SYE existing positions in Agency 26, Office of Capital Facilities are transferred to Fund 124, County and Regional Transportation Projects.

### Program Area Summary by Character

Category	FY 2007 Actual	FY 2008 Adopted Budget Plan	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan
Authorized Positions/Staff Years				
Regular	479/ 479	481/ 481	488/ 488	470/ 470
Expenditures:				
Personnel Services	\$26,734,493	\$29,650,468	\$29,961,850	\$29,145,751
Operating Expenses	52,182,272	56,557,308	59,164,329	61,268,261
Capital Equipment	347,290	390,500	739,654	406,250
<b>Subtotal</b>	<b>\$79,264,055</b>	<b>\$86,598,276</b>	<b>\$89,865,833</b>	<b>\$90,820,262</b>
Less:				
Recovered Costs	(\$14,745,297)	(\$16,076,054)	(\$16,076,054)	(\$22,153,854)
<b>Total Expenditures</b>	<b>\$64,518,758</b>	<b>\$70,522,222</b>	<b>\$73,789,779</b>	<b>\$68,666,408</b>
<b>Income</b>	<b>\$4,045,017</b>	<b>\$3,761,763</b>	<b>\$3,877,424</b>	<b>\$4,268,575</b>
<b>Net Cost to the County</b>	<b>\$60,473,741</b>	<b>\$66,760,459</b>	<b>\$69,912,355</b>	<b>\$64,397,833</b>

### Program Area Summary by Agency

Category	FY 2007 Actual	FY 2008 Adopted Budget Plan	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan
Facilities Management Department	\$42,329,615	\$47,610,896	\$49,683,729	\$49,762,545
Business Planning and Support	380,304	414,712	448,012	425,356
Office of Capital Facilities	10,124,619	11,519,146	11,456,301	11,130,272
Stormwater Management	11,025,602	10,473,543	11,697,812	6,844,310
Unclassified Administrative Expenses	658,618	503,925	503,925	503,925
<b>Total Expenditures</b>	<b>\$64,518,758</b>	<b>\$70,522,222</b>	<b>\$73,789,779</b>	<b>\$68,666,408</b>

### Budget Trends

For FY 2009, the proposed funding level of \$68,666,408 for the Public Works program area comprises 5.6 percent of the total General Fund Direct Expenditures of \$1,230,247,000. It also includes 470 or 3.9 percent of total authorized positions for FY 2009.

The Public Works program area decreases \$5,123,371 or 6.9 percent from the *FY 2008 Revised Budget Plan* funding level. The decrease reflects \$2.9 million in one-time carryover funds included in the FY 2008 Revised level, primarily encumbrances for the Facility Management Department and Stormwater Management, as well as other adjustments due to funding restraints and department realignments to increase operating efficiency. These adjustments are detailed below.

It should be noted that the FY 2009 funding level reflects a net decrease of \$1,855,814, or 2.6 percent, from the FY 2008 Adopted Budget Plan funding level. This decrease results from General Fund funding restraints, resulting in a budget adjustment to charge \$4.2 million related to a portion of costs of the Maintenance and Stormwater Management Division (MSMD) to Fund 318, Stormwater Management Program. In addition, 18/18.0 SYE Office of Capital Facilities positions which support the design and land acquisition associated

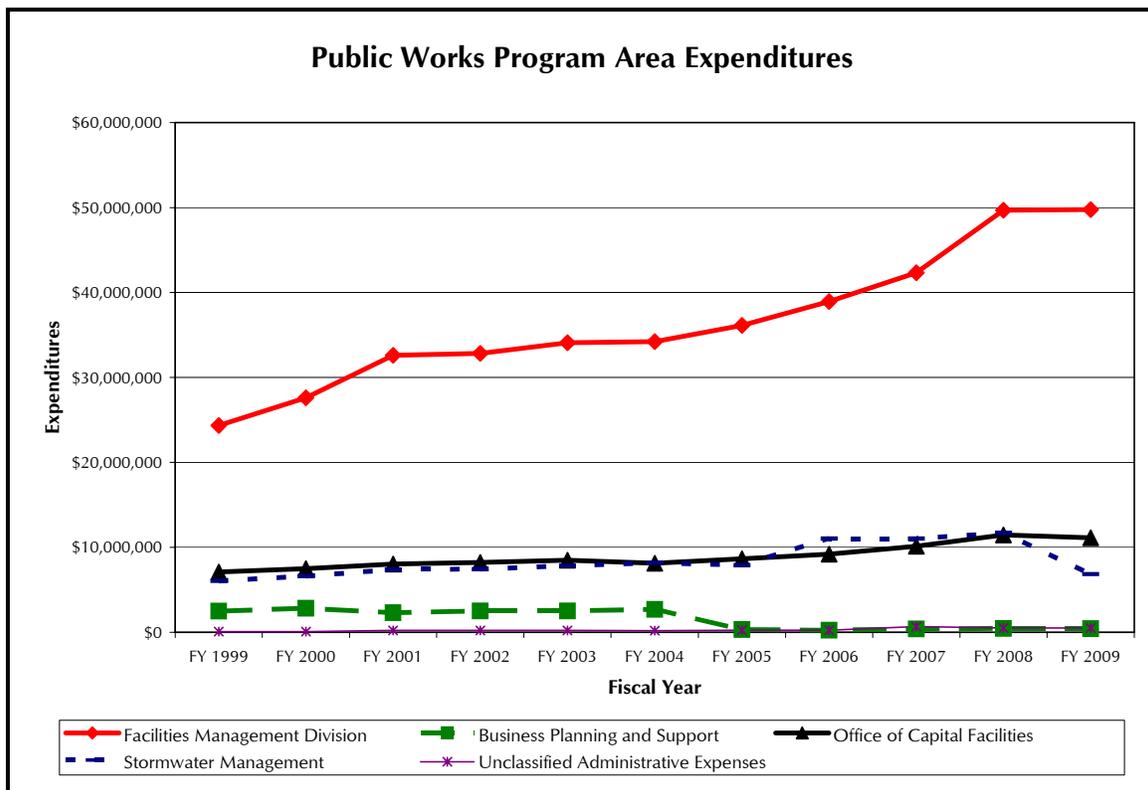
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with roadway improvements, and \$0.5 million in position-related costs, are transferred to Fund 124, County and Regional Transportation Projects. Fund 124 is newly created to begin the consolidation of all of the County transportation functions under one funding source provide a seamless coordination and flow of transportation project work from the planning and funding coordination stage, through final construction. Funding 124 funding includes newly authorized transportation revenue as a result of the General Assembly's passage of House Bill 3202.

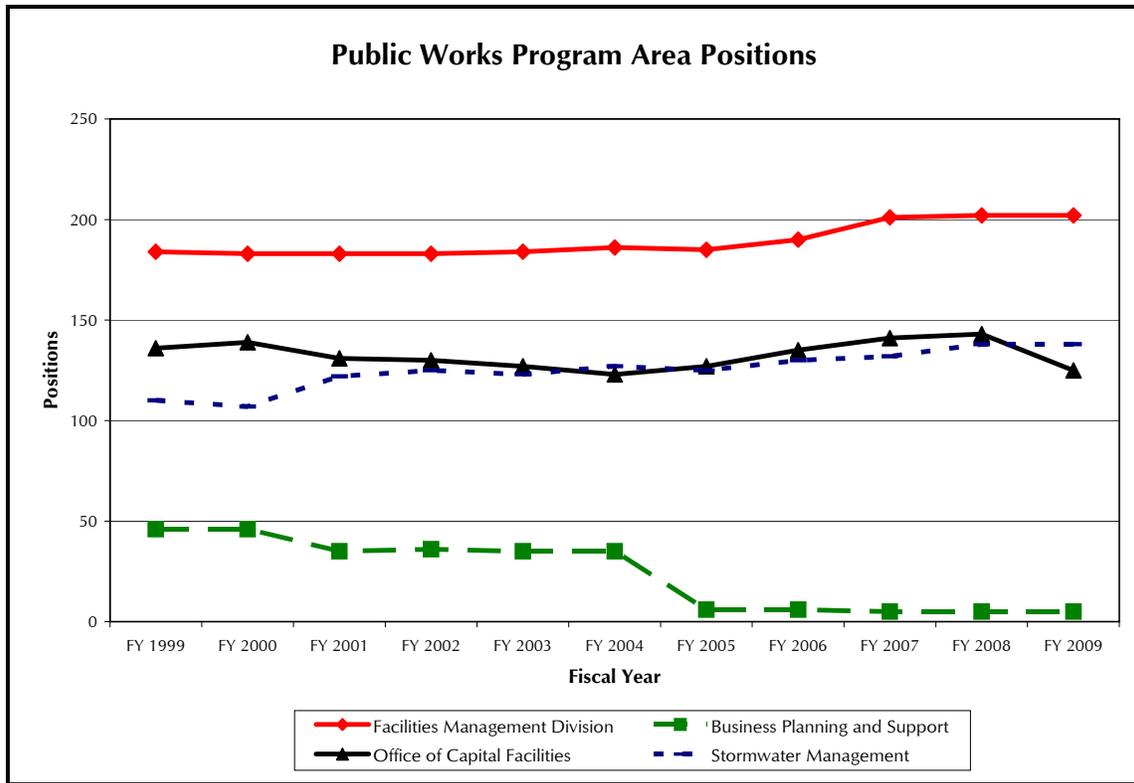
These decreases are in part offset by increases of \$0.5 in new lease costs, and \$1.6 million in new operating expenses for custodial, utility, security, repair and maintenance, and landscaping costs associated with new facilities opening in FY 2009. These facilities include the West Ox Bus Operations Center, Forensics Facility, Public Safety Transportation and Operation Center (PSTOC) and the Girls Probation House. These new facilities will provide an additional 203,160 to the current square footage maintained by the Facilities Management Department. Decreases also are offset by an increase of \$0.5 million County compensation levels. It is noted that, while the overall FY 2009 compensation level increases, it also reflects across-the-board reductions as a result of budget constraints. For FY 2009, employee increases as part of the pay for performance system have been discounted by 50 percent and the impact of the lower pay for performance funding is reflected in the Personnel Services.

Income in the Public Works program area is projected to be \$4,268,575, an increase of \$391,151 or 10 percent over the *FY 2008 Revised Budget Plan*, resulting in a FY 2009 net cost of \$64,397,833.

### Trends in Expenditures and Positions

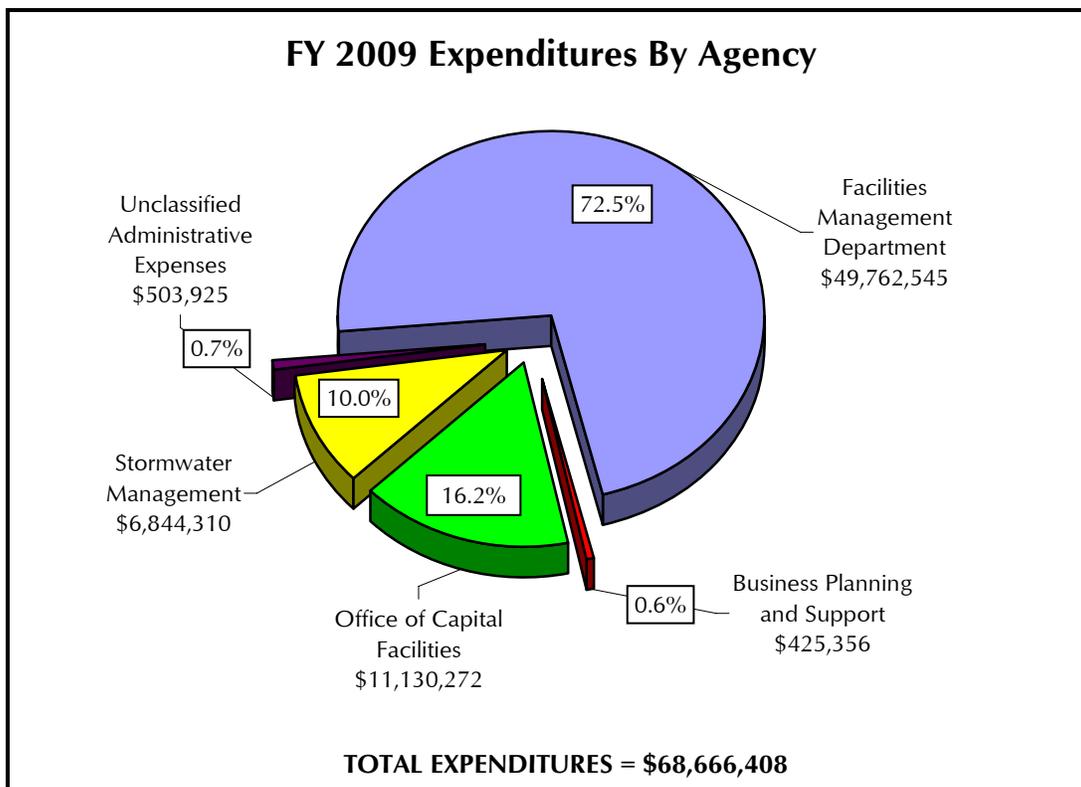


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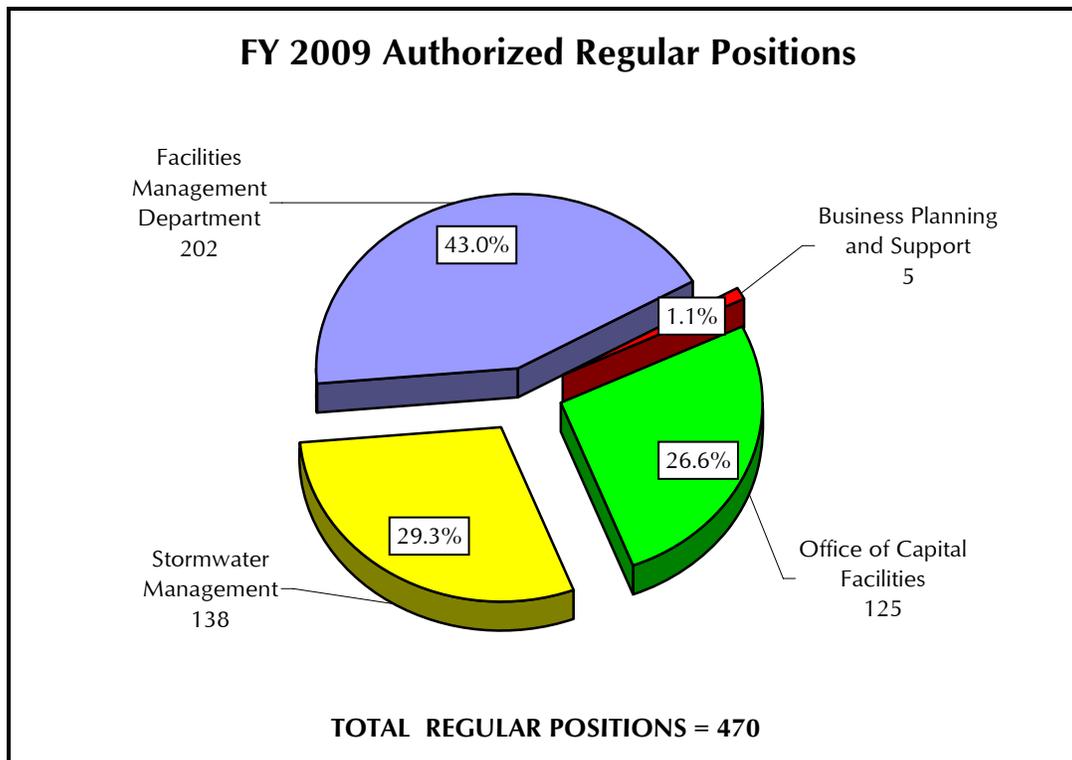


Note: Decrease of funding and positions in Business Planning and Support from FY 2004 to FY 2005 reflects the transfer of positions from that agency in this program area to Land Development Services in the Community Development program area to more appropriately reflect the scope of their responsibilities.

## FY 2009 Expenditures and Positions by Agency



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## 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.

Mandate information from the FY 2008 Federal/State Mandate Report was not available at the time of publication, but will be published in the FY 2009 Adopted Budget Plan in June 2008.

## Benchmarking

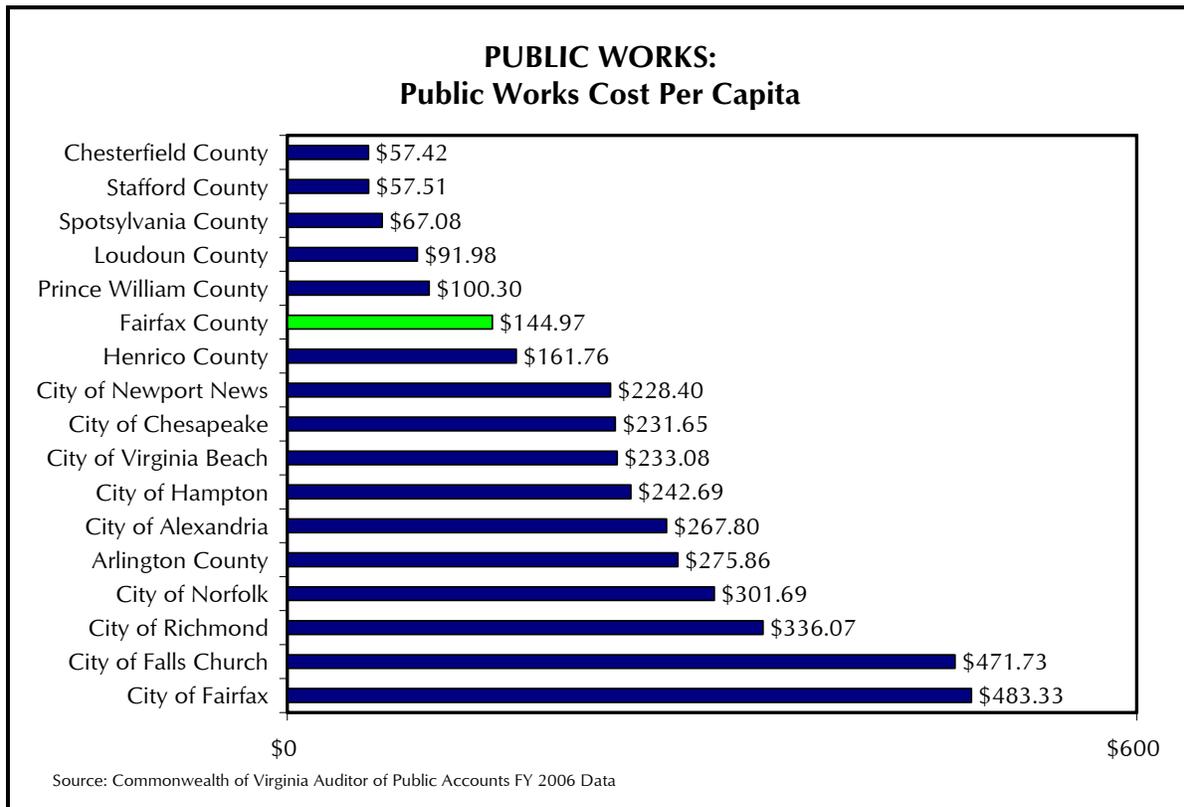
Since the FY 2005 Budget, benchmarking data have been included in the annual budget as a means of demonstrating accountability to the public for results achieved. These data are included in each of the Program Area Summaries in Volume 1 (General Fund) and now in Volume 2 (Other Funds) as available. Fairfax County has participated in the International City/County Management Association's (ICMA) benchmarking effort since 2000. Approximately 220 cities and counties now 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

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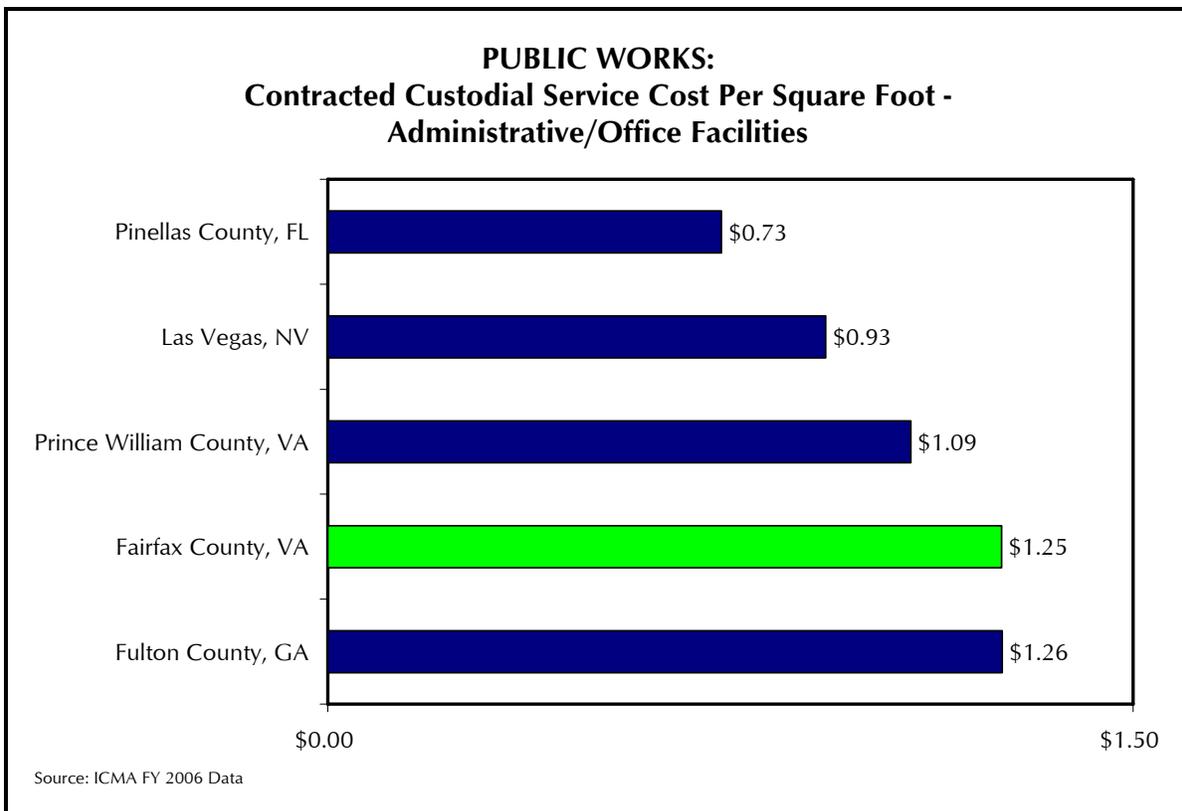
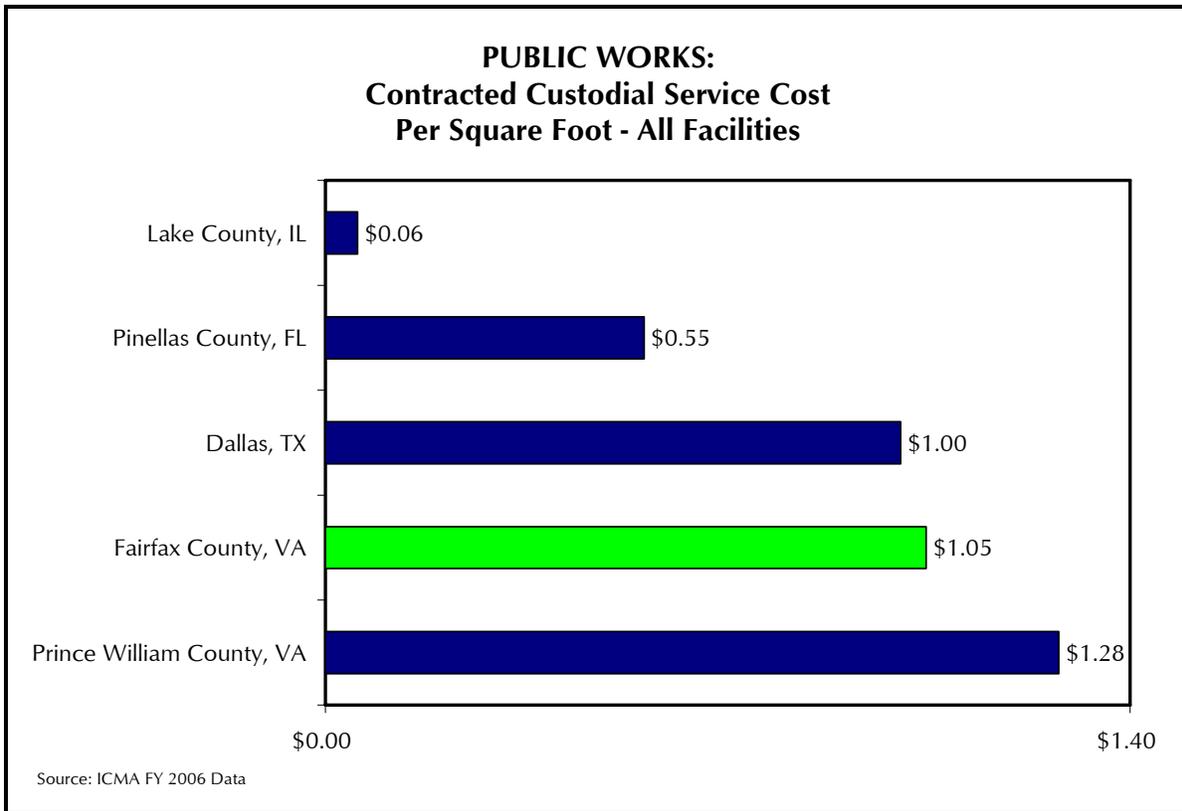
templates provided by ICMA in order to ensure consistency. ICMA then performs extensive data cleaning to ensure the greatest accuracy and comparability of data. As a result of the time for data collection and ICMA's rigorous data cleaning processes, information is always available with a one-year delay. FY 2006 data represent the latest available information. The following graphs 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, the economy, 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.

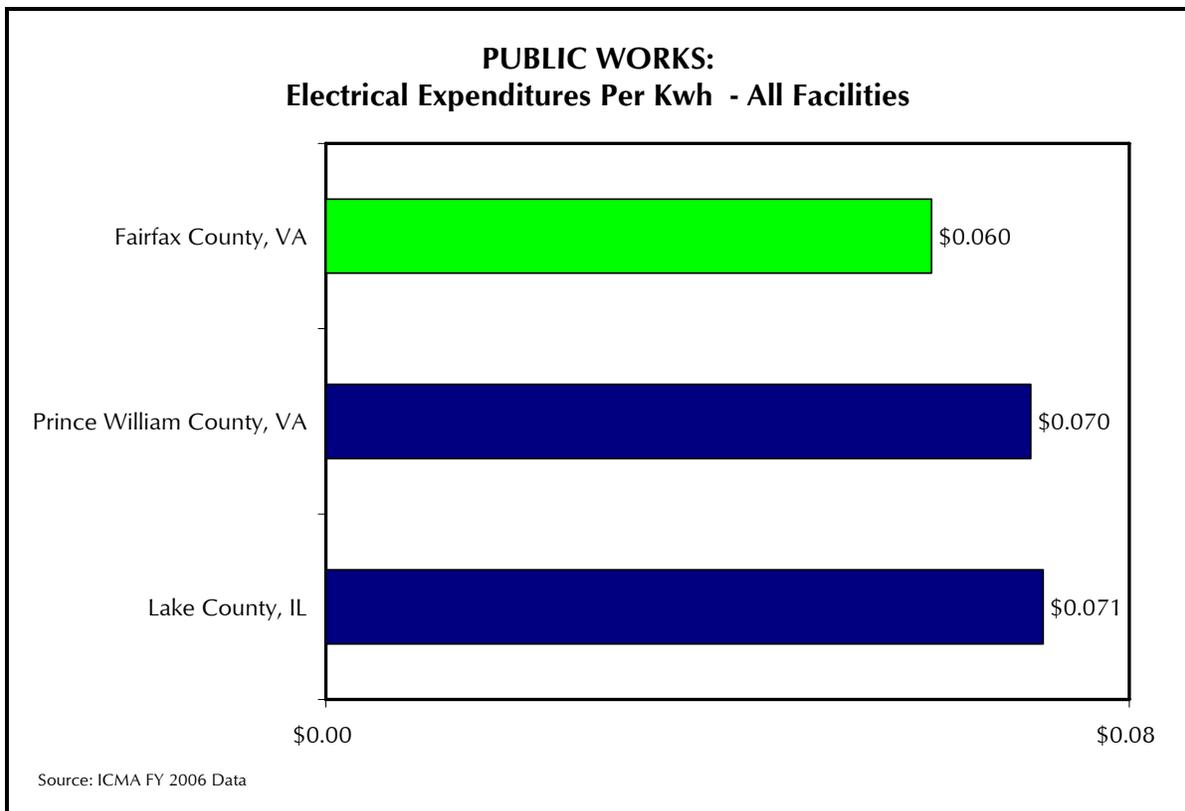
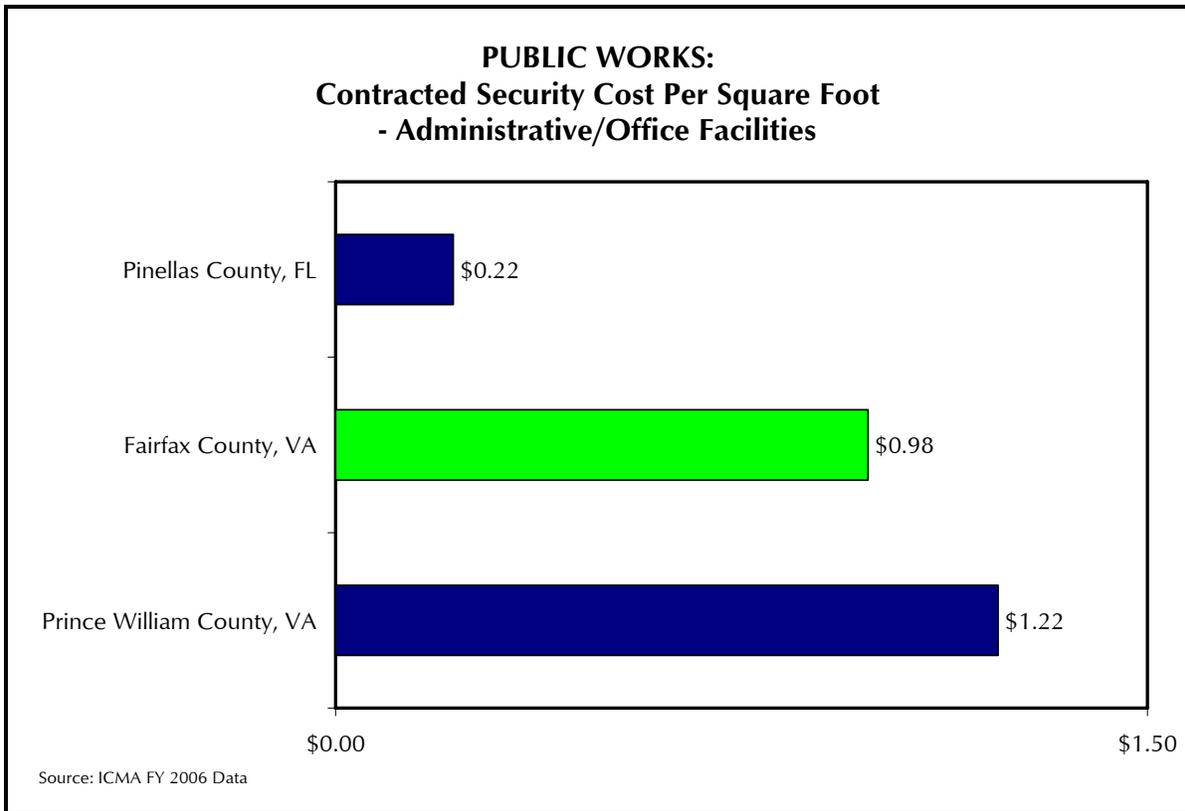
In addition, as part of an effort to identify additional benchmarks beyond the ICMA effort, data collected by the Auditor of Public Accounts (APA) for the Commonwealth of Virginia are also included here. Again, due to the time necessary for data collection and cleaning, FY 2006 represents the most recent 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 comparisons show that Fairfax County is also competitive with other large jurisdictions that responded to the various template questions.



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