

# Public Works Summary

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	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Orig. FY 06	% Change From Adj. FY 06
<b>Public Works Administration</b>	\$263,587	\$272,800	\$267,640	\$282,430	3.53%	5.53%
<b>Engineering Administration</b>	195,190	243,120	243,120	254,830	4.82%	4.82%
<b>Engineering Construction Inspection</b>	279,254	300,350	300,350	318,470	6.03%	6.03%
<b>Engineering Design</b>	255,933	277,700	282,350	296,200	6.66%	4.91%
<b>Engineering Survey</b>	166,018	213,690	208,250	179,500	-16.00%	-13.81%
<b>Roads Operations</b>	5,225,542	6,273,350	6,217,315	6,529,750	4.09%	5.03%
<b>Storm Emergencies</b>	1,083,313	1,126,450	1,126,450	1,356,270	20.40%	20.40%
<b>Traffic Control</b>	217,899	224,020	224,020	268,930	20.05%	20.05%
<b>Total Public Works</b>	<b>\$7,686,736</b>	<b>\$8,931,480</b>	<b>\$8,869,495</b>	<b>\$9,486,380</b>	<b>6.21%</b>	<b>6.96%</b>

## Budget Changes

- The differences between the FY 06 Original Budgets and the FY 06 Adjusted Budgets are primarily due to salary adjustments.
- The 13.81% decrease in Engineering Survey budget in FY 07 is due to one-time funding for the replacement of the Global Positioning System survey equipment in FY 06.
- The 20.40% increase in the Storm Emergencies budget in FY 07 is primarily due to the addition of smaller contractual trucks for subdivision snow removal and an increase in the price of salt. Salt is used on County roads during snow and ice conditions.
- A 20.05% increase in the Traffic budget in FY 07 is due to an increase in the price of paint and one-time funding for replacement equipment for the painting operation. Paint is used for striping County roads.

## Highlights, Changes and Useful Information

- The Bureau of Roads Operations maintains approximately 140 bridges and more than 970 miles of roads.
- Sixty-one snow removal crews can be mobilized for twenty-four hour operation. Forty-two of these crews operate County owned equipment and are County employees, while the other nineteen crews are contracted. Each crew is assigned to a specific predetermined route based on the type and severity of the storm.

# Public Works Administration

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$256,800	\$258,060	\$252,900	\$265,680	2.95%	5.05%
Operating	6,633	14,740	14,740	16,750	13.64%	13.64%
Capital Outlay	155	0	0	0	0.00%	0.00%
<b>Total</b>	<b>\$263,587</b>	<b>\$272,800</b>	<b>\$267,640</b>	<b>\$282,430</b>	<b>3.53%</b>	<b>5.53%</b>
Employees FTE	4.50	4.50	4.50	4.10	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

**J. Michael Evans, Director, Department of Public Works  
(410) 386-2035**  
**Deborah Effingham, Senior Budget Analyst (410) 386-2082**

- Generally, salaries were planned to grow at 5% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.
- The 13.64% increase in operating is the result of the addition of training related to a position upgrade from an Agreement Coordinator to a Financial Manager in FY 06.

## Mission and Goals

The Department of Public Works is dedicated to timely client service and projects proceeding on schedule and completed on time with cost effective service delivery.

### Goals Include:

- Provide high quality public utilities in the service area.
- Expand and improve our public utility systems to ensure continuity of service.
- Expand the Northern Landfill, while exploring long-range alternatives for the collection and disposal of municipal solid waste.
- Continue to maintain the network of county-maintained roads.
- Develop policies on the care and maintenance of gravel roads.
- Coordinate with State Highway Administration on intersection safety.

## Positions

Title	Type	FTE
<i>Administrative Office Associate</i>	Full-time	1.80
<i>Financial Manager</i>	Full-time	0.20
<i>Deputy Director</i>	Full-time	0.10
<i>Director</i>	Full-time	1.00
<i>Land Acquisition Specialist</i>	Full-time	1.00
<b>Total</b>		<b>4.10</b>

45% of the Deputy Director, 40% of the Financial Manager, and 20% of Administrative Office Associate positions are charged to the Solid Waste Enterprise Fund. 45% of the Deputy Director and 40% of the Financial Manager positions are charged to the Bureau of Utilities Enterprise Fund.

## Description

The Director of Public Works oversees the following bureaus/divisions:

- Engineering Administration
- Engineering Construction Inspection
- Engineering Design
- Engineering Survey
- Roads Operations
- Storm Management
- Traffic Control
- Solid Waste
- Utilities

## Budget Changes

- The difference between the FY 06 Original Budget and the FY 06 Adjusted Budget in personnel is the result of salary adjustments.
- A change in allocation of .4 personnel to the Utilities and Solid Waste Enterprise Funds occurred in the FY 07 budget.

# Engineering Administration

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$192,725	\$237,380	\$237,380	\$249,320	5.03%	5.03%
Operating	2,464	3,690	3,690	5,510	49.32%	49.32%
Capital Outlay	0	2,050	2,050	0	-100.00%	-100.00%
<b>Total</b>	\$195,190	\$243,120	\$243,120	\$254,830	4.82%	4.82%
Employees FTE	5.00	5.00	5.00	5.00	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

Deborah Butler, Bureau Chief of Engineering (410) 386-2157  
Deborah Effingham, Senior Budget Analyst (410) 386-2082

## Mission and Goals

To provide responsible, efficient and effective direction to the various Engineering Divisions that are in the Bureau, so as to accomplish the tasks necessary for building a sound infrastructure to serve the public needs. This infrastructure consists of roads, bridges, storm drains, water and sewer systems, and landfills.

### Goals Include:

- Oversee the design and construction of Community Investment Plan projects assigned to the bureau.
- Establish a format to gauge performance of the various consultant engineering companies and contractors doing work for the County under the Community Investment Plan.
- Keep citizens abreast of on-going capital projects.
- Satisfy other agency's requests for engineering design and survey-related services.

## Description

The Bureau of Engineering Administration directs the operations of four divisions:

- Survey
- Construction Inspection
- Design

These divisions collectively provide engineering services and funds tracking of capital improvement projects and payments to contractors for:

- Roads
- Bridges
- Storm drains
- Water and sanitary sewer utilities
- landfills

## Program Highlights

During 2005, the Bureau administered seven engineering contracts totaling \$450,000, ten road and bridge projects totaling \$11.6 million, and twenty water and sewer engineering and inspection contracts totaling \$880,000.

## Budget Changes

Generally, salary expenses were planned to grow 5% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.

## Positions

Title	Type	FTE
<i>Bureau Chief</i>	Full-time	1.00
<i>Capital Improvement Specialist</i>	Full-time	1.00
<i>Engineering Review Manager</i>	Full-time	1.00
<i>Engineering Reviewer</i>	Full-time	1.00
<i>Office Associate</i>	Full-time	1.00
<b>Total</b>		<b>5.00</b>

# Engineering Construction Inspection

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$277,895	\$297,640	\$297,640	\$312,530	5.00%	5.00%
Operating	1,360	2,710	2,710	5,940	119.19%	119.19%
Capital Outlay	0	0	0	0	0.00%	0.00%
<b>Total</b>	\$279,254	\$300,350	\$300,350	\$318,470	6.03%	6.03%
Employees FTE	7.00	7.00	7.00	7.00	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

Gene Warrenfeltz, Manager, Construction Inspection  
(410) 386-2173

Deborah Effingham, Senior Budget Analyst (410) 386-2082

## Mission and Goals

The mission of the Construction Inspection Division of Engineering is to provide quality inspection services for the construction and upgrade of roads, storm drains, hot mix asphalt overlay, water and sewer distribution lines, treatment plants and landfills planned in the community investment plan and to complete projects within the budgets allocated in a timely manner.

### Goals Include:

- Perform quality inspection services in a timely and cost effective manner.
- Ensure projects are done according to standards developed by County agencies.
- Address citizen's requests and concerns in a timely manner.

## Description

The Construction Inspection Division's primary function is to ensure that community investment and neighborhood projects are constructed as specified using approved materials and built to proposed dimensions. The division also controls the measurement and quantities of materials used as well as collecting payments from the contractors.

The division works closely with Development Review on development projects keeping them informed of discrepancies between the approved plans and field conditions.

## Program Highlights

In 2005, the Construction Inspection Division inspected the paving and rehabilitation of sixty-two County roads, the reconstruction of two bridges, and the improvements to three major intersections. The County collected \$111,200 in inspection fees that offset costs to the taxpayer in 2005.

## Budget Changes

- Generally, salary expenses were planned to grow 5% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.
- The 119% increase in operating in FY 07 is primarily due to State recertification of inspectors. The inspectors are State certified in soil, aggregate and concrete.

## Positions

Title	Type	FTE
Construction Inspector	Full-time	6.00
Manager/Construction Inspector	Full-time	1.00
<b>Total</b>		<b>7.00</b>

# Engineering Design

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$249,026	\$269,940	\$274,590	\$288,320	6.81%	5.00%
Operating	6,906	7,760	7,760	7,880	1.55%	1.55%
Capital Outlay	0	0	0	0	0.00%	0.00%
<b>Total</b>	<b>\$255,933</b>	<b>\$277,700</b>	<b>\$282,350</b>	<b>\$296,200</b>	<b>6.66%</b>	<b>4.91%</b>
Employees FTE	6.00	6.00	6.00	6.00	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

**Deborah Butler, Bureau Chief of Engineering**  
(410) 386-2157

**Deborah Effingham, Senior Budget Analyst (410) 386-2082**

## Mission and Goals

The mission of the Design Division of Engineering is to provide high quality engineering and project management for building a sound infrastructure of roads, bridges and storm drains.

### Goals Include:

Complete the road and bridge projects planned in the Community Investment Plan within one construction season and within 10% of the original bid price.

## Description

The primary function of the Bureau of Engineering Design is to implement the following types of capital projects:

- Road maintenance
- Road construction
- Bridge rehabilitation/replacement

The division designs in-house projects and reviews designs of outside contractors. The use of computer aided design (CAD) and drafting system allows the division to do more in-house design projects including:

- Grading studies
- Parking lots
- Boundary plats
- Road design
- Highway safety improvements
- Drainage, slip-lining and culvert design

After the division approves the design and completes the construction documents they advertise the project, initiate the bid process and award the contract.

## Program Highlights

More emphasis has been placed on correcting failed pavements in neighborhoods. Forty-seven neighborhood roads, totaling 13.6 miles of rehabilitation, fifteen mainline roads totaling 23.6 miles of repair, one roundabout, and one bridge project were completed in the FY 05 construction season.

## Budget Changes

- The difference between the FY 06 Original Budget and the FY 06 Adjusted Budget is due to salary adjustments and position upgrades.
- Generally, salary expenses were planned to grow 5% and operating expenses at 3% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.

## Positions

Title	Type	FTE
<i>Civil Engineer Manager</i>	Full-time	1.00
<i>Designer/Drafting Technician II</i>	Full-time	3.00
<i>Project Engineer</i>	Full-time	1.00
<i>Traffic Engineer</i>	Full-time	1.00
<b>Total</b>		<b>6.00</b>

# Engineering Survey

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$149,564	\$169,390	\$163,950	\$172,140	1.62%	5.00%
Operating	6,609	6,800	6,800	7,360	8.24%	8.24%
Capital Outlay	9,846	37,500	37,500	0	-100.00%	-100.00%
<b>Total</b>	<b>\$166,018</b>	<b>\$213,690</b>	<b>\$208,250</b>	<b>\$179,500</b>	<b>-16.00%</b>	<b>-13.81%</b>
Employees FTE	4.70	4.70	4.70	4.70	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

Richard Krebs, County Surveyor (410) 386-2171  
Deborah Effingham, Senior Budget Analyst (410) 386-2082

- Generally, salary expenses were planned to grow 5% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.
- The 100% decrease in capital outlay is due to a one-time expenditure in FY 06 for the replacement of the County's Global Positioning System surveying equipment.

## Mission and Goals

The mission of the Survey Division of Engineering is to provide responsible, efficient and effective surveys, survey control and global positioning system points.

### Goals Include:

- Complete survey projects on or before schedule.
- Establish and maintain a system of global positioning points where no two points are more than 1½ miles apart. The department has established approximately 500 of the 600 pairs of survey points necessary to meet this goal.
- Place all Survey Control cards on the County web site for public access.

## Positions

Title	Type	FTE
<i>County Surveyor</i>	Full-time	1.00
<i>GPS Technician</i>	Full-time	1.00
<i>Survey Helper</i>	Part-time	.70
<i>Survey Party Chief</i>	Full-time	1.00
<i>Surveying Instrument Operator</i>	Full-time	1.00
<b>Total</b>		<b>4.70</b>

## Description

The division is responsible for all survey related functions performed for the County, including surveys of County owned property and property intended to be purchased by the County. Services include topographic surveys for proposed roads, bridges, culverts and buildings.

This division maintains the County Survey Control Network. The network is a series of geographical survey points, which are used as reference points for surveys.

## Program Highlights

Output measures for the Survey division are as follows:

Type of Project	FY 03	FY 04	FY 05
Topographic Surveys	120	118	150
Right-of-Ways/Easement Plats	53	42	45
Boundary Outline Surveys	50	41	35
New Deed Descriptions	54	50	40
Bureau of Engineering Projects	168	150	212
Totals	445	401	482

## Budget Changes

- The difference between the FY 06 Original Budget and the FY 06 Adjusted Budget is due to salary adjustments.

# Roads Operations

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recomm Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$3,345,191	\$3,798,720	\$3,742,685	\$3,928,550	3.42%	4.97%
Operating	1,876,684	2,422,430	2,422,430	2,589,270	6.89%	6.89%
Capital Outlay	3,667	52,200	52,200	11,930	-77.15%	-77.15%
<b>Total</b>	<b>\$5,225,542</b>	<b>\$6,273,350</b>	<b>\$6,217,315</b>	<b>\$6,529,750</b>	<b>4.09%</b>	<b>5.03%</b>
Employees FTE	118.10	118.10	118.10	118.10	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

**Benton Watson, Bureau Chief of Roads (410) 386-6717**  
**Deborah Effingham, Senior Budget Analyst (410) 386-2082**

- The 77.15% decrease in capital outlay is a result of one-time expenditures in FY 06 for the addition of a power box paver and a truck mounted conveyor spreader.

## Mission and Goals

To provide a local road system that is in good condition by using the most economical means available and to provide timely citizen service.

### Goals Include:

Use timely preventative maintenance measures to keep the roads and bridges in good condition and reduce the life cycle costs.

## Description

The Bureau of Roads Operations maintains approximately 140 bridges and more than 970 miles of roads. Road maintenance tasks include:

- Paving and patching
- Crack sealing
- Road shoulder restoration
- Ditch installation and reconditioning
- Inlet repair and rebuilding
- Pipe maintenance and replacement
- Roadside mowing
- Tree trimming and removal
- Litter and debris removal
- Roadway evaluations

The primary concern is the maintenance of existing County roads. Each year the entire system is evaluated using the Road Surface Management System (RSMS). The RSMS uses three primary factors of substructure, road surface and storm water management as criteria for evaluating a road's condition.

## Budget Changes

- The difference between the FY 06 Original Budget and the FY 06 Adjusted Budget is the result of salary adjustments.
- Generally, salary expenses were planned to grow 5% between FY 06 and FY 07. Most budgets, including this one, were held at or near that level.
- The 6.89% increase in operating in FY 07 is a result of increased costs for asphalt.

## Positions

Title	Type	FTE
<i>Administrative Office Associate</i>	Full-time	1.00
<i>Area Roads Chief</i>	Full-time	5.00
<i>Bureau Chief</i>	Full-time	1.00
<i>Dispatch Clerk</i>	Full-time	1.00
<i>Equipment Mechanic/Tool Rm.</i>	Full-time	1.00
<i>Foreman Bridges</i>	Full-time	1.00
<i>Foreman Roads</i>	Full-time	9.00
<i>Foreman Surface Crew</i>	Full-time	1.00
<i>Office Associate</i>	Full-time	2.00
<i>Office Associate</i>	Part-time	0.50
<i>Paver Operator</i>	Full-time	1.00
<i>Public Works Inspector</i>	Full-time	3.00
<i>Road Equipment Operator</i>	Full-time	69.00
<i>Road Worker</i>	Full-time	20.00
<i>Roads Administrative Supervisor</i>	Full-time	1.00
<i>Technician</i>	Contractual	.60
<i>Tree Trimming Inspector</i>	Contractual	1.00
<b>Total</b>		<b>118.10</b>

# Storm Emergencies

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$392,367	\$354,590	\$354,590	\$372,320	5.00%	5.00%
Operating	677,629	747,360	747,360	959,450	28.38%	28.38%
Capital Outlay	13,317	24,500	24,500	24,500	0.00%	0.00%
<b>Total</b>	<b>\$1,083,313</b>	<b>\$1,126,450</b>	<b>\$1,126,450</b>	<b>\$1,356,270</b>	<b>20.40%</b>	<b>20.40%</b>
Employees FTE	0.00	0.00	0.00	0.00	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

**Benton Watson, Bureau Chief of Roads (410) 386-6717**  
**Deborah Effingham, Senior Budget Analyst (410) 386-2082**

## Mission

To provide effective responses to emergencies that involves the County's highway system.

## Description

The funds allocated to this budget are to cover the costs of snow removal operations and emergency response to damage from:

- Flooding
- Downed trees
- Cave-ins
- Vehicles accidents
- Other hazards

There are no regular hours for employees charged to this budget. The personnel expenses are for overtime hours logged by Roads Operations and other County employees who have responded to snow or other emergency situations.

Sixty-one snow removal crews can be mobilized for twenty-four hour operation. Forty-two of these crews operate County owned equipment and are County employees, while the other nineteen crews are contracted. Each crew is assigned to a specific predetermined route based on the type and severity of the storm.

## Budget Changes

- The 28.38% increase in operating in FY 07 is a result of increased salt prices and additional contractual snow removal services.
- Capital outlay includes \$24,500 for seven tanks, which will be installed on the salt trucks to pre-wet the salt with a calcium chloride solution. The combination of salt and calcium chloride is an effective treatment of icy and snow-covered roads. This is the third year of a five-year plan to install seven tanks per year on all of our salt trucks. Replacement trucks will be equipped with these tanks as part of their standard outfitting.

# Traffic Control

Description	Actual FY 05	Original Budget FY 06	Adjusted Budget FY 06	Recom Budget FY 07	% Change From Original FY 06	% Change From Adjusted FY 06
Personnel	\$0	\$0	\$0	\$0	0.00%	0.00%
Operating	217,899	224,020	224,020	251,930	12.46%	12.46%
Capital Outlay	0	0	0	17,000	100.00%	100.00%
<b>Total</b>	<b>\$217,899</b>	<b>\$224,020</b>	<b>\$224,020</b>	<b>\$268,930</b>	<b>20.05%</b>	<b>20.05%</b>
Employees FTE	0.00	0.00	0.00	0.00	-----	-----

Note: The Adjusted Budget includes budget changes made during the year. On-going mid-year changes have been annualized for comparison purposes.

## Contact

Benton Watson, Bureau Chief of Roads (410) 386-6717  
Deborah Effingham, Senior Budget Analyst (410) 386-2082

## Mission and Goals

To keep all signs and highway markings in good repair and in compliance with the manual on Uniform Traffic Control Devices.

### Goals Include:

To minimize the amount of time that signs are down or missing and to have a reasonable schedule of re-striping and replacing road markings.

## Description

Traffic Control works in conjunction with the Bureau of Roads Operations and is responsible for maintenance and placement of all highway markings such as:

- Centerlines
- Edge lines
- Crosswalks
- Stop bars
- Turn lanes
- Rail crossings

In addition, this division has the following responsibilities connected with traffic control and road name signs:

- Replacement
- Repair
- Cleaning
- Creating
- Installation

The need for new signs is determined through routine inspection and investigation, citizen requests, and laws and regulations.

## Budget Changes

- The 12.46% increase in operating is due to an increase in the price of paint.
- The 100% increase in capital outlay is due to a one-time expenditure to replace an attenuator. An attenuator is attached to the rear of the striping machine and is used to absorb rear end impact that may occur during slow moving painting operations.