

# Public Works Summary

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	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Orig. FY 05	% Change From Adj. FY 05
Public Works Administration	\$205,420	\$272,585	\$246,788	\$272,800	0.08%	10.54%
Engineering Administration	202,552	223,940	229,640	243,120	8.56%	5.87%
Engineering Construction Inspection	262,236	285,960	286,662	300,350	5.03%	4.77%
Engineering Design	260,544	286,070	264,626	277,700	-2.93%	4.94%
Engineering Survey	157,082	180,280	178,025	213,690	18.53%	20.03%
Roads Operations	4,907,052	5,818,725	5,810,606	6,273,350	7.81%	7.96%
Storm Emergencies	1,347,080	1,050,000	1,050,000	1,126,450	7.28%	7.28%
Traffic Control	201,046	229,820	229,820	224,020	-2.52%	-2.52%
<b>Total Public Works</b>	<b>\$7,543,011</b>	<b>\$8,347,380</b>	<b>\$8,296,167</b>	<b>\$8,931,480</b>	<b>7.00%</b>	<b>7.66%</b>

## Budget Changes

- Differences between the FY 05 Original Budgets, the FY 05 Adjusted Budgets and the FY 06 Budget are primarily due to salary adjustments.
- The 20.03% increase in Engineering Survey budget in FY 06 is due to the replacement of the Global Positioning System survey equipment.
- The 7.96% increase in the Roads Operations budget in FY 06 is primarily due to the increased cost of surface sealing and asphalt patching.
- The 7.28% increase in the Storm Emergencies budget in FY 06 is due to the price of salt and calcium chloride. Salt is used on County roads during snow and ice conditions.

## Highlights, Changes and Useful Information

- The Bureau of Roads Operations maintains approximately 140 bridges and more than 970 miles of roads.
- Fifty-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 nine 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 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$196,795	\$249,350	\$223,553	\$258,060	3.49%	15.44%
Operating	7,745	23,235	23,235	14,740	-36.56%	-36.56%
Capital Outlay	879	0	0	0	0.00%	0.00%
<b>Total</b>	<b>\$205,420</b>	<b>\$272,585</b>	<b>\$246,788</b>	<b>\$272,800</b>	<b>0.08%</b>	<b>10.54%</b>
Employees FTE	4.10	4.50	4.50	4.50	-----	-----

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, Budget Analyst (410) 386-2082

## 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:

- Improve the network of roads by providing high quality maintenance and repair.
- Revise and update the Design Manual.
- Work with the Department of Planning to update the Transportation Master Plan.
- Work with the State to improve traffic safety at intersections.

## 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
- Utilities

## Budget Changes

- The difference between the FY 05 Original Budget and the FY 05 Adjusted Budget in personnel is the result of salary adjustments.
- The 15.44% increase in personnel in FY 06 is due to employee turnover and salary adjustments.
- The 36.56% decrease in operating in FY 06 is the result of an adjustment for appraisal and inspection fees related to land purchases.

## Positions

Title	Type	FTE
<i>Administrative Office Associate</i>	Full-time	1.10
<i>Agreement Coordinator</i>	Full-time	1.00
<i>Deputy Director</i>	Full-time	0.10
<i>Director</i>	Full-time	0.90
<i>Land Acquisition Specialist</i>	Full-time	1.00
<i>Utilities Engineer</i>	Full-time	0.40
<b>Total</b>		<b>4.50</b>

40% of the Deputy Director and 40% of an Administrative Office Associate positions are charged to the Solid Waste Enterprise Fund, 40% to the Bureau of Utilities Enterprise Fund and 10% to the Septage Facility Enterprise Fund. 60% of the Utilities Engineer is charged to the Utilities Enterprise Fund. 90% of the Director's salary is charged to Public Works, 5% to the Utilities Enterprise Fund and 5% to the Solid Waste Enterprise Fund.

# Engineering Administration

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$200,449	\$220,380	\$226,080	\$237,380	7.71%	5.00%
Operating	2,103	3,560	3,560	3,690	3.65%	3.65%
Capital Outlay	0	0	0	2,050	100.00%	100.00%
<b>Total</b>	\$202,552	\$223,940	\$229,640	\$243,120	8.56%	5.87%
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, 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 capital improvement 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 Improvement 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

## Budget Changes

- The difference between the FY 05 Original Budget and the FY 05 Adjusted Budget is due to salary adjustments.
- Generally, salary expenses were planned to grow 5% and operating expenses at 3% between FY 05 and FY 06. Most budgets, including this one, were held at or near that level.
- The 100% increase in capital outlay is due to replacement of reception area workspace.

## 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>		5.00

# Engineering Construction Inspection

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$260,686	\$283,335	\$284,037	\$297,640	5.05%	4.79%
Operating	1,550	2,625	2,625	2,710	3.24%	3.24%
Capital Outlay	0	0	0	0	0.00%	0.00%
<b>Total</b>	\$262,236	\$285,960	\$286,662	\$300,350	5.03%	4.77%
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, Budget Analyst (410) 386-2082

## Positions

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

## 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 improvement 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 capital improvement and subdivision 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

Between December 2003 and November 2004, \$138,000 was collected in inspection fees that offset costs to the taxpayer.

## Budget Changes

- The difference between the FY 05 Original Budget and the FY 05 Adjusted Budget is the result of salary adjustments.
- Generally, salary expenses were planned to grow 5% and operating expenses at 3% between FY 05 and FY 06. Most budgets, including this one, were held at or near that level.

# Engineering Design

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$255,266	\$278,530	\$257,086	\$269,940	-3.08%	5.00%
Operating	5,278	7,540	7,540	7,760	2.92%	2.92%
Capital Outlay	0	0	0	0	0.00%	0.00%
<b>Total</b>	\$260,544	\$286,070	\$264,626	\$277,700	-2.93%	4.94%
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, 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 overlay projects planned in the Community Improvement 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 projects

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

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 subdivisions. Forty-six subdivision roads, totaling 13.0 miles of rehabilitation and four bridge replacement projects are planned for the FY 05 construction season.

## Budget Changes

- The difference between the FY 05 Original Budget and the FY 05 Adjusted Budget is due to salary adjustments.
- Generally, salary expenses were planned to grow 5% and operating expenses at 3% between FY 05 and FY 06. 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</i>	Full-time	3.00
<i>Project Engineer</i>	Full-time	1.00
<i>Traffic Engineer</i>	Full-time	1.00
<b>Total</b>		6.00

# Engineering Survey

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$152,037	\$163,580	\$161,325	\$169,390	3.55%	5.00%
Operating	5,045	6,700	6,700	6,800	1.49%	1.49%
Capital Outlay	0	10,000	10,000	37,500	275.00%	275.00%
<b>Total</b>	<b>\$157,082</b>	<b>\$180,280</b>	<b>\$178,025</b>	<b>\$213,690</b>	<b>18.53%</b>	<b>20.03%</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, Budget Analyst (410) 386-2082

- The 275% increase in capital outlay in FY 06 is a result of 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 300 of the 600 pairs of survey points necessary to meet this goal.

## Positions

Title	Type	FTE
County Surveyor	Full-time	1.00
GPS Technician	Full-time	1.00
Survey Helper	Part-time	.70
Survey Party Chief	Full-time	1.00
Surveying Instrument Operator	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 02	FY 03	FY 04
Topographic Surveys	115	120	118
Right-of-Ways/Easement Plats	50	53	42
Boundary Outline Surveys	38	50	41
New Deed Descriptions	36	54	50
Bureau of Engineering Projects	160	168	150
Totals	399	445	401

## Budget Changes

- The difference between the FY 05 Original Budget and the FY 05 Adjusted Budget is due to salary adjustments.
- Generally, salary expenses were planned to grow 5% and operating expenses at 3% between FY 05 and FY 06. Most budgets, including this one, were held at or near that level.

# Roads Operations

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$3,249,689	\$3,622,665	\$3,614,546	\$3,798,720	4.86%	5.10%
Operating	1,651,827	2,192,810	2,192,810	2,422,430	10.47%	10.47%
Capital Outlay	5,536	3,250	3,250	52,200	1506.15%	1506.15%
<b>Total</b>	<b>\$4,907,052</b>	<b>\$5,818,725</b>	<b>\$5,810,606</b>	<b>\$6,273,350</b>	<b>7.81%</b>	<b>7.96%</b>
Employees FTE	116.50	116.50	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, Budget Analyst (410) 386-2082**

- The 1,506.15% increase capital outlay is a result of an 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 05 Original Budget and the FY 05 Adjusted Budget is the result of salary adjustments and the addition of a contractual technician for traffic counts and an inspector for the tree trimming operation.
- Generally, salary expenses were planned to grow 5% between FY 05 and FY 06. Most budgets, including this one, were held at or near that level.
- The 10.47% increase in operating in FY 06 is a result of increased costs for surface sealing and asphalt patching.

## 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 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$526,898	\$354,590	\$354,590	\$354,590	0.00%	0.00%
Operating	809,438	667,310	667,310	747,360	12.00%	12.00%
Capital Outlay	10,744	28,100	28,100	24,500	-12.81%	-12.81%
<b>Total</b>	<b>\$1,347,080</b>	<b>\$1,050,000</b>	<b>\$1,050,000</b>	<b>\$1,126,450</b>	<b>7.28%</b>	<b>7.28%</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, 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.

Fifty-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 nine crews are contracted. Each crew is assigned to a specific predetermined route based on the type and severity of the storm.

## Budget Changes

- The 12% increase in operating in FY 06 is a result of increased costs for salt and calcium chloride prices.
- 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 second 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.

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# Traffic Control

Description	Actual FY 04	Original Budget FY 05	Adjusted Budget FY 05	Budget FY 06	% Change From Original FY 05	% Change From Adjusted FY 05
Personnel	\$0	\$0	\$0	\$0	0.00%	0.00%
Operating	200,527	229,820	229,820	224,020	-2.52%	-2.52%
Capital Outlay	519	0	0	0	0.00%	0.00%
<b>Total</b>	<b>\$201,046</b>	<b>\$229,820</b>	<b>\$229,820</b>	<b>\$224,020</b>	<b>-2.52%</b>	<b>-2.52%</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, 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 2.52% decrease in operating is due to a one-time expense in FY 05 for striping with no like expenditures planned in FY 06.