

DPWES - Stormwater Management



FY 2010 LOBS Presentation

November 21, 2008

Agency Mission



- ◆ To develop and maintain a comprehensive watershed and infrastructure management program to protect property, health and safety; to enhance the quality of life; to preserve and improve the environment for the benefit of the public. To plan, design, construct, operate, maintain and inspect the infrastructure, and perform environmental assessments through coordinated stormwater and maintenance programs in compliance with all government regulations utilizing innovative techniques, customer feedback and program review; and to be responsive and sensitive to the needs of the residents, customers and public partners.
- 1. **29-01 Storm Drainage Program**
Comprehensive maintenance and inspection of the existing storm drainage network, for the protection of residents and commercial and residential property owners.
- 2. **29-02 Stormwater Management Program**
Maintenance, inspection, engineering, design, monitoring, planning and regulatory oversight of stormwater run-off for opportunities to improve water quality.
- 3. **29-03 Transportation Services Program**
Maintenance of transportation facilities such as Park-and-Ride, Trails and Walkways, Roads, Bus Shelters, Commercial Districts and public Street Name Signs in support of transportation initiatives and alternatives to relieve congested roadways, and help meet current vehicular emission standard requirements.
- 4. **29-04 Snow and Emergency Response Program**
First response services for snow removal services and support for unexpected or unanticipated weather conditions and flooding. Additionally, mitigation services in support of health and safety violations and grass mowing ordinances related to property service requests and recent graffiti abatement initiatives.

Agency Growth Since FY 2001



◆ Growth in Expenditures:

- FY 2009: \$3.75 million, FY 2001: \$7.09 million
 - A decrease of \$3.34 million or 47.16%
 - An average annual decrease of 7.66%

◆ Growth in Positions/Staff Year Equivalency (SYE):

- FY 2009: 139/139.0 - FY 2001: 121/121.0
 - An increase of 19/18.0 SYE

◆ **Which areas have seen the most growth?**

Note: The decline in expenditures shown above is a direct result of the transfer of \$7.3 million in operational funds moved to the Capital Stormwater management program in Fund 318, as part of the FY 2009 funding reductions to support the General Funded Storm Drainage and Stormwater Management LOB's.

While the growth in expenditures indicated above have declined, the Stormwater Business area has experienced growth in existing programs, and added new programs since FY 2001. Stormwater has experienced growth in every program that is related to the four LOB's managed by the Business Area.

◆ **What factors are driving the growth?**

- Increased Federal and State Regulatory Requirements
- Need to reinvest in aging infrastructure
- Growth in Population – Development and Infill
- Economic Conditions – Increased Fuel Prices
- Added Programs – Bus Shelter Maintenance – Property Service Directives
- Added Facility Inventory
- Increased Customer Expectations – Internal and External
- Increased Environmental Awareness – Internal and External

New Programs Since FY 2001



- **Bus Shelter Maintenance program**

In FY 2006 this comprehensive bus shelter maintenance program was added to address maintenance for all bus shelters located in Fairfax County, to include those shelters owned by other entities such as, VDOT, WMATA and others, as well as County owned bus shelters. The current inventory of approximately 300 bus shelters provides maintenance services to include, but not limited to, weekly trash removal, monthly washing, inspection services and non-routine maintenance repairs, for an estimated annual cost of \$290,000. The Sheriff's office provides routine maintenance to about half the shelters.

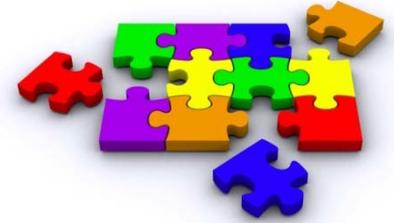
- **Property Maintenance Services and Graffiti Abatement Directive Program**

In FY 2008 this program was added to address emergency and non-emergency directives related to property maintenance services and graffiti abatement services. Directives are issued to mitigate Health and Safety, as well as, grass mowing ordinance violations that are not corrected by property owners. Additionally, Fairfax County codes were modified to allow the removal of graffiti from residential and commercial properties. Capital funding has been established to provide mitigation services directly related to the directives, but the program added a substantial work load related to administrative duties in program management associated with contract oversight, billing, and collection responsibilities.

- **The Stormwater Penny**

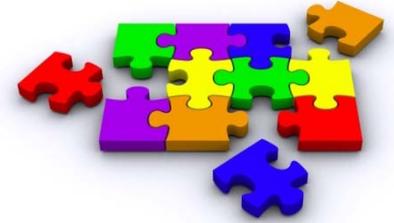
In FY 2006, the BOS dedicated the value of one cent of the real estate tax base to provide needed funding to meet current stormwater requirements associated with stormwater management in the County. While this added funding is not directly related to this reduction exercise, the added funding is provided to indicate a substantial increase in work load and management for the Business Area that was not part of the 2001 Program. The increased funding, and increased work load was added without an increase to staff resources. The same staff that provides support for the increased Stormwater Management program, also provides the support for the General funded Stormwater and Transportation maintenance operations programs.

Agency Strategic Focus



- ◆ The strategic planning process for Stormwater places focus on all four LOB's managed by the Business Area. Stream condition assessment and performance of maintenance programs related to storm drainage systems and walkways are reviewed and reported annually within the DPWES balanced card. This strategic focus provides measurement of program performance on the stormwater and transportation oriented programs.
- ◆ Challenges that are facing the programs managed by the Business Area are similar within all of the programs.
 - Increased regulatory requirements related to the Stormwater program, and increased infrastructure inventory coupled with decreasing available funding is lowering program service levels needed to meet the increasing requirements, and internal and external customer expectations are impacting the program.
 - Redevelopment and infill are impacting the Stormwater Management program requiring innovative solutions as development reaches build-out levels.
 - Attracting and retaining skilled staff resources with declining funding is very challenging within all of the program areas.
 - The infrastructure is aging

Agency Strategic Focus Continued...



- ◆ If adequate funding for these programs was available.
 - Maintenance service levels that have been reduced to minimum standards from prior funding reductions would be restored. Service levels, which are primarily provided on a citizen request for assistance basis only, could be provided on a scheduled proactive basis, as opposed to reactive maintenance
 - Infrastructure replacement cycles could be decreased to be better aligned with adequate life cycle expectations, resulting in better maintained facilities and functional infrastructure.
 - Regulatory requirements could be met at higher than minimum standards, resulting in substantial improvements to storm drainage systems, stormwater quality, and the environment.
 - With adequate funding for these programs, the overall environmental conditions in the County and the region would most likely improve, as most of the programs have direct impact to environmental conditions.



LOBS Summary Table:

FY 2008 Adopted Budget Plan Data

<i>Number</i>	<i>LOB Title</i>	<i>Net LOB Cost</i>	<i>LOB Number of Positions</i>	<i>LOB SYE</i>
29-01	Storm Drainage Program	\$3,953,654	56	56.0
29-02	Stormwater Management Program	\$3,396,137	53	52.5
29-03	Transportation Services Program	\$1,540,347	10	10.5
29-04	Snow / Emergency Response Program	\$1,583,405	13	13.0
TOTAL		\$10,473,543	132	132.0

Note: Miscellaneous revenues of \$19,000 are not included in LOB calculations.

LOBS Highlights:

LOB 29-01 Storm Drainage Program

- What We Do:

The Storm Drainage program objective is to provide operational and maintenance services for the County's stormwater drainage conveyance systems, which are, pipes, manholes, channels, swales, and streams. The storm drainage program requires the flexibility to be both pro-active in terms of preventative maintenance, and re-active in terms of response to unplanned and unforeseen storm events.

- Who We Serve:

The Storm Drainage program serves all Fairfax County residents and commercial and residential property owners, environmental partners, and Federal and State regulations.

- Why We Do It:

The Storm Drainage program is provided to protect the safety and well being of Fairfax County residents, as well as provide protection and maintain value of residential and commercial property. The program is required to maintain the operational and functional integrity of the storm drainage infrastructure to limit flooding conditions, and meet federal and state mandated requirements pertaining to the MS4 stormwater discharge permit. **This LOB is federally and/or state mandated. The percentage of this LOB's resources utilized to satisfy the mandate is 100%.**

- Benefits and Value of LOB:

The benefit of this program provides safety for residents and protects property values. The program also keeps the county compliant with federal and state stormwater discharge regulations.

LOBS Highlights:

LOB 29-02 Stormwater Management Program

- **What We Do:**

The Stormwater Management (SWM) program objective is to provide operational and maintenance services for the County's stormwater management facilities which address water quality and water quantity issues.

- **Who We Serve:**

The Stormwater Management program serves Fairfax County residents and commercial and residential property owners, environmental partners and stakeholders, as well as, Federal and State regulations.

- **Why We Do It:**

The Stormwater Management program is provided to protect the safety and well being of Fairfax County residents, as well as provide protection and maintain property values of residential and commercial property owners as related to improving the quality, and managing the volume generated by stormwater runoff. The program also provides environmental benefits through program goals aimed at improving water quality. **This LOB is federally and/or state mandated. The percentage of this LOB's resources utilized to satisfy the mandate is 100%.**

- **Benefits and Value of LOB:**

The benefit of this program provides safety for residents and protect property values. The program also keeps the county compliant with Federal and State stormwater discharge regulations related to improving stormwater runoff water quality.

LOBS Highlights:

LOB 29-03 Transportation Services Program

- **What We Do:**

The Transportation Services program is comprised of six different transportation programs that are administered by the Stormwater Management Business Area. The six programs are in addition to the Stormwater Management program. These programs include, Trails/Walkways/Bridges, Roadway Maintenance, Street Name Signs, Park-n-Rides, Bus Shelters, CRP Districts.

- **Who We Serve:**

The Transportation Services program serves Fairfax County residents and commercial and residential property owners, environmental partners and stakeholders, as well as, Federal and State regulations.

- **Why We Do It:**

Maintenance of transportation facilities such as Park-and-Ride, Trails and Walkways, Roads, Bus Shelters, Commercial Districts and public Street Name Signs provides support of transportation initiatives and alternatives to relieve congested roadways, and help to meet current vehicular emission requirements associated with Federal and State mandates pertaining to the Clean Air Act.

- **Benefits and Value of LOB:**

- The Transportation Services program provides critical maintenance of facilities associated with alternative transportation initiatives in Fairfax County. The program provides public safety and aesthetic maintenance that attracts and supports participation in the alternative transportation initiatives.

LOBS Highlights:

LOB 29-04 Snow and Emergency Response Program

What We Do:

The Snow Removal/Emergency Support and Directives Services maintenance programs have been combined under a single LOB for purposes of simplification. They are grouped together because of the common maintenance program characteristics such as, first response requirements, unplanned events and critical response requirements associated with all three programs. The programs are: Snow Removal Services, Emergency Response, Response to Directives.

– Who We Serve:

The Snow Removal/Emergency Response program serves all Fairfax County residents and residential and commercial property owners. The snow removal services serve county employees as well as, regional transit commuters.

– Why We Do It:

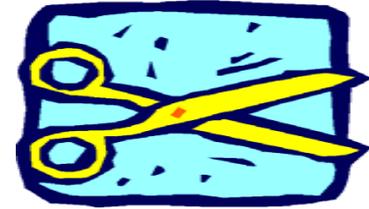
To provide first response public safety services for the residents of the County. To provide assistance and safety services during critical emergency situations. To provide regional commuter assistance during inclement weather. To provide critical mitigation services to abate public safety conditions related to health and safety directives.

– Benefits and Value of LOB:

The Snow Removal/Emergency Support and Directives LOB provides valuable assistance to County residents during inclement weather conditions, and is critical to public safety as well as, County employee's and regional transportation. The work in response to directives is intended to correct specific deficiencies on private properties that endanger public health or devalue adjoining properties.

Agency Reduction Priorities

Reduction Philosophy



- ◆ The LOB reduction strategy was based mostly on prioritization of programs within the Business Area. The prioritization of programs is based on mission criticalness, and those that would have the least impact to residents. In addition, consideration is given that the transportation programs could have an alternate funding source within Fund 124, County and Regional Transportation Projects.

Commercial Revitalization Maintenance Program

- Elimination of this program will have the least impact to the residents in the County. The maintenance is primarily aesthetic and not structural or Public Safety related.

Bus Shelter Maintenance Program

- Reduced service levels for the elimination of trash removal services, monthly cleaning and maintenance reduced to repairs only. Reduction is aesthetic and not structural. Facilities would still exist for transportation services. Could possibly be funded under new Transportation Fund.

Road Maintenance Program

- Elimination of this program is primarily due to the consideration that the program currently has very minimum service levels from previous years reductions. Fewer number of residents will be impacted. Maintenance could possibly be funded under new Transportation Fund.

Trails, Walkways and Pedestrian Bridges Program

- Reduced service level. Capital trails and walkway renewal program staff eliminated. Maintenance has been previously reduced to citizen request for assistance only. As currently funded, the capital program has an approximate replacement cycle of 370 years. This program will be funded under the new Transportation Fund in the future.

FY 2010 LOB's 3 & 4 Program Priority Summary with Proposed Reductions

Line Of Business	Program Priority	Operating Funding	CIP Funding	Inventory	Previous Adjustments	15% Reduction
Commercial Revitalization Districts	7	\$40,000	\$400,000	5 ea	FY06 exp=\$381,000 FY07 exp=\$404,000 Added McLean in FY 08 with no funding Recommended FY09 CIP funding \$520,000	\$40,000
Bus Shelters	6	\$340,000	\$0	275 ea	Includes repairs, cleaning and trash collection Repairs estimated at \$50,000/yr	\$284,192
Roads and Service Drives	5	\$100,000	\$75,000	Roads - 7 miles Segments - 53 ea	FY04 \$35,000 cut preventive maintenance FY05 \$75,000 reduction by charging staff to Capital	\$100,000
Park and Ride	4	\$1,200,000	\$0.00	11 ea	FY03 deferred \$150,000 FY04 deferred \$140,000	
Trails and walkways	3	\$440,000	\$400,000	T-225 miles S-370 miles B-64 each	\$400,000 in CIP funding moved to Ttransportation Fund (124) in FY2009	\$80,000
Street Name Signs	2	\$240,000	\$0	38,000 ea	FY04 reduced \$110,000 FY05 Reduced \$50,000 Program resourced to response only - about 30 day turn around cycle	
Snow/Emergency Response/Directives	1	\$1,400,000	\$0.00	110 facilities for snow removal Approx 400 directives y-t-d	FY04 reduced \$20,000 delay libraries FY05 reduced \$48,000 eliminated outer walks FY05 reduced \$30,000 increase response times Expanded grass and graffiti FY06 Exp = \$8,000 Fy 08>\$100,000 Additional 1SYE utilized	
Total of LOB's 3 & 4		\$3,760,000			* Specific Employees are not assigned to programs. They serve multiple functions and programs and are reassigned based on business needs. An SYE is made -up of several different staff positions equal to 2080 program hours.	\$504,192

Agency Reduction Priorities

Reduction Summary

Priority Ranking	Reduction Description	Positions	SYE	Net Reduction
1	Elimination of CRP Program	0	0.0	\$40,000
2	Elimination of Trash Pickup/Cleaning of Bus Shelters	0	0.0	\$284,192
3	Elimination of all Maintenance on County Roads	0	0.0	\$100,000
4	Elimination of reinvestment work on Trails	0	0.0	\$80,000
TOTAL REDUCTION		0	0.0	\$504,192

LOBS Reduction Impact



Reduction 1: Eliminate Commercial Revitalization Maintenance Program within LOB #029-03: Transportation Services Program

LOB Reduction: \$40,000

Program Description

- The Commercial Revitalization program (CRP) was developed to provide maintenance services for the seven delineated commercial districts and areas in Fairfax County. Routine maintenance services include grass mowing, plant care, weed control, turf management, trash removal and maintenance of streetscape amenities and appurtenances.

Reduction Impact

- The impact of eliminating this program will result in loss of investment for streetscape elements. An intent of the CRP program was to entice business to commercial districts through aesthetic streetscape community concepts. Elimination of this maintenance program will be counter to this concept, and most likely have a negative impact on commercial property that could result in potential losses in commercial tax base.

Funding Statement

- The program will be eliminated, and the identified staff will be moved to support the stormwater program in Fund 318. This support will replace a consultant that is currently funded by Capital Projects in Fund 318. Savings will be realized through an increase in recovered cost from the Stormwater program. **Note: Elimination of this program would enable a savings of aprox. \$400,000 in maintenance funds within Fund 303 – Project 009422 (Maintenance – CRP).**

LOBS Reduction Impact

Reduction 2: Reduce Bus Shelter Maintenance Program within LOB #029-03: Transportation Services Program. Remove all trash receptacles and Eliminate trash removal and cleaning services. Program would be reduced to repair of deficiencies only.

LOB Reduction: \$284,192

Program Description

- In FY 2006, the Fairfax County Board of Supervisor's (BOS) approved County maintenance of all bus shelters in the County, regardless of the bus shelter ownership. The BOS adopted a secondary (lower) service level for those bus shelters that were not owned and operated by the County which include shelters that belong to Washington Area Metropolitan Transit Authority (WAMTA), VDOT and proffered bus shelters owned and maintained by private entities. The current service level in this program related to routine maintenance services includes, weekly trash removal, monthly shelter cleaning, monthly inspection services, and non-routine repairs. This LOB provides routine maintenance to about half the shelters and non routine repairs to County owned shelters. The Sheriff provides cleaning and trash collection to about half of the shelters.

Reduction Impact

- The impact of eliminating weekly trash removal services, and monthly cleaning of bus shelters will result in less clean facilities for the patrons that use the bus transit system. Bus shelters will have increased graffiti, and increased illegal advertisements and solicitations that are not removed during the weekly maintenance visits. Less clean facilities could deter usage of the bus transit system. Less dependence of the transit system will result in negative impacts to the environment, and will result in increased single occupancy vehicle emissions.

Funding Statement

- The program service level will be reduced, and the identified staff will be moved to support the stormwater program in Fund 318. This support will replace consultant services that are currently funded by Capital Projects in Fund 318. Saving will be realized through an increase in recovered cost from the Stormwater program, and a reduction of operating expenses through elimination of contracted bus shelter maintenance services.

LOBS Reduction Impact

Reduction 3: Eliminate Road Maintenance (FCRIMP) Program within LOB #029-03: Transportation Services Program

LOB Reduction: \$100,000

Program Description

- The Fairfax County Road Maintenance and Improvement (FCRMIP) program provides maintenance for unimproved roads in Fairfax County. The current inventory of roads maintained in the FCRIMP program includes approximately 43.7 miles of unimproved roads, service drives and stub streets. The various road segments serve approximately 860 private residential property owners, and fronting commercial properties along the service drives. The original intent of the program was to upgrade the unimproved roads in the County to meet VDOT maintenance standards so that the roads could be accepted into the state maintenance systems. Prior to budget reductions in this program, the purpose of the program was to provide maintenance services to the unimproved roadway segments in the County and eventually upgrade them.

Reduction Impact

- The service levels in this program were substantially lowered during previous years budget reductions to citizens requests for services, annual inspections, and only repairs of most critical safety items. The complete elimination of maintenance services in this program will result in not providing minimum standards of care for the roads that are maintained by the County. Greater maintenance costs will be passed to the effected property owners. Public safety will be impacted as missing and damaged traffic control signs will not be replaced, and major road drainage failures will not be addressed. Road surface conditions will further deteriorate unless repaired by the adjacent property owners.

Funding Statement

- The program will be eliminated, and the identified staff will be moved to support the stormwater program in Fund 318. This support will replace a consultant that is currently funded by Capital Projects in Fund 318. Savings will be realized through an increase in recovered cost from the Stormwater program, and a reduction of operating expenses through elimination of materials used for road repairs. **NOTE: Elimination of this program would enable a savings of aprox. \$75,000 within Fund 303 – Project V00002 – Emergency Road Repairs.**

LOBS Reduction Impact

Reduction 4: Reduce Trails, Walkways, Pedestrian Bridges Maintenance Program within LOB #029-03: Transportation Services Program. Eliminates the capital renewal program for sidewalk and trails, reduce maintenance to minimum call-in for assistance requests.

LOB Reduction: \$80,000

Program Description

- The Trails, Walkways, Pedestrian Bridge maintenance program provides maintenance services for the network of sidewalks and trails that fall under the responsibility of the Department of Public Works and Environmental Services. As currently funded, the Trails, Walkways and Pedestrian Bridges maintenance program provides limited maintenance services to approximately 225 miles of trails, 370 miles of sidewalks and 64 pedestrian bridges. The maintenance program is managed in concert with trails managed by the Fairfax County Park Authority (FCPA), and the Fairfax County Trails Committee and in coordination with VDOT. Previously there were three additional capital projects funds that provide implementation funding for capital trail and sidewalk projects. Funding for ADA compliance project 009406 was eliminated in FY 2009, and funding for the other two projects has been moved to the new Transportation Fund 124.

Reduction Impact

- The impact of reducing this program will result in the elimination of support to implement the Capital renewal projects associated with trails and sidewalks maintained by the Business Area. This reduction will eliminate the staff to implement the Capital reinvestment. If the CIP funding is provided, the Capital project will have to fund the staff for implementation. This reduction will increase replacement cycles in the trails and sidewalks program which support transportation alternatives, and further degrade and increase pedestrian safety related surface failures, as well as blocked trail sections due to bridge failures.

LOBS Reduction Impact

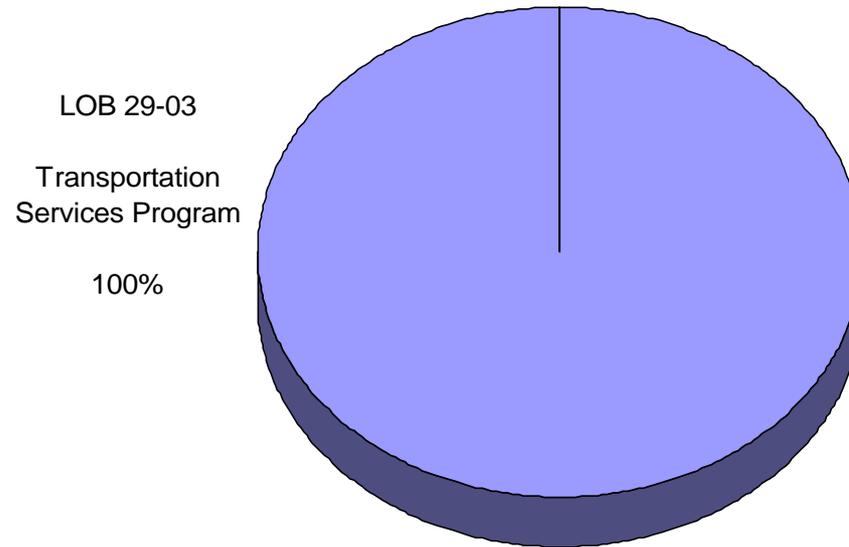
Reduction 4: continued....

Funding Statement

- The program will be reduced, and the identified staff will be moved to support the stormwater program in Fund 318. This support will replace a consultant that is currently funded by Capital Projects in Fund 318. Savings will be realized through an increase in recovered cost from the Stormwater program. **Note: Approximately \$400,000 was appropriated within Fund 124 – Projects 002200 (Emergency Maintenance of Existing Trails) and X00407 (Sidewalk Replacement) to provide funds for major rehabilitation and reinvestment. These projects were funded in FY09.**

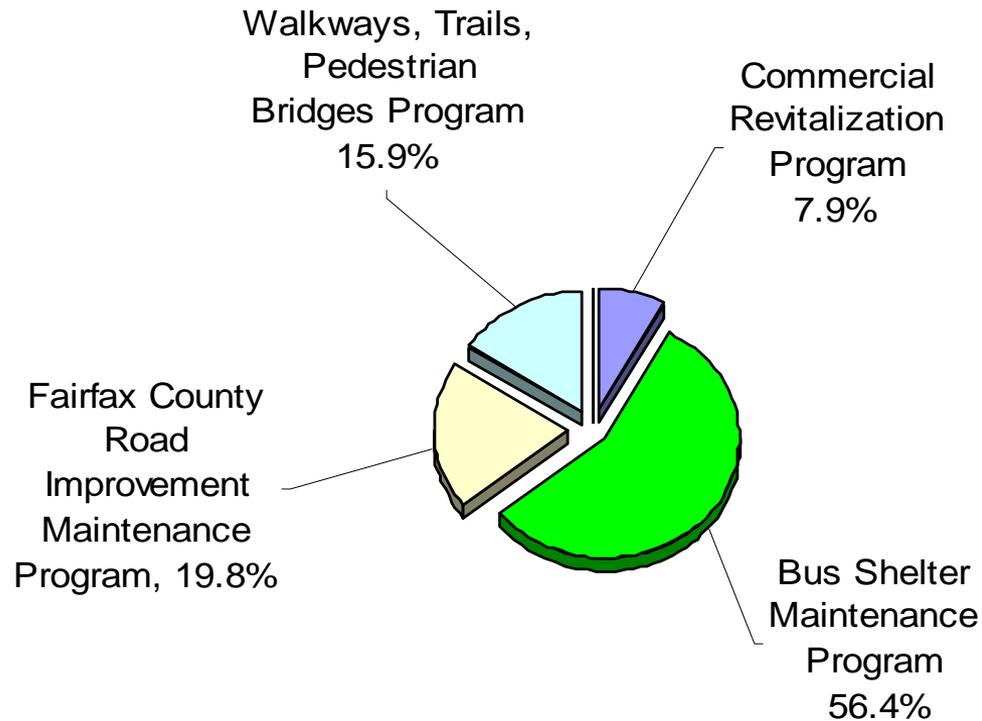
Agency Reduction Priorities

Reductions by LOB



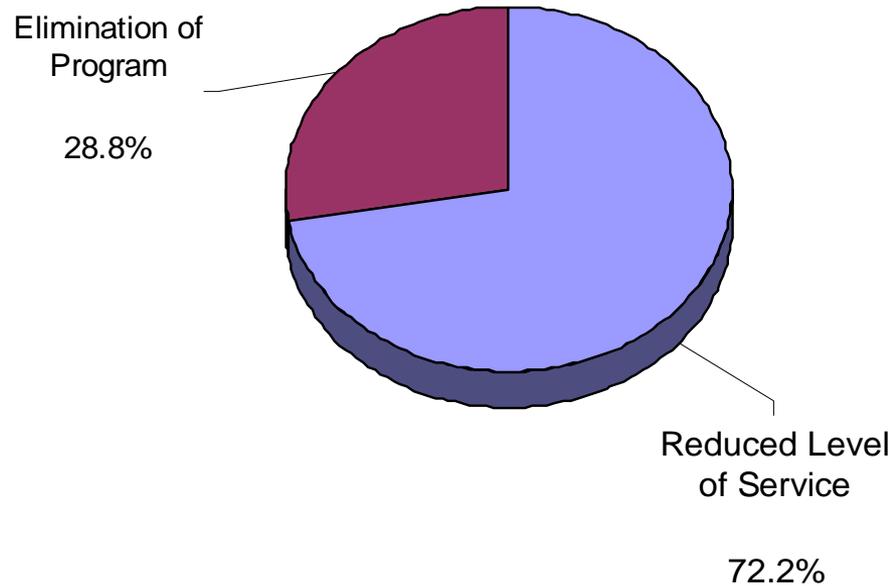
Agency Reduction Priorities

Reductions by Program Area



Agency Reduction Priorities

Reductions by Classification



Questions and Answers



Stormwater Funding

- ◆ All Phase 1 communities in the State have, or are proposing utility fees
- ◆ The MS4 permit specifies actions to “the maximum extent practicable” and lack of funding is not a justified reason for failing to meet permit conditions
- ◆ Nationwide, communities are being fined for failure to meet conditions, or failure to fund or staff programs.
- ◆ This program funds Dam safety that was previously in a different capital program
- ◆ Funds are being used for Infrastructure Reinvestment
- ◆ Average Utility Rate in 9 Va. communities- \$57 per residential unit

◆ **ANNUAL RESIDENTIAL STORMWATER FEES**
May, 2008

JURISDICTION	ANNUAL FEE PER EQUIVALENT RESIDENTIAL UNIT (ERU)	COMMENTS
Arlington County	\$50.00	A sanitary district tax of \$0.01 per \$100 of assessed property value currently is being proposed to voters. if adopted, the average homeowner will pay \$50 per year for the stormwater program.
City of Charlottesville	-0-	Charlottesville has not adopted a stormwater utility. The city's environmental administrator and its director of public works recommended in the fall of 2007 that the City Council do so, but no utility is included in the city manager's proposed budget for the upcoming fiscal year.
City of Newport News	\$58.20	Based on an ERU rate of \$4.85 per month. No change since last report.
City of Virginia Beach	\$62.42	Based on an ERU rate of 17.1 cents per day, a decrease of 1 cent since last report.
City of Hampton	\$55.20	Based on an ERU rate of \$4.60 per month. No change since last report.
City of Norfolk	\$93.96	Based on a flat fee per dwelling of \$7.83 per month. No change since last report.

◆ **ANNUAL RESIDENTIAL STORMWATER UTILITY FEES**
April, 2008

JURISDICTION	ANNUAL FEE PER EQUIVALENT RESIDENTIAL UNIT (ERU)	COMMENTS
City of Richmond	-0-	A tiered stormwater utility fee currently is being proposed to voters. Based on parcel size, residential owners would be charged from \$45 to \$135; commercial owners would be charged from \$45 to \$90.
City of Suffolk	\$47.40	Based on an ERU rate of \$395 per month. No change since last report.
City of Chesapeake	\$53.40	Based on an ERU rate of \$4.45 per month. No change since last report.
James City County	\$58.80	No change since last report.
Prince William County	\$26.36	No change since last report. Flat fee per detached dwelling; townhouses and condos pay a flat fee of \$19.78
	\$56.97	AVERAGE ANNUAL STORMWATER FEE AMONG THOSE JURISDICTIONS THAT IMPOSE ONE

Creating a Tax District for Stormwater

- ◆ Provides dedicated Stormwater funding source
- ◆ Similar to Leaf collection and Gypsy Moth
- ◆ To fund the existing Stormwater program and restore the “Penny” would require the approximate value of 1.5 cents
- ◆ Based on a \$500,000 average assessed home value, the 1.5 cent rate would equal approximately \$75.00 per household annually or \$6.25/month

Utility vs Tax

- ◆ Tax requires less overhead
- ◆ Tax self inflates
- ◆ Tax is deductible from Federal and State
- ◆ Utility allows for financial incentives - individualized bills
- ◆ Utility removes revenue from “Tax Rate” comparisons
- ◆ Utility allows for revenue based borrowing

Questions and Answers

