

## Fund 317 Capital Renewal Construction

### Board of Supervisors' Adjustments

*The following funding adjustments reflect all changes to the FY 2009 Advertised Budget Plan, as approved by the Board of Supervisors on April 28, 2008:*

- ◆ The Board of Supervisors made no adjustments to this fund.

### Focus

This fund supports the long-term needs of the County's capital assets to maximize the life of County facilities, avoid their obsolescence, and provide for planned repairs, improvements and restorations to make them suitable for organizational needs. Capital renewal is the planned replacement of building subsystems such as roofs, electrical systems, HVAC, plumbing systems, carpet replacement, parking lot resurfacing, fire alarm replacement and emergency generator replacement that have reached the end of their useful life. Without significant reinvestment in building subsystems, older facilities can fall into a state of ever decreasing condition and functionality, and the maintenance and repair costs necessary to operate the facilities increase.

Fairfax County will have a projected facility inventory of approximately 180 buildings in FY 2009 (excluding schools, parks, housing and human services residential facilities), with a projected FY 2009 total of over 8.0 million square feet of space throughout the County. This inventory is expanding both with the addition of newly constructed facilities and by the acquisition of additional property. With such a large inventory, and the acquisition of additional facilities, it is critical that a planned program of repairs and restorations be maintained. In addition, the age of a major portion of this inventory of facilities is reaching a point where major reinvestments are required in the building subsystems.

Many County facilities have outdated HVAC and electrical systems that are susceptible to failure or are highly inefficient energy users. Sites are identified and each individual project involves a two-step process to complete both design and construction. Roof repairs and waterproofing are conducted in priority order after a detailed evaluation of all roofs at County facilities. Based upon the results of that evaluation, critical requirements are prioritized and a five-year plan is established. Repairs and replacement of facility roofs are considered critical to avoid the serious structural deterioration that occurs from roof leaks. By addressing this problem in a comprehensive manner, a major backlog of roof problems can be avoided. Carpet replacement and parking lot resurfacing are evaluated annually and prioritized based on the most critical requirements for high traffic areas. In addition, emergency generators and fire alarm systems are replaced based on equipment age, coupled with maintenance and performance history. Emergency minor repairs and renovations, usually generated by customer requests, are accomplished under the category of emergency building and repair. These small projects abate building obsolescence and improve the efficiency and effectiveness of facilities and facility systems. The following table outlines the expected service life of building subsystems used to project capital renewal requirements, coupled with actual condition of the subsystem component:

# Fund 317

## Capital Renewal Construction

### General Guidelines for Expected Service Life Of Building Subsystems

#### Electrical

Lighting	20 years
Generators	25 years
Service/Power	25 years
Fire Alarms	15 years

#### Plumbing

Pumps	15 years
Pipes and fittings	30 years
Fixtures	30 years

#### HVAC

Equipment	20 years
Boilers	15 to 30 years
Building Control Systems	10 years

#### Finishes

Broadloom Carpet	7 years
Carpet Tiles	15 years
Systems Furniture	20 to 25 years

#### Conveying Systems

Elevator	25 years
Escalator	25 years

#### Site

Paving	15 years
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#### Roofs

Replacement	20 years
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In order to better define the County's capital renewal needs, a comprehensive facilities condition assessment was conducted on 92 selected Fairfax County facilities (approximately 4.2 million square feet of space), representative of older facilities anticipated to have the most capital renewal requirements in the near future. The assessment included a complete visual inspection of roofs and all mechanical and electrical components for each facility. Maintenance and repair deficiencies were identified and funding requirements estimated. The results indicate a multi-million investment is needed over time. Specifically, the facility condition assessment indicated an estimated total of \$80 million needed through 2010 to repair facilities and meet expected repair and equipment replacement needs. The Facilities Management Department (FMD) prioritized the comprehensive facility assessment lists and classified projects into five categories. Projects were classified as Category F: urgent/safety related, or endangering life and/or property; Category D: critical systems beyond their useful life or in danger of possible failure; Category C: life-cycle repairs/replacements where repairs are no longer cost effective; Category B: repairs needed for improvements if funding is available, and Category A: good condition.

Funding in the amount of \$6,924,321 is included in Fund 317, Capital Renewal Construction, in FY 2009. Funding is supported by the allocation of HB 599 state revenues. Funding provides for the most critical prioritized renewal projects, which are categorized as category F. Some Category F projects funded in FY 2009 support public safety facilities. As part of the fall 2006 public safety bond referendum, the voters approved \$5 million in capital renewal projects at public safety facilities. The entire \$5 million has been committed to prioritized projects; requiring additional funding in FY 2009 for public safety capital renewal.

## Fund 317

### Capital Renewal Construction

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#### **Changes to FY 2008 Adopted Budget Plan**

*The following funding adjustments reflect all approved changes in the FY 2008 Revised Budget Plan since passage of the FY 2008 Adopted Budget Plan. Included are all adjustments made as part of the FY 2007 Carryover Review and all other approved changes through December 31, 2007:*

- ◆ As part of the *FY 2007 Carryover Review*, the Board of Supervisors approved an increase of \$11,926,733 due to the carryover of unexpended project balances in the amount of \$10,851,733 and an adjustment of \$1,075,000. This adjustment includes an increase to the General Fund transfer of \$1,075,000 for various projects including: \$775,000 to support critical roof repairs at the Government Center due to significant deterioration and multiple roof leaks; and \$300,000 to support garage repairs and remedial work to repair structural beams and concrete damage at the Herndon Monroe Parking Garage.

*The following funding adjustments reflect all approved changes to the FY 2008 Revised Budget Plan from January 1, 2008 through April 21, 2008. Included are all adjustments made as part of the FY 2008 Third Quarter Review:*

- ◆ As part of the *FY 2008 Third Quarter Review*, the Board of Supervisors approved a decrease of \$374,000 associated with a transfer out to Fund 303, County Construction to fund higher than anticipated costs associated with HVAC replacement and electrical support systems for a portion of the Government Center which includes the Enterprise and Technology Operation Center (data center). The Enterprise Technology and Operations Center (ETOC) houses all County mainframe computers and corporate servers and is essential to on-going County business and service to citizens. The current HVAC and electrical systems date back to 1992. There have been tremendous changes in the hardware, software, and communications infrastructure supporting County business, resulting in significant additions to the ETOC. This equipment has put a strain on the supporting facility infrastructure which is at, or over capacity. Funding is available in Fund 317 based on the completion of several projects to help offset expenditures associated with this critically required system upgrade.

A Fund Statement, a Summary of Capital Projects, and Project Detail Tables for each project funded in FY 2009 are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., contingency or planning project). The Project Detail Tables include project location, description, source of funding and completion schedule.

# Fund 317

## Capital Renewal Construction

### FUND STATEMENT

Fund Type G30, Capital Project Funds

Fund 317, Capital Renewal Construction

	FY 2007 Actual	FY 2008 Adopted Budget Plan	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan
<b>Beginning Balance</b>	<b>\$10,950,245</b>	<b>\$0</b>	<b>\$12,851,733</b>	<b>\$0</b>	<b>\$0</b>
Revenue:					
Sale of Bonds <sup>1</sup>	\$2,000,000	\$14,000,000	\$12,000,000	\$0	\$0
State Aid <sup>2</sup>	2,449,000	7,056,000	7,056,000	6,924,321	6,924,321
<b>Total Revenue</b>	<b>\$4,449,000</b>	<b>\$21,056,000</b>	<b>\$19,056,000</b>	<b>\$6,924,321</b>	<b>\$6,924,321</b>
Transfer In:					
General Fund (001) <sup>3</sup>	\$5,641,000	\$868,321	\$1,943,321	\$0	\$0
<b>Total Transfers In</b>	<b>\$5,641,000</b>	<b>\$868,321</b>	<b>\$1,943,321</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Available</b>	<b>\$21,040,245</b>	<b>\$21,924,321</b>	<b>\$33,851,054</b>	<b>\$6,924,321</b>	<b>\$6,924,321</b>
Total Expenditures	\$8,188,512	\$21,924,321	\$33,477,054	\$6,924,321	\$6,924,321
Total Transfers Out					
County Construction (303) <sup>4</sup>	\$0	\$0	\$374,000	\$0	\$0
<b>Total Transfers Out</b>	<b>\$0</b>	<b>\$0</b>	<b>\$374,000</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Disbursements</b>	<b>\$8,188,512</b>	<b>\$21,924,321</b>	<b>\$33,851,054</b>	<b>\$6,924,321</b>	<b>\$6,924,321</b>
<b>Ending Balance<sup>5</sup></b>	<b>\$12,851,733</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<sup>1</sup> The sale of bonds is presented here for planning purposes only. Actual bond sales are based on cash needs in accordance with Board policy. On November 7, 2006, the voters approved a \$125 million Public Safety Bond Referendum, of which \$14 million was designated for capital renewal purposes. Due to extremely favorable interest rates, an amount of \$2.0 million was sold as part of the January 2007 Bond Sale in advance of FY 2008 for capital renewal purposes. An amount of \$12.0 million remains in authorized but unissued bonds from the November 7, 2006 bond referendum.

<sup>2</sup> Represents House Bill 599 state revenues.

<sup>3</sup> The General Fund transfers support annual capital renewal projects.

<sup>4</sup> Represents a Transfers Out to Project 009504, Enterprise and Technology Operation Center (ETOC) Renovation, in Fund 303, County Construction to fund higher than anticipated costs associated with HVAC replacement and electrical support systems.

<sup>5</sup> Capital projects are budgeted based on the total project costs. Most projects span multiple years, from design to construction completion. Therefore, funding for capital projects is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.

# Fund 317

## Capital Renewal Construction

### FY 2009 Summary of Capital Projects

**Fund: 317 Capital Renewal Construction**

Project #	Description	Total Project Estimate	FY 2007 Actual Expenditures	FY 2008 Revised Budget	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan
003099	Emergency Building Repairs		\$272,898.68	\$646,440.15	\$0	\$0
003100	Fire Alarm Systems		236,168.99	2,037,998.72	1,020,000	1,020,000
009132	Roof Repairs and Waterproofing		108,561.55	1,881,334.00	0	0
009133	Carpet Replacement		246,423.61	228,576.39	0	0
009136	Parking Lot and Garage Repairs		728,689.89	628,398.72	0	0
009145	Emergency Systems Failures		750,189.73	1,593,895.49	0	0
009146	Transferred School Site		668,081.39	460,919.36	0	0
009151	HVAC/Electrical Systems		4,121,716.12	8,585,359.27	3,875,000	3,875,000
009431	Emergency Generator		533,580.59	464,157.24	320,000	320,000
009480	Library Capital Renewal		143,541.48	0.00	0	0
009481	Juvenile/Human Services Capital Renewal		378,659.59	123,974.60	0	0
009600	Elevator Replacement		0.00	2,826,000.00	1,709,321	1,709,321
009601	Public Safety Capital Renewal		0.00	14,000,000.00	0	0
<b>Total</b>		<b>\$0</b>	<b>\$8,188,511.62</b>	<b>\$33,477,053.94</b>	<b>\$6,924,321</b>	<b>\$6,924,321</b>

## Fund 317 Capital Renewal Construction

<b>003100</b>	<b>Fire Alarm Systems</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the replacement of fire alarm systems throughout the County. Fire alarm systems are replaced based on age and difficulty in obtaining replacement parts and service. FY 2009 funding in the amount of \$1,020,000 is included for the replacement of fire alarm systems installed in the original Adult Detention Center building in 1975 (\$720,000), and the 10 year old system at the Criminal Justice Academy (\$300,000), both of which are experiencing failure due to age and obsolete system parts. In general, the useful life of fire alarm systems is 15 years.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0	0
Construction		135,022	236,169	2,037,999	1,020,000	1,020,000	0
Other		0	0	0	0	0	0
<b>Total</b>	Continuing	<b>\$135,022</b>	<b>\$236,169</b>	<b>\$2,037,999</b>	<b>\$1,020,000</b>	<b>\$1,020,000</b>	<b>\$0</b>

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$0	\$0	\$1,020,000	\$1,020,000

## Fund 317 Capital Renewal Construction

<b>009151</b>	<b>HVAC/Electrical Systems</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for HVAC replacement at prioritized County facilities, based on the severity of problems including overloaded systems, fire hazards, costly repairs, and lack of alternative funding sources. This funding level of \$3,875,000 will provide for HVAC replacement and electrical repairs for the 18 year old system at the Government Center (\$2,200,000), the 36 year old system at the Police Annex (\$850,000), the three year old system at the James Lee Community Center which is experiencing inefficient system operations (\$575,000), and the 50 year old system at the Patrick Henry Shelter (\$250,000). All of these repairs have been classified as safety-imminent repairs, or critical systems beyond their useful life in risk of failure, or life-cycle repairs/replacements where repairs are no longer cost effective. In general, the useful life of HVAC/Electrical systems is 20 years.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0	0
Construction		1,730,676	4,121,716	8,585,359	3,875,000	3,875,000	0
Other		0	0	0	0	0	0
<b>Total</b>	Continuing	<b>\$1,730,676</b>	<b>\$4,121,716</b>	<b>\$8,585,359</b>	<b>\$3,875,000</b>	<b>\$3,875,000</b>	<b>\$0</b>

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$0	\$0	\$3,875,000	\$3,875,000

## Fund 317 Capital Renewal Construction

<b>009431</b>	<b>Emergency Generator Replacement</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the replacement of emergency generators at County facilities. This program was established to address the replacement of generators that have outlived their useful life of 25 years. FY 2009 funding is included to replace the generators and obsolete parts for the 17 year old system at Bailey's Fire Station (\$80,000), the 24 year old system at the Criminal Justice Academy (\$80,000), the 11 year old system at the Gum Springs Community Center (\$80,000), and the 18 year old system at the Mt. Vernon Fire Station (\$80,000). In general, the useful life of generators is 25 years.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0	0
Construction		26,262	533,581	464,157	320,000	320,000	0
Other		0	0	0	0	0	0
<b>Total</b>	Continuing	<b>\$26,262</b>	<b>\$533,581</b>	<b>\$464,157</b>	<b>\$320,000</b>	<b>\$320,000</b>	<b>\$0</b>

<b>Source of Funding</b>				
General Fund	General Obligation Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$0	\$0	\$320,000	\$320,000

## Fund 317 Capital Renewal Construction

<b>009600</b>	<b>Elevator Replacement</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the emergency elevator replacement program. This program was established to address the replacement of elevators that have outlived their useful life and are experiencing frequent breakdowns. FY 2009 funding is included to begin to replace obsolete elevator components installed in the 18 year old system at the Government Center (\$1,339,321), and replace the 36 year old system for one elevator at the Historic Courthouse which is used by the public (\$370,000). Funding supports replacement of the elevator equipment, architectural and engineering costs, and installation and modification of related systems. This new elevator equipment will satisfy all current code requirements for elevator safety devices. In general, the useful life of elevators is 25 years.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	FY 2009 Adopted Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0	0
Construction		0	0	2,826,000	1,709,321	1,709,321	0
Other		0	0	0	0	0	0
<b>Total</b>	Continuing	<b>\$0</b>	<b>\$0</b>	<b>\$2,826,000</b>	<b>\$1,709,321</b>	<b>\$1,709,321</b>	<b>\$0</b>

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$0	\$0	\$1,709,321	\$1,709,321