

Fund 30020

Capital Renewal Construction

Focus

Fund 30020 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, window replacement, 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 FY 2015 facility inventory of over 8.8 million square feet of space throughout the County (excluding schools, parks, housing and human services residential facilities). This inventory continues to expand with the addition of newly constructed facilities, the renovation and expansion of existing facilities and the acquisition of additional property. With such a large inventory, 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Many County facilities have outdated HVAC and electrical systems that are susceptible to failure or are highly inefficient energy users.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 all roofs at County facilities are evaluated. 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. Critical emergency repairs and renovations are accomplished under the category of emergency building repairs. These small projects abate building obsolescence and improve the efficiency and effectiveness of facilities and facility systems. The following table outlines, in general, the expected service life of building subsystems used to project capital renewal requirements, coupled with the actual condition of the subsystem component:

General Guidelines for Expected Service Life Of Building Subsystems

<u>Electrical</u>		<u>Plumbing</u>	
Lighting	20 years	Pumps	15 years
Generators	25 years	Pipes and fittings	30 years
Service/Power	25 years	Fixtures	30 years
Fire Alarms	15 years		
 <u>HVAC</u>		 <u>Finishes</u>	
Equipment	20 years	Broadloom Carpet	7 years
Boilers	15 to 30 years	Carpet Tiles	15 years
Building Control Systems	10 years	Systems Furniture	20 to 25 years

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Conveying Systems

Elevator	25 years
Escalator	25 years

Site

Paving	15 years
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Roofs

Replacement	20 years
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Each year, the Facilities Management Department (FMD) prioritizes and classifies capital renewal projects into five categories. Projects are 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.

In September 2009, a staff analysis indicated that a backlog of category D and F critical capital renewal projects existed. In order to address this backlog, as part of the FY 2011 Adopted Budget Plan, the Board of Supervisors approved a 3-year plan of short-term borrowing totaling \$35 million. The 3-year plan was designed to eliminate the backlog and enable staff to determine a realistic level of annual funding for the future. The proposed short-term borrowing program for capital renewal was included in the debt capacity estimates in the Capital Improvement Program (CIP) and accommodated within established debt limits for General Fund supported debt.

The Facilities Management Department (FMD) continues to work on some of the \$35 million backlog identified in 2009. Many of these backlogged capital renewal projects required multiple years to complete both design and construction and some are still underway. In addition, current staffing levels, the complexity of some of the projects, ADA upgrade requirements, and staff requirements in other areas have delayed the completion of some renewal projects.

In April 2013, the County and School Board formed a joint committee, the Infrastructure Financing Committee (IFC), to collaborate and review both the County and School's Capital Improvement Program (CIP) and capital requirements. One of the goals of the Committee was to develop long term maintenance plans for both the County and Schools, including annual requirements and reserves. The committee conducted a comprehensive review of critical needs and approved recommendations to support the development of a sustainable financing plan to begin to address current and future capital requirements. The requirement for County capital renewal is estimated at \$26 million per year. This estimate is based on current assessment data, much of which is nearly 10 years old; as well as industry standards (2 percent of the current replacement value). Based on current staffing levels, the complexity of many of the projects, and the timeline for completing renewal projects, it is estimated that approximately \$15 million per year would be a good goal for maintenance funding. During their deliberations on the FY 2015 Advertised budget, the Board of Supervisors reduced funding from \$8.0 million to \$2.7 million. This funding will allow staff to focus on completing the backlogged renewal projects begun in FY 2014 and begin new category F projects.

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Specific FY 2015 funding levels in Fund 30020, Capital Renewal, include:

HVAC Systems

This project provides for the planned replacement of HVAC systems at prioritized County facilities, based on the severity of problems including overloaded systems, fire hazards, and costly repairs. In general, the useful life of HVAC/Electrical systems is 20 years; however, some systems fail earlier due to wear and tear, and often emergency repairs are costly based on difficulty obtaining parts and additional code requirements.

FY 2015 funding of \$1,255,000 is included for HVAC system component replacements at the following facilities: \$255,000 for the Government Center, \$420,000 for the Adult Detention Center, \$340,000 for the Courthouse and \$240,000 for the Burkholder Center. These systems are beyond their useful life and consistently at risk of failure. They are requiring increased maintenance efforts due to age and stress on the systems and replacement components such as air handling units, water tanks and hot water heaters, circulating pumps, cooling towers and boilers to meet current code requirements.

Electrical System Upgrades

Funding in the amount of \$250,000 is included for replacement of electrical systems at Frying Pan Fire Station to replace the existing and emergency distribution panel boards and sub panels. All of these repairs have been classified as safety risks in need of repairs or critical systems beyond their useful life and in risk of failure.

Roof Repair and Replacement

This project provides for the planned replacement or repair of facility roofs and waterproofing systems in County buildings. Maintenance and repairs are required to stop rapid deterioration and damage due to water penetration. As roofs age, repairs are no longer cost effective and replacement is required. Roofs at County facilities range in warranty periods from 10 to 20 years. The warranties on all of the roofs slated for replacement in FY 2015 have expired. In FY 2015, funding in the amount of \$1,045,000 is included for roof repairs and replacement including: \$450,000 for the Joseph Willard Health Center, \$330,000 for Sherwood Library, \$230,000 for Bailey's Community Center and \$35,000 for the Fox Mill Fire Station. In general, roof replacement is required every 20 years; however, leaking and damage caused by water infiltration to facilities can require more immediate attention.

Emergency Building Repairs

This project provides for emergency repairs and critical upgrading at various buildings and facilities throughout the County. Projects include emergency repairs to buildings and building equipment, plumbing repairs, minor upgrades to electrical and mechanical systems, structural repairs, vandalism abatement, and other non-recurring construction and repair projects. FY 2015 funding of \$150,000 is included for the Annandale Child Care Center to replace the drainage system and sidewalks along the rear of the building. During weather events, rain and snow are collecting in the walkways and not draining properly into the drainage system. This has resulted in uneven sidewalks and an imminent safety hazard to children, staff and visitors of the facility.

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Changes to FY 2014 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2014 Revised Budget Plan since passage of the FY 2014 Adopted Budget Plan. Included are all adjustments made as part of the FY 2013 Carryover Review, FY 2014 Third Quarter Review, and all other approved changes through April 30, 2014.

- ◆ **Carryover Adjustments** **\$37,238,641**

As part of the *FY 2013 Carryover Review*, the Board of Supervisors approved an increase of \$37,238,641 due to the carryover of unexpended project balances in the amount of \$31,797,127 and an adjustment of \$5,441,514. This adjustment included an increase to the General Fund transfer of \$5,000,000 to support emergency repairs at County facilities in the event of a major systems failure such as a large HVAC system, or other unforeseen event, and \$441,514 due to the appropriation of revenues received in FY 2013 associated with reimbursements from the Virginia Department of Transportation (VDOT) and the Virginia State Police for their share of the operational costs at the McConnell Public Safety and Transportation Operations Center (MPSTOC) as well as the state share of future projected capital renewal requirements at this facility. The County pays for all operational requirements such as security, custodial, landscaping, maintenance, parking lot repairs and snow removal costs and the State reimburses the County for their share of these costs. In addition, the state has begun providing annual funding for future repair and renewal costs to avoid large budget increases for required capital renewal costs in the future. Funding received from the state is appropriated annually at the Carryover Review.

A Fund Statement and a Summary of Capital Projects 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., a contingency or planning project).

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FUND STATEMENT

Fund 30020, Capital Renewal Construction

	FY 2013 Actual	FY 2014 Adopted Budget Plan	FY 2014 Revised Budget Plan	FY 2015 Advertised Budget Plan	FY 2015 Adopted Budget Plan
Beginning Balance	\$8,426,210	\$0	(\$7,334,369)	\$0	\$0
Revenue:					
Sale of Bonds ¹	\$1,900,000	\$0	\$4,100,000	\$0	\$0
Short Term Borrowing ²	0	0	35,000,000	0	0
MPSTOC Reimbursement ³	441,514	0	0	0	0
Total Revenue	\$2,341,514	\$0	\$39,100,000	\$0	\$0
Transfers In:					
General Fund (10001)	\$0	\$0	\$5,000,000	\$8,000,000	\$2,700,000
Cable Communications (40030) ⁴	285,000	0	0	0	0
Total Transfers In	\$285,000	\$0	\$5,000,000	\$8,000,000	\$2,700,000
Total Available	\$11,052,724	\$0	\$36,765,631	\$8,000,000	\$2,700,000
Total Expenditures⁵	\$18,387,093	\$0	\$36,765,631	\$8,000,000	\$2,700,000
Total Disbursements	\$18,387,093	\$0	\$36,765,631	\$8,000,000	\$2,700,000
Ending Balance^{6,7}	(\$7,334,369)	\$0	\$0	\$0	\$0

¹ 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. An amount of \$1.9 million was sold in January 2013 and results in a balance of \$4.1 million in authorized but unissued bonds.

² In FY 2014, up to \$35,000,000 is anticipated to be provided using the County's short-term borrowing tools in order to reduce existing capital renewal backlogs. Borrowing will be based on actual project completion schedules and cash flow requirements as identified by staff.

³ A total of \$441,514 represents revenue received from the Virginia Department of Transportation (VDOT) and Virginia State Police associated with the state share of operating costs at the McConnell Public Safety and Transportation Operations Center (MPSTOC). These funding reimbursements will be held in capital renewal projects for future replacement requirements.

⁴ The FY 2013 Cable Communications transfer of \$285,000 supported the replacement of auditorium seating and carpeting at the Government Center.

⁵ In order to account for revenue and expenditures in the proper fiscal year, an audit adjustment in the amount of \$473,010.61 has been reflected as an increase to FY 2013 expenditures. This impacts the amount carried forward and results in a decrease of \$473,010.61 to the *FY 2014 Revised Budget Plan*. The projects affected by this adjustment are 2G08-005-000, Emergency Systems Failures, GF-000012, Emergency Generator Replacement, GF-000013, Elevator Replacement and GF-000015, Public Safety Renewal-DPWES. The audit adjustments have been included in the FY 2013 Comprehensive Annual Financial Report (CAFR). Details of the audit adjustments were included in the FY 2014 Third Quarter package.

⁶ The FY 2013 Actual negative ending balance was a result of a higher than anticipated amount of capital renewal projects reaching the construction phase and increased project activity in the spring of 2013. These projects include the planned repair and replacement of HVAC systems, elevators and emergency repairs and critical upgrading at various buildings and facilities throughout the County. Staff is currently working on a backlog of \$35 million in capital renewal projects. In order to eliminate the negative ending balance, short-term borrowing will take place immediately in FY 2014 to address both FY 2013 and FY 2014 capital renewal expenses.

⁷ 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.

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FY 2015 Summary of Capital Projects

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Project #	Description	Total Project Estimate	FY 2013 Actual Expenditures	FY 2014 Revised Budget	FY 2015 Advertised Budget Plan	FY 2015 Adopted Budget Plan
2G08-003-000	Carpet Replacement		\$391,706.50	\$38,184.50	\$0	\$0
2G08-004-000	Parking Lot and Garage Repairs		1,457,837.27	46,714.82	200,000	0
2G08-005-000	Emergency Systems Failures		699,080.28	9,930,513.37	0	0
2G08-006-000	Window Replacement		246,005.10	77,922.45	190,000	0
2G08-007-000	State Support For MPSTOC Renewal		0.00	462,029.00	0	0
2G08-008-000	County Support For MPSTOC Renewal		0.00	1,352,913.00	0	0
GF-000008	Emergency Building Repairs		2,128,533.93	1,867,007.76	770,000	150,000
GF-000009	Fire Alarm Systems		789,409.60	749,148.37	530,000	0
GF-000010	Roof Repairs and Waterproofing		375,247.80	539,213.62	1,045,000	1,045,000
GF-000011	HVAC Systems		5,431,224.78	2,561,536.10	4,575,000	1,255,000
GF-000012	Emergency Generator Replacement		935,698.40	1,651,003.70	200,000	0
GF-000013	Elevator Replacement		3,946,366.51	9,020,017.94	0	0
GF-000014	Public Safety Renewal - FMD		195,354.54	149,183.46	0	0
GF-000015	Public Safety Renewal - DPWES		1,757,829.18	6,028,041.64	0	0
GF-000017	Electrical Systems		32,799.23	2,292,200.77	490,000	250,000
Total		\$0	\$18,387,093.12	\$36,765,630.50	\$8,000,000	\$2,700,000