

COUNTY STAFF PRESENTATION TO THE BOARD OF SUPERVISORS



Budget Workshop

***CAPITAL INFRASTRUCTURE
REQUIREMENTS***

March 8, 2008

Overview of CIP Issues

- *Inventory of County facilities continues to increase*
- *County facilities are aging and require continued investment*
- *Recruitment and retention issues coupled with increased workloads and inability to fund operating costs are resulting in delay of CIP projects*
- *Near term CIP requirements far exceed available resources*
- *Stringent prioritization will be required*

New And Expanded Facilities

- Since FY 2001, 69 new and expanded facilities will have opened by the end of FY 2008
- Most of these facility openings resulted in significant operational cost increases for the County
- Approximately 28 new or expanded facilities are funded, in progress, and scheduled to open between FY 2009 and FY 2012 (*Does not include SACC rooms or projects that are currently only partially funded*)

New Facilities (FY 2001- FY 2008)

- *Great Falls Library (FY 2001)*
- *North Point Fire Station (FY 2001)*
- *Noman M. Cole Administration Building Rehabilitation (FY 2001)*
- *Herndon Harbor House Adult Day Care (FY 2001)*
- *Groveton Senior Center (FY 2002)*
- *Hideaway Teen Center (FY 2002)*
- *Braddock District Supervisors Office (FY 2002)*
- *South County Government Center (FY 2002)*
- *Fire Apparatus Shop Expansion at Oakton Fire Station (FY 2002)*
- *Burke Volunteer Fire Station (FY 2002)*
- *Public Safety Parking Structure (FY 2003)*
- *Sully Police Station (FY 2003)*
- *Little River Glen Adult Day Care (FY 2003)*
- *Mt. Vernon Police Station Renovation and Expansion (FY 2003)*
- *West Springfield Police Station Renovation and Expansion (FY 2003)*
- *Newington DVS Fire and Rescue Apparatus Maintenance Facility (FY 2003)*
- *James Lee Community Center Expansion (FY 2004)*
- *West Springfield Police Station Renovation (FY 2004)*
- *West County RECenter (Cub Run) (FY 2004)*
- *West Ox Maintenance Facility Expansion (2 new buildings) (FY 2005)*
- *Noman M. Cole, Jr. Pollution Control Plant Expansion (FY 2005)*
- *Herndon Harbor House Senior Center (FY 2005)*
- *Laurel Hill Golf Course (FY 2005)*
- *Fairfax Centre Fire Station (FY 2006)*
- *South Gate Community Center Expansion (FY 2006)*
- *Crosspointe Fire Station (FY 2007)*
- *Little River Glen Adult Day Health (FY 2007)*
- *Katherine K. Hanley Family Shelter (FY 2007)*
- *Oakton Library (FY 2007)*
- *Jennings Judicial Center Expansion Component (FY 2008)*
- *Burke Centre Library (FY 2008)*
- *Fairfax City Library (FY 2008)*

Total of 32

New Facilities - SACC Centers (FY 2001- FY 2008)

- *Braddock (FY 2001 expansion)*
- *Hybla Valley (FY 2001 expansion)*
- *Crestwood (FY 2001 new)*
- *Kings Glen (FY 2002 expansion)*
- *Kilmer Center (FY 2002 expansion)*
- *McNair Farms (FY 2002 new)*
- *Spring Hill (FY 2002 expansion)*
- *Churchill Road (FY 2002 expansion)*
- *Camelot (FY 2003 expansion)*
- *Bren Mar (FY 2003 expansion)*
- *Hunters Woods (FY 2003 expansion)*
- *Dogwood (FY 2003 expansion)*
- *Orange Hunt (FY 2003 expansion)*
- *Northeast Centreville/Colin Powell (FY 2004 new)*
- *Island Creek (FY 2004 new)*
- *Andrew Chapel/Colvin Run (FY 2004 new)*
- *Lorton Station (FY 2004 new)*
- *Lemon Road (FY 2004 expansion)*
- *Navy (FY 2005 new)*
- *Sunrise Valley (FY 2005 new)*
- *Colin Powell (FY 2006 expansion)*
- *Canterbury Woods (FY 2006 expansion)*
- *Floris (FY 2006 expansion)*
- *Forest Edge (FY 2006 expansion)*
- *Greenbriar East (FY 2006 expansion)*
- *Groveton (FY 2006 expansion)*
- *Island Creek (FY 2006 expansion)*
- *Laurel Ridge (FY 2006 expansion)*
- *Lorton Station (FY 2006 expansion)*
- *Navy (FY 2006 expansion)*
- *Stratford Landing (FY 2006 expansion)*
- *Sunrise Valley (FY 2006 expansion)*
- *Andrew Chapel/Colvin Run (FY 2006 expansion)*
- *Oak Hill (FY 2007 new)*
- *West Fairfax/Eagle View (FY 2007 new)*
- *Cherry Run (FY 2007 expansion)*
- *Key Center (FY 2008 expansion)*

Total of 37 Schools (40 Rooms)

Facilities Scheduled to Open Between FY 2009 and FY 2012

- *PSTOC (new)*
- *Forensics Facility (new)*
- *Wolftrap Fire Station (new)*
- *Fair Oaks Police Station (renovation/expansion)*
- *McLean Police Station (renovation/expansion)*
- *Reston Police Station (renovation/expansion)*
- *Fire and Rescue Training Academy (renovation/expansion)*
- *Great Falls Volunteer Fire Station (renovation/expansion)*
- *West Ox Animal Shelter (renovation/expansion)*
- *Jennings Judicial Center (renovation)*
- *Existing Courtroom Renovations (4 out of 25)*
- *Less Secure Shelter II (new)*
- *Girls Probation House (renovation/expansion)*
- *Old Courthouse Renewal (renovation)*
- *Thomas Jefferson Library (renovation/expansion)*
- *Martha Washington Library (renovation/expansion)*
- *Dolley Madison Library (renovation/expansion)*
- *Richard Byrd Library (renovation/expansion)*
- *Gregory Drive Treatment Facility (renovation/expansion)*
- *Mount Vernon Mental Health Center (renovation/expansion)*
- *Health Department Laboratory (renovation/expansion)*
- *Mid-County Human Services (Woodburn) (renovation/expansion)*
- *Mott Community Center (renovation/expansion)*
- *Newington DVS garage (renovation/expansion)*
- *Alban DVS Maintenance Facility (renovation/expansion)*
- *Herndon Monroe Parking Garage (repairs/renovation)*
- *Burke VRE Parking Structure (new)*
- *West Ox Bus Operations Garage (new)*

Total of 28

Current Facility Inventory

- *County currently maintains 170 facilities with nearly 8 million square feet of space*
- *As of 2007*
 - *81% of County facilities are over 10 years old*
 - *72% of County facilities are over 15 years old*
 - *58% of County facilities are over 20 years old*
 - *34% of County facilities are over 30 years old*
- *Based on the age of County facilities, an estimated \$22-25 million is required annually for capital renewal or reinvestment in building sub-systems*
- *FY 2009 budget includes \$6,924,321 in General Fund monies for capital renewal*

What is Capital Renewal?

- *The replacement of major building subsystems (roofs, HVAC, electrical systems, fire protection systems, parking lots, elevators, carpet and tile replacement) that are at the end of their service life.*
- *A necessary reinvestment in facility infrastructure to ensure buildings continue to efficiently operate and satisfy their functional requirement.*
- *Does NOT include routine maintenance and emergency repairs.*
- *It is NOT new building construction or major renovation/expansions of existing facilities.*

Facility Assessment Results

- *In 2004, 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)*
- *A facility condition assessment is used to develop a baseline of current facility conditions and to develop a multiyear maintenance plan. The plan provides the foundation to replace major facility systems by providing the following information:*

Assessment Reports/Cost Estimates

Analysis of Facility Condition Information

Life Cycle Analysis for Component Renewal

- *Assessment included a complete visual inspection of roofs and all mechanical and electrical components for each facility*
- *Results from survey indicated an estimated total of \$80 million needed through 2010 or approximately \$13 million per year for these 92 facilities – representing only 54 percent of current inventory*
- *Staff estimates that the current inventory of 170 buildings requires approximately \$22-25 million per year*

FMD Rankings

- *FMD prioritized the comprehensive facility assessment list and classified building subsystems into five categories:*
 - *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 needed where repairs are no longer cost effective;*
 - *Category B: repairs needed for improvements if funding is available; and*
 - *Category A: good condition.*
- *FMD annually categorizes facility sub-systems at each of the 170 facilities and assigns a ranking of A through F*

*Examples of
Critical Capital Renewal
Requirements*

Franconia Government Center Roof

- *Deteriorated roof membrane causing leaks in the facility. Surface worn out and fibers showing. Very difficult to get patches to adhere.*
- *Approximately 35 leaks found in December 2007*
- *Emergency situation-project will be completed in FY 2008*
- *Fiscal Impact \$250,000 (Category F)*



Government Center Elevators

- *Increase in the number of elevator problems and shutdowns at the Government Center*
- *95% of the shutdowns are due to problems with the circuit boards*
- *FY 2009 budget request for \$4 million to modernize (replace the major components) all 15 Government Center elevators*
- *FY 2009 budget includes \$1,339,371 for Government Center elevator repairs (Category F)*



Centreville Library Roof

- *Deteriorated roof membrane causing leaks in the facility.*
- *Surface worn out and fibers showing. Very difficult to get patches to adhere.*
- *Large patch on the deteriorated roof membrane causing numerous leaks in the facility*
- *Project to be completed in FY 2008*
- *Fiscal Impact \$155,000*



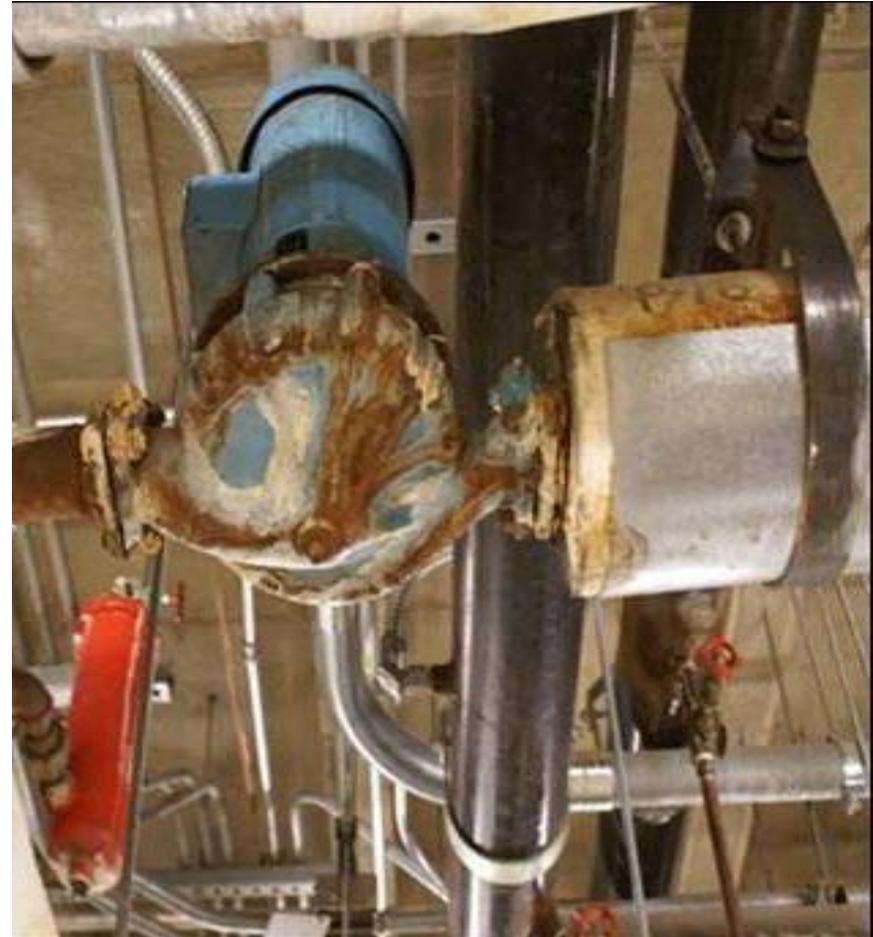
Joseph Willard Center Electrical System

- *Aged wire in the Current Transformer (CT) cabinet shorted causing a localized electrical fire shutting the power down for the facility*
- *Facility closed for 3 days*
- *Emergency situation - project completed in FY 2008*
- *Fiscal Impact \$50,000 (excluding lost time for using agency)*



Adult Detention Center HVAC

- *Replacement of HVAC components*
- *Need to replace water pumps, condenser water pumps, hot cooling tower*
- *Seals changed numerous times; valves don't close*
- *Picture: condensing water pumps have reached their useful life*
- *Fiscal impact \$350,000; Category D – Not funded in FY 2009*



Unanticipated Roof Damage: Fire Stations

- *Fair Oaks Fire Station: Wind lifted over 50% of the aged skylights off the roof*
- *Fiscal Impact \$40,000*
- *Frying Pan Fire Station: High wind lifted metal pans off the roof*
- *Fiscal Impact \$10,000*
- *Both projects completed in FY 2007*



Unanticipated Sewer Line Break at Government Center

- *Broken sewer line*
- *Camera used to examine the drain*
- *Plumbing contractor dug hole to access the drain; cast iron pipe had separated from PVC pipe*
- *Forced to shut down cafeteria and gym areas for 2 days*
- *Emergency situation-project completed in FY 2008*
- *Fiscal impact \$50,000*



FY 2009 Requirements

<u>Category</u>	<u>Amount</u>
F	\$9,835,000
D	\$7,135,000
C	\$3,720,000
B	\$4,750,000
A	\$0
Total	\$25,440,000

- *FY 2009 Advertised Budget of **\$6,924,321** is \$1.0 million less than the FY 2008 level of General Fund support (Supports Category F projects only)*

Industry Standards for Capital Renewal

- *Industry standard for capital renewal reinvestment is currently 2% of replacement value*
- *Based on average replacement value of \$150 per square foot, capital renewal requirements of \$3.00 per square foot would be required to meet industry standards*
- *County renewal support is currently estimated at \$1.79 per square foot in FY 2008 and \$0.86 in FY 2009*

Note: Does not include capital renewal when included in a major building renovation project or minor repairs and renewal items (painting, plumbing, electrical repairs) performed as needed by FMD staff

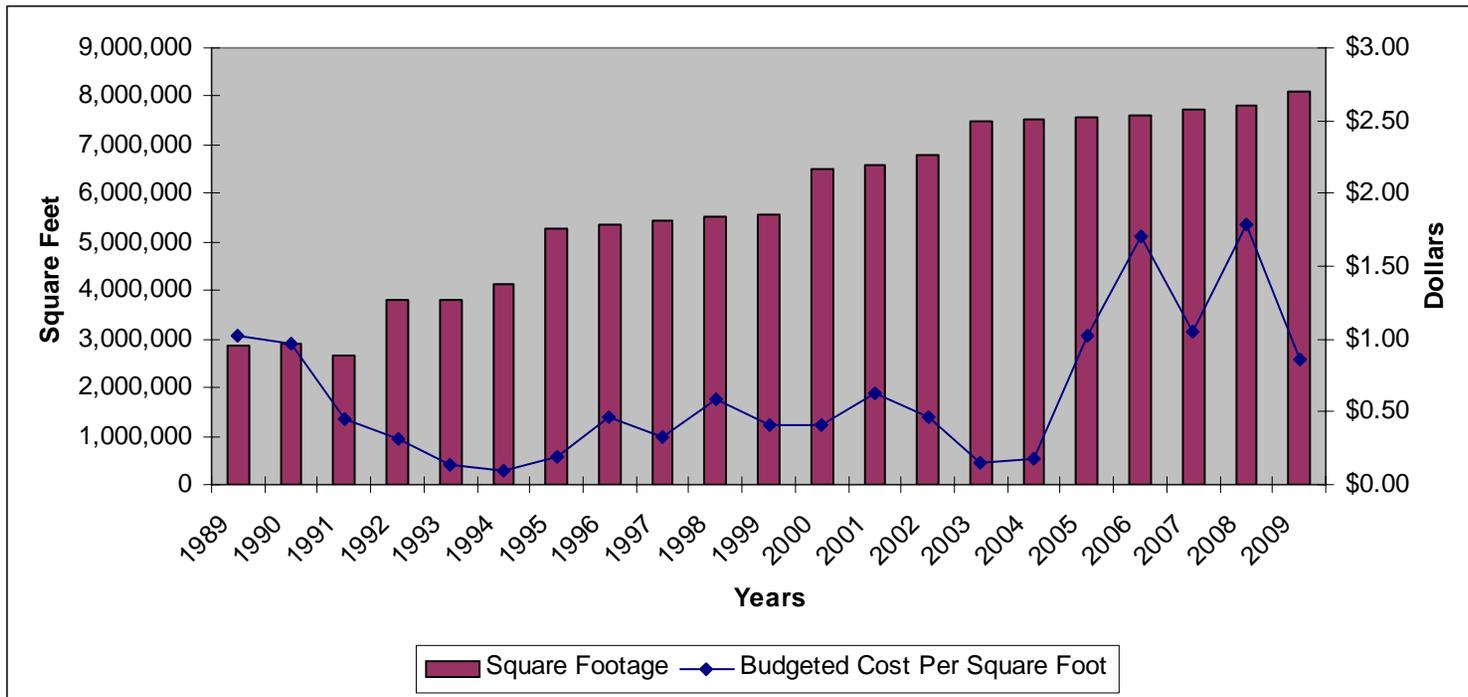
Capital Renewal Support in Recent Years

<u>Fiscal Year</u>	<u>Amount Funded</u>	<u>Cost per Square Foot</u>	<u>Requirements at \$3.00 per SF</u>
FY 2001	\$4,140,000	\$0.63	\$19,760,931
FY 2002	\$3,160,000	\$0.46	\$20,404,113
FY 2003	\$1,162,371	\$0.16	\$22,445,331
FY 2004	\$1,385,000	\$0.18	\$22,592,181
FY 2005	\$7,746,000*	\$1.02	\$22,695,081
FY 2006	\$12,926,000	\$1.70	\$22,790,460
FY 2007	\$8,090,000	\$1.05	\$23,160,780
FY 2008	\$13,999,321*	\$1.79	\$23,445,987
FY 2009	\$6,924,321	\$0.86	\$24,239,133

* General Fund support supplemented by General Obligation bonds of \$2.5 million for human services/juvenile court facility renewals, \$2.5 million for library renewals, and \$5.0 million for public safety facility renewal

20-Year History: Capital Renewal

County Square Footage and Capital Renewal Budgets



FY 2009 = \$0.86 per square foot

Capital Renewal Support

- *The level of funding provided for capital renewal in recent years supports a reactionary program only*
- *Minimal preventative maintenance can be accommodated within these funding levels*

Workload Issues

- *Difficulty filling engineering vacancies despite continuous advertisements over the last 18+ months (example: Building Design Branch managing over \$1 billion in active projects with approximately 70% of engineering positions filled)*
- *In some cases, augmenting regular merit staff with a limited number of Consultant Project Managers at increased expense (as much as double the cost of regular merit positions)*
- *Certain CIP projects will be delayed*

CIP Project Delays

- *Wolftrap Fire Station – Delayed 2 years*
 - *Design and Permitting are complete*
 - *Construction bid will be delayed to January 2009*
 - *Operating costs to open facility estimated at \$3-3.5 million*
- *Reston Police Station – Delayed 2 years*
 - *Project design has not yet started*
 - *Naturally being delayed pending the results of the Reston Area Land Study*
- *McLean Police Station – Delayed 1 year*
 - *Project design has not yet started*
- *Fire and Rescue Academy Renovations – Delayed 9 months*
 - *Project design has not yet started*
- *Newington DVS Garage – Delayed 6 months*
 - *Project design has not yet started*

Future CIP Challenges

Massey Building

- ❑ *166,777 square foot building*
- ❑ *Constructed in 1967 (over 40 years old)*
- ❑ *Houses Police Department (300 staff); Fire Department (131 Staff); and Office of the Sheriff (32 staff)*
- ❑ *Inefficiencies include:*
 - *Aged lighting fixtures; Electrical system is filled to capacity and overloaded, no spare capacity for new equipment*
 - *Aged HVAC components – repair parts often not available*
 - *Aged plumbing fixtures causing leaking behind the walls*
 - *Roof deficiencies*
 - *Obsolete fire alarm systems*
 - *Asbestos*
- *The need for a Public Safety Headquarters is critical; Demolition of the Massey Building will also be necessary*

Future CIP Challenges

- *Other Public Safety Needs (currently unfunded)*
 - *Jefferson Fire Station*
 - *Herndon Fire Station*
 - *Fire and Rescue Academy (additional renovations)*
 - *Warehouse Facility for Fire and Rescue Logistics Distribution*
 - *Pine Ridge*
 - *Tyson's Area Police Station*
 - *Warehouse Facility for Police Property, Evidence and Specialty Vehicles*
 - *Driver Training Track Classroom Structure*
 - *Laurel Hill Police Station*
 - *South County Animal Shelter*

Future CIP Challenges

- *Human Services requirements*
- *Additional Courtroom Renovations (21 existing Courtroom renovations remain unfunded)*
- *Laurel Hill Development*
- *Projects in support of the Board's Environmental Agenda*
- *ADA compliance (recent audit may result in additional requirements)*
- *Wiehle Ave PPEA*
- *Kingstowne Library PPEA*
- *Other PPEAs*

CIP Prioritization

- *Requires monitoring of bond capacity and careful selection of projects for future bond referendum approval*
- *General Fund monies may not be available for an increased Paydown Program*
- *Requires more stringent prioritization of CIP projects in the next several years*
- *Capital Program will be reviewed as part of the LOBs process*