
Massey Building Condition Assessment



Facilities Management Department

March 26, 2010

Building Information

- ◆ Constructed in 1967
- ◆ 166,777 gross square feet
- ◆ Tenants:
 - Police Department (approximately 300 employees)
 - Fire and Rescue Department (approximately 131 employees)
 - Sheriff's Office (approximately 32 employees)
- ◆ Building deficiencies:
 - Asbestos fireproofing throughout the building restricts or prohibits access to equipment, which is needed to make repairs.
 - Pre-cast concrete pieces are breaking off the exterior panels.
 - Overloaded electrical system with no spare capacity for new equipment. Breakers trip constantly because the electrical system is overloaded.
 - Outdated HVAC components – Repair parts are often not available. Experienced two failures in 2009 due to chiller and associated components that required people in the building to temporarily vacate and relocate.
 - Roof inefficiencies and aged plumbing fixtures are causing water leaks and hazards.
 - Obsolete fire alarm systems
 - Aged lighting fixtures are causing safety concerns.

In the news . . .

The Washington Post

Asbestos, water leaks among Fairfax building's hazards

By Derek Kravitz

Washington Post Staff Writer

Sunday, February 28, 2010; C01

“Fairfax County's aging public safety headquarters building is quickly becoming a hazard for its employees and the public because of its asbestos-coated ceiling and walls and frequent water leaks. . . .”

AME Facility Assessment

- ◆ From 2001 to 2002, Applied Management Engineering, Inc. (AME) conducted a facilities condition assessment on 92 buildings (approximately 4.2 million square feet)
- ◆ Facilities assessments are used to develop a baseline of current facility conditions and a multiyear replacement plan. This plan is built into the County's Capital Improvement Program (CIP) to ensure a well developed funding strategy is in place to maintain the County's facility infrastructure and includes the following:
 - Assessment Reports / Cost Estimates
 - Analysis of Facility Condition Information
 - Life Cycle Analysis for Component Renewal

AME Facility Assessment

- ◆ The condition assessment of the Massey building was limited to HVAC, electrical, plumbing and roof systems. It did not include a condition assessment of:
 - Asbestos Abatement
 - Structural components, i.e. outside walls
 - Parking, sidewalks and pavement
 - Carpet/Flooring replacement
 - Systems Furniture
 - Minor repairs and renovations usually generated by customer requests
- ◆ AME estimated the cost to repair current and anticipated deficiencies (based upon the age of equipment) for major electrical, HVAC and roof systems at the Massey facility was \$5,679,791. Using the Building Cost Index (BCI) staff estimates the cost to complete the repairs in FY 2011 is \$8,570,000.
- ◆ In FY 2007, FMD identified additional deficiencies that are not included in AME's condition assessment.

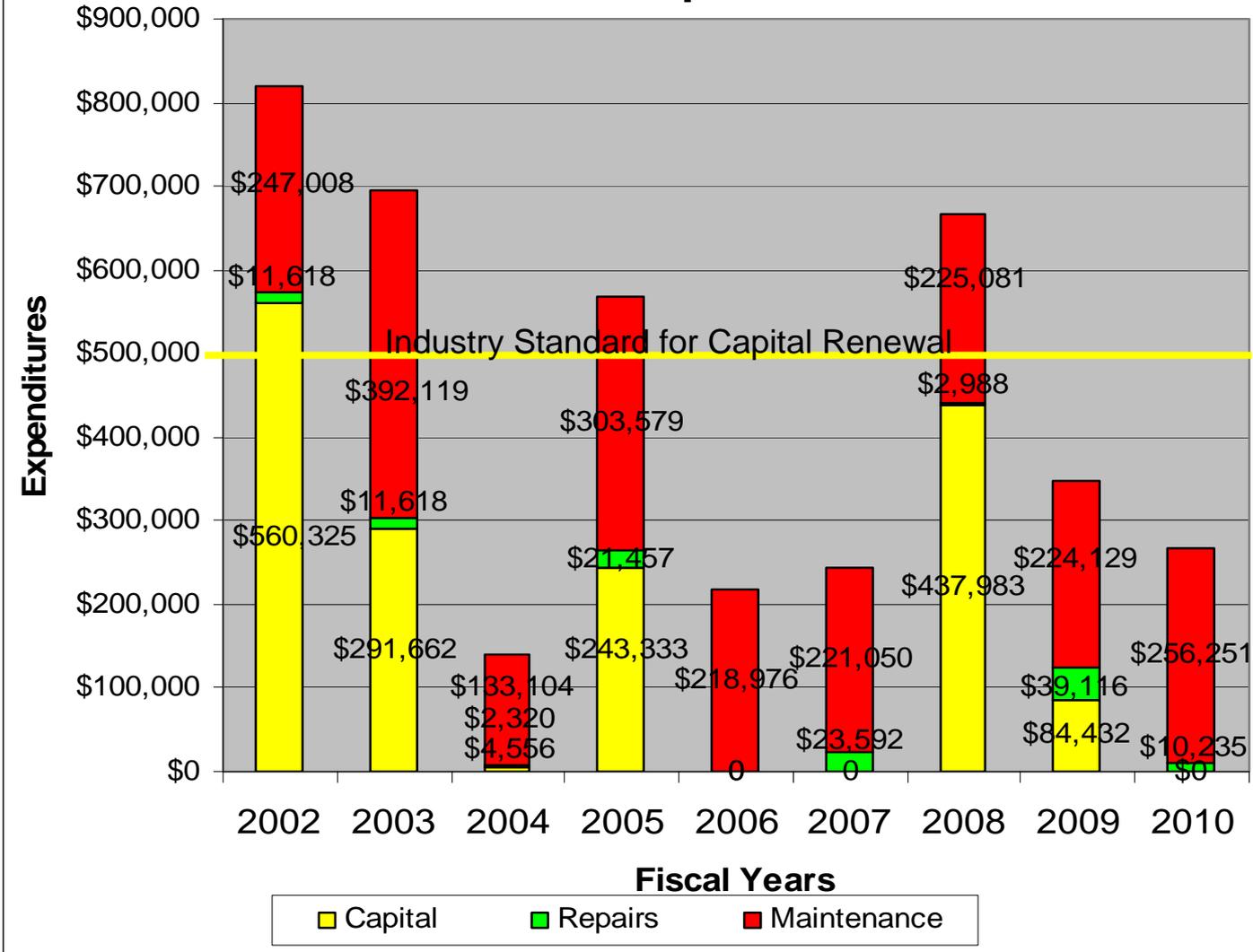
FMD Facility Assessment

The following component inefficiencies were identified by FMD in September 2006. Replacing the components would not improve the overall condition of the facility.

DEFICIENCY	DESCRIPTION	FY 2007 ESTIMATED COSTS
HVAC	Replace four A/C units	\$200,000
Electrical	Replace electrical distribution systems, main and sub panels	\$1,000,000
Electrical	Replace UPS System	\$500,000
Fire Alarm	Replace fire alarm system	\$800,000
Plumbing	Replace drain pipes/take out water coolers/asbestos in walls	\$600,000
Generator	Replace ventilation louvers on generator air intake/exhaust	\$75,000
Misc. Repair	Replace electric hot water heater	\$80,000
	TOTAL	\$3,255,000 *

* Using the BCI, the FY 2011 estimated cost would be \$3,502,000.

Massey Building - Capital, Repairs, and Maintenance Expenditures



*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.

Estimated Renovation Costs

◆ Asbestos Removal	=	\$5.2 M
◆ Building Systems	=	\$31.3 M
- Systems (\$150/SF)	=	\$25 M
- Soft cost: A/E/permits (10%)	=	\$6.3 M
◆ Outside	=	\$ 19 M
- Pre-cast concrete (\$75/SF)	=	\$12.5 M
- Windows (\$39/SF)	=	\$6.5 M
◆ Finishes	=	\$7.6 M
- Demo (\$10/SF)	=	\$1.3 M
- Partitions, floor coverings, ceilings, etc (\$50/SF)	=	\$6.3 M
◆ Relocation Cost	=	\$18 M
- IT (voice/data/video systems)	=	\$13 M
- Temporary Lease (\$28/SF)	=	\$4.8 M
- Moves	=	\$.2 M
TOTAL	=	\$ 81.1 M

Other Considerations

- ◆ The Massey Building is 43 years old and is at the end of its useful life. The facility was constructed using a 1960's office model, which is inadequate for a public safety headquarters in the 21st Century. Among the critical components that cannot be changed, one must consider:
 - Building Floor Plates
 - Inadequate Square Footage
 - Building Security
 - ADA Accommodations
 - Storage

- ◆ The Approved PCA/CDPA/FDPA for the Fairfax County Courthouse states that any future expansion of the Courthouse would occur in the direction of the Massey building.

Options to Replace the Massey Building

- ◆ Relocate Permanently
 - Design-Bid-Build on County Owned Property
 - Adapt an existing facility
- ◆ Renovate
- ◆ Do Nothing