

# Infrastructure Replacement and Upgrades

## PROGRAM DESCRIPTION

One of the primary roles for facility management in both government and private industry is to provide for the long-term needs of the organization's capital assets. This maximizes the life of the facilities, avoids their obsolescence and provides for a planned program of repairs, improvements and restorations to make them suitable for organizational needs. Infrastructure Replacement and Upgrades is the planned replacement of building subsystems such as roofs, electrical systems, HVAC systems and plumbing systems that have reached the end of their useful life. Major renewal investment is required in facilities to replace old, obsolete building subsystems that have reached the end of their life cycle. Without significant reinvestment in building subsystems, older facilities will fall into a state of ever deteriorating condition and functionality and the maintenance and repair costs necessary to keep them functional will increase. This section also includes the upgrades associated with Americans with Disabilities (ADA) compliance at County facilities.

## LINK TO THE COMPREHENSIVE PLAN

Fairfax County's Comprehensive Plan has established a number of objectives and policies in order to:

- ✓ Ensure adequate infrastructure replacement and upgrades of existing County facilities, and provide urgently needed emergency repairs to facilities in order to meet public health or safety needs.

Source: 2017 Edition of the Fairfax County Comprehensive Plan, Area IV (amended through 10-24-2017), and the Policy Plan Element, Economic Development (amended through 3-4-2014) and Public Facilities Sections (amended through 7-25-2017), as amended.

## PROGRAM INITIATIVES

The Facilities Management Department (FMD) currently provides support for evaluating facilities, identifying problems, developing costs estimates, establishing priorities and performing the upgrades required. Some of the major work completed annually at County facilities includes the replacement of building subsystems: HVAC and electrical system repairs and replacement, roof repairs and waterproofing, carpet replacement, parking lot and garage repairs, window repairs/replacement, elevator/escalator repairs/replacement, fire alarm replacement and emergency generator replacement. Fairfax County will have a projected FY 2019 facility inventory of over 10 million square feet of space (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 replacement, repairs, and waterproofing are conducted in priority order based on an evaluation of maintenance and performance history. 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 infrastructure replacement and upgrade requirements, coupled with the actual condition of the subsystem component:

<b>GENERAL GUIDELINES FOR EXPECTED SERVICE LIFE OF BUILDING SUBSYSTEMS</b>	
<b>ELECTRICAL</b>	
Service/Power	25 years
Generators	25 years
Lighting	20 years
Fire Alarms	15 years
<b>HVAC</b>	
Equipment	20 years
Boilers	15 to 30 years
Building Control Systems	10 years
<b>PLUMBING</b>	
Pipes and fittings	30 years
Fixtures	30 years
Pumps	15 years
<b>OTHER</b>	
Elevator	25 years
Escalator	25 years
Systems Furniture	20 to 25 years
Roofs	20 years
Paving	15 years
Carpet Tiles	15 years
Broadloom Carpet	7 years

Each year, the 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 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 infrastructure upgrade 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 Committee found the analysis of financial policy, the review of the condition of hundreds of facilities, and the scarce options for financing to be challenging. A Final Report was developed and approved by the Board of Supervisors on March 25, 2014, and the School Board on April 10, 2014. The Report included support for conducting capital needs assessments, new policy recommendations for capital financing, including a capital sinking fund and increased annual General Fund supported funding, the adoption of common definitions related to all types of maintenance, support for County and School joint use opportunities for facilities, and continued support for evaluating ways to further reduce capital costs.

The Board of Supervisors approved the establishment of the IFC recommended Capital Sinking Fund as part of the *FY 2014 Carryover Review*. To date, a total of \$26,767,431 has been dedicated to capital sinking funds and allocated for infrastructure replacement and upgrades in the following areas: \$14,722,086 for FMD, \$5,353,485 for Parks, \$2,676,744 for Walkways, \$2,676,744 for County owned Roads and \$1,338,372 for Revitalization. Projects have been initiated in all of these program areas from the sinking fund allocation. FMD has initiated several larger scale projects with the \$14,722,086 allocated to the Sinking Fund, including HVAC system component replacements at the Patrick Henry and Herndon Fortnightly Libraries; emergency generator replacements at the Government Center, Pennino and Herrity Buildings; repairs to the roofs at the Pennino Building, James Lee Community Center and Bailey's Community Center; windows replacement at the Hollin Hall building; structural repairs at Patrick Henry Library; and a structural analysis and review of the visitor garage at the Fairfax County Judicial Center.

In addition, the IFC discussed the requirement for County infrastructure replacement and upgrades being estimated at \$26 million per year. This estimate was based on assessment data, 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 replacement and upgrade projects, it is estimated that approximately \$15 million per year would be a good funding goal. Due to budget constraints, in FY 2019, an amount of \$1,700,600 is included to address six of the top priority Category F projects. In addition, funding in the amount of \$8,237,400 will be proposed as part of the FY 2018 Third Quarter Review for a total of \$9,938,000 in FY 2019 identified projects. These projects, all category F, will address emergency building repairs, fire alarm system replacement, parking lot and garage repairs, HVAC system upgrades, roof repairs and waterproofing, emergency generator replacement, elevator/escalator repairs, and electrical system upgrades/repairs. The following table provides specific project details of the projects that are proposed to be funded at the *FY 2018 Third Quarter Review* and the projects proposed in the FY 2019 Advertised Budget Plan.

FY 2019 INFRASTRUCTURE REPLACEMENT AND UPGRADE PROGRAM					
PRIORITY	PROJECT TYPE	FACILITY	CATEGORY	EXISTING CONDITIONS/DEFFICIENCIES	ESTIMATE
<b>PROJECTS PROPOSED TO BE FUNDED AS PART OF THE FY 2018 THIRD QUARTER REVIEW</b>					
1	Plumbing	Hollin Hall	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures</li> <li>· Multiple water leaks</li> </ul>	\$150,000
2	Electrical	Hollin Hall	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures</li> <li>· Old technology</li> <li>· Replacement per Building Assessment</li> </ul>	\$234,000
3	Roof	Hollin Hall	F	<ul style="list-style-type: none"> <li>· Water leaks</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Disruption to building operations/end users</li> <li>· Increased utilities cost</li> <li>· Replacement per Building Assessment</li> </ul>	\$366,000
4	Plumbing	Adult Detention Center (West Wing)	F	<ul style="list-style-type: none"> <li>· Immediate need - will not impact larger Adult Detention Center renovation project</li> <li>· Parts no longer available (proprietary)</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures</li> <li>· Old technology</li> <li>· Replacement per Building Assessment</li> </ul>	\$150,000
5	Electrical	Government Center (Data Center Uninterrupted Power Source (UPS) Batteries)	F	<ul style="list-style-type: none"> <li>· Increased equipment failure</li> <li>· Safety hazard</li> </ul>	\$125,000
6	Electrical	Judicial Visitor Garage (Garage B Lighting)	F	<ul style="list-style-type: none"> <li>· Increased equipment failure</li> <li>· Old technology</li> <li>· Disruption to users</li> <li>· Safety hazard</li> </ul>	\$507,000
7	Generator	West Centreville Fire Station	F	<ul style="list-style-type: none"> <li>· Out of Code Compliance</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures</li> <li>· Old technology</li> </ul>	\$350,000
8	Generator	Kingstowne Fire Station	F	<ul style="list-style-type: none"> <li>· Out of Code Compliance</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures</li> <li>· Old technology</li> </ul>	\$350,000
9	Building Envelope	Sully Government Center	F	<ul style="list-style-type: none"> <li>· Water leaks and air infiltration</li> <li>· Disruption to building operations/end users</li> <li>· Increased utilities cost</li> </ul>	\$56,000
10	Building Envelope	Great Falls Library	F	<ul style="list-style-type: none"> <li>· Water leaks and air infiltration</li> <li>· Disruption to building operations/end users</li> <li>· Increased utilities cost</li> </ul>	\$52,000

**FY 2019 INFRASTRUCTURE REPLACEMENT AND UPGRADE PROGRAM**

PRIORITY	PROJECT TYPE	FACILITY	CATEGORY	EXISTING CONDITIONS/DEFFICIENCIES	ESTIMATE
<b>PROJECTS PROPOSED TO BE FUNDED AS PART OF THE FY 2018 THIRD QUARTER REVIEW</b>					
11	Building Automation System	Juvenile Detention Center	F	<ul style="list-style-type: none"> <li>· Partial funding</li> <li>· Increased utilities costs</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Increased failures resulting in inability to control building temperature</li> <li>· Old technology</li> </ul>	\$322,400
12	Elevator	Jennings Judicial Center	F	<ul style="list-style-type: none"> <li>· Increased failures</li> <li>· Maintenance and repairs no longer feasible</li> <li>· Old technology</li> <li>· Does not meet current code requirements</li> </ul>	\$1,350,000
13	Paving	Mt. Vernon Police & Government Center	F	<ul style="list-style-type: none"> <li>· Surface has failed</li> <li>· Safety hazard</li> <li>· Cost increases if delayed</li> </ul>	\$325,000
14	Paving	James Lee Community Center	F	<ul style="list-style-type: none"> <li>· Surface has failed</li> <li>· Safety hazard</li> <li>· Cost increases if delayed</li> </ul>	\$350,000
15	Fire Alarm	Hollin Hall	F	<ul style="list-style-type: none"> <li>· Increased maintenance required to keep system operational</li> <li>· Replacement parts are difficult to obtain</li> <li>· Obsolete system</li> </ul>	\$180,000
16	Fire Alarm	Mt. Vernon Police & Government Center	F	<ul style="list-style-type: none"> <li>· Increased maintenance required to keep system operational</li> <li>· Priority system</li> <li>· Replacement parts are difficult to obtain</li> </ul>	\$177,000
17	Fire Alarm	North Point Fire Station	F	<ul style="list-style-type: none"> <li>· Increased maintenance required to keep system operational</li> <li>· Replacement parts difficult to obtain</li> <li>· The Siemens Panel is no longer supported by the manufacturer</li> <li>· Obsolete equipment</li> </ul>	\$136,000
18	Roof	Juvenile Holding Building	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Water leaks</li> <li>· Disruption to building operations/end users</li> </ul>	\$265,000
19	Roof	Herrity Building	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Water leaks</li> <li>· Disruption to building operations/end users</li> <li>· Increased utilities cost</li> </ul>	\$1,225,000
20	Roof	Jennings Judicial Center	F	<ul style="list-style-type: none"> <li>· Holes in the membrane, blisters and open seams</li> <li>· Water leaks</li> <li>· Standing water. Roof lacks adequate slope to drain properly</li> <li>· Failed caulking</li> <li>· Increased utilities cost</li> </ul>	\$230,000
21	Building Envelope	Jennings Judicial Center Expansion	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Water leaks eminent</li> <li>· Disruption to building operations/end users</li> <li>· Safety concerns</li> </ul>	\$350,000
22	Interior Repairs	North Point Fire Station	F	<ul style="list-style-type: none"> <li>· Maintenance and repairs no longer feasible</li> <li>· Water leaks and mold</li> <li>· Disruption to building operations/end users</li> </ul>	\$105,000

FY 2019 INFRASTRUCTURE REPLACEMENT AND UPGRADE PROGRAM					
PRIORITY	PROJECT TYPE	FACILITY	CATEGORY	EXISTING CONDITIONS/DEFFICIENCIES	ESTIMATE
<b>PROJECTS PROPOSED TO BE FUNDED AS PART OF THE FY 2018 THIRD QUARTER REVIEW</b>					
23	Interior Repairs	Crosspoint Fire Station	F	· Maintenance and repairs no longer feasible · Disruption to building operations/end users	\$107,000
24	Paving	James Lee Community Center	F	· Surface has failed · Safety hazard	\$255,000
25	Paving	Fair Oaks Fire Station	F	· Surface has failed · Safety hazard	\$172,000
26	Paving	Mott Community Center	F	· Surface has failed, large cracks run vertically and horizontally across the basketball court · Safety hazard	\$140,000
27	HVAC	Springfield Warehouse	F	· Parts no longer available (proprietary) · Maintenance and repairs no longer feasible · One roof top unit has failed and cannot be repaired. One area of the building receives minimal heat and typically only reaches a high temperature of 55 to 60 degrees. · Old technology	\$160,000
28	Various	Building Assessments			\$48,000
<b>Subtotal</b>					<b>\$8,237,400</b>
<b>PROPOSED FY 2019 PROJECTS</b>					
29	HVAC and Building Automation System	Hollin Hall	F	· Parts no longer available (proprietary) · Maintenance and repairs no longer feasible · Increased failures · Old technology · Replacement per Building Assessment	\$750,000
30	HVAC and Building Automation System	Stevenson Place	F	· Maintenance and repairs no longer feasible · Increased failures and reduced effectiveness · Increased utilities costs	\$208,000
31	HVAC	Jennings Judicial Center Expansion	F	· Maintenance and repairs no longer feasible · Increased failures and reduced effectiveness · Increased utilities costs	\$275,000
32	HVAC	Government Center	F	· Increased maintenance required · Leaks from the HVAC system are penetrating the building, damaging finishes and causing mold to form	\$210,000
33	Building Automation System	Boys Probation House	F	· Parts no longer available (proprietary) · Maintenance and repairs no longer feasible · Increased failures · Old technology	\$170,000
34	Building Automation System	Juvenile Detention Center	F	· Partial funding · Increased utilities costs · Maintenance and repairs no longer feasible · Increased failures resulting in inability to control building temperature · Old technology	\$87,600
<b>Subtotal</b>					<b>\$1,700,600</b>
<b>Grand Total</b>					<b>\$9,938,000</b>

In addition to the above projects identified as part of the FY 2019 plan, FMD has identified many additional Category F and D projects. Analysis of these requirements is conducted annually and projects may shift categories, become an emergency and be funded by the emergency systems failures project, or be eliminated based on other changes, such as a proposed renovation project.

## CURRENT PROJECT DESCRIPTIONS

1. **HVAC System Upgrades and Replacement** (Countywide): This is a continuing project for the repair, renovation and/or upgrading of Heating Ventilation and Air Conditioning (HVAC) systems in various facilities throughout the County. 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. In FY 2019, \$1,700,600 will support HVAC system component replacements at a variety of locations.
2. **Roof Repairs and Waterproofing** (Countywide): This is a continuing project for the repair and replacement of facility roofs and waterproofing systems at County buildings. Typically, roofs at County facilities range in warranty periods from 10 to 20 years.
3. **Fire Alarm System Replacements** (Countywide): This is a continuing project for the replacement of fire alarm systems based on age, difficulty in obtaining replacement parts and service and overall condition assessment. This program provides for the replacement of fire alarm systems which are 15 to 30 years old, have exceeded their useful life and experience frequent failure when tested.
4. **Parking Lot and Garage Repairs** (Countywide): This is a continuing project for the repair and maintenance to parking lots and garages at various locations throughout the County. Parking lot surfaces are removed, the base re-compacted and a new surface course installed. In some cases, asphalt paving is milled down and resurfaced.
5. **Carpet Replacement** (Countywide): This is a continuing project for carpet replacement at various County facilities where the existing carpet has deteriorated beyond repair or is in an unserviceable condition.
6. **Emergency Generator Replacement** (Countywide): This is a continuing project for generator replacements at various sites throughout the County. Requirements are programmed based on equipment age coupled with maintenance and performance history.
7. **Elevator/Escalator Replacement** (Countywide): This is a continuing project for the replacement and repairs of elevators throughout the County.
8. **Window Replacement** (Countywide): This is a continuing project for the replacement or repair of windows where water is leaking into County buildings.
9. **Electrical System Upgrades and Replacements** (Countywide): This is a continuing project for the repair, renovation and upgrading of mechanical and electrical systems in various facilities throughout the County.
10. **Building Energy Management Systems** (Countywide): This is a continuing project to support the installation of Building Energy Management Systems (BEMS) within existing County facilities. BEMS control a facility's lighting, HVAC, bay door interlocking, and negative pressure room systems. Older facilities are retrofitted with these systems in order to increase energy efficiency.
11. **Public Safety Infrastructure Upgrades** (Countywide): \$3,123,000 for infrastructure replacement and upgrade projects at Public Safety facilities. This funding is supported by existing Public Safety bonds available in completed projects as a result of a favorable bid environment. These projects, all located at Public Safety/Courts facilities, are large upgrade projects with life spans in excess of 20 years and appropriately funded by bonds.
12. **Emergency Building Repairs** (Countywide): This is a continuing project for the critical repair, renovation, remodeling and upgrading of various facilities throughout the County. Requirements include abatement of health or safety hazards and emergency or unanticipated repairs of building systems or components.

13. **Emergency Systems Failures** (Countywide): This is a continuing project for emergency repairs and replacements to County facilities in the event of a major systems failure, such as a large HVAC system or other unforeseen event. Currently, this is the County's only source to deal with potential system failures. Infrastructure Replacement and Upgrades funding is encumbered quickly because it is earmarked for specific projects. As a result, specific project balances are unavailable for emergencies. If a system failure should occur, there is the potential that a County facility may shut down, suspending services to residents and disrupting County business. Although the County's emphasis on infrastructure replacement and preventative maintenance is intended to ensure these kinds of interruptions are avoided, this funding will enable potential disruptions to be corrected immediately.
14. **Capital Sinking Fund – FMD** (Countywide): \$14,722,086 for the capital sinking fund for FMD. The Capital Sinking Reserve Fund was established as a direct result of the Infrastructure Financing Committee (IFC). The Board of Supervisors approved the allocation of the Capital Sinking Reserve Fund for capital projects as part of the *FY 2016 Third Quarter Review*. It is anticipated that funding for each sinking fund will be approved annually as part of the Carryover Review and will be allocated based on the following percentages: 55 percent for FMD, 20 percent for Parks, 10 percent for walkways, 10 percent for County maintained Roads and Service Drives, and 5 percent for revitalization. FMD has initiated several larger scale projects with the \$14,722,086 allocated to the Sinking Fund, including HVAC system component replacements at the Patrick Henry Library and the Herndon Fortnightly Library; emergency back-up generator replacements at the Government Center, Pennino Building and Herrity Building; replacement of the reflective coating, flashing and caulking of the roofs at the Pennino Building, James Lee Community Center and Bailey's Community Center; windows replacement at the Hollin Hall building; structural repairs at the Patrick Henry Library; and a structural analysis and review of the visitor garage at the Fairfax County Judicial Center.
15. **MPSTOC County Support for Renewal** (Springfield District): \$2,611,543 is currently in reserve to begin to address future capital renewal requirements at the McConnell Public Safety Transportation Operations Center (MPSTOC). This funding is appropriated at the end of each year and supported by revenues received from the State. This revenue represents funding associated with the state reimbursement for their share of the operational costs at MPSTOC such as security, custodial, landscaping, maintenance, parking lot repairs and snow removal costs. The County pays for all operational requirements and the State reimburses the County annually for their share of these costs. This funding has been placed in this reserve to address future capital renewal requirements.
16. **MPSTOC State Support for Renewal** (Springfield District): \$675,165 is currently in reserve to begin to address future capital renewal requirements at the McConnell Public Safety Transportation Operations Center (MPSTOC). This funding is appropriated at the end of each year and supported by revenues received from the State. This revenue represents the state's annual installment of funds for their share of future repairs and renewal costs in order to avoid large budget increases for capital renewal requirements in the future. This contribution is based on the industry standard of 2 percent of replacement value or \$3.00 per square foot.
17. **ADA Compliance - FMD** (Countywide): This is a continuing project to support County compliance with the Americans with Disabilities Act County-owned facilities. This program supports the continuation of improvements required as part of the Department of Justice audit and identified in the settlement agreement signed by the Board of Supervisors on January 28, 2011. It should be noted that mitigation of violations associated with Park Authority buildings and facilities is detailed in the Parks section of this document.

**PROJECT COST SUMMARIES**  
**INFRASTRUCTURE REPLACEMENT AND UPGRADES**  
**(\$000's)**

Project Title Project Number	Source of Funds	Budgeted or Expended Through FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY2019- FY2023	Total FY2024- FY2028	Total Project Estimate
1 HVAC System Upgrades and Replacement GF-000011	G	C	\$1,701	\$6,500	\$6,500	\$6,500	\$6,500	\$27,701	\$32,500	\$60,201
2 Roof Repairs and Waterproofing GF-000010	G	C		\$600	\$600	\$600	\$600	\$2,400	\$3,000	\$5,400
3 Fire Alarm System Replacements GF-000009	G	C		\$500	\$500	\$500	\$500	\$2,000	\$2,500	\$4,500
4 Parking Lot and Garage Repairs 2G08-004-000	G	C		\$1,200	\$1,200	\$1,200	\$1,200	\$4,800	\$6,000	\$10,800
5 Carpet Replacement 2G08-003-000	G	C		\$500	\$500	\$500	\$500	\$2,000	\$2,500	\$4,500
6 Emergency Generator Replacement GF-000012	G	C		\$1,000	\$1,000	\$1,000	\$1,000	\$4,000	\$5,000	\$9,000
7 Elevator/Escalator Replacement GF-000013	G	C		\$1,000	\$1,000	\$1,000	\$1,000	\$4,000	\$5,000	\$9,000
8 Window Replacement 2G08-006-000	G	C		\$200	\$200	\$200	\$200	\$800	\$1,000	\$1,800
9 Electrical System Upgrades and Replace. GF-000017	G	C		\$500	\$500	\$500	\$500	\$2,000	\$2,500	\$4,500
10 Building Energy Management Systems GF-000021	G	C		\$1,500	\$1,500	\$1,500	\$1,500	\$6,000	\$7,500	\$13,500
11 Public Safety Infrastructure Upgrades GF-000025	B	C	\$3,123					\$0		\$3,123
12 Emergency Building Repairs GF-000008	G	C		\$500	\$500	\$500	\$500	\$2,000	\$2,500	\$4,500
13 Emergency Systems Failures 2G08-005-000	G	C		\$1,000	\$1,000	\$1,000	\$1,000	\$4,000	\$5,000	\$9,000



**PROJECT COST SUMMARIES  
INFRASTRUCTURE REPLACEMENT AND UPGRADES  
(\$000's)**

Project Title Project Number	Source of Funds	Budgeted or Expended Through FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY2019- FY2023	Total FY2024- FY2028	Total Project Estimate
14 Capital Sinking Fund - FMD GF-000029	G	<b>\$14,722</b>						\$0		\$14,722
15 MPSTOC County Support for Renewal 2G08-008-000	X	<b>\$2,612</b>						\$0		\$2,612
16 MPSTOC State Support for Renewal 2G08-007-000	X	<b>\$675</b>						\$0		\$675
17 ADA Compliance - FMD GF-000001	G	<b>C</b>		\$300	\$300	\$300	\$300	\$1,200	\$1,500	\$2,700
<b>Total</b>		<b>\$21,132</b>	\$1,701	\$15,300	\$15,300	\$15,300	\$15,300	\$62,901	\$76,500	\$160,533

Notes: Numbers in ***bold italics*** represent funded amounts. A "C" in the 'Budgeted or Expended' column denotes a continuing project.

Key: Source of Funds  
 B Bonds  
 G General Fund  
 S State  
 F Federal  
 X Other  
 U Undetermined