FiberNet

(P509651)

Category	General Government	Date Last Modified	05/11/23
SubCategory	Technology Services	Administering Agency	Technology Services
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	7,385	6,259	709	417	417	-	-	-	-	-	-
Land	4	4	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	19,017	17,084	1,433	500	130	130	60	60	60	60	-
Construction	29,798	1,919	199	27,680	9,045	4,047	3,647	3,647	3,647	3,647	-
Other	58,371	55,204	-	3,167	750	617	450	450	450	450	-
TOTAL EXPENDITURES	114,575	80,470	2,341	31,764	10,342	4,794	4,157	4,157	4,157	4,157	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Contributions	1,611	1,611	-	-	-	-	-	-	-	-	-
Current Revenue: Cable TV	76,109	62,204	527	13,378	3,718	2,650	2,155	1,867	1,619	1,369	-
Current Revenue: General	25,842	5,642	1,814	18,386	6,624	2,144	2,002	2,290	2,538	2,788	-
G.O. Bonds	8,866	8,866	-	-	-	-	-	-	-	-	-
PAYGO	2,147	2,147	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	114,575	80,470	2,341	31,764	10,342	4,794	4,157	4,157	4,157	4,157	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 24 Request	4,794	Year First Appropriation	FY96
Cumulative Appropriation	93,153	Last FY's Cost Estimate	114,575
Expenditure / Encumbrances	81,539		
Unencumbered Balance	11,614		

PROJECT DESCRIPTION

FiberNet CIP provides for the planning, design, and installation of a countywide electro-optical fiber communication network with the capacity to support voice, public-safety, traffic management, data, Internet access, wireless networking (including public WiFi) and video transmissions among Montgomery County Government (MCG), Montgomery County Public Schools (MCPS), Montgomery College (MC), Maryland National Capital Park and Planning Commission (M-NCPPC), Housing Opportunities Commission (HOC) and Washington Suburban Sanitary Commission (WSSC) facilities. FiberNet is the communications backbone for the Public Safety Radio and Public Safety Mobile Data Systems (collectively, Public Safety Communications System (PSCS), DOT's Advanced Traffic

Management System (ATMS), and other technology implementations (including the 800 MHz IP public safety radio). Upgrades and replacements to electronic components in the core and at user sites extend the usefulness of outside fiber facilities. Core and user equipment must be periodically replaced and upgraded to harness the capabilities of technological evolution and to meet the expanding networking demands of FiberNet customers. FiberNet3 investments exponentially increased FiberNet's ability to support cloud services, resilient data storage and retrieval, and cost effective access to high speed broadband service. Video transmission will include distribution of public, education, government access channel and selected cable programming.

ESTIMATED SCHEDULE

Previous CIPs focused on expansion of the FiberNet footprint to existing Montgomery County Government, MCPS, Montgomery College, Housing Opportunities Commission and WSSC locations and installing the majority of third-generation FiberNet3 equipment and integration, including upgraded core and hub equipment and establishment of Ashburn data center connections, refreshed past end of life routing and firewall equipment, and installed and implemented an encrypted private cloud, failover recovery equipment, and ransomware recovery capability. The FY23-24 CIP funds complete the implementation of Phase I of the County's Business Continuity Strategic Plan. FY25-FY28 activities will focus on implementing Phases 2 and 3 of the Business Continuity Strategic Plan and replacement of other critically vulnerable FiberNet edge equipment.

COST CHANGE

Reflects a $7.2 million FY22 supplemental and increased FY23 to FY28 funding for Business Continuity Strategic Plan implementation.

PROJECT JUSTIFICATION

FiberNet is a critical infrastructure asset providing communication services and applications to every agency in Montgomery County. As more services are offered electronically (e-applications, e-payment, e-document, e-storage, e-learning), and more services require cloud-access, it is critical that every County location has robust access to FiberNet, and that FiberNet be secure, reliable, and always-on, and that sufficient equipment be in place to enable data recovery in the event of major power outages, natural disasters, or cybersecurity events. In addition, aging internal building wiring, public WiFi access points, external fiber, and end point routers, switches and firewalls need to be upgraded to enable use of newer IT services and technology. A large amount of equipment is beyond End of Life or End of Support and some had been identified as critical to replace to prevent cybersecurity intrusions.

FISCAL NOTE

A supplemental appropriation request for $7.2 million in Current Revenue: General was approved in FY22. Ongoing General Fund support was added beginning in FY23 due to declining Cable Fund revenues.

FY23-FY25: Montgomery Municipal Cable (MMC) will give the County $1M in capital funds towards FiberNet in return for $500k in operating funds to MMC. Additional funds were added as an Enhancement in FY23, 24, and 25 to fund Construction - Business Continuity - Equipment Modernization.

During FY24 to FY28, Current Revenue: Cable TV is being replaced with Current Revenue: General. This change is necessary because Cable Fund revenues are declining as consumers switch from cable to streaming services.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Technology & Enterprise Business Solutions (TEBS), Department of Transportation, Advanced Transportation Management System Project, Montgomery County Public Schools, MNCPPC, MC, HOC, WSSC, PSCS, Information Technology Policy Coordination Committee (ITPCC), ITPCC CIO Subcommittee, and Interagency Technology Advisory Group (ITAG); and supports ATMS, Traffic Signal System Modernization (TSSM) and Traffic Signal CIPs.

FiberNet Route Infrastructure FY2022
FiberNet-Served Sites

Legend

— FiberNet Fiber

Facility Type
- Affordable Housing
- Education
- Government
- Health
- Library, Recreation, Parks
- Non-Profit
- Public Safety
- Transportation
- Water
- Wine & Liquor

FiberNet Site shown not connected to FiberNet fiber are served using fiber maintained by third parties.

MNCPPC, VITA, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA