

# Fibernet (P509651)

Category General Government  
 Sub Category Technology Services  
 Administering Agency Technology Services (AAGE05)  
 Planning Area Countywide

Date Last Modified 12/12/16  
 Required Adequate Public Facility No  
 Relocation Impact None  
 Status Ongoing

Total	Thru FY16	Rem FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
-------	-----------	----------	---------------	-------	-------	-------	-------	-------	-------	--------------

### EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	7,552	3,354	0	4,198	731	724	719	705	614	705	0
Land	1,819	4	0	1,815	225	300	300	300	390	300	0
Site Improvements and Utilities	14,568	13,568	0	1,000	200	200	200	200	200	0	0
Construction	20,480	12,062	0	8,418	2,040	1,466	1,421	1,045	1,455	991	0
Other	31,584	24,210	567	6,807	497	1,200	1,200	1,500	910	1,500	0
<b>Total</b>	<b>76,003</b>	<b>53,198</b>	<b>567</b>	<b>22,238</b>	<b>3,693</b>	<b>3,890</b>	<b>3,840</b>	<b>3,750</b>	<b>3,569</b>	<b>3,496</b>	<b>0</b>

### FUNDING SCHEDULE (\$000s)

Cable TV	63,123	40,318	567	22,238	3,693	3,890	3,840	3,750	3,569	3,496	0
Contributions	1,624	1,624	0	0	0	0	0	0	0	0	0
Current Revenue: General	256	256	0	0	0	0	0	0	0	0	0
G.O. Bonds	4,074	4,074	0	0	0	0	0	0	0	0	0
PAYGO	6,926	6,926	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>76,003</b>	<b>53,198</b>	<b>567</b>	<b>22,238</b>	<b>3,693</b>	<b>3,890</b>	<b>3,840</b>	<b>3,750</b>	<b>3,569</b>	<b>3,496</b>	<b>0</b>

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 18	3,890
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		57,458
Expenditure / Encumbrances		53,198
Unencumbered Balance		4,260

Date First Appropriation	FY 96
First Cost Estimate	
Current Scope	FY 17 76,003
Last FY's Cost Estimate	76,003

## Description

FiberNet CIP provides for the planning, design, and installation of a county wide electro-optical 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)), and future technology implementations (including 800 MHz IP public safety radio). FiberNet's outside physical plant has a practically unlimited useful life. Upgrades and replacements to electronic components in the core and at user sites will be required periodically throughout the service life. Each generation of FiberNet electronic components have an estimated useful life of at least 10 years. FiberNet I is a legacy network still used to support specific public safety and traffic communications. FiberNet II is being used to support all County communications services including 311, e-mail, Internet and local cable channel video. FiberNet III is in the pilot and planning phase. When implemented, FiberNet III equipment will allow faster, higher capacity, more reliable means of optical networking. Using optical technology, all three generations of FiberNet can be run on the same outside physical plant.

## Estimated Schedule

At the end of FY15, FiberNet reached 476 Locations. Based on the current funding schedule, FiberNet is scheduled to reach 526 Locations by the end of FY16; 551 locations by the end of FY17; and 576 locations by the end of FY18. The Traffic Management network reaches over 210 traffic cameras and 850 traffic signals with plans to add 200 pedestrian safety beacons. By the end of FY18 - and including sites connected by private carriers and institutional partners - FiberNet is expected to have a total of more than 1,825 sites on the network serving a tremendous variety of facilities from pedestrian beacons, wine and liquor stores to major campus networks and large multi-story office buildings. The focus remains on the completion of adding MCPS elementary schools, performing hub-site upgrades, adding new sites and constructing inter-jurisdictional connections to enable cost-effective future technology partnerships such as supporting fiber to the University of Maryland along the Purple Line and the Federal Exchange's 100G pilot.

## Cost Change

Cost change is due to addition of FY21 and FY22 to this project, major hub relocations and upgrades, IP video distribution, registering and monitoring underground plant with Miss Utility, and completing new site constructions. Expenditure increase is funded by restricted-use Cable Fund PEG/I NET capital grant revenue that the county has a legal obligation to spend on appropriate uses.

## Justification

## Fibernet (P509651)

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) it is critical that every County location has robust access to FiberNet, and that FiberNet be secure, reliable, and always-on.

### **Fiscal Note**

There will be more restricted-use Cable Fund PEG/I NET capital grant funding available through the County's three cable franchise agreements because the County has demonstrated the continuing need for expansion and upgrade of the FiberNet network. Previously, funding for the FiberNet CIP was provided by the General Fund, Cable Fund cable franchise fees, and restricted-use Cable Fund PEG/I NET capital grants. Funding for future years of the FiberNet CIP will be from restricted-use Cable Fund PEG/I NET capital grants. FiberNet operations and maintenance (O&M) activities are a critical component of FiberNet's utility but are not funded by the FiberNet CIP. O&M expenses have been partially funded by a Comcast FiberNet operations grant. In the renewed Comcast franchise transmitted by the County Executive for Council approval, restricted-use grant funding available to support FiberNet O&M will be reduced and a greater portion of FiberNet O&M will be funded by Cable Fund franchise fee revenue. In FY16 funds were also used to support Government and Educational ultraMontgomery broadband initiatives.

### **Coordination**

DTS, Department of Transportation, Advanced Transportation Management System Project, Montgomery County Public Schools, M-NCPPC, MC, HOC, WSSC, PSCS, Information Technology Policy Coordination Committee (ITPCC), ITPCC CIO Subcommittee, and Interagency Technology Advisory Group (ITAG).