

Fibernet -- No. 509651

Category
Subcategory
Administering Agency
Planning Area

**General Government
Technology Services
Technology Services
Countywide**

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

**May 14, 2010
No
None.
On-going**

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	2,420	1,814	206	400	200	200	0	0	0	0	0
Land	4	4	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	12,011	11,881	0	130	65	65	0	0	0	0	0
Construction	4,543	41	1,811	2,691	250	2,441	0	0	0	0	0
Other	20,735	20,735	0	0	0	0	0	0	0	0	0
Total	39,713	34,475	2,017	3,221	515	2,706	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Cable TV	28,627	23,964	1,442	3,221	515	2,706	0	0	0	0	0
Contributions	86	86	0	0	0	0	0	0	0	0	0
G.O. Bonds	8,900	8,325	575	0	0	0	0	0	0	0	0
PAYGO	2,100	2,100	0	0	0	0	0	0	0	0	0
Total	39,713	34,475	2,017	3,221	515	2,706	0	0	0	0	0

DESCRIPTION

This project provides for the planning, design, and installation of a Countywide fiber optic cable-based communication network with the capacity to support voice, data, 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 also the communications backbone for the Public Safety Radio and Public Safety Mobile Data Systems (collectively, PSCS), and future technology implementations. Fibernet has an estimated useful life of at least 20 years. Upgrades and replacements to electronic components in the core and at user sites will be required periodically.

COST CHANGE

Reduce FY11 expenditures and funding by \$1.5M. Expenditures and funding for years FY13 through FY16 have yet to be determined and the future needs will be re-evaluated periodically.

JUSTIFICATION

FiberNet is a critical infrastructure asset serving every agency, the fiber plant for Asynchronous Transfer Mode Systems (ATMS), and the dedicated and redundant communications links for the PSCS/800 MHz system. As of September 1, 2009, 289 user sites are on-net and receiving critical services from FiberNet. In FY07, the Department of Technology Services (DTS) completed the re-engineering of FiberNet (now referred to as FiberNet II) to directly support Ethernet connections. This provides a core network that is technologically newer, faster and less expensive on a per-site basis. The Interagency Technology Policy Coordination Committee (ITPCC) focus during the first three years of the CIP is adding the remaining MCPS elementary schools to FiberNet. DTS, in cooperation with ITPCC and its Information Technology Advisory Group (ITAG) workgroup, continues to refine the master implementation schedule. MCG, MCPS, MC, M-NCPPC, HOC and WSSC will require substantially increased communication services and bandwidth among their facilities. The County will provide fiber optic services to those facilities for which leased telecommunications services cannot meet current or projected demand as cost effectively as FiberNet. Studies include: Fibernet Master Plan; RAM Comm. Mar 1995; Fibernet Eval. Rpt., TRW, Sept 1997; Fibernet Proj. Cost Est., ARINC, Apr 1998; Fibernet Proj. Cost-Benefit Analysis, ARINC, Oct 1998; Fibernet Strategic Plan, PrimeNet, Jun 2002; Fibernet Strategic Direction, ITAG, Nov 2003; Fibernet service level agreement, Jan 2005.

OTHER

DTS is responsible for project management, network operations, and maintenance of electronics; Department of Transportation (DOT) for installation and maintenance of the fiber optic cable. Comcast, at DTS's direction, also provides fiber used in Fibernet. Sites installed to date include MCG departments/offices, PSCS sites, MC campuses, MCPS high schools/middle schools/administrative facilities, M-NCPPC sites, HOC sites and WSSC sites including the headquarters building in Prince Georges County. The municipalities of Takoma Park, Gaithersburg and Rockville are on FiberNet as well as several cultural centers including American Film Institute (AFI), Strathmore, the Convention Center and Black Rock. Sites have been, and will continue to be, installed in a priority order based on the expected cost savings/avoidance; current and future connectivity needs; and availability of fiber optic cable to an area. Approximately \$3 million is necessary to build out the cable plant to support ATMS field devices, and is not reflected in the expenditures and funding displayed in the FY11-16 CIP. This need will be captured in the future in accordance with fiscal capacity and project schedules.

FISCAL NOTE

Fibernet maintenance is supported by a grant from the franchise agreement with the County's cable service provider. The original grant amount of \$1.2 million/yr is increased by the CPI each year. For this reason the Operating Budget Impact is \$0.

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY96	(\$000)
First Cost Estimate		
Current Scope	FY11	39,713
Last FY's Cost Estimate		42,557
Appropriation Request	FY11	515
Appropriation Request Est.	FY12	2,706
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		36,492
Expenditures / Encumbrances		35,066
Unencumbered Balance		1,426
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION

Department of Technology Services
Department of Transportation
Advanced Transportation Management System Project
Montgomery County Public Schools
M-NCPPC
Montgomery College
HOC
WSSC
Comcast
Public Safety Radio System
Information Technology Policy Coordination Committee (ITPCC)
ITPCC CIO Subcommittee
Interagency Technology Advisory Group (ITAG)

MAP

