

Fibernet -- No. 509651

Category **General Government**
 Agency **Technology Services**
 Planning Area **Countywide**
 Relocation Impact **None**

Date Last Modified
 Required Adequate Public Facility

January 4, 2006
NO

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY05	Est. FY06	Total 6 Years	FY07	FY08	FY09	FY10	FY11	FY12	Beyond 6 Years
Planning, Design and Supervision	1,245	733	512	0	0	0	0	0	0	0	0
Land	4	4	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	11,841	8,632	2,609	600	100	100	100	100	100	100	0
Construction	8,223	40	1,388	6,795	1,370	1,185	1,060	1,060	1,060	1,060	0
Other	17,918	16,068	0	1,850	500	450	400	175	175	150	0
Total	39,231	25,477	4,509	9,245	1,970	1,735	1,560	1,335	1,335	1,310	0

FUNDING SCHEDULE (\$000)

PAYGO	2,100	2,100	0	0	0	0	0	0	0	0	0
G.O. Bonds	8,913	6,471	2,442	0	0	0	0	0	0	0	0
Contributions	73	73	0	0	0	0	0	0	0	0	0
Current Revenue:											
General	0	0	0	0	0	0	0	0	0	0	0
Cable TV	28,145	16,833	2,067	9,245	1,970	1,735	1,560	1,335	1,335	1,310	0

ANNUAL OPERATING BUDGET IMPACT (\$000)

Maintenance				192	32	32	32	32	32	32	0
Offset Revenue				-192	-32	-32	-32	-32	-32	-32	0
Net Impact				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), MCPS, Montgomery College (MC), M-NCPPC, HOC and 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.

JUSTIFICATION

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.

Plans and Studies

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

Cost Change

The increase is due to the inclusion of a six-year program. Funding will support the continued transition of FiberNet to the next generation, new sites and critical engineering services.

STATUS

FiberNet is a critical infrastructure asset serving every agency, the fiber plant for ATMS, and the dedicated and redundant communications links for the PSCS/800 MHz system. As of June 2005, 178 user sites are on-net and receiving critical services from FiberNet. In FY05 and FY06, DTS began to re-engineer FiberNet to directly support Ethernet connections. This will lead to a core network that is technologically newer, faster and less expensive, and will be accomplished in phases that include a requirements study and procurement of a new network core. The focus for FY07 and FY08 is the next generation of FiberNet, infrastructure improvements, and deployment of new sites. DTS, in cooperation with ITPCC and its ITAG workgroup, continues to refine the new architecture and the master implementation schedule.

OTHER

DTS is responsible for project management, network operations, and maintenance of electronics; DPWT 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/administrative facilities, M-NCPPC sites, HOC sites. 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.

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. The Operating Budget Impact Offset Revenue section reflects estimated increases in CPI for the FY07-12 CIP.

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY96	(\$000)
Initial Cost Estimate		19,410
First Cost Estimate		
Current Scope	FY07	39,231
Last FY's Cost Estimate		29,986
Present Cost Estimate		39,231
Appropriation Request	FY07	1,970
Appropriation Request Est.	FY08	1,735
Supplemental		
Appropriation Request	FY06	0
Transfer		0
Cumulative Appropriation		29,986
Expenditures/		
Encumbrances		26,149
Unencumbered Balance		3,837
Partial Closeout Thru	FY04	0
New Partial Closeout	FY05	0
Total Partial Closeout		0

COORDINATION

Department of Technology Services
 Department of Public Works and Transportation
 Montgomery County Public Schools
 M-NCPPC
 Montgomery College
 HOC
 WSSC
 Cable Communications Management
 Comcast
 Advanced Transportation Management System
 Educational Technology: Global Access
 Public Safety Radio System
 Information Technology: College
 Information Technology Policy Coordination
 Committee
 Interagency Technology Advisory Group

MAP

