Network Infrastructure and Server Operations

(P076619)

Category	Montgomery College	Date Last Modified	05/19/24
SubCategory	Higher Education	Administering Agency	Montgomery College
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	9,669	8,898	771	-	-	-	-	-	-	-	-
Construction	1,899	1,899	-	-	-	-	-	-	-	-	-
Other	52,349	23,990	3,759	24,600	4,100	4,100	4,100	4,100	4,100	4,100	-
TOTAL EXPENDITURES	63,917	34,787	4,530	24,600	4,100	4,100	4,100	4,100	4,100	4,100	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Contributions	600	-	-	600	300	300	-	-	-	-	-
Current Revenue: General	61,897	33,367	4,530	24,000	3,800	3,800	4,100	4,100	4,100	4,100	-
Recordation Tax	1,420	1,420	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	63,917	34,787	4,530	24,600	4,100	4,100	4,100	4,100	4,100	4,100	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
FULL TIME EQUIVALENT (FTE)			6	6	6	6	6	6

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 25 Request	4,100	Year First Appropriation	FY07
Appropriation FY 26 Request	4,100	Last FY's Cost Estimate	54,517
Cumulative Appropriation	39,317		
Expenditure / Encumbrances	35,499		
Unencumbered Balance	3,818		

PROJECT DESCRIPTION

This project supports the ongoing installation and maintenance of the information technology (IT) network infrastructure throughout all Montgomery College facilities, as well as on-premise server operations for applications not suitable for cloud computing. The network-related infrastructure includes cable distribution systems (conduit, fiber optics, wiring); equipment such as routers, switches, wireless access points, firewalls, intrusion detection and prevention devices; network management systems, specialized technology tools, monitoring systems, and diagnostic equipment; and remote access technologies. Also included are telephone systems, emergency

notification systems, building management systems, and video security systems.

The scope of the project includes the associated electrical, environmental, and backup systems needed to ensure the reliable operation of all equipment. On-premise server operations are supported through the maintenance of a primary data center on the Takoma Park/Silver Spring (TP/SS) campus, and a backup data center on the Rockville campus. Associated with the TP/SS data center is the College's Network Operating Center (NOC), where staff maintain server and network equipment and provide 24/7 monitoring of all College IT systems and services to ensure proper functioning and performance. This includes instructional and administrative applications and all network and Internet-related services used in support of both credit and non-credit programs. This project funds six positions.

Note: The Network Operating Center/Datacenter project's (P076618) FY19 and beyond funding requests and work years have been added to this project. In addition, the project name has changed from Network Infrastructure Support Systems to Network Infrastructure and Server Operations.

COST CHANGE

Increase due to addition of FY29 and FY30. Annual project cost increase due to escalation.

PROJECT JUSTIFICATION

The College networks used for all forms of data, voice, video, and machine communication must be maintained and upgraded continuously to ensure no College location is without the necessary technology capabilities and support. This requires planned replacement and upgrades as technology evolves. As faculty continue to develop more learning programs and methods to meet the increased expectations of students, the technology needs also evolve and change. Without meeting the expectations and requirements developed in the various College strategic and master planning documents, the College will fall behind in its ability to provide needed technology at the appropriate time. State-of-the-market hardware and software capabilities and cloud services are required to attract and serve students, faculty and staff, as well as to serve the business community by upgrading work force technology skills and providing a base for continued economic development in the county. Information technology directly enables the College's mission and is used to facilitate student success; to effectively and efficiently operate the College; and to support the College's growth, development, and community initiatives.

OTHER

FY25 Appropriation: $4,100,000 ($3,800,000 Current Revenue: General; $300,000 Contributions (Fund Balance)). FY26 Appropriation: $4,100,000 ($3,800,000 Current Revenue: General; $300,000 Contributions (Fund Balance)). The following fund transfers/reductions have occurred with this project: By County Council Resolution No. 16-1261, the cumulative appropriation was reduced by $533,000 (Current Revenue: General) as part of the FY10 savings plan; $800,000 to the Network Operating Center project (#P076618)(BOT Resol. #12-06-037,6/11/12). FY19 reduction of $400,000 due to County affordability constraints.

FISCAL NOTE

Source of FY25 and FY26 Contributions is College Fund Balance.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

MC Strategic Plan (7/23), Academic Master Plan 2016-2021, Collegewide Facilities Master Plan (Pending 2023), Information Technology Master Plan, Student Affairs Master Plan 2018-2021, and campus building renovation projects. Expenditures are made in alignment with the priorities and guidelines establish by these documents.