

ED COMMITTEE #1&2
May 5, 2016
Worksession

MEMORANDUM

May 3, 2016

TO: Education Committee

FROM: Essie McGuire, Senior Legislative Analyst 

SUBJECT: **Worksession – FY17-22 Capital Improvements Program, Montgomery College, Information Technology Projects, and Montgomery College Operating Budget, continued**

Today the Education Committee will continue its review of the FY17-22 Capital Improvements Program (CIP) for Montgomery College, and will take up the College's CIP projects that support information technology. Carl Whitman, Vice President for Instructional and Informational Technology, Montgomery College, will discuss these projects with the Committee. The Committee will also continue its review of the Montgomery College operating budget.

I. COLLEGE CIP: INFORMATION TECHNOLOGY

The College has four CIP projects that support information technology. For the FY17-22 CIP, the College's request is consistent with the approved funding level in the CIP. It also reflects the \$6.5 million reduction that was taken in FY16 expenditures in two of these projects as a part of the FY16 savings plan. At this juncture, the College's requested funding level for these four projects is reflected within the Council's preliminary reconciliation affordability assumptions for the CIP. **Council staff supports the College's requested funding level for these projects**, with the caveat that additional adjustments may need to be made to meet affordability constraints during final reconciliation.

Mr. Whitman reports that the College is undertaking a strategic planning effort for information technology in the context of the broader master planning efforts going on across all functional areas of the College. The information technology master plan process has been slated to begin after the academic master planning process to ensure that information technology is appropriately aligned, coordinated, and integrated with the academic strategic vision and initiatives. Mr. Whitman reports that this process will likely take place over the summer and early fall and will provide a basis for possible restructuring of these projects consistent with the new strategic plan.

Council staff suggests that the Education and Government Operations and Fiscal Policy (GO) Committees may want to meet jointly in late fall to hear the results of the information technology strategic plan efforts and understand the new focus going forward.

1. Information Technology: College (PDF on circles 1-2)

This project supports the major elements of desktop modernization and other hardware and software purchase and replacement for the College. The College's request is for \$8.5 million each year in the CIP, consistent with the approved level.

In the FY16 savings plan, the College took a reduction of \$5.05 million in this project. The college implemented this reduction by reducing expenditures in FY16, creating a larger than expected unencumbered balance in the project which then in turn reduces the appropriation request in FY17. FY16 expenditures were ultimately \$2.32 million. The savings plan required the College to delay implementation of some systems or replacements and focus on higher critical priorities.

Mr. Whitman reports that the College is embarking on a project to replace its Enterprise Resource Planning (ERP) system, which is currently 20 years old. This project will be implemented in stages over the next few years.

2. Network Infrastructure and Support Systems (PDF on circles 3-4)

This project supports the campus networking infrastructure, including routers, servers, and wireless infrastructure. The College's request is \$1.8 million each year in the CIP, consistent with the approved funding level.

In the FY16 savings plan, the College took a reduction of \$1.45 million in this project. The college implemented this reduction by reducing expenditures in FY16, creating a larger than expected unencumbered balance in the project which then in turn reduces the appropriation request in FY17. The FY16 expenditures in this project were ultimately \$350,000. The College absorbed this reduction largely through shifting and deferring certain upgrades and other planned work.

Mr. Whitman reports that this project supports the infrastructure across all three campuses. The College does benefit from the County's Fibernet Network as much as possible to support this critical infrastructure.

3. Network Operating Center (PDF on circles 5-6)

This project supports the College's primary data center for all three campuses, which is located at the Takoma Park/Silver Spring campus. The College's request is \$2.0 million each year in the CIP, consistent with the approved funding level.

As the Government Operations (GO) Committee has discussed, there are ongoing efforts through the Interagency Technology Policy and Coordination Committee (ITPCC) to maximize available space and other resources by consolidating some network operations support resources for County Government and Park and Planning with the College's Network Operating Center.

4. Student Learning Support Systems (PDF on circle 7)

This project supports software costs, programs, assistive support devices, and other technology that supports student learning. This includes online and other electronic materials as well as assistive devices and systems for students with specific needs or requiring accommodations. The College requested \$1.4 million each year in the CIP, consistent with the approved funding level.

II. MONTGOMERY COLLEGE OPERATING BUDGET, CONTINUED

The Committee reviewed the Montgomery College operating budget on April 18. Today the Education Committee will receive a progress update on the discussions related to compensation at the College and will review its funding recommendation for FY17. The Council is scheduled to review the College's FY17 Operating Budget on May 16.

The College's requested increase in the Current Fund over FY16 is \$12.2 million. Of this request, the College requested that \$10 million come from new County funds. The County Executive recommended an increase in County funding of \$2 million. Unlike the FY16 budget discussions, the College and the Executive have largely consistent resource assumptions with the exception of new County funding. After accounting for other resource changes (tuition, State Aid, and use of fund balance), the County Executive's funding level is \$4.8 million over the FY16 approved level and \$7.3 million less than the College's request for the Current Fund.

The Education Committee added a total of \$4.5 million to the reconciliation list to support the College's requested programmatic enhancements. The total amount is represented in three increments of \$2 million, \$1.5 million, and \$1 million. The Education Committee also specified that the recommended total includes \$300,000 to support the I-BEST scholarships that the Council funded in FY16 for workforce development courses.

On April 21, the GO and ED Committees met jointly to review compensation and benefits for all agencies. The Committees adopted the following recommendation related to the College:

Do not support full implementation of proposed Montgomery College pay adjustments. The College will need to reduce its negotiated pay increases to meet affordability requirements and to prioritize investments in programmatic enhancements and support for student needs within the amount appropriated by the Council. This would involve all bargaining units. Again, pay adjustments in FY17 should not create unsustainable annualized costs in FY18.

Information Technology: College (P856509)

Version: Working

Category: Montgomery College
 Sub Category: Higher Education
 Administering Agency: Montgomery College (AAGE15)
 Planning Area: Countywide

Date Last Modified: 9/21/12
 Required Adequate Public Facility: No
 Relocation Impact: None
 Status: Ongoing

	Total	Thru FY15	Est 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	16,482	16,482	0	0	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	23,274	19,081	1,193	3,000	500	500	500	500	500	500	0
Other	122,191	70,169	4,022	48,000	8,000	8,000	8,000	8,000	8,000	8,000	0
Total	161,947	105,732	5,215	51,000	8,500	8,500	8,500	8,500	8,500	8,500	0

FUNDING SCHEDULE (\$000s)											
Current Revenue: General	88,491	43,100	5,215	40,176	6,681	6,699	6,699	6,699	6,699	6,699	0
Current Revenue: Recordation Tax	66,812	55,988	0	10,824	1,819	1,801	1,801	1,801	1,801	1,801	0
G.O. Bonds	4,603	4,603	0	0	0	0	0	0	0	0	0
PAYGO	2,041	2,041	0	0	0	0	0	0	0	0	0
Total	161,947	105,732	5,215	51,000	8,500	8,500	8,500	8,500	8,500	8,500	0
Full Time Equivalent (FTE)					4.0	4.0	4.0	4.0	4.0	4.0	

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 17	3,450
Appropriation Request Est.	FY 18	8,500
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		115,997
Expenditure / Encumbrances		105,732
Unencumbered Balance		10,265

Date First Appropriation	FY 85
First Cost Estimate	
Current Scope	FY 17 161,947
Last FY's Cost Estimate	149,997
Partial Closeout Thru	0
New Partial Closeout	0
Total Partial Closeout	0

Description

This project provides for the design and installation/construction, and support of College Information Technology (IT) systems including data, video, cyber security, software services, enterprise applications, and voice applications; associated cable systems, equipment closet, IT space construction; and the replacement/upgrade of IT equipment to meet current requirements. The project includes planning, installation, and furnishing of technology in classrooms, labs, and offices. These IT systems support and enhance the College's mission, instructional programs, student services including counseling; admissions, registration, etc., and administrative computing requirements for finance, human resources, institutional advancement, workforce development and continuing education, etc., and are implemented in accordance with collegewide strategic planning efforts. The Office of Information Technology (OIT) determines and recommends the hardware and software to be purchased based on requirements analysis. OIT is responsible for equipment purchases, monitoring of systems results, providing assistance during implementation, and on-going technology reviews and analysis. Four (4) technical staff positions are in this project.

Capacity

As part of the FY16 savings plan the College has reduced the FY17 CIP request by \$5,050,000 (Council Resol.#18-248, 9/15/15) to \$350,000 for this project. Increase due to addition in FY21, and FY22.

Justification



To meet current and projected technical standards for data, video, and voice communications the College plans and installs complete IT, telecommunications and learning center systems at each campus, the central administration building and all instructional sites. The new systems allow replacement of legacy systems for data and video applications; provide for updated networking capabilities; provide necessary security and monitoring capabilities; establish learning centers in classrooms and labs, and for distributed instruction; and allow expanded opportunities for linking with external information technology services. The Information Technology Strategic Plan (ITSP) is a comprehensive plan covering information technology activities funded from all budget sources for an integrated and complete plan for the College. The ITSP helps meet student requirements for information technology tools and instruction in preparation for career opportunities and transfer programs to four-year institutions. Use of state-of-the-market hardware and technology capabilities are required to attract and serve students, as well as serving the business community by upgrading work force technology skills and providing a base for continued economic development in the county. Three goals of the ITSP- are the use of information technology to (1) facilitate student success; (2) effectively and efficiently operate the College; and (3) support the College's growth, development, and community initiatives. The ITSP is an overall strategic plan that provides a cost effective and efficient vision for instructional, academic, and administrative systems. The ITSP supports the current IT program and serves as documentation for future funding requests.

Other

FY2017 Appropriation: Total \$3,450,000; \$1,631,000 (Current Revenue: General), \$1,819,000 (Current Revenue: Recordation Tax).
FY2018 Appropriation: Total \$8,500,000; \$6,699,000 (Current Revenue: General), \$1,801,000 (Current Revenue: Recordation Tax). The following fund transfers have been made from this project: \$1,300,000 to the Takoma Park Campus Expansion project (CIP No. P996662) (BOT Resol. #07-01-005, 1/16/2007); \$300,000 to the Student Learning Support Systems project (CIP No. P076617); and \$2,500,000 to the Network Operating Center project (#P076618)(BOT Resol. #12-06-037, 6/11/12). The following fund transfers have been made to this project: \$111,000 from the Planning, Design and Construction project (CIP No. P906605), and \$25,000 from the Facilities Planning: College project (CIP No. P886886) to this project (BOT Resol. #91-56, 5/20/1991); the project appropriation was reduced by \$559,000 in FY92.

Disclosures

Expenditures will continue indefinitely.

Coordination

Information Technology (IT) Strategic Plan , New Building Construction projects, Campus Building Renovation projects

Network Infrastructure and Support Systems (P076000)

Version: Working

Category: Montgomery College
 Sub Category: Higher Education
 Administering Agency: Montgomery College (AAGE15)
 Planning Area: Countywide

Date Last Modified: 9/21/12
 Required Adequate Public Facility: No
 Relocation Impact: None
 Status: Ongoing

Total	Thru FY15	Est FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	4,293	3,834	459	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0
Construction	2,369	1,548	821	0	0	0	0	0	0	0
Other	17,455	6,253	402	10,800	1,800	1,800	1,800	1,800	1,800	1,800
Total	24,117	11,635	1,682	10,800	1,800	1,800	1,800	1,800	1,800	1,800

FUNDING SCHEDULE (\$000s)

Current Revenue: General	22,697	10,215	1,682	10,800	1,800	1,800	1,800	1,800	1,800	1,800
Current Revenue: Recordation Tax	1,420	1,420	0	0	0	0	0	0	0	0
Total	24,117	11,635	1,682	10,800	1,800	1,800	1,800	1,800	1,800	1,800
Full Time Equivalent (FTE)				4.0	4.0	4.0	4.0	4.0	4.0	4.0

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 17	350	Date First Appropriation	FY 07
Appropriation Request Est.	FY 18	1,800	First Cost Estimate	
Supplemental Appropriation Request		0	Current Scope	FY 17 24,117
Transfer		0	Last FY's Cost Estimate	21,967
Cumulative Appropriation		14,767	Partial Closeout Thru	0
Expenditure / Encumbrances		11,635	New Partial Closeout	0
Unencumbered Balance		3,132	Total Partial Closeout	0

Description

The purpose of this project is to provide for planned technology replacements and upgrades, and to establish and maintain network infrastructure and support systems both in existing and new locations based on the academic and instructional needs and requirements of the students and College community. The network infrastructure and support systems represent systems outside the College's datacenters and network operating center structure, including campus cable distribution systems (conduit and wiring); campus centers for labs, classrooms, offices, and learning centers; and operation centers for telephony, communication, security, and notification systems. These network infrastructure and support systems refer to the organization of its various parts and their configurations, and will enhance student learning and benefit the entire College community. These systems include servers, high speed connection systems, routers, ports, wireless access points, network protocols, network access methodologies, firewalls, instructor workstations, hands on computing and technology tools, audio visual equipment, software support and remote access among other developing technologies. This project also funds three (3) project managers to oversee the design of new buildings and renovations (one for each campus) and one (1) position for collegewide communication and notification systems.

Cost Change

As part of the FY16 savings plan the College has reduced the FY17 CIP request by \$1,450,000 (Council Resol. #18-248, 9/15/15) to \$350,000 for this project. Increase due to the addition of FY21 and FY22.

Justification

The datacenter and network operation center network infrastructure must be compatible and work in concert with each other so no location is without central and on-site technology capabilities and support. This requires planned replacement and upgrades as new technology evolves. As faculty continue to develop more learning programs and methods to meet the increased expectations of students, the technology needs are increasing and changing for existing and new capabilities. Without meeting the requirements developed in the Information Technology Strategic Plan (ITSP), College unit plans, overall strategic plans, and telecommunications plans, the College will fall behind on expectations and the ability to deliver the right technology at the appropriate time. The Information Technology Strategic Plan (ITSP) is a comprehensive plan covering information technology activities funded from all budget sources for an integrated and complete plan for the College. The ITSP helps meet student requirements for information technology tools and instruction in preparation for career opportunities and transfer programs to four-year institutions. Use of state-of-the-market hardware and technology capabilities are required to attract and serve students, as well as serving the business community by upgrading work force technology skills and providing a base for continued economic development in the county. Three goals of the ITSP- are the use of information technology to (1) facilitate student success; (2) effectively and efficiently operate the College; and (3) support the College's growth, development, and community initiatives. The ITSP is an overall strategic plan that provides a cost effective and efficient vision for instructional, academic, and administrative systems. The ITSP supports the current IT program and serves as documentation for future funding requests.

Other
FY17 Appropriation: \$350,000 (Current Revenue: General). FY18 Appropriation: \$1,800,000 (Current Revenue: General). 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).

Disclosures
Expenditures will continue indefinitely.

Coördination
Montgomery College Information Technology Strategic Plan

Network Operating Center (P076618)

Version: Working

Category: Montgomery College
 Sub Category: Higher Education
 Administering Agency: Montgomery College (AAGE15)
 Planning Area: Silver Spring

Date Last Modified: 9/21/12
 Required Adequate Public Facility: No
 Relocation Impact: None
 Status: Ongoing

	Total	Thru FY15	Est 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	5,844	3,175	1,589	1,080	180	180	180	180	180	180	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	9,333	7,856	877	600	100	100	100	100	100	100	0
Other	19,377	6,826	2,231	10,320	1,720	1,720	1,720	1,720	1,720	1,720	0
Total	34,554	17,857	4,697	12,000	2,000	2,000	2,000	2,000	2,000	2,000	0

FUNDING SCHEDULE (\$000s)											
Current Revenue: General	23,261	10,564	697	12,000	2,000	2,000	2,000	2,000	2,000	2,000	0
Current Revenue: Recordation Tax	11,293	7,293	4,000	0	0	0	0	0	0	0	0
Total	34,554	17,857	4,697	12,000	2,000	2,000	2,000	2,000	2,000	2,000	0
Full Time Equivalent (FTE)					2.0	2.0	2.0	2.0	2.0	2.0	

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 17	2,000
Appropriation Request Est.	FY 18	2,000
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		22,554
Expenditure / Encumbrances		17,857
Unencumbered Balance		4,697

Date First Appropriation	FY 07	
First Cost Estimate		
Current Scope	FY 17	34,554
Last FY's Cost Estimate		30,554
Partial Closeout Thru		0
New Partial Closeout		0
Total Partial Closeout		0

Description

The purpose of this project is to establish and maintain a datacenter and network operating center on the Takoma Park/Silver Spring Campus and related central sites, and to provide for planned (lifecycle) technology replacements. The datacenter and network operating center houses the technology from which control is exercised over the College's instructional, academic, and administrative computing systems. This project also funds staff for monitoring security, cyber security, disaster recovery and redundant systems to help insure the integrity of the datacenters. Two (2) staff positions are included in the project.

Cost Change

Increase due to the addition FY21 and FY22.

Justification

The datacenter and network operating center located on the Takoma Park/Silver Spring Campus provides the College with high availability as well as upgraded disaster recovery components, security firewalls, and security systems. Planned lifecycle asset replacement and upgrades are critical components of maintaining state-of-the-marketplace hardware and operating software complement within each Campus center. The College's strategic planning initiatives include comprehensive strategies to cover information technology activities funded from all budget sources for an integrated and complete plan for the College. This strategic planning ensures that the College meets student requirements for information technology tools and instruction in preparation for career opportunities and transfer programs to four-year institutions. Use of state-of-the-market hardware and technology capabilities are required to attract and serve students, as well as serving the business community by upgrading work force technology skills and providing a base for continued economic development in the county. Collegewide strategic planning goals include using information technology to (1) facilitate student success; (2) effectively and efficiently operate the College; and (3) support the College's growth, development, and community initiatives. The College's strategic planning efforts provide for a cost effective and efficient vision for instructional, academic, and administrative systems. The College's strategic plan supports the current IT program and serves as documentation for future funding requests.

Other

FY17 Appropriation: \$2,000,000 (Current Revenue: General). FY18 Appropriation: \$2,000,000 (Current Revenue: General). By County Council Resolution No. 16-1261, the cumulative appropriation was reduced by \$146,000 (Current Revenue: General) as part of the FY10 savings plan. The following fund transfers have been made to this project: \$800,000 from the Network Infrastructure Support System project (#P076619), \$2,500,000 from the Information Technology project (#P856509)(BOT Resol. #: 12-06-037, 6/11/12).

Disclosures

Expenditures will continue indefinitely.

Coordination

Cafritz Foundation Arts Center (CIP No. P056604), Computer Science Alterations (CIP No. P046602), Germantown Science and Applied Studies Phase 1 - Renovation (CIP No. P136600).

Student Learning Support Systems (P076617)

Version: Working

Category: Montgomery College
 Sub Category: Higher Education
 Administering Agency: Montgomery College (AAGE15)
 Planning Area: Countywide

Date Last Modified: 9/21/12
 Required Adequate Public Facility: No
 Relocation Impact: None
 Status: Ongoing

	Total	Thru FY15	Est 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	6,769	4,037	332	2,400	400	400	400	400	400	400	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0
Other	12,051	3,263	2,788	6,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Total	18,820	7,300	3,120	8,400	1,400	1,400	1,400	1,400	1,400	1,400	0

	Total	Thru FY15	Est FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
FUNDING SCHEDULE (\$000s)											
Current Revenue: General	18,458	6,938	3,120	8,400	1,400	1,400	1,400	1,400	1,400	1,400	0
Current Revenue: Recordation Tax	362	362	0	0	0	0	0	0	0	0	0
Total	18,820	7,300	3,120	8,400	1,400	1,400	1,400	1,400	1,400	1,400	0
Full Time Equivalent (FTE)					4.0	4.0	4.0	4.0	4.0	4.0	4.0

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 17	1,400
Appropriation Request Est.	FY 18	1,400
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		10,420
Expenditure / Encumbrances		7,300
Unencumbered Balance		3,120

Date First Appropriation	FY 07
First Cost Estimate	
Current Scope	FY 17 18,820
Last FY's Cost Estimate	16,020
Partial Closeout Thru	0
New Partial Closeout	0
Total Partial Closeout	0

Description

This project includes the installation, upgrading, and replacement of technology systems used to support teaching and learning and to assess student outcomes and the effectiveness of MC services to students. This includes technology to support student with disabilities, technology based communications and collaborations with students, to support and enhance access to course electronic materials software anytime anywhere, identification security, and cyber security tools for these systems and other applications used by and for students and faculty, including both hardware and software. The project also funds four (4) technical project and planning analyst staff positions to manage applications systems, and to be in charge of the design, setup and maintenance of technical specifications and the on-going review and update of the systems to stay current.

Cost Change

Increase due to the addition of FY21, and FY22.

Justification

It is essential that appropriate systems are in place to enhance learning as well as collaboration and communication. Increased attention on student retention and success creates a growing need to assess the effectiveness of the services and support provided to students and the impact on student success. Leveraging technology is fundamental in measuring/documenting student success. The Information Technology Strategic Plan (ITSP) is a comprehensive plan covering information technology activities funded from all budget sources for an integrated and complete plan for the College. The ITSP helps meet student requirements for information technology tools and instruction in preparation for career opportunities and transfer programs to four-year institutions. Use of state-of-the-market hardware and technology capabilities are required to attract and serve students, as well as serving the business community by upgrading work force technology skills and providing a base for continued economic development in the county. Three goals of the ITSP- are the use of information technology to (1) facilitate student success; (2) effectively and efficiently operate the College; and (3) support the College's growth, development, and community initiatives. The ITSP is an overall strategic plan that provides a cost effective and efficient vision for instructional, academic, and administrative systems. The ITSP supports the current IT program and serves as documentation for future funding requests.

Other

FY2017 Appropriation: \$1,400,000 (Current Revenue: General). FY2018 Appropriation: \$1,400,000 (Current Revenue: General). The following fund reductions/transfers have occurred with this project: By County Council Resolution No. 16-1261, the cumulative appropriation was reduced by \$1,000,000 (Current Revenue: General) as part of the FY10 savings plan; and \$300,000 was transferred from the Information Technology project (#P856509) to this project in FY11.

Disclosures

Expenditures will continue indefinitely.

Coordination