

MONTHLY OUTLOOK

A Meeting Preview with Data Insights and Strategic Topics

May 6, 2022

May Meeting Highlights—What to Expect and Why

Your next meeting takes place on Monday, May 16. Following are major items and topics planned at this time.

Conference Session. A conference session will be held to discuss 2022 commencement ceremonies, activities, and protocols. Commencement ceremonies will be held in person on Thursday, May 19, and Friday, May 20.

Report on Single Audit. You will convene as the Audit Committee prior to the public Board meeting to hear a report of the College's single audit for the fiscal year ending June 30, 2021. The report will be presented by the external auditor, Clifton Larsen Allen, LLP. The Audit Committee is a committee of the whole, chaired by the first vice chair. Later in the evening, when convened as the Board, you will vote on accepting the audit.

Several Awards of Contract. There are four awards of contract being presented for your consideration. There are two awards are for equipment to be used in the Catherine and Isiah Leggett Math and Science Building: microscopes system and the replacement of planetarium equipment. The third is for services related to the College's classification and compensation systems, and the fourth is for health care certification related courses.

Academic Matter. A resolution requesting modification to the Cisco Certified Network Associate+ Security Preparation Certificate curriculum will be brought for your consideration.

The following items are on your consent agenda:

Personnel Actions Confirmation Report. This report reviews the personnel actions taken during the month of March 2022.

Naming of the Food Pantry on the Rockville Campus. In recognition of retired Professor Connie McGuire and her family, this action proposes to name the food pantry on the Rockville Campus in honor of the McGuire family.

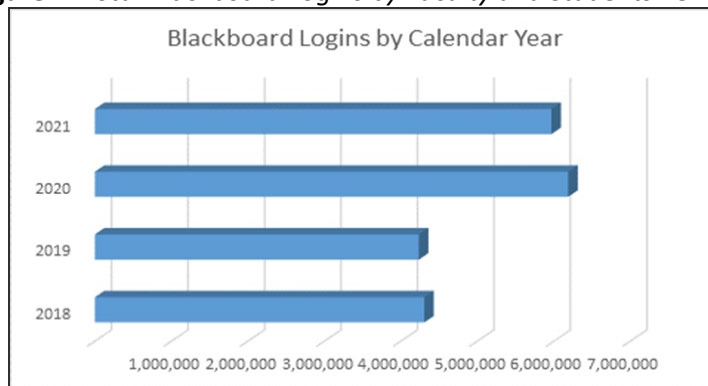
Data Focus

Pandemic Impacts on Information Technology

The pandemic had some noticeable impacts on information technology at the College. Three trends capture some important lessons illuminated by the pandemic: adoption of hybrid technology can be done more quickly than previously imagined; email continues to be a point of vulnerability; security training of employees is vital to protecting College data.

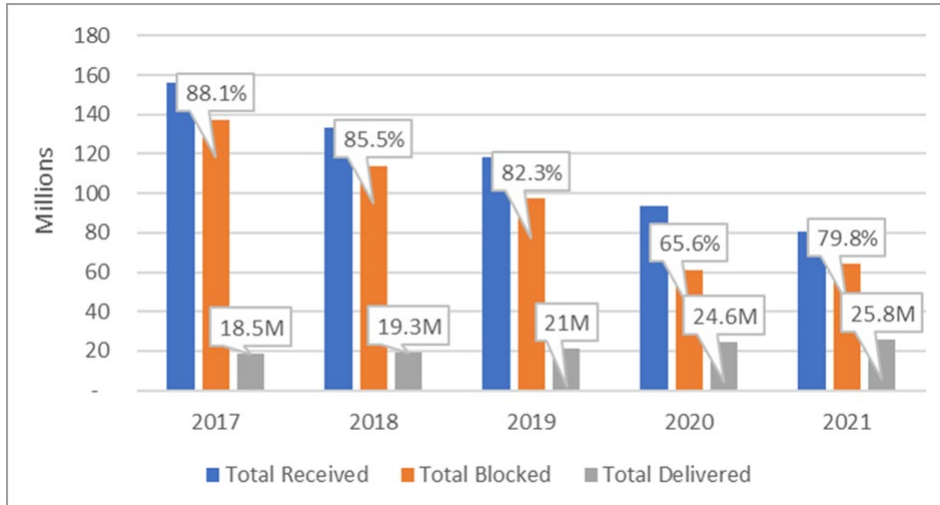
New technologies embraced. The Blackboard and Blackboard Collaborate—a videoconferencing program embedded in Blackboard (similar to Zoom)—rose significantly as faculty used the tool as part of the Structured Remote Teaching modality. At the start of remote instruction, the Office of E-Learning, Innovation and Teaching Excellence (ELITE) trained nearly 1,000 full-time and part-time faculty to use Blackboard to engage students in remote instruction (see Figure 1). This training focused on effective ways to deliver content, to create teacher presence and to further connect faculty with the local, regional, and national work taking place in their disciplines. Blackboard training has maintained its relevancy as students take classes on campus. Faculty continue to post content and engage students in online discussions. Training of faculty on strong usage of Blackboard enabled students to move easily between instructional modalities. As classes began the return to campuses, the use of Collaborate decreased, but was still popular for instruction, tutoring, and office hours suggesting that it gained a new acceptance as a useful tool.

Figure 1. Total Blackboard Logins by Faculty and Students Per Year



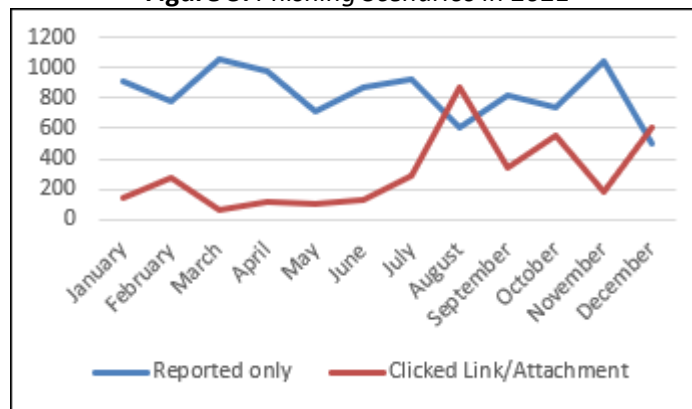
IT security is always critical. IT has become increasingly more vital as employees and students interacted primarily online for two years. An interesting trend was that the overall volume of email received at the College had been trending down over the last five years. While this trend continued during remote work, attention to security became even more vital. The College successfully blocks much of the malicious email before it reaches College employees’ email inboxes. Among the messages that do get through, however, the total number is increasing as attackers successfully circumvent automated email protections, leaving users to serve as the last line of defense (see Figure 2). These trends reaffirm the College’s investment in important, strategic security controls.

Figure 2. Montgomery College Email Statistics



Security training matters. Phishing is the most common tactic for introducing ransomware and other malicious activities into an organization. Montgomery College regularly tests employees to ensure they remain vigilant against such attacks. Figure 3 represents the rate of users reporting suspicious email to MC’s Phishtrap, using the “Report Phishing” button in Outlook, as compared to those who responded to the phishing attempt. The intersection of the two lines on the graph highlights scenarios in which users were more vulnerable. The scenarios created in August and December preyed upon employees’ curiosity, with emails claiming to provide a voicemail message (August) or a holiday schedule (December). These responses spotlight the need for continuous training, so that employees are reminded to protect the College from intrusions. Employees who are identified as repeat offenders are enrolled in weeklong Phishing bootcamps to raise their awareness and give them extra practice at recognizing malicious email.

Figure 3. Phishing Scenarios in 2021



Strategic Topic of the Month

The Pandemic's Impact on Local Workforce Needs



One of the goals of the *Montgomery College 2025* plan is to fuel the economy and drive economic mobility. In the plan, the College committed to giving students “market-relevant skills [that] are key to individual and county economic success.” Mobilizing local and regional partnerships with employers and education institutions enables the College to effectively respond to labor market needs.

How has the pandemic impacted local workforce needs? Industries like information technology (IT), health care, biotechnology, hospitality, construction trades, and commercial truck driving have been among those most impacted by the pandemic. However, the trends have not all been simple growth or declines—they have varied widely according to health conditions, supply chain challenges, and the flow of funding from federal and state pandemic sources. The College has worked to respond to diverse impacts as conveyed to us by affinity groups and partnerships. It has responded to the biotech industry’s call for more vaccine and test production workers, and health care’s need for more nurses, practitioners, and technicians. Enrollment in commercial truck driving has been a strong area of rebound for Workforce Development and Continuing Education.

How has MC leveraged grants to respond to these needs? Numerous grants help MC fuel the workforce. State EARN grants fund MC’s biotechnology bootcamps—short-term training that connects students to employers for entry-level jobs. EARN-funded commercial driver’s license programs train or upgrade skills for in-demand bus and truck drivers for MCPS, WMATA, and Ride On. BioTrain, also EARN-funded, identifies and prepares students to fill biotechnology workforce gaps. National Science Foundation (NSF) grants help MC teach scientists and health science workers to resolve quantitative problems, an industry-identified need. MC creates unique industry-requested trainings, then connects job seekers to employers.

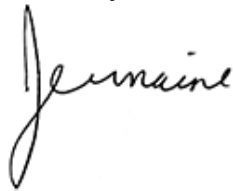
How does MC communicate with industries? MC is part of the Maryland Community College’s Association for Continuing Education and Training (MCCACET) affinity group. The MCCACET has advisory groups representing large program areas common to most community colleges’ continuing education and workforce development functions. Each advisory group meets three times a year to develop new markets, monitor evolving legislation, develop and submit standardized courses to MHEC, and coordinate cooperative programs. Advisory groups in allied health, education, manufacturing and skilled trades, transportation, and IT provide invaluable feedback to MC’s efforts to prepare students for jobs in these areas.

What partnerships have been developed to fuel the economy? The College is partnering with Nexus Montgomery, a collaboration of Montgomery County hospitals, to bring new entrants to the workforce, start them on a career as health care professionals, and provide the support needed to put them on career paths. Such paths will provide access to the low and no-cost training that unemployed and underemployed residents need. Additional partnerships with Apple, Amazon, and Amarex continue to shape MC’s curriculum and degree/certificate offerings. Glaxo SmithKline (GSK) and Kite have apprenticeship programs with MC in which the companies pay for a student’s education, while they prepare for employment. A new National Science Foundation grant will help MC establish seven biotechnology company partnerships to develop a cell and gene therapy curriculum and industry-

recognized certificate by 2023. Local scientists employed by AstraZeneca, BioReliance, GSK, Histochemical Society, NIH, and the FDA, turn to MC's Bio-Trac for updating their skills. Partnerships with Amazon Web Services Educate and George Mason University created MC's cloud computing degree with seamless transfer to GMU—a path to high-demand careers. With SANS Technology Institute (STI), MC offers the first two years of an STI applied cybersecurity bachelor's degree. MC also partners with Baltimore Cyber Range to train its students and faculty.

How is MC's impact on the local economy measured? Emsi Burning Glass' 2021 [report](#) on MC's economic value notes that MC provides \$1.8 billion in added income to the local economy. Education increases earnings, benefiting the economy—the report indicates MC degree-holders earn \$11,300 more, on average, than high school diploma-holders in Maryland. Certificates produce similar increases.

Sincerely,

A handwritten signature in black ink that reads "Jermaine". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Dr. Jermaine F. Williams
President

We empower our students to change their lives, and we enrich the life of our community. We are accountable for our results.