



MIDDLESEX
Community College

Student Success Starts Here

NECHE 2019

INTERIM FIVE-YEAR ACCREDITATION REPORT



Lowell Campus



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MIDDLESEX COMMUNITY COLLEGE

33 Kearney Square
Lowell, MA

INTERIM FIVE-YEAR ACCREDITATION REPORT

Submitted to the New England Commission of Higher Education

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INTRODUCTION

In anticipation of submitting the Middlesex Community College Five-Year Interim Accreditation Report to the New England Commission of Higher Education (NECHE) on August 15, 2019, a Middlesex Community College team attended the NECHE Interim Report Orientation Workshop on April 24, 2018. Information offered at the workshop provided direction for the leadership team as it coordinated the process for compiling the five-year report. The team was led by the Provost and Vice President of Academic and Student Affairs Philip Sisson. Other team members were Cathleen McCarron, Five-Year Interim Report Faculty Chair and Professor of English; Susan Anderson, Executive Director of Institutional Effectiveness; Shirley Salamone, Assistant Director of Institutional Research; and Mary Anne Dean, retired Dean of Resource and Professional Development.

The leadership team began meeting regularly in June 2018. Primary responsibilities were identified related to the Standards, Areas of Emphasis, Report Forms, and E-Series Forms. Additionally, Provost Sisson and Interim Report Faculty Chair McCarron kept the college's Board of Trustees, leadership team, faculty, and staff informed of the process through several presentations, including those made at meetings of the trustees and Faculty Staff Association (FSA).

Staff and faculty associated with each Standard and Area of Emphasis were interviewed by a member of the leadership team to obtain information on key changes that had taken place over the past five years since the submission of the [Middlesex Community College 2014 NEASC Self-Study](#). Drafts of Standard updates were developed and submitted to all those who had been interviewed and to FSA standing committees for review. Drafts were also submitted to the President's Cabinet. Standard drafts (excluding Standard 8 – Educational Effectiveness) were posted on the Middlesex FSA website in November. All faculty and staff were invited to submit comments or suggestions for changes.

To assist the leadership team in developing the Standard 8 Educational Effectiveness reflective essay, all faculty and staff were invited to participate in a brainstorming session that was part of the December 6, 2018, FSA meeting. Group facilitators supported participants in identifying areas representing the college's strengths and weaknesses. In addition, an online survey was sent to all part-time faculty, since most of them do not attend the FSA meeting. Suggestions made at the FSA session and obtained from the online survey helped to identify key content for the Educational Effectiveness essay. A draft of this essay was posted on the FSA website in April with a request for comments. In addition, two open forums were held on each campus, providing further opportunity for employee input. Based on information highlighted in the Areas of Emphasis and all of the Standards, the President's Cabinet developed projections for the next five years.

Preparation of the five-year interim report was a year-long inclusive process that offered all members of the college community multiple opportunities for input. The process culminated in a final report that reflects significant achievements, as well as important challenges, and incorporates projections that will be built into the college's next strategic plan.

INSTITUTIONAL OVERVIEW

September 24, 2020, will mark exactly 50 years since the first students of Middlesex Community College passed through the doors of the college, looking to further their education and explore the opportunities that awaited them.

When the first students enrolling at the college entered their classrooms in one of the college's two rented spaces at the Veterans Administration Hospital in Bedford that Thursday in September 1970, the annual tuition cost was \$200 a year. Their ages ranged from 17 to 66 years, and they hailed from 52 different cities and towns. Fast-forward 50 years, and the educational landscape, not just at Middlesex, but statewide, has dramatically changed, but the aspirations of the college's learners remain limitless.

As the college prepares to celebrate its golden anniversary in 2020, much attention will be focused on the tens of thousands of lives that have been changed by the faculty and staff who have dedicated their careers to educating their students and preparing them for the constantly evolving workforce of not just Massachusetts, but the world. The college itself has seen dramatic growth – from cramped, rented space shared with veterans returning from the Vietnam War to nearly 20 buildings on two campuses – a suburban, sprawling campus on 200 acres in Bedford, and an urban campus spread across a series of historic properties in downtown Lowell.

When the college first opened, programs such as nursing and criminal justice were the mainstays of its academic curriculum. Today, robust programs in fields such as cybersecurity and biotechnology help educate students for some of the most sought-after career pathways in the Commonwealth of Massachusetts. Middlesex's newest academic space, the Richard and Nancy Donahue Family Academic Arts Center, has allowed the college to invest in its theater, music and dance programs in a way never before seen in its history. A state-of-the-art biotechnology laboratory, currently under construction, will help support burgeoning STEM programs, especially in biotech. The Academic Arts Center and biotechnology laboratory are two of several new academic facilities aimed at providing students with the resources and support to succeed.

Throughout the college's growth, leaders have sought to keep the pathways to education at Middlesex both accessible and affordable, even in the wake of dwindling state fiscal support. New, ambitious partnerships with 16 high schools have helped propel Middlesex to the forefront of dual enrollment and early college programs. At the other end, intensified collaborations with four-year institutions, such as the University of Massachusetts at Lowell, have helped solidify seamless transitions for students looking to continue their educations.

Middlesex is poised to address today's challenges by continuing to remain entrepreneurial in its approach to new initiatives, forming new business partnerships to help support the academic mission, and engaging alumni during its 50th anniversary to help the college celebrate its achievements while looking forward to exciting new opportunities and continued success in preparing students to achieve their goals.

RESPONSE TO AREAS IDENTIFIED FOR SPECIAL EMPHASIS

Area of Emphasis One

Enhancing Communication between Board of Trustees and Campus Community

The Middlesex Community College Board of Trustees is tasked with fostering the continued growth and development of the college. Since the 2014 NEASC Self-Study, there has been a complete turnover on the Board, and the current Chair was appointed by the Governor in spring 2015. Whenever a new member is appointed to the Board, he/she meets with the Board Chair and President to begin the onboarding process and then receives the [Massachusetts Community Colleges Presidents and Board of Trustees Legal Resource Manual](#) that is reviewed with them by legal counsel at the beginning of his/her term. The manual provides an overview of the Massachusetts Public Higher Education system and outlines the roles and responsibilities of community college trustees as well as laws and standards related to open meetings, public records, conduct, campaign finance, expenditure of trust funds, record retention schedule, and immunity and indemnification. The manual provides a foundation for guiding the trustees as they fulfill their leadership role.

The Chairman of the Board provides overall direction for members and represents the Board at multiple annual community-based events taking place throughout the college's service area. Both the President and Executive Director of Public Affairs provide information that is helpful to the Chairman when speaking to external groups and organizations. In addition to providing an overview of the college to those attending, the Chairman attempts to speak one-on-one about the college with key individuals at these events, including national, state, and local civic, business, education, and social service leaders. When Middlesex leadership students are in attendance, the Chairman facilitates their role as external ambassadors of the college. Finally, when asked to speak on behalf of the Board to the media, the Chairman coordinates his message with the President and Executive Director of Public Affairs to ensure that the Board's position on a matter is clearly articulated, and that it supports the mission and values of the college.

The Board meets monthly except in the summer and follows the state's open meeting law. In addition to trustees, those regularly attending the meetings include the President, members of his Cabinet, President of the Faculty Staff Association (FSA - shared governance), President of MCCC (Faculty-Staff Union), and invited guests doing presentations. Annually, a student trustee is elected by students and helps to bring the student perspective to the Board.

The Board interacts with faculty and staff primarily through its subcommittees that include Audit, Development and Fundraising, Finance, Institutional Planning, Leadership Evaluation, Student Success and Diversity, and Workforce Development. Each member of the Board is assigned to one or more subcommittees. In addition to the subcommittees, if needed, ad hoc committees are created to deal with specific issues. Trustees participate in subcommittee meetings throughout the year. A representative(s) from the college is assigned to each subcommittee to serve as a communication and information liaison. Annually, each subcommittee and its liaison present a report on the work it has conducted during the year to the full Board.

Following is a summary of the key responsibilities of each subcommittee:

Audit: Establishes an independent relationship with the college auditors to review the annual audit and recommendations and to recommend its acceptance by the full Board.

Development/Fundraising: Focuses on reviewing information on cultivation and fundraising initiatives; where appropriate, assists the college in identifying and cultivating potential donors and sponsors for fundraising events.

Finance: Reviews and makes recommendations related to the budgeting policies and practices of the college; after reviewing the proposed annual operating budget in consultation with college leadership, presents to the full Board the annual operating budget recommendations, including the setting of fees; reviews and recommends to the full Board any changes to the investment policy and practices, including the allocation and diversity of the investment portfolio.

Institutional Planning: Provides input related to the development, implementation, and assessment of the college's strategic plan; monitors the progress of strategic plan initiatives by reviewing related accountability data.

Leadership Evaluation: Periodically undertakes a self-assessment of the effectiveness of the Board and recommends to the Chair and the President changes in the committee structure of the Board as appropriate; annually sets institutional goals and evaluates the President. System level goals are articulated by the MA Board of Higher Education, and the Commissioner of Higher Education evaluates the President on these goals in a separate evaluation.

Student Success/Diversity: Focuses on reviewing a variety of areas related to admissions, enrollment, retention, completion, and transfer including the areas of enrollment management plans and strategies, vertical teaming, dual enrollment, college readiness, basic skills assessment, developmental education models, instructional initiatives, high impact practices, comprehensive student services, developmental advising, and student learning outcomes; with respect to diversity, reviews policies and practices related to succession planning, hiring, affirmative action, workforce demographics, the onboarding process, complaint procedures, human resources procedures, student recruitment and admission policies and procedures, student demographics, student achievement gaps, the globalization of the curriculum, and extra-curricular activities.

Workforce Development: Monitors, supports and helps stimulate workforce development initiatives, including ensuring the alignment of degree and certificate programs with the needs of statewide, regional and local employers; expansion of a comprehensive database of contacts that helps the college to increase its contract training and non-credit offerings; and ongoing research on future workforce needs and innovative delivery methods.

Annual subcommittee reports to the Board help members understand the many different initiatives being carried out across the college in support of its mission and to provide knowledgeable and appropriate input within the scope of a trustee's role.

While the subcommittee structure fostered additional channels of communication and interaction among faculty, staff, and trustees, new challenges emerged. In 2018-2019, the faculty union found itself at an impasse with the President on issues related to articulating and communicating a vision for the college's future, and the process for making and communicating decisions. After the union leadership presented their issues, the Board voted full confidence in the President's leadership. This resulted in votes of no confidence against both the President and Chairman of the Board by the union. An Ad Hoc Committee was appointed by the Board and is working with the President and union leaders to define the issues and find solutions. The President has redoubled his efforts to understand faculty concerns and to implement more channels of communication and opportunities for sharing information and will report regularly on these efforts in the coming year. The Board, consistent with the authority given to it, is committed to providing the level of strategic oversight required to ensure the college moves forward in a way that leverages past successes, addresses current concerns, and positions Middlesex to provide the education and services required by its students.

Area of Emphasis Two

Diversifying Faculty and Supporting Part-Time Faculty

HIRING FACULTY FROM UNDERREPRESENTED POPULATIONS

Middlesex Community College continues to work towards increasing the diversity of full- and part-time (FT/PT) faculty with significant success, particularly for FT faculty where the percent of faculty from underrepresented populations has increased from 20% in 2014-15 to 28% in 2018-2019. The following tables demonstrate the increases in FT and PT faculty from underrepresented populations.

Minority and Non-Minority Full-Time Faculty*										
	2014-2015		2015-2016		2016-2017		2017-2018		2018-2019	
	n	%								
Minority	27	20%	29	23%	28	23%	31	26%	33	28%
Non-Minority	106	80%	96	77%	93	77%	89	74%	85	72%
Total	133	100%	125	100%	121	100%	120	100%	118	100%

Minority and Non-Minority Part-Time Faculty*										
	2014-2015		2015-2016		2016-2017		2017-2018		2018-2019	
	n	%								
Minority	32	8%	29	7%	34	9%	34	9%	38	10%
Non-Minority	363	85%	343	85%	309	79%	304	77%	291	76%
Unreported	31	7%	32	8%	46	12%	57	14%	52	14%
Total	426	100%	404	100%	389	100%	395	100%	381	100%

Source: Middlesex Community College Office of Institutional Research and Analytics

*Only employees with faculty status are included in this table.

College leadership has championed the importance of increasing the number of faculty from underrepresented populations by establishing this as a strategic goal, improving hiring processes, documenting procedures, and

creating a clear understanding of affirmative action. Recruitment and hiring strategies have included listing all FT and PT position openings, with the exception of late PT hires, on the New England Higher Education Recruitment Consortium ([HERC](#)) and [Higher Education Jobs](#) websites, two very large databases. When necessary, openings are posted on other specialized websites or in publications designed for underrepresented populations. All position descriptions include the requirement that applicants be “culturally competent with experience and/or knowledge working with students, staff and/or faculty of diverse identities such as socioeconomic level, sexual orientation, race, ethnicity, and veterans, including those with different levels of academic preparation and varying physical and learning abilities.” Position descriptions also contain a preferred requirement that candidates be bilingual.

[Human Resources](#) conducts special training and retraining for Search Committee members that incorporate an emphasis on bias reduction and the importance of diversity for creating an inclusive, welcoming environment and richness of perspectives. The [Affirmative Action Officer](#) certifies the applicant, interview, and finalists pools to ensure that each pool is sufficiently diverse and has the option to recommend reopening the search, if required.

Retention strategies for FT and PT faculty include initiatives at both the departmental and college levels and range from new faculty seminars and workshops to mentoring and participation on Faculty Staff Association (FSA) committees. Targeted retention strategies for PT faculty include establishment of an Adjunct Faculty Liaison position and [Adjunct Junction](#), a website for PT faculty.

While the implementation of the above strategies has resulted in an increase of new underrepresented FT faculty, the significant 2014-2018 decline in annual enrollment from 6,002 to 5,018 FTE students has resulted in a subsequent substantial decrease in the number of course sections requiring PT faculty. For those sections that do open, the [Massachusetts Community College Council DCE Collective Bargaining Agreement](#) impacts the hiring of faculty from underrepresented populations in two ways. First, it requires that priority be given to PT faculty who have reached the threshold for reappointment (teaching five courses over three consecutive semesters) and who are then added to the official seniority list for each area. Historically, this list does not include a significant percentage from underrepresented populations. Second, the contract also requires that faculty who have regularly been assigned two or more sections continue to be assigned to multiple sections. Although there have been fewer opportunities for new PT faculty hires, the percentage of underrepresented PT faculty has increased slightly from 8% in 2014-2015 to 10% in 2018-2019. Whenever possible, the interview process for a PT candidate involves a small team composed of the division dean, department chair, and/or one-two faculty members, all of whom have completed the Search Committee training provided by Human Resources. The FT and PT hiring processes are closely aligned. However, timing and faculty availability create some practical limitations to the part-time hiring process.

INTEGRATING PART-TIME FACULTY INTO COLLEGE

PT instructors, who comprise more than 75% of faculty, are considered full members of the college faculty and are integrated into the college in many ways and through a variety of opportunities. All PT faculty are invited to attend the all-college New Faculty Orientation Day held each semester and to participate in face-to-face and online professional development opportunities offered throughout the year. They are also supported in attending conferences. Stipends are provided for some training, such as that related to assessment or course redesign. At the division level, all PT faculty are invited to attend divisional and departmental meetings and are included in faculty emails related to divisional/departmental programming and plans. Deans, department chairs and/or program coordinators, and FT faculty provide support and mentoring to PT faculty, particularly those new to the college. The combination of professional development opportunities, ongoing informal mentoring, as well as periodic classroom observations and regular student evaluation, insures that new PT faculty have access to a broad range of input and support.

To complement the support provided at the divisional and departmental levels to integrate faculty into the college, the position of Adjunct Faculty Liaison, first established in 2013, has been continued. One of the most significant projects completed by the first Adjunct Faculty Liaison was to create “[Adjunct Junction](#),” a website specifically devoted to providing PT faculty with information and resources. The site includes a checklist for new PT faculty and onboarding information from Human Resources as well as resources related to all aspects of teaching, including syllabus design, instructional policies and procedures, student success and behavior, faculty library guide, and professional development opportunities. The current Adjunct Faculty Liaison was formerly a PT faculty member and an assistant dean and now serves as Assistant Professor of History. In addition to regularly updating the Adjunct Junction web page, she welcomes PT faculty at the New Faculty Orientation and communicates via email with all PT faculty at least once per semester, informing them of new initiatives or alterations in college policies that will impact them, such as changes in course add/drop requirements. In addition, she encourages PT faculty to contact her if they have questions or concerns, so that she can direct them to the appropriate resources or facilitate a resolution to specific situations. She encourages PT faculty to attend meetings; access [professional development funding](#); develop [mini grant](#) proposals; and participate in the assessment process, including [training in the use of Blackboard Outcomes](#), a method for the digital collection and scoring of artifacts.

During the past five years, despite collective bargaining constraints, Middlesex has expanded its efforts not only to recruit and hire FT and PT faculty from underrepresented populations, but also to integrate and retain them. It will continue to seek ways to build diverse applicant pools and to support faculty participation in multiple college initiatives.

Area of Emphasis Three

Advancing the Culture of Assessment

Middlesex Community College’s ongoing commitment to building a culture of assessment and using assessment findings to improve student learning outcomes was recognized in 2017 when it was awarded an Excellence in Assessment (EIA) designation by the National Institute for Learning Outcomes Assessment (NILOA) at the annual meeting of the [Association of American Colleges & Universities](#). Middlesex was one of just five members of the [2017 class of EIA designees](#) and one of only two community colleges recognized.

Within the past five years, four important changes have been made to foster the continued growth and impact of assessment initiatives: the faculty-chaired General Education and Assessment Committees now lead assessment efforts; an all-college [Assessment Day](#) is held annually; [Course Student Learning Outcomes](#) (CSLOs) have been established; and [Blackboard Outcomes](#) has been selected as the assessment management system.

Assessment Leadership: For several years, a Dean of Assessment, working closely with faculty and staff, spearheaded the development of assessment practices and processes. In 2016, with increased faculty and staff ownership of assessment processes and in preparation for the 2017 retirement of the dean, an Assessment Task Force was formed to strategize the decentralization and democratization of assessment work. Three subcommittees (Assessment Committee, Program Review/Evaluation, Assessment Day Models) researched best practices, met with faculty and staff, and developed recommendations presented at the May 2017 Faculty Staff Association (FSA) meeting. One of the noteworthy recommendations was to have the Task Force become a standing FSA Assessment Committee, which occurred in May 2017. Other recommendations that have been adopted included incorporating more student voice in the assessment and program review process (e-portfolios and documentation of student reflection); formalizing ongoing re-assessment of previously assessed PSLOs to “close the loop”; incorporating use of E-Series Forms for Assessment Day work; incentivizing use of the assessment management system; shifting the focus of program review to program efficacy for student learning and success; and linking a Professional Day with Assessment Day, providing an environment for cross-college focus on collaboration and improvement. Supporting this collaboration is Middlesex’s assessment website that offers a range of resources for faculty and staff and is accessed through the college’s portal.

The new assessment structure was officially launched in fall 2018. Faculty chair both the General Education Committee that oversees assessment of institutional student learning outcomes ([ISLOs](#)), and the Assessment Committee that focuses on assessment of program ([PSLOs](#)) and course level (CSLOs) student learning outcomes and the program review process. Both are now permanent committees of the Faculty Staff Association ([FSA](#)). The Assessment Committee Chair, a faculty member in the Science Department, receives one course reassigned time per semester to lead the effort. The large committee includes faculty representation from all academic divisions and several administrators. Institutional Research staff, the Dean of Social Sciences and Online Learning, and a newly hired instructional designer serve as consultants to the committee to assist departments in determining and gathering data and using Blackboard Outcomes and other technologies to complete assessment work. The committee includes two subcommittees (Program Review and Assessment Day) and one General Education liaison, who attends meetings of that FSA committee to determine how the larger committee can support General Education’s assessment goals.

The 2018-2019 assessment process included conducting an information workshop for chairs and coordinators who then met with faculty at the first department meeting in September to review the previous year’s assessment work and decide what to study or measure for AY 2018-19. Additional activities included Assessment Committee members reviewing department planning forms and serving as “valets” to departments to assist them, and a summit with department chairs and deans to provide feedback on 2018-2019 assessment plans.

Assessment Days: In 2015, Middlesex offered its first annual [Assessment Day](#), providing full- and part-time faculty, staff, and administrators an opportunity to gather to examine collaboratively student demonstrations of learning and development in order to improve the college's practice and student growth. In administrative areas, Enrollment Management staff assessed customer service and teamwork skills, and Advising staff reviewed processes for New Student Orientation and Advising sessions to identify assessment methods that would help them to determine intervention efficacy. Faculty, staff, administrators, and students served on assessment teams to determine student fluency with ISLOs and PSLOs. The General Education Assessment Team assessed students' [Quantitative Literacy](#) within General Education courses and disaggregated results by progress to degree. The Institutional-level Assessment Team assessed Middlesex artifacts contributed to the Multistate Collaborative Assessment Project ([MSC](#)) to compare the college's expectations for student learning, as measured with VALUE rubrics, with national scoring of those artifacts. The Offices of Assessment and Professional Development developed templates and resources for program chairs tasked with leading their area in this work and facilitated Assignment Design workshops led by Middlesex faculty with assignment design experience from participation in [NILOA](#)'s [DQP](#) (Degree Qualifications Profile) [Assignment Charrette](#) project, AAC&U's [QC DQP](#) Project and the [MA PIF](#) (Performance Improvement Fund) project. These workshops took place in face-to-face and online formats, facilitating the participation of many part-time faculty. A Middlesex assignment database is under development to showcase faculty work in this area.

In 2016, after a six-month stretch of "work-to-rule" status for Middlesex full-time faculty, faculty and staff were offered the option of using [Assessment Day 2016](#) for either assessment or assignment design work focused on the Critical and Creative Thinking and Problem Solving ISLO with the understanding that we would assess that outcome in 2017. The option of having one of two annual Professional Days set aside for outcomes based curricular improvement was well-received. In [2017](#), faculty and staff worked with their programs/areas on Assessment Day. The General Education Assessment of [Critical and Creative Thinking and Problem Solving](#), in both hard copy and online formats, took place after Assessment Day, in response to 2015 feedback that faculty/staff were conflicted between their program/area responsibilities and their institutional responsibilities. In [2018](#) and [2019](#), each department chose a range of areas to assess based on specific needs. Programs have the flexibility to select the outcome(s) to be assessed or related activity according to their own specific needs. For example, in one year, the Science Department reviewed final lab reports for a specific science course in relation to that course's student learning outcomes; the Advising staff brainstormed ways in which they could determine the efficacy of new Student Orientation and Advising practices recently implemented; and nursing faculty, led by two of their own faculty and with a college instructional designer present for support, worked in a computer room and piloted their use of the new assessment management system to score student work products online using a digital rubric.

The General Education Committee identifies a specific ISLO for assessment each year, with input from the Assessment Committee, and gathers artifacts from faculty and staff. Using Blackboard Outcomes, members of the committee conduct norming sessions, assess the artifacts, and report out to the college community through FSA.

Program chairs and the General Education Chair complete E-Series forms, articulating the data/evidence-based changes planned as a result of their assessment work. These forms are submitted to division deans to facilitate support of program assessment and improvement work, as well as to the Provost for NECHE reporting.

Development of Course Student Learning Outcomes: In 2016, with a strong infrastructure of PSLO/ISLO alignment, program-level curriculum maps illustrating the scaffolded alignment of courses to PSLOs, and a new faculty contract referencing course student learning outcomes (CSLOs) as essential elements of course syllabi, Middlesex began collegewide alignment of CSLOs to existing PSLOs and ISLOs, including the development of common course outcomes for high enrollment, multi-section courses. This work directly supports ongoing departmental and program-level assessments of student learning.

By May 2019, all courses completed the revision process. This highly participatory, transparent, thoughtful process has not only resulted in more consistency across courses, it has made explicit for potential and current students and their families the learning expected to occur in each course.

Assessment Management System: Middlesex has adopted [Blackboard Outcomes Assessment](#) (BOA), a digital system integrated into [Blackboard Learn™](#), as the college's assessment management system. It provides a set of tools that allows faculty and administrators to collect samples of student work that can be used for both institutional and program assessment activities, thus streamlining the assessment process and contributing to the collection and dissemination of outcome data. BOA facilitates the participation of part-time faculty in the assessment process through online submission and scoring of artifacts. It is changing the focus of Assessment Day from hard copy scoring and debriefing to a focus on "closing the loop," utilizing generated data. The college recognizes the need to allow for the "messiness" that ensues in this transition from analog to digital assessment processes and is supporting faculty, staff, and administrators with workshops and online resources.

Assessment activities taking place throughout the year and on Assessment Day are clear evidence of the work done at Middlesex to create an environment in which faculty and staff assessment-related professional development is embedded and self-directed, focusing on examining the impact of college practices on student learning and development and identifying initiatives that respond to the information gained through the assessment process to support student success.

Area of Emphasis Four

Communicating Learning Outcomes

Middlesex engaged in a college-wide effort both to revise/develop student learning outcome expectations for every course in the curriculum and communicate these outcomes clearly. By May 2019, all courses completed the revision process.

Completion of this work ensures students enrolled in courses with multiple sections will receive a more consistent learning experience across the college. Additionally, course student learning outcomes (CSLOs) now appear on course syllabi and are published in the [online course catalog](#); easy access to and transparency of the CSLOs allow students to set realistic expectations for their learning experience.

The Provost and Curriculum Committee Chair launched a three-year CSLOs' revision/development initiative involving faculty from all departments. By providing instruction on how to develop clear, assessable outcomes and offering departments the option to revise courses individually or collectively by completing a [Batch Student Learning Outcomes Form](#) through which departments could submit revised outcomes for every course in a

program on one form, the Curriculum Committee oversaw an inclusive process involving full- and part-time faculty, academic deans, the Curriculum Committee, and the Faculty Student Association (FSA).

The process was designed to meet the following goals:

1. production of a minimum of four-to-seven clear, assessable outcomes for every course offered at the college;
2. redesigned or newly developed courses that preserve academic freedom, encouraging faculty to bring their individual teaching styles and, in some disciplines, curriculum materials (as well as additional outcomes) to the classroom and online environments; and
3. alignment of each course to both program and institutional student learning outcomes.

A college-wide, stipended professional development activity led by the Dean of Assessment introduced chairs, coordinators, and other faculty to the hierarchy of verbs in [Bloom's taxonomy](#) and the concept of "assessable" outcomes. Learning the importance of replacing vague verbs ("understand," "believe," etc.) with precise verbs that accurately reflect what students will be able to do ("describe," "identify," "synthesize") provided faculty clear information to guide development of outcomes. Additional help was provided at the beginning of Curriculum Committee meetings by subgroups trained to sharpen/clarify wording.

Equally important, the process fostered deep discussion among faculty who took a fresh look at their expectations for student learning across courses in their departments. This collaborative exercise generated both anticipated and unanticipated benefits:

1. faculty followed [Bloom's Taxonomy](#) to develop outcomes that accurately reflected expectations for students depending on course level and course content (e.g., an introductory vs. a capstone course);
2. full- and part-time faculty participated in outcomes discussions that often led to rich dialogue about effective pedagogy for achieving common outcomes across multi-section courses;
3. course descriptions and titles were revised with language that reflects a 21st Century learning environment (e.g., technology terms, classroom activities/practices, and select figures listed in humanities and social sciences course descriptions were updated);
4. course prerequisites were examined and changed when necessary, resulting in the removal of "hurdles" unnecessarily blocking access to some courses and the addition of prerequisites when programs added/revised course sequences or course content changed; and
5. completing the Batch form in which all revised courses in a department were submitted at once allowed faculty to see both overlaps and gaps in course content across a program; adjustments created more clear scaffolding and more cohesion within programs.

Division deans vetted each department's CSLOs and attended Curriculum Committee meetings with department chairs and/or other faculty involved in the course revision process. Committee members reviewed each course and each outcome prior to the meeting, paying close attention to the language of the outcomes to make sure each was measurable. The committee then voted to approve the revised courses; upon approval, CSLOs were

presented for a vote at the full FSA meeting. During FSA meetings (the locus of shared governance work), faculty and administrators were invited to voice concerns and/or ask questions before the final vote. Completed course revisions and Batch Course Proposals were uploaded to a folder accessible by faculty and staff.

The revised and new courses adhere to criteria set forth in Appendix A of the [MCCC Collective Bargaining Agreement](#), “Principles Statement on Student Learning Outcomes and Assessment.”

Note: The DCE Collective Bargaining Agreement does not currently include outcomes language.

STANDARD ONE

Mission and Purposes

With numerous changes at Middlesex Community College since the Mission Statement was last revised in January 2012, most notably the hiring of a new President, the college embarked on a planning process in fall 2015 to revisit and reinvigorate the mission, vision, and values as well as to undertake the development of a new strategic plan. A Strategic Planning Committee was formed and charged with leading the process to articulate a new mission statement with accompanying vision and values. Regular meetings were held over eight months. Middlesex’s new [Mission Statement](#), vision, and associated values were widely vetted and endorsed as the result of the comprehensive process that engaged the college and community.

Mission: *Middlesex Community College provides access to affordable education for a diverse community from all ethnic backgrounds and identities, preparing individuals for success and lifelong learning. We promote academic excellence, provide workforce development opportunities, and empower all learners to become productive and socially responsible members of our local and global communities.*

Vision: *Middlesex Community College is committed to academic excellence and transforming lives through educational and career opportunities for all members of our community. We will inspire and prepare individuals to successfully meet the challenges of a rapidly changing world.*

The following nine core values were also defined to guide institutional actions: *Excellence, Affordability and Accessibility, Diversity and Equity, Workforce Development, Integrity and Respect, Innovation, Inclusive Learning and Support, Wellness, and Flexibility.*

The Mission Statement and the Strategic Directions and Goals are posted throughout the college and on the website. They appear in numerous publications, emphasizing their importance and the college’s commitment to them.

STANDARD TWO

Planning and Evaluation

The most recent strategic planning process, conducted by the Strategic Planning Committee in 2015-2016, was similar to previous Middlesex planning initiatives. It engaged a wide range of internal and external stakeholders and was coordinated with the [MA Department of Higher Education's efforts to support strategic planning](#) across the public higher education system. In October 2015, a strategic planning kick-off event featured [Dr. James Honan](#), a consultant on strategic planning and resource allocation. More than 75 individuals participated from both the college and community. As the process progressed, inclusiveness was highly valued and encouraged through divisional forums that generated input from 100 faculty; All-College Professional Day feedback sessions that engaged 200 faculty and staff members in discussions about institutional priorities; and six student forums that gathered perspectives from 132 students on institutional strengths and areas for improvement. Additional feedback from members of the college was then elicited through four collegewide forums facilitated by committee co-chairs, while two community forums, hosted by the President, gathered valuable input from community partners. The Strategic Plan was reviewed in its final form by the Faculty Staff Association (FSA) as well as by external partners at the annual Advisory Board Dinner in April 2016. Approval and adoption occurred at the Middlesex Board of Trustees meeting in May 2016.

The new strategic plan, [Transformative Education FY 2016-2020](#), identifies five foundational directions and accompanying goals. These directions – Teaching and Learning, Access and Student Success, Community Partnerships, Technology, and Institutional Effectiveness – and associated goals provide the framework for prioritizing both ongoing work as well as new initiatives. Accountability measures track and assess progress through the collection and analysis of student success data to provide the means to gauge and measure progress to defined outcomes for each goal.

The college establishes annual priorities articulated by the [President's Cabinet](#) to operationalize the strategic directions and goals for each year. The primary college divisions then align their unit plans to these priorities. For AY 2018-2019, the following priorities were developed in August 2018: reimagining instructional and student spaces, revising and updating the enrollment management plan, building institutional effectiveness, forming resilient partnerships and collaborations, and managing capital campaigns. These operational priorities are further aligned to the college budget process to ensure they receive the resources needed for their success.

Consistent with projections in the [NEASC 2014 Self-Study](#), the operationalization of the strategic plan is progressing to one that is data informed and evidence driven with the incorporation of dashboards for data-on-demand and trend analysis. The college continues to provide professional development training to administrators, faculty, and staff to increase use of data tools that inform decision making. The hiring of an analytics officer in summer 2018 is supporting more sophisticated analysis of data to inform planning.

STANDARD THREE

Organization and Governance

The structure and responsibilities of the [Board of Trustees](#), Faculty and Staff Association ([FSA](#)), and Student Union Government Association ([SUGA](#)) remain largely the same with each body having defined roles and responsibilities. The Board of Trustees membership and Chairman have changed as the result of new appointments at the state level as well as the expiration of several members' five-year terms. Board subcommittees have been revised under the new membership; Student Success and Diversity merged into one subcommittee and a Development subcommittee was added. A student trustee, elected each year by the student body, is an active member of the board and provides the perspective and voice of the student body to the board.

The appointment of the new [President](#) in early 2015 led to a realignment of the executive staff, now composed of twelve senior administrators who form the President's Cabinet and have the authority to fully execute college operations and guide the fulfillment of the strategic plan and its priorities. The connections and working relationships with faculty and staff through the Massachusetts Community College Council ([MCCC](#)); American Federation of County, State, and Municipal Employees ([AFSCME](#)); and the Management Association Committee on Employee Relations (MACER) are strong. The college leadership is mindful of the importance of effective communications strategies as the basis for positive relationships among the various college constituencies represented by these bodies and proactively communicates about, and engages the college community in, matters of importance. Regular communication occurs through Convocation; [FSA meetings](#); topical [Open Forums](#); the [Middlesex Connector](#), a crowd-sourced newsletter; Listening Sessions; and emails and letters from the President's Office. The FSA, a critical entity for exercising shared governance and fostering collegewide communication, maintains subcommittees with college employees actively participating. In the past year, FSA instituted an ad hoc by-laws committee to review and update FSA policies, practices, and procedures.

STANDARD FOUR

The Academic Program

The Academic Program at Middlesex reflects its responsiveness to external factors in the local community, state, and region and its commitment to improve the graduation rate by strengthening the pathways for all students to achieve a credential and/or prepare for successful transfer. The hiring of a new college president, a demographic shift marking a decrease in traditional college-aged students, a booming economy in need of middle- and high-skills workers, and a public higher education system committed to shoring up connections between the community college and university system have informed curricular changes from 2014-2019.

Three additional sources have provided the philosophical direction, analytical framework, and financial support needed to effect these changes: participation in [Complete College America](#) (CCA), a national alliance committed to finding strategies to remove barriers to success for our most vulnerable students; the hiring of

[Gray Associates](#), a consulting firm that uses market-based data to provide information on academic program offerings; and the awarding of [DOL GPSTEM](#), a statewide [DOL TACCCT](#) grant, which supported the implementation of several evidenced-based CCA practices within STEM programs and then, by extension, throughout the college. Initiatives implemented are described below and fall into three major categories: Development of Academic and Pathways Maps, Assessment and Alignment of Programs and Courses, and Redesign of the Academic Schedule.

Pathways Maps - Academic Program, Academic Pathways, and Career: Following CCA's research that indicates national trends showing students who take too few credits, delay gateway courses, and do not know which field to pursue are likely to become part of the 95% of community college students who do not complete a degree in two years, Middlesex has developed a series of maps: [Academic Program Maps](#), [Pathways Maps](#) and Career Pathways Maps. These tools demystify the process of degree completion and help students stay on track.

The [Academic Program Maps](#), developed collaboratively by advisors and faculty, use a two-year, 15-credit per semester format to provide a snapshot of the requirements, including pre-requisite and milestone courses, needed to complete each of the 70+ degree and certificate programs. Maps can be adapted for part-time students and include notes on advising, transfer, and careers. To support this work, the Mathematics Department analyzed all degree programs to ensure each program's pathway included the correct math course(s). Creating a two-pathways system (algebraic and quantitative) to tailor students' math education to their programs of study, the Mathematics Department was able to modify, shorten and, in some cases, eliminate developmental algebraic modules.

The [Academic Pathways Maps](#) are designed for first-semester students who may still be exploring academic interests and career opportunities. They cover seven broad academic areas (Arts, Humanities and Communications; Business; Education; Health; Public Service; STEM; and Social Sciences). Each map outlines courses to be taken during the first semester, including one related to career exploration.

Career Pathway Maps were developed for the Biotechnology, IT Cybersecurity, Digital Forensics and CAD-Engineering programs through the DOL-GPSTEM grant. Timely availability of career information for students in all programs is now possible with the implementation of the Title III-funded EAB Navigate, an integrated planning and advising system.

Assessment and Alignment of Programs and Courses: The cross-college efforts to create Academic Program and Pathways Maps and to develop and revise course outcomes have led to the building of new programs and revising of existing ones.

New and Revised Programs: To respond to the growing economy and shifting workforce development needs, academic divisions and departments have developed 15 new associate's/transfer degrees and certificate programs; revised 81 existing programs; launched 53 new courses; developed/revised student learning outcomes for all courses; and aligned math courses to majors across the college. Additionally, faculty and administrators have participated in MA Department of Higher Education's [statewide initiative](#) to align foundational community college courses with bachelor's degree requirements.

Alignment of Course Outcomes: A collegewide effort to revise courses to include a minimum number of clear, measurable student learning outcomes has occurred over the past three years. The Chair of the Curriculum Committee developed a [Batch Student Learning Outcomes form](#). This enabled departments to engage in an inclusive process with full- and part-time faculty to develop clear outcomes and amend course descriptions and prerequisites so that each course in a given program was aligned with the program and institutional student learning outcomes.

A 2 B /MassTransfer Pathways: Under the guidance of the MA Department of Higher Education, the college's Provost, deans, and faculty worked closely with colleagues across the Commonwealth's community colleges, state universities, and the University of Massachusetts system to develop programs that would allow students who complete 60 credits at their community college to transfer as a junior to a state university. Middlesex currently has 12 programs in the A 2 B/Mass Transfer Pathways with plans for expansion.

Redesign of the Academic Schedule: To meet the varying needs of a diverse student body and allow more time for active learning, the college redesigned its academic schedule, replacing 50-minute, three-day per week classes with either two-day per week 75-minute classes or one-day per week 150-minute classes. Students may now build a one-, two-, three-, four- or five-day schedule during the traditional 16-week semester. Most students create a two- or four-day schedule occurring on Monday-Wednesday/Tuesday-Thursday that allows more flexibility for work and family commitments.

Additionally, to accommodate students who need to accelerate portions of their education, Middlesex expanded summer offerings to include four different start times with some sessions running five weeks and others running eight. Courses can be taken in a face-to-face, hybrid, or online format. The college added four new "mini-mesters," which occur over two eight-week consecutive blocks during the fall and spring semesters and offer courses in all three formats. Student enrollment in "mini-mesters" is rapidly rising. Another new scheduling option is Quick Start, which features three-and-a-half week sessions during May and January. Based on demonstrated student interest, the college will continue to explore creative scheduling options.

More detailed information related to Standard Four is included in Standard Eight, Educational Effectiveness.

STANDARD FIVE

Students

Admissions: The establishment of a Bedford Admissions Office in summer 2014 to complement the Lowell Admissions Office and the creation of three Bedford full-time staff positions as well as additional positions in Lowell, including a Director of Diversity Recruitment, have supported increased student outreach and services. Admissions full-time professional staff has increased from five in 2014 to nine in 2018. Admissions has shifted from a reactive to proactive recruitment model. A targeted recruitment strategy, specifically designed to meet the needs of non-traditional students, focuses on expanding high school initiatives and engaging students in various settings and multiple touch points. This shift incorporates recommendations from

the 2014-2015 [Enrollment Business Process Review](#) as well as the work of the Enrollment Planning Committee and the current Enrollment Working Group (EWG). The EWG is chaired by the Provost, has representation from across the college (including all academic division deans), meets biweekly, and has developed a 2018-2021 Enrollment Management and Retention Plan. This plan includes strategies to address the varied needs of both full- and part-time students ranging from recent high school graduates to older adults.

Multiple new recruitment approaches are being implemented. To support narrowing the achievement gap, Admissions offers the [Pathways to Success](#) program in collaboration with high schools that identify first-generation, low-income students who need assistance navigating the admissions process. Students spend a day at Middlesex where they tour the campus; attend a class; and meet with admissions, financial aid, support services, and student engagement staff. On-the-Spot Admissions events are now conducted at 14 high schools with additional on-site registration events at the college's two top feeder high schools. New campus-based bilingual admissions and financial literacy sessions are offered to families. In 2016, the Reserved Placement Program ([RPP](#)), a partnership with UMass - Lowell ([UML](#)), was established to accept into the Middlesex Honors Program students who meet UML standards, but cannot be accommodated in UML programs until January. The redesign of admissions materials, production of a new admissions video, use of document imaging, and implementation of EAB Navigate further support admissions and enrollment processes.

Dual Enrollment: Expanded dual enrollment opportunities have resulted in concurrent enrollment increasing from four high schools in 2014 to 16 high schools in 2018, in addition to higher individual enrollments. The number of dual enrolled students increased from 107 in fall 2010 to 1,111 in fall 2018. This is a direct result of the intensive partnership development process Middlesex uses for concurrent enrollment and the considerable attention paid to the co-construction and co-creation of course offerings that meet the needs of students at individual high schools. The program provides an effective preparation pathway for students to enter college. The percentage of dual enrolled students who went on to enroll in a degree program at Middlesex within two years has remained fairly stable since fall 2013, at over 20%, until fall 2016, when it dropped to 15%. The majority of other dual enrolled students enrolled in other four-year colleges and universities.

In January 2019, Middlesex received the Commonwealth's [Early College](#) Designation for partnerships with two area high school, Lowell High School and Nashoba Valley Technical High School. The Early College Designation recognizes that these high school/college partnerships adhere to five fundamental design principles for early college programs: equitable access; academic pathways; robust student support; connections to career; and deep, high-quality partnerships. The Early College model seeks to provide students from groups traditionally underrepresented in higher education with early preparation and experiences to help them complete college and prepare for careers. Together these partnerships will serve more than 800 students per year.

Student Services and Co-Curricular Experiences: To counter enrollment declines, Middlesex continues to identify new strategies for increasing persistence, retention, and completion as demonstrated by changes in advising, tutoring, personal and career counseling, orientation, and services to multicultural and LGBTQ+ students. [MCC 360](#), a five-year Title III grant awarded in fall 2016, is aimed at transforming the student experience. It includes the development of student self-service processes related to enrollment functions and an integrated digital planning and advising system (IPAS). The academic success of students will be shaped by building a digital "360" degree view of student progress that will provide faculty, administrators, and students access to predictive analytics to guide timely decision-making and interventions.

Through the Title III grant, Middlesex purchased [EAB Navigate](#) as the integrated planning and advising system to enhance the student self-service options and [HelioCampus](#), a data warehouse and analytics platform with visualization tools, to support predictive analytics. Navigate, piloted in fall 2018 with incoming students, offers a streamlined onboarding experience that offers a clear path to enrollment, while providing tips and adapting to student progress along the way. Navigate aids students in academic pathway selection by suggesting top programs that match their goals and interest, and it incorporates online career assessment linked to current labor market data. Navigate's advising functionality facilitates early alerts, scheduling, and care coordination strategy and services. Overall, Navigate supports the college's efforts to provide more personalized student communication and to maximize advisor time. [HelioCampus](#) was implemented in 2018-2019. A data analytics consultant from [HelioCampus](#) continues to work with the college to customize implementation. Finally, a centralized service center in Bedford has been created to provide better coordination among the admissions, academic and transfer advising, financial aid, and registration processes.

Another new five-year grant, US DOE [AANAPISI](#), supported establishment of an [Asian American Connections Center](#) on the Lowell campus. Focused on increasing retention, graduation, and transfer rates of Asian American students, the Center offers advising, mentoring, and leadership development opportunities as well as cultural competency workshops for faculty and staff. New curriculum modules are being developed to infuse an understanding of Asian culture across the curriculum. The grant also funded establishment of a new language lab integral to the [Intensive English Language Institute](#) and available to Asian and other students to assist them to achieve English competency.

The [Office of Student Affairs](#) has implemented numerous programming changes and new initiatives to increase student success. Orientation has evolved from a half-day informational session to a more comprehensive, multi-pronged program. The roles of the two personal counselors have been redefined to include not only initial short-term services to students in need, but also increased, proactive outreach to divisions and departments, along with direct support and training to faculty and staff to assist them in dealing with student behavioral and classroom management issues. In 2018, the college hired a second full-time career counselor, making it possible to provide more one-on-one career counseling and the development of SPARK, a career discovery program aimed at career exploration tied to specific courses. The [Academic Pathways Center](#), formerly focused on students in Health and STEM programs, now serves all students and offers proactive advising, access to computers and printers, individual and group study space, peer mentoring, academic and career workshops, field trips, math scholarships, and summer bridge programs.

While the college no longer offers health services since students are required by state law to have their own health insurance providers, it provides a wide array of educational and wellness programming and activities designed to support students' physical, emotional and mental health. The new FSA Wellness Committee, composed of a diverse collection of employees, facilitates formal and informal assessment regarding campus climate, engages in dialogue about institutional wellness, makes wellness-related recommendations to college leadership, and makes informed and specific recommendations regarding the trajectory of wellness programming on campus. Through Middlesex's Center for [Leadership & Engagement](#), students and staff worked together to establish a [food pantry](#) on each campus in 2017. In addition, Middlesex is helping homeless students through a collaborative, state-sponsored [DHE Housing Pilot Program](#), which started in spring 2019.

With an increasingly diverse student body, the college has opened a Multicultural Center on the Bedford campus in addition to the Multicultural Center in Lowell. The centers offer educational, social, cultural, peer mentoring, and leadership development programs. The [Spectrum Club](#) serves as an important resource for LGBTQ+ students, along with a new online [Virtual Center](#). Faculty and staff may also access resources available through these initiatives that are aimed at fostering an inclusive and welcoming community for everyone.

Academic tutoring is provided through the Academic Centers for Enrichment ([ACE](#)). A significant change is the movement from a professional tutoring to a certified peer tutoring model to provide individual and group tutoring and student skills support both online and in person. In addition, Middlesex's nationally recognized Supplemental Instruction Program ([SI](#)), begun in 2012 with 13 courses sections, has undergone tremendous expansion and in fall 2017 supported 71 course sections with 1,098 students enrolled in challenging courses. A total of 564 of those students accessed SI services delivered by trained student SI Leaders. Middlesex data consistently shows that most students accessing SI attain higher grades and are more likely to complete a course than those who do not. Two new initiatives were begun in fall 2018: the Blackboard (Bb) Ambassadors program to provide peer tutor instructional technology support for students in online courses (20 sections) and the Honors Mentor program to support Honors students with research and writing. ACE also hosts a biennial [Northeast Regional Supplemental Instructional Conference](#).

STANDARD SIX

Teaching, Learning, and Scholarship

Faculty and Academic Staff: Since the publication of the [NEASC 2014 Self-Study](#), 38 new faculty have been hired, and the number of full-time faculty has decreased from 125 to 118. The college continues its commitment to replace full-time faculty vacancies with new full-time faculty. Human Resources instituted [new policies and procedures](#) to make the selection process more cost effective and equitable and to continue to develop a well-qualified, diverse group of full-time faculty. The new policy requires the first round of interviews for all candidates be conducted via web conferencing if any candidate must travel more than 100 miles to campus. Second interviews still allow for travel reimbursement when candidates meet the distance criteria. All full-time faculty and staff are interviewed by the Provost with final hiring recommendations made to the President. When hiring part-time faculty, Human Resources now vets the applicant pool, as it does with full-time faculty, to ensure sufficient diversity among candidates. Additionally, when possible, both a department chair and dean or designee conduct each interview to ensure candidates will be well-qualified, skilled instructors.

For many years the college has offered a semester-long institute for new full-time faculty. In fall 2018, with funding through the Title III grant, Middlesex revamped, expanded, and renamed this program, calling it the Transformative Learning Institute (TLI), which supports the Faculty Area of Emphasis. Two faculty members facilitate the new program, which begins with a day-long orientation run by Human Resources and continues with a semester-long program during which new, returning, and veteran faculty complete the Association of College and University Educators ([ACUE](#)) Course on [Effective Teaching Practice](#), an online educational resource nationally recognized for promoting best practices in teaching. The ACUE program requires faculty

participants to reflect on each activity they choose to implement in their courses; these reflections serve as a critical assessment tool by which faculty can examine their practice. In addition to completing the ACUE modules, new faculty engage in a mentoring relationship with a senior faculty member and attend monthly meetings with the entire cohort. This pilot provides course reassigned time or stipends to participants and will be assessed upon completion.

Over the past few years, Middlesex has expanded its full-time professional and academic staff, including an increase in the number of full-time advisors and librarians. Through a contractual impact bargaining process, nine advisors' and five librarians' positions have been converted from part time to full time. These full-time positions have resulted in expanded services to students in advising and the libraries. The libraries now have full-time staffing for the Circulation Desk and Reference/Instruction services on both campuses as well as an additional position to support online education, research clinics, and services for faculty. Additionally, through an agreement with the local chapter of MCCC, professional staff teaching in the [World Languages Institute](#), which offers curricula through a flexible studies model, are now classified as part-time faculty.

Teaching and Learning: Over the last five years, the college has altered its professional development model to move the bulk of faculty professional development under the purview of the Middlesex Scholarship of Teaching & Learning ([SoTL](#)) Community, coordinated by two faculty members. The group currently has close to 200 members, including full- and part-time faculty from all divisions and many key administrators. Among initiatives started by the group is the 100% Course Completion Initiative in which 22 faculty worked collaboratively to improve student retention. A second phase of the project began in 2019. Other initiatives include the Transformative Learning Institute (TLI), an annual winter retreat, annual spring conference, collegewide book club, Transparency in Learning and Teaching ([TILT](#)) national program, several affiliated workshops, and a one-credit action research course for students.

As part of the Academic and Student Affairs' reorganization, the Provost restructured an academic dean's position to provide clear oversight for online learning – a growth area in a time of declining enrollment. The Dean of Humanities and Social Sciences is now the Dean of Social Sciences, Interdisciplinary Studies, and Online/Evening/Weekend Education. This dean also oversees the Liberal Arts and Sciences Associate of Arts degree. To replace a recently retired instructional designer, the college hired a new person who reports to this dean and supports faculty using the [Blackboard Learning Management System](#) in online, hybrid, and face-to-face formats and assists with other instructional technology needs.

To strengthen developmental education and accelerate student progress, the college has revamped both its Math and English programs, making two major adjustments: 1) the development and scale-up of co-requisite courses; and 2) the introduction of Multiple Measures placement for incoming students. These initiatives are described in detail in Standard Eight, Educational Effectiveness.

Finally, with respect to teaching with technology, 16 faculty and more than 2,000 students have participated in an iPad pilot in which students in courses ranging from the Co-requisite Writing Skills Seminar through English Composition II use [iPads](#) to learn in specially equipped [Apple](#) classrooms. Over the past four semesters, faculty have undergone a series of trainings, with one faculty member being trained as an Apple Educator. Plans to scale up the program in English and in other departments are underway.

STANDARD SEVEN

Institutional Resources

Human Resources: Middlesex Community College employs a total of 388 full-time and 573 part-time employees. After the retirement of the Director of Human Resources in 2015, the Assistant Director assumed the Director's position for a brief period of time. After her departure, there was an interim director for six months. A new Executive Director of Human Resources, appointed in December 2016 and promoted to Vice President in January 2019, serves on the Cabinet and reports directly to the President, a change from the previous structure. Human Resources (HR) has focused on aligning staffing with areas of work function: organizational and employee development; hiring, compensation and benefits; employee and labor relations; diversity, equity, and inclusion; and management of human resources data and systems. Key staffing additions include an Assistant Director with responsibilities for affirmative action and diversity and equity affairs; an HR Generalist with responsibility for HR information systems and data collection to support analysis, reporting, and compliance; and a Labor Relations Specialist to assist staff throughout the college to understand, manage, and comply with collective bargaining agreements. The Director of Professional Instructional Development has been reassigned from Academic Affairs to Human Resources to expand training opportunities. The Financial and Human Resources Business Process Review, conducted by [Grant Thornton](#) consultants and presented in October 2018, identified key recommendations for improvement among which are expanding use of technology and Banner capabilities; developing, updating and communicating policies and procedures; defining the roles of HR staff and cross training; improving integration among college departments, particularly between HR and payroll; and revising hiring, onboarding, and separation procedures for all employee groups. An action plan to address these recommendations is being developed and will be implemented over the next three years.

Financial Resources: After the departure of the longtime Executive Vice President in 2015, two interim chief financial officers oversaw the department for two years. In June 2017, a permanent Executive Director of Finance/Chief Financial Officer (CFO) joined the college and was promoted to Vice President in January 2019. One of the most important challenges faced by Middlesex has been to develop a stable budget that positions the college for financial sustainability and responds to the ongoing decline in credit hour enrollment (2014 -180,000 hrs.; 2018 -150,000 hrs.). In 2016, this decline resulted in a projected \$4.2 million deficit from decreased enrollment due to changing demographics. Other factors affecting the budget include level state funding, much-needed upgrading of campus infrastructure, and the recently completed construction of an Academic Arts Center.

To respond effectively to the projected deficit, the President and his Cabinet implemented a [Strategic Transformation](#) process. The process involved a review of enrollment and financial data projections, an all-college summit in October 2016, and two Cabinet retreats. More than 400 faculty and staff worked together to generate ideas to increase enrollment, retention, revenue, and efficiency. These were then reviewed at the Cabinet retreats by senior leadership, who identified the crucial actions to be taken. Key initiatives included offering an Early Retirement Incentive Plan accessed by 32 employees; restructuring position job descriptions and eliminating nine positions; reducing part-time positions and overtime; consolidating and reducing hours of operation for energy savings; introducing new software systems and processes; implementing major energy reduction plans; developing strategies to increase enrollment, retention, and revenue; and validating academic

program offerings and schedules that meet market demand. As a result of the implementation of the Strategic Transformation recommendations, along with tuition and fee increases, the college has maintained a balanced budget.

Steps have been taken to make the entire budget process more transparent with the Vice President and his staff meeting with all departments to review and discuss budget needs and identify priorities that reflect strategic goals. In FY19, all department priorities were funded to support student success. Fees were increased for higher cost programs, including a fee for technology and facilities.

Other steps taken by Finance to increase transparency and budget understanding and monitoring include digitizing all finance-related documents for easier and more effective information gathering; emailing monthly three-year budget trend reports to department heads; and providing quarterly summary financial statements to the Cabinet and Board of Trustees.

Observations and recommendations from the Grant Thornton Business Process Review of Finance and Human Resources were shared at a college team meeting in October 2018. The Finance and Human Resources teams are developing action plans to address the recommendations over the next three years, including upgrading [Ellucian Banner](#) modules; streamlining the [HRCMS](#) process with Banner financial reporting; developing policy, procedures, and work flow processes; and increasing professional development training.

Donor relations and fundraising initiatives have continued to expand, as the college seeks increased support from private sources, including individuals and corporations. In 2016, as part of the reorganization process, the position of Executive Director of Institutional Advancement was established and filled by a staff member with significant experience in community and corporate relations. In 2018, Middlesex received the largest, single named private donation in its history from the Donahue Family to assist in funding arts education offered through the recently opened [Richard and Nancy Donahue Family Academic Arts Center](#). A new [Dean of College Advancement](#) joined Middlesex in August 2018 to oversee further expansion of giving programs and explore launching the college's first capital campaign. The college has set goals of \$1.5 million for the Aspire Campaign to support the Academic Arts Center; \$200,000 for its spring fundraiser; and \$50,000 for the Middlesex Fund, an annual giving program. Through establishment of an [Alumni Association](#) two years ago and implementation of several new fundraising initiatives, Middlesex is laying the groundwork for significantly increasing financial support.

In 2019, the college created an [Institutional Effectiveness](#) area led by an Executive Director. The area includes the [Office of Resource Development](#), which has historically secured multiple large grants to support programmatic activities, the [Office of Institutional Research and Analytics](#), and institutional planning initiatives. The new position of an Analytics Officer will spearhead predictive analytics and contribute to evidenced-based decision-making efforts. Grants received within the past five years include awards from [DOL-GPSTEM](#) (sub-award of \$525,000); [US DOE - Title III](#) (FY16 \$2,205,024); [AANAPISI](#) (FY16 \$1,728,140); [MA Skills Capital Fund](#) (FY16 \$117,024; FY17 \$489,750; FY19 \$499,254 and \$124,262); [MA Life Sciences Center](#) (FY14 \$3,000,000); and [MA Cultural Council Facilities Fund](#) (FY16 \$113,000).

Information Resources: After 25 years with the NOBLE library system, Middlesex became one of seven founding members of a new statewide library network for public higher education institutions, Higher Education Libraries of Massachusetts ([HELM](#)), which was established in 2017 and is supported by the Fenway Library Organization ([FLO](#)). The network represents a significant cost savings to members, while also allowing colleges to utilize an open source common catalog, expand their academic resources, share collections, and take advantage of group purchasing. The cost savings has permitted Middlesex to add more database resources, primary of which is the [EBSCO Discovery](#) platform that provides access to a wide range of full text and bibliographic databases designed for research. In having access to Discovery, students gain experience using this database and are prepared for utilizing it at four-year colleges and universities.

Physical Resources: Several major projects have been completed during the past five years to support programs and services, among which are the transformation of the former Boston and Maine Railway Station into a state-of-the-art [Academic Arts Center](#); construction of a cybersecurity lab and server room; renovation of English, math, engineering, computer-aided design ([CAD](#)) and academic resource labs; conversion of the entire first floor of the Bedford Enrollment Center into a multiservice student enrollment area; and completion of some Americans with Disabilities Act (ADA) updates. In June 2018, Middlesex began an ADA Strategic Compliance Assessment, part of which involved the development of an implementation plan with a “road map” to address high priority recommendations that support ongoing compliance.

Deferred maintenance projects include the continued upgrading of HVAC systems on both campuses. A 10-year deferred maintenance/ADA plan was developed by [Sightlines](#) in FY 2018 for the MA Department of Capital Asset Management and Maintenance ([DCAMM](#)) and the college to address deferred maintenance on both campuses, which exceeds \$70 million. The [Commonwealth of Massachusetts Higher Education Bond Bill](#) was passed in July 2018 and will provide \$8.6 million deferred maintenance funding to the college over the next five years.

In spring 2018, a Classroom Optimization Taskforce was created to improve the teaching and learning spaces on both campuses. The committee, chaired by a dean and faculty member, is composed of faculty from all divisions and staff from Disability Support Services and the Registrar’s Office. It worked with Facilities, Information Technology, Purchasing, and the Chief Administrative Officer to begin the renovation of teaching spaces and to reduce the student maximum capacity for some classrooms. As part of the optimization work, Facilities staff upgraded (painted and replaced ceiling tiles, carpet, and wiring) 11 classrooms, the Lowell Multicultural Center and the [Cowan Center](#) lobby. Three classrooms were equipped with new furniture and serve as models of active learning spaces. The classroom optimization project will continue over the next several years.

Information Technology: In 2016, to ensure more effective and efficient delivery of information technology ([IT](#)) services, Middlesex ended its contract with [CampusWorks](#), an external organization that had overseen IT systems and services for 15 years. The college’s Director of Academic Technology Services, who reported to the Provost, was named the Chief Information Officer (CIO), reporting to the President. He brought knowledge of both overall IT requirements and academic IT needs to the position. Significant changes have been made in staffing, infrastructure, and classroom technology. Principal managers for IT applications, services, and infrastructure were appointed from current staff. Infrastructure improvements include the enhancement of the Virtual Desktop Interface (VDI) through a cost-saving partnership with UMass - Lowell. All specialized labs,

such as engineering, CAD and computer science, utilize VDIs supported by UMass - Lowell, allowing students to access programs remotely from a variety of devices. Other infrastructure improvements include the Banner 9 major upgrade, expansion of the wireless network from 100 – 300 access points, and the implementation of technology infrastructure for [HelioCampus](#). In collaboration with the Provost's Office, IT is supporting iPad use by students enrolled in English courses, a significant change in classroom technology. In 2018, the CIO worked with the Classroom Optimization Taskforce to identify new technological resources for 18 classrooms. Wireless projectors, new teacher stations, advanced whiteboards, and student power desk pods that allow for flexible classroom configurations were installed. Several steps have been taken to improve support services, such as the addition of two full-time service desk staff, assignment of IT technicians to the libraries during the 9 a.m.-2 p.m. peak hours, implementation of an emergency app that allows faculty and staff to access help desk services immediately, and establishment of walk-in services on both campuses.

STANDARD NINE

INTEGRITY, TRANSPARENCY, and PUBLIC DISCLOSURE

Middlesex upholds high ethical standards in its admissions practices, operation of the institution, and its relationships with the college's myriad constituencies and partners. Existing and updated policies, practices, and demographic and performance data are disseminated through a variety of communication channels. The channels include the college's publications, digital and print advertising, website with its improved student portal, social media, and text messaging, which ensure the college community, prospective students, other stakeholders, and the public are receiving clear, accurate, appropriate information.

Integrity: Through constant review of policies, practices, procedures, and data, the college is committed to maintaining institutional integrity. Recent initiatives include Business Process Reviews for Enrollment, Finance, and Human Resources. In another area, the Director of Compliance has institutionalized a series of workshops, which she offers regularly at the following events: Professional Day; department, division and area meetings; and upon request. Topics include [sexual harassment](#) and [bystander intervention training](#). She also holds training workshops for students on [sexual harassment](#), [sexual violence](#), students as victims of crime, bystander intervention training, and Title IX-related sessions for pregnant and parenting students. Workshops are also delivered both at forums and by request in one-credit [First Year Experience](#) courses and at student club meetings.

The college has processes in place to establish that the student who registers in a distance education course or program is the same student who participates in and completes the program and receives the academic credit. This is done through the use of a college issued student ID and student password.

Transparency: The college catalog, published only online, contains comprehensive information related to credit hour, credit transfer policies, costs, and student rights and responsibilities including grievance procedures in compliance with federal regulations relating to Title IV. Beginning in spring 2018, the college began publishing Student Learning Outcomes related to each course in the [online course catalog](#), which is easily accessible.

At the recommendation of the Department of Higher Education's Performance Measurement Working Group, the Community College Council of Presidents has agreed to adopt the Voluntary Frameworks of Accountability (VFA), a platform to integrate and make accessible key data.

The [Office of Institutional Research and Analytics](#), now within the [Institutional Effectiveness](#) area, provides [demographic and performance measurement data](#) through the college website and reports to external entities/agencies. Online formats include data visualization tools, such as Tableau reports, that allow viewers to interact with the data provided.

[MCC Mobile](#), a new app for Apple and Android smartphones and tablets, was developed to provide accessible educational information to students, faculty, and staff. Available information includes class schedules, grades, campus maps, parking information, e-mail, faculty/staff directory, campus news, and events.

To increase transparency and accessibility in Human Resources, the staff is using its Banner system in a more robust way to capture faculty activity, including advancement from one level of professorial rank to the next and to track sabbaticals. Additionally, expanded access to the [faculty salary grid](#) was implemented to ensure consistency across the state regarding faculty progression and to provide employees information to gauge timing of pay increases.

The college's Emergency Management Team has updated its policies and procedures related to its Emergency Alert text system to determine a consistent generator of texts and to dissuade college community members from opting out of the service.

Public Disclosure: In January 2017, the updated [Public Records Law](#) went into effect. To comply with this legislation, the college created policies and procedures for records requests from outside agencies and municipalities regarding access to electronic records, response time for requests, fees, administrative appeals, and attorneys' fees.

STANDARD EIGHT

Educational Effectiveness: The Reflective Essay

INTRODUCTION

Since the publication of the NEASC 2014 Self-Study, Middlesex Community College has faced shifting demographics, economic challenges, and significant changes in leadership across the college. As the institution prepares to celebrate its 50th anniversary in 2020, Middlesex continues to honor its mission to provide access to affordable education for a diverse community and prepare students for success and lifelong learning. To fulfill this commitment, faculty, administrators, and staff have begun to engage in data-informed practices to improve enrollment, persistence, and graduation rates.

The Educational Effectiveness essay reflects the institution's efforts over the last five years to improve student learning. Recognizing that student learning begins with a successful onboarding process and ends with well-prepared students entering a baccalaureate institution or the workforce, this essay highlights work undertaken across the college to improve and measure students' experience at the beginning, middle, and end of their time at Middlesex.

Changes at the course, program, and institutional levels presented in this document reveal an institution that looks both inward and outward, gathering data and researching trends on the institutional, state, and national levels. The work of the past five years has been guided by three documents: the [Middlesex 2016-2020 Strategic Plan, *Transformative Education*](#); the Massachusetts Department of Higher Education's [\(DHE\) *Vision Project*](#); and the groundbreaking book, *Redesigning America's Community Colleges*, by Bailey, Smith Jaggars, and Jenkins of the Community College Research Center ([CCRC](#)) at Columbia University, which outlines the nation's completion agenda for community colleges.

This essay, including description, analysis and projections, reflects a college that fully understands that change is incremental and challenges are monumental. In a time of declining enrollment due to a shift in demographics and an historically low unemployment rate, the college is using an equity lens to bring all students through their degree programs while providing resources necessary to meet the needs of an increasingly diverse student body. Toward that end, the essay reflects the college's commitment to advance the Commonwealth's focus on [equity](#), which seeks to increase access, success, and degree completion or transfer for [historically underserved students](#) whose population marks the one growth area in the state.

Overall, this essay describes progress the college is making to achieve three clear goals: improve access; provide clear pathways for educational and workplace success; and improve persistence, retention, graduation, and transfer rates for all students. This essay documents efforts to continue this trajectory by explaining what students have gained as a result of their education, the assessment of student learning outcomes, the measures of student success, and levels of achievement on mission-related outcomes. The document is organized into six sections: 1) updates on overall persistence, retention, graduation, and transfer rates; 2) changes in English and Math gateway course progression; 3) improvements in STEM (Science, Technology, Engineering and Mathematics) student transfer and completion rates and closing the achievement gap (a DHE performance metric); 4) implementation of guided pathways; 5) progress on institutional, program, and course student learning outcomes; and 6) response to the Massachusetts Board of Higher Education (BHE) equity agenda.

1. UPDATES ON OVERALL PERSISTENCE, RETENTION, GRADUATION, AND TRANSFER RATES

Middlesex continues to experience an enrollment decline. Across the Massachusetts Community College system, [declines](#) have been as high as nine percent; at Middlesex, the Full Time Equivalency (FTE) enrollment rate declined 6.1% between fall 2017 and fall 2018. The persistence rate, which marks the percentage of first-time degree seeking students who begin at Middlesex in the fall and return in the spring, has declined slightly over the past five years. The percentage of students who persisted in the fall 2014 cohort was 72.4%. For the fall 2017 cohort, 69% persisted. Retention of first-time degree seeking students has declined slightly, hovering between 63% - 61% for full-time students over the past three years. Middlesex's retention rate for full-time students ranks third highest among community colleges in the state. Retention of part-time students declined

from 45% to 43% from the fall 2014 to the fall 2017 cohort. The chart below reflects MCC’s retention rates from fall 2011- fall 2018.

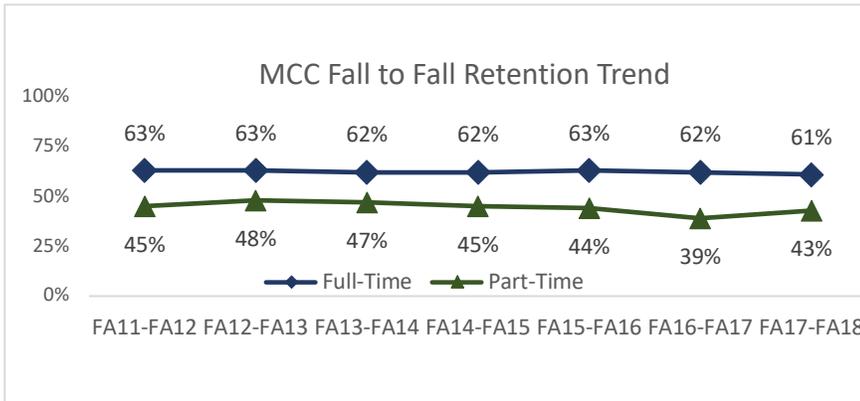


Figure 1
Source: Middlesex Community College Office of Institutional Research and Analytics

While the college’s persistence and retention rates have remained fairly consistent, significant progress has been made with respect to graduation and transfer rates. Since 2013, Middlesex has reached a combined graduation/transfer rate of 40%. Graduation rates for first-time, full-time degree seeking students graduating within 150% of normal time have grown from 13% for the fall 2010 cohort to 21% for the fall 2015 cohort, a 62% increase. For those graduating within four years, the percentage has grown significantly, from 19% to 27%, a 42% increase between the fall 2010 and fall 2014 cohorts. Middlesex is moving in the right direction in supporting students toward degree completion.

The chart below shows graduation rates for first-time, full-time degree seeking students graduating within both 150% and 200% of normal time (three or four years).

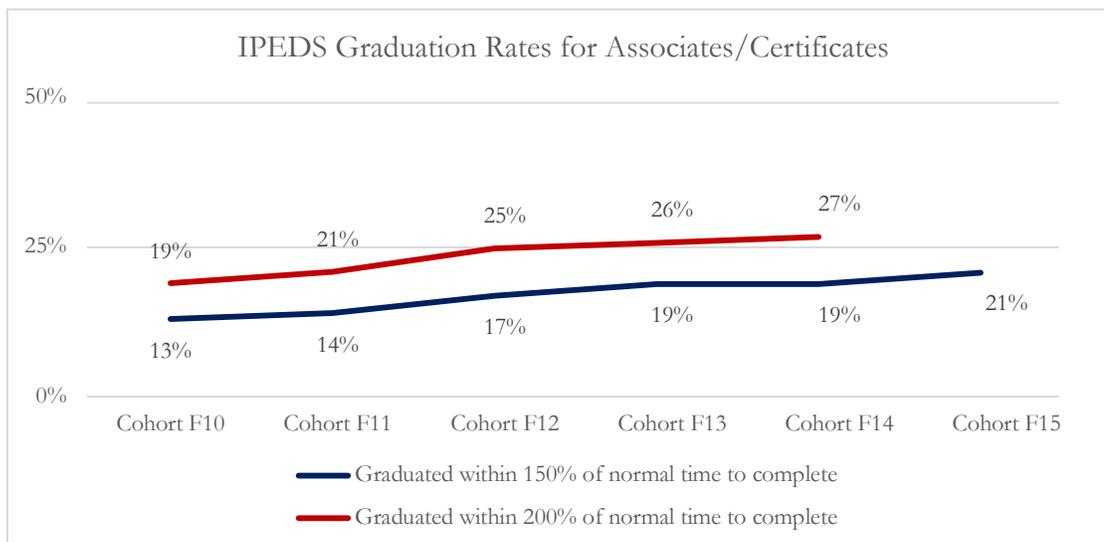


Figure 2
Source: Middlesex Community College Office of Institutional Research and Analytics

Middlesex is in the process of adopting Six-Year Outcomes Measures, part of the Voluntary Framework of Accountability (VFA) led by the American Association of Community Colleges (AACC). This model examines students who first enrolled in a fall term and earned a credential, transferred, attained 30 credits, and/or remained enrolled after six years. The chart below reflects that Middlesex is on par with its peer institutions in the state in all categories except transfer in which it ranks higher.

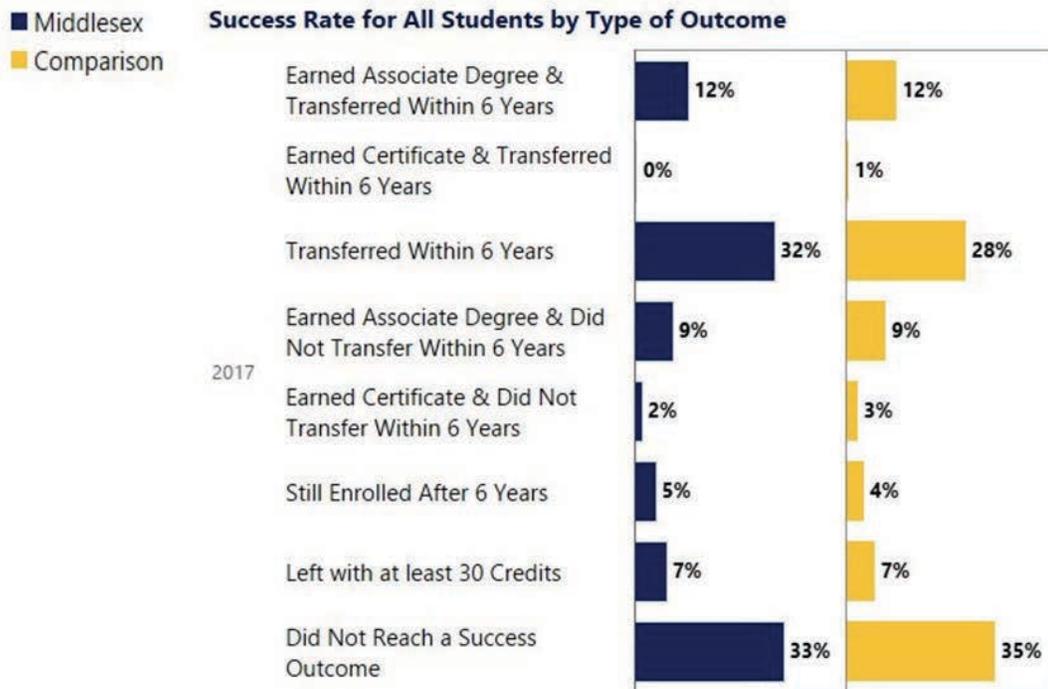


Figure 3
 Source: Massachusetts Department of Higher Education Performance Measurement Reporting System

Longstanding processes and new programs and procedures, which will be described in this essay, explain how a cross-college effort is contributing to increases in the graduation rate.

2. CHANGES IN ENGLISH AND MATH GATEWAY COURSE PROGRESSION

Among first-time, full-time degree seeking cohorts from fall 2012 - fall 2015, more than 90% of students placed into at least one developmental course upon entry to Middlesex. National studies have long shown that community college students trapped in developmental course sequences have a far lower rate of graduating. Since 2011, Middlesex has redesigned developmental English and Math programs, using a backward design approach that ensures students follow an efficient path to achieve their associate degree or transfer goals. The graduation rate among students enrolling in developmental courses has increased 4.4 percentage points from 15.5% for Cohort 2012 to 19.9% for Cohort 2015. New Multiple Measures approaches (described below) will result in even fewer students having to enroll in developmental education.

Another key metric the DHE tracks is completion of gateway courses in Math and English. This measure shows the percentage of first-time, full-time, degree-seeking students who complete college-level English and Math courses by the end of their first year. At Middlesex, 35% percent of first-time, full-time students completed college-level English and Math courses by the end of spring 2017, ranking it the second highest community

college in the state. When disaggregating by race/ethnicity, Black/African American and Latinx students are faring better at Middlesex than at other community colleges in the Massachusetts system. The charts below indicate that Black/African American students at Middlesex complete gateway courses at nearly identical rates as White students. While Latinx students are 11 percentage points behind White students with respect to gateway course completion rates, the gap is closing.

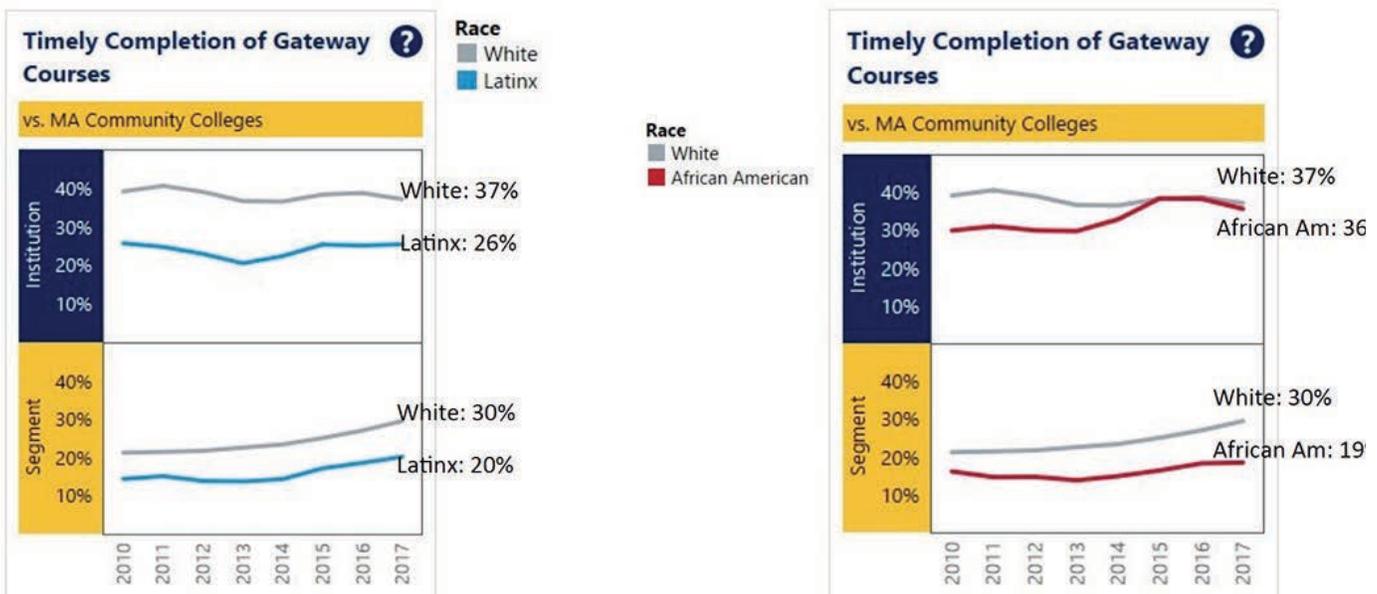


Figure 4
Source: Massachusetts Department of Higher Education Performance Measurement Reporting System

English Initiatives

From fall 2012 to the present, Middlesex has engaged in broad-based reform of its reading and writing program. From a program that formerly offered several levels of developmental reading and writing courses, the college now offers one six-credit combined Reading, Writing, Reasoning (RWR) course designed for students with below 10th grade reading levels and one Accelerated Learning Program (ALP) course modeled after the [Baltimore County Community College program](#), which pairs English Composition I (ENG 101) with a three-credit support course. The program has been brought fully to scale, and results are encouraging.

Two cohorts were analyzed: fall 2013 (Pre-ALP) and fall 2015 (ALP). In fall 2013, 707 students tested into developmental writing and tested out of developmental reading. These students commenced the traditional developmental sequence in which they were required to complete a standalone developmental writing course, Basic Writing, before enrolling in ENG 101. Of these 707 students, 456 enrolled in ENG 101 within the two-year timeframe, and 47% (331 out of 707) passed the course with a C- or better. Out of the 707, 215 went on to take ENG 102 within the two-year timeframe and earned a C- or better, or 30%. This is in contrast to the fall 2015 cohort: a total of 269 students sharing the same characteristics as the fall 2013 cohort (tested into developmental writing and tested out of developmental reading) were followed over a two-year period. As all of these students enrolled in ENG 101 their first semester, their progression through developmental to college-level English was accelerated from the onset. A total of 200 out of 269 (74%) enrolled in ENG 101 and completed it with a C- or better. Further, 138 out of 269, or 51%, enrolled in and completed ENG 102 within

two years. Comparing the former developmental sequence with the ALP sequence, ENG 101 completion is 57.4% higher for ALP students than occurred for students enrolled in the previous model.

Changes in Developmental English since 2015

The college has brought its Accelerated Learning Program (ALP) fully to scale. The ALP program now offers two models: a three-pronged ALP in which one faculty member teaches three courses: two sections of ENG 101 and one section of [ENG 099](#). In each of the ENG 101 sections, seven of the students are ALP students and 15 are ENG 101 students. The seven students in each ENG 101 are enrolled in a writing workshop in which they practice writing skills and complete an exit exam at the end of the semester. The second model, a two-pronged ALP, enrolls 18 developmental students in a six-credit combined course in which they matriculate together through ENG 101 and ENG 099. Data comparing the two- and three-pronged ALP models demonstrated students in both ALP formats were successfully completing ENG 101 at nearly equal rates, and both at higher levels than students taking standalone ENG 101.

Another component to the redesign of developmental English included an overhaul of the English Language Learner (ELL) program to accelerate student progress. In the past, there were 13 possible ELL courses for students to complete before even entering developmental English. Through a backwards design process from ENG 101, the number of courses has been reduced to five. The top-level course leads to ENG 101 either as a standalone section or the co-requisite (ALP) model of ENG 101 and ENG 099. Two versions of the top-level course were developed, one for students predominantly educated outside the US, the other for Generation 1.5 students, who have been predominantly educated within the US.

Mathematics Initiatives

From fall 2013 to fall 2018, Middlesex developed and implemented several changes to the math curriculum. The college completed the modularization of the developmental math sequence, implemented co-requisite remediation, instituted Math Pathways aligned to majors, and implemented Multiple Measures for student placement. In addition, the college ensured that all majors required a college-level math course.

Developmental Math and Math Pathways

On average, only 22% of students test into college-level math. To increase the rate of college-level math completion, the [Mathematics Department](#) revised [Ramp-Up](#), a module-based, computer-aided developmental math program based on the Emporium model. This revision involved the incorporation of the content of the final developmental math course into the [Ramp-Up program](#). This revision, along with the restructuring of existing modules, resulted in Math Pathways aligned to majors. Math Pathways focus students' learning on the math required for their degrees. Those needing pre-calculus take modules 80-85, which concentrate heavily on algebra. Those not needing pre-calculus take modules 70-73, which focus on quantitative reasoning, the math needed to succeed in Statistics ([MAT 177](#)) and Math for Liberal Arts ([MAT 120](#)).

In addition, the [Mathematics Department](#) developed and implemented co-requisite remediation to accelerate student progress to college-level math. Since MAT 177 and MAT 120 are high enrollment courses, the department developed a co-requisite model for each course in which students take the college credit math course along with a one-credit skills development course (MAT 007) taught by the same instructor.

As a result of implementing the Math Pathways and the co-requisite model for MAT 177 and MAT 120, the number of students enrolled in developmental math has decreased by 35 percentage points, with almost 60% of the math enrollment now in college-level math. In addition, the percentage of students in calculus and above has more than doubled. The Math Pathways have shifted students away from algebra when the content is unnecessary for their majors. The table below highlights these significant math enrollment changes.

Math Enrollment Changes					
Fall 2013 – Fall 2018 Total Math Enrollment	Fall 13	Spring 14	Fall 17	Spring 18	Fall 18
Developmental Math	74.27%	67.44%	46.98%	45.07%	40.52%
College Level Math	25.73%	31.65%	53.02%	54.93%	59.48%
Enrollment in Calculus or above	3.02%	4.11%	6.79%	9.25%	8.02%
Enrollment in Quantitative Reasoning Pathway	11.34%	13.54%	31.55%	30.23%	36.04%
Enrollment in Algebraic Pathway	14.37%	18.11%	21.38%	24.63%	23.41%

Source: Middlesex Community College Office of Institutional Research and Analytics

The increased number of students in Math Pathways and the changes in Ramp-Up modules have resulted in an increased percentage of students completing a college-level math course within two years. A total of 27% of students enrolled in the fall 2015 cohort where algebraic modules were eliminated for selected programs completed a college-level math course with a C- or better within two years in comparison to only 19% in the 2013 cohort that placed students into Ramp-Up modules according to math placement scores and required completion of algebra. Further analysis shows that a total of 24% of those completing a college-level math course did so by taking the specific course required by their major, an important factor contributing to program completion.

Overall, since 2013 there has been a 93% increase in college-level math completion among new students at Middlesex and a 157% increase in the number of students taking college-level math the semester immediately after entry, an indication that the focused efforts to accelerate student completion are succeeding.

Co-requisite Pilot for MAT 177 (Statistics) and MAT 120 (Liberal Arts)

In fall 2017, 74 students took the co-requisite course with MAT 177 (Statistics) and 19 took the co-requisite course with MAT 120 (Math for Liberal Arts). MAT 177 without the co-requisite had a 74.2% successful completion rate, while MAT 177 with the co-requisite course had a 60.8% successful completion rate. MAT 120 without the co-requisite had a 77.3% successful completion rate, while MAT

120 with the co-requisite course had a 63.2% successful completion rate. Although the successful completion rate is lower for those students taking the college-level math course with a co-requisite course, without the co-requisite placement initiative, students would have been required to take the developmental math course prior to enrolling in the college-level course. The college continues to evaluate placement into the co-requisite courses and the method to deliver the foundational coursework that students need to succeed in the college-level course. The Department will also implement a co-requisite course for MAT 195 (Pre-Calculus for Engineering and Science) in fall 2019.

Multiple Measures: Math and English

Initially launched as part of a [statewide pilot program](#) in fall 2014, the college implemented a Multiple Measures placement process in which students who graduate from high school with an unweighted high school GPA of 2.7 or higher within the previous three years are eligible to enroll in their first college-level math course for their degree. Those students placed via GPA continue to do at least as well as those students who go through the developmental math sequence. A fall 2017 analysis of MCC students placed into developmental or college-level math courses showed those placed according to GPA had an overall completion rate of 80.2%, while the comparison group completion rate was 71.5%. For fall 2019, Multiple Measures Placement is planned for calculus.

In fall 2018, the [English Department](#), following the example of the [Mathematics Department](#), established these criteria for direct placement into English Composition I (ENG 101): graduation from high school within the previous three years with an overall unweighted GPA of 2.7 or higher; or Verbal (critical reading and writing) SAT score of 500 or higher. These students are exempt from taking the English Accuplacer exam. Students who do not meet these criteria continue to take the Accuplacer exam to determine English placement.

The table on the next page indicates that in fall 2018, of the 1054 students enrolled in ENG 101, 43% (453 students) were placed through GPA/SAT. This program resulted in 440 more students enrolled in standalone ENG 101 in fall 2018 compared to fall 2017 (1054 in fall 2018 versus 614 in fall 2017). In fall 2018, 65% (683 students) completed ENG 101, resulting in 265 more students moving on than in fall 2017 and 164 more students moving on than in fall 2016.

Comparison of ENG 101 Course Completion Rates Pre- and Post-Implementation of Multiple Measures						
Term	CRSE	Total Enrolled	Completed w/C- or Higher	% C- or Higher	D/F/W/I	%DFWI
Fall 2016	ENG 101	817	519	63.5%	298	36.5%
Fall 2017	ENG 101	614	418	68.1%	196	31.9%
Fall 2018	ENG 101	1054	683	64.8%	371	35.2%

Source: Middlesex Community College Office of Institutional Research and Analytics

The table below represents successful completion rates of students who entered ENG 101 through GPA or SAT compared to those entering through Accuplacer. In fall 2018, 70.4% of multiple measures students completed the course with a C- or better compared to 64.8% of students placed by way of the Accuplacer test.

Comparison of ENG 101 Course Completion Rates between GPA/SAT and Accuplacer Placement						
Cohort	CRSE	Total Enrolled	Completed w/C- or Higher	% C- or Higher	D/F/W/I	%DFWI
Fall 2018 Multiple Measure (GPA/SAT) Cohort	ENG 101	453	319	70.4%	134	29.6%
Fall 2018 Accuplacer Cohort	ENG 101	366	237	64.8%	129	35.2%
Fall 2017 Accuplacer Cohort	ENG 101	463	314	67.8%	149	32.2%

Source: Middlesex Community College Office of Institutional Research and Analytics

In spring 2019, the English Department conducted a small assessment project using ENG 101 essays to compare the critical thinking (use of evidence) and syntax/mechanics skills of those who placed into the course through GPA/SAT with those who had either placed by Accuplacer or developmental courses. Students placed into the course by GPA/SAT scored slightly lower in terms of assessment of critical thinking and syntax/mechanics. On critical thinking the mean score for GPA/SAT students was 2.24 and for all other students 2.36. Regarding syntax/mechanics, GPA/SAT students' mean score was 2.57 and all other students was 2.66. Overall, the difference in achievement between the two populations was small, indicating skills of students' placing into ENG 101 by GPA/SAT are comparable to those who earn placement by other means. The English Department will repeat this assessment next year with a larger sample.

Students who do not satisfy the Multiple Measures criteria must take the [Next Generation Accuplacer](#) exam to determine course placement. After completing the exam, students talk with a placement specialist who offers advice on next steps. Students who disclose test anxiety or not preparing for an exam may be advised to attend an exam refresher session and re-take the exam. Having specialists meet one-on-one with students reflects a student-focused approach, which improves the access experience for students, many of whom are first-generation college students or from different countries.

In fall 2018, one other policy change aimed toward reducing the number of students in developmental English took place. Students who take the Accuplacer reading test and the Writeplacer test multiple times can combine their best scores from different test dates to qualify for ENG 101; the previous policy required students to use their scores on the day of testing for placement.

3. IMPROVING STEM STUDENT TRANSFER AND COMPLETION RATES AND CLOSING THE ACHIEVEMENT GAP

The Massachusetts DHE has established several programs to move more community college students through the STEM pipeline to either transfer to competitive baccalaureate programs in STEM fields or to enter the job market directly. Two important initiatives are contributing to these goals at Middlesex: accelerating entrance to calculus and collaborating with our largest transfer institution, UMass-Lowell, to strengthen the transfer process.

Combining Pre-Calculus and Trigonometry to Accelerate Entrance into Calculus

In fall 2015, the STEM Division began offering Accelerated Pre-Calculus for Engineering and Science ([MAT 196](#)). This course creates a contextualized opportunity for students not ready for calculus and is designed to shorten the time it takes them to progress into STEM majors that require calculus. Many STEM concentrations/programs require calculus in the first year, and students are delayed in completing their degrees if they do not place directly into Calculus I for Engineering and Science (MAT 290). Combining the required materials from two separate courses (7 credits) – Pre-Calculus for Science (4) and Engineering and Trigonometry for Science and Engineering (3) – into the one semester MAT 196 course (6 credits) allows students to accelerate their progress towards taking Calculus 1 and therefore complete degrees in a more timely manner.

In September 2017, student success data was analyzed to see if there was a difference in success in [MAT 290](#) between students who took MAT 196 prior to MAT 290 and students who took MAT 290 either by placement or by taking Pre-Calculus for Science (MAT 195) and Engineering and Trigonometry for Science and Engineering ([MAT 165](#)). The analysis showed that, historically, the C or better success rate for MAT 290 had been 50% (875/1743); among the 51 students who took both MAT 196 and MAT 290, the C or better rate was 55% (28/51). In 2018, a second analysis was completed; the results appear below. The successful completion rate for students taking MAT 196 prior to MAT 290 was 6.2 percentage points higher than those taking MAT 195 and MAT 165 prior to MAT 290.

2018 Analysis of Students Successfully Completing MAT 290 After Successfully Completing MAT 196			
Course	Total Enrollment	Completed	Successful Completion Rate
MAT 196	110	89	81%
MAT 290	65	45	69%

Source: Middlesex Community College Office of Institutional Research and Analytics

2018 Analysis of Students Successfully Completing MAT 290 After Successfully Completing MAT 165 and MAT 195			
Course	Total Enrollment	Completed	Successful Completion Rate
MAT 290	78	49	62.8%

Source: Middlesex Community College Office of Institutional Research and Analytics

The Mathematics Department will continue to monitor the success rate of students enrolling in MAT 196 prior to MAT 290 as well as other data related to completion and future performance at University of Massachusetts Lowell. Further adjustments in curricula and instruction will be made as necessary.

Middlesex – UMass-Lowell Collaboration

In 2016, Middlesex and University of Massachusetts Lowell (UMass-Lowell) collaborated on the project, “Using Predictive Analytics for Success in STEM – Transfer, Completion and Closing the Achievement Gap,” that was supported by a DHE Performance Improvement Fund (PIF) grant. The project focused on improving the academic success and completion rates of students in STEM majors at both UMass-Lowell and Middlesex, especially those students in achievement gap groups. In particular, the project focused on those students in achievement gap groups that the Educational Advisory Board (EAB) describes as falling into the “murky middle”; that is, students who complete a full year with GPAs between 2.0 and 3.0 yet fail to complete programs and graduate. Middlesex data indicated that a disproportionate number of students in achievement gap groups were underachieving in critical STEM courses and appeared to be in this “murky middle.” For example, Middlesex institutional research data on Calculus I for Engineering and Science (MAT 290) for fall 2013 and 2014 showed that of 114 students completing this course with a “C” or better, 40% were Pell-eligible while 60% were not, and fewer Asian (57%), Black (36%) Hispanic (26%) students completed this course with a “C” or better than White (62%) students.

At an April 2016 Academic Summit, Middlesex and UMass-Lowell faculty from computer science, biology, chemistry, physics, engineering and math, as well as staff from advising and tutoring, reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps in Middlesex student preparedness for UMass-Lowell courses. Additional statewide convenings of biology, chemistry, and physics faculty from community colleges, state universities and UMASS further compared curricula to determine obstacles to success. As a result, several changes have been made to the Middlesex curricula including adding Organic Chemistry to the biology and chemistry majors; decreasing the number of social sciences and humanities courses; increasing the number and level of biology, physics, math, and chemistry courses; and collaboratively developing summer bridge programs to assist STEM students transferring from Middlesex to UMass-Lowell.

With the implementation of these significant changes, Middlesex projects increasing the success of STEM transfer students at UMass-Lowell, including disaggregating data for those in achievement gap groups. While there is no current data on the impact of these changes on student performance because they are so recent, Middlesex and UMass-Lowell did conduct a follow-up summit in November 2018 and plan to have additional summits to review data related to student success.

Supporting the Equity Agenda in STEM

The college's STEM programs are making strides to advance the equity agenda to increase graduation rates of students from underserved populations. In FY16, there was no STEM degree gap between Black/African American and White degree recipients. In FY17, the percentage of Black/African American degree recipients was 8% higher than the percentage of White STEM degree recipients. With respect to Latinx students, in FY16, the percentage of Latinx students receiving a STEM degree was 10% higher than the percentage of White students. In FY17, there was no difference.

While graduation rates for STEM students from underserved populations have improved, the college needs to devote more attention to attracting and retaining women. In FY16, the percentage of women earning STEM degrees was 13% lower than the percentage of men. By FY17, the gap widened to 20%. Efforts such as the [Women in STEM luncheon](#) and informal mentoring by female STEM faculty reflect current steps to reverse this trend; plans to secure a grant focused on female STEM majors are under discussion.

4. IMPLEMENTATION OF GUIDED PATHWAYS

Recently, the mission of community colleges has expanded from a system focused on providing access to *enrollment* in higher education to one focused on providing access to *completion* of a post-secondary credential (Veney & Sugimoto, 2017). To meet the local economy's increasing demands for middle- and highly-skilled workers and to provide greater numbers of students with the skills needed to succeed in well-paying careers, community colleges recognize their role in supporting a diverse population with diverse needs to and through their educational path (transfer and career). To reimagine what a commitment to completion would comprise, The Community College Research Center (CCRC) at Columbia University endorsed the concept of [guided pathways](#), which begins by laying out a clear process for students to achieve their end goals and aligns services and business processes to facilitate forward progress.

The Complete College America (CCA) movement in 2009; awarding of the DOL GPSTEM grant (2014); and publication of the landmark work, *Redesigning America's Community Colleges* (2015), informed Middlesex's comprehensive development of [Academic Maps](#). In *Redesigning America's Community Colleges*, authors Bailey, Smith Jaggars, and Jenkins describe the effectiveness of providing community college students clear guidance as they determine their program of study. CCA advocated for the creation of "[Momentum Pathways](#)" to prevent students from spending too much time in developmental courses, taking too few credits per semester, accumulating excess credits, delaying required gateway courses, and not forging a smooth path to graduation. With funding from a CCA Technical Assistance Grant awarded through the DHE, Middlesex developed its first pathway map for students interested in STEM programs.

Middlesex embraced the guided pathways model, rolling out the program in four phases: 1) Academic Maps for STEM programs, 2) Academic Maps for all other programs, and 3) Pathways Maps for undecided students. The fourth phase, still underway, involves the significant investment in student self-service technology, which is driving changes to business, enrollment, and advising processes that maximize efficiency, minimize errors, and provide greater opportunity for students to form relationships with faculty and staff advisors who can help them set and meet their educational and career goals.

STEM Guided Pathways

The DOL GPSTEM grant included development of Academic Maps for seven associate degree and five certificate programs within STEM: Biotechnology Technician, Mechanical and Civil/Environmental Engineering, Computer Aided Design (CAD), Digital Forensics, Information Technology-Cybersecurity Transfer, Computer Science Transfer – Secure Software Development, and Precision Machining.

An evaluation conducted for the DOL GPSTEM grant indicated that Academic Maps and clear pathways are important factors in improving student persistence and retention. The table below comparing STEM student cohorts from 2010 and 2015 shows increases in persistence and retention with the development and adoption of Academic Maps. There was a 22.4 percentage point increase in persistence and a nearly 21 percentage point increase in retention of students who had used Academic Maps. Although other variables also may have influenced the increase in persistence and retention rates, the Academic Maps were certainly a contributing factor.

2010 and 2015 Persistence and Retention Rates of GPSTEM Cohort						
	Cohort		Cohort			
			Persisted		Retained	
	Number	Percent	Number	Percent	Number	Percent
Fall 2010	747	100%	357	47.8%	255	34.1%
Fall 2015	503	100%	353	70.2%	276	54.9%

Source: Middlesex Community College Office of Institutional Research and Analytics

College-Wide Academic Maps

In 2015, Middlesex unveiled its new [Academic Maps](#), designed as the cornerstone of CCA's "15 to Finish" campaign in which students are encouraged to take 15 credits per semester to graduate in two years. The maps provide a clear semester-by-semester breakdown of the curriculum required to complete a program of study. Each map identifies milestone courses that must be completed by a certain semester in order to progress through the program and graduate on time. Although designed to encourage full-time attendance, the maps can easily be adapted for students taking fewer than 15 credits. The 21% graduation rate for students in the fall 2015 cohort, the year the maps were introduced, suggests this initiative is making a positive contribution to student completion. In addition, the Academic Maps have been an essential part of the college's growth in Dual Enrollment and early college programs. Guidance counselors and Middlesex representatives share the maps to inform prospective students and families about the progression from high school through college.

[Pathways \(Metamajor\) Maps for Undecided Students](#)

The next phase comprised an effort to move undecided students into a field of study within one semester of enrolling. Middlesex has developed pathways maps for first-semester students to assist them in exploring academic interests and career opportunities: Arts and Humanities, Business, Education, Health, Public Service, Social Science, and STEM, which mirror the college's academic divisions. Each pathway provides a structure that allows students to explore a field they are interested in without committing to a major within their first 18 credits. By grouping similar disciplines into each pathway, academic areas are connected to career fields,

allowing students to make more informed decisions. Within the pathway, students complete a related one-credit career exploration course. Each pathway includes one semester's worth of transferrable general education requirements. The map also includes a list of potential related majors students may enroll in the following semester. Middlesex currently offers more than 70 academic programs; choosing from among six pathways is far less overwhelming for new, undecided college students.

Pathways maps provide another strategy to close equity gaps at Middlesex. Bailey (2018) writes that contributing to low graduation rates at community colleges which enroll disproportionate numbers of low-income students and students of color are "structural barriers such as disconnected courses [and] unclear program requirements." Creation of pathways (metamajor) maps has been particularly effective in moving students enrolled in [Liberal Studies](#) (undeclared) into degree programs. In fall 2017, 48% of first time Liberal Studies students who were in a pathway moved from the pathway into a specific program by fall 2018, compared to 16% of first time Liberal Studies students not in a pathway. Before development of pathways maps, many students floundering without a major took excess credits and were not retained. In fall 2017, 76% of first-time Liberal Studies majors enrolled in a metamajor pathway; retention to fall 2018 was 58.1%, a 17% increase from fall 2016 when retention of first-time Liberal Studies students was 49.8%. Additionally, progress related to keeping students on track is beginning to occur; the average number of excess earned credits declined 8.8% from 21.48 excess credits in FY14 for degrees awarded to 19.60 excess credits in FY18.

Education Advisory Board (EAB) Navigate Integrated Planning and Advising System (IPAS)

The technology component of the guided pathways initiative began with a U.S. Department of Education Title III grant that supported Middlesex's investment in EAB Navigate Integrated Planning and Advising System (IPAS). The IPAS system helps students track academic progress and successfully meet program and institutional requirements. While these tools will allow students to monitor their own progress, they can also be used as a basis for discussions between students and their faculty or staff advisors, who are being trained in the IPAS system. Tools that keep students on their degree path will result in more time to explore future academic and career plans during advising sessions and less time scanning the course catalog.

Through IPAS, Middlesex students will still be encouraged to meet with faculty advisors or members of the advising staff to discuss their academic and career plans. Coupled with the Academic Maps, the implementation of EAB Navigate allows students to take greater control of their academic planning process. This new platform enables students, faculty, and administrators to access different features based on their needs. The platform is intended to impact enrollment by providing easier access to students as they plan and make their program and course choices.

While the Academic Maps provide the roadmap for students to follow toward degree completion, IPAS makes possible access to back-end data that creates a 360-degree view of students' progress to completion. IPAS uses analytics to flag risk patterns related to course choices, prior performance, or other indicators as well as provides data visualizations/dashboards for faculty, staff, and administration to assess institutional trends. In addition, Middlesex's Title III project supported the acquisition of a data warehouse platform (HelioCampus) and EAB Intelligence Module to enable the use of analytics. Both provide predictive analytics that offer insight into student risk factors and academic performance. The data enables administrators, faculty, and staff to design schedules, services, and interventions that are targeted and timely. Analytics will afford members of the campus

community a fuller and more complex picture of those points at which students are successful and those at which they need support, contributing to both enhanced student learning and institutional effectiveness.

Middlesex expects this technology investment will result in growth in enrollment, yield, persistence, retention, and graduation rates, as projected in the following Title III goals: 1) increase persistence and retention rates of students using IPAS by 5% by 2022; 2) increase by 5% each year the number of enrolled students and the yield rate of enrolled students compared to student applicants by adding streamlined enrollment functions accessible through the student portal; 3) increase graduation rates of first-time, full-time students who use IPAS from the 2014 baseline by 5%; and 4) train 100+ faculty/staff advisors on IPAS.

Beyond the Maps

Development of Academic Maps and the technological infrastructure comprises two key components of the college's guided pathways commitment. This commitment also requires allocation of human resources and creation of programs and services to further support student success. Development of Middlesex's comprehensive approach to guided pathways stems from the college's recognition of its place in the middle of the K-20 pipeline. While Middlesex's Dual Enrollment and Early College programs seek to support high school students' access to and success in college, its [MassTransfer](#) efforts support students through their associate's degree and onto baccalaureate programs. Meeting the needs of a 21st century student body(ies) has required Middlesex to construct a supportive environment in which a diverse group of students with different levels of academic preparation and varied work, home, and family commitments can all thrive. Some of the components that reinforce the pathways commitment are highlighted in the following section and include Supplemental Instruction and tutoring, revised orientation, expansion of First Year Experience ([FYE](#)) program, reconfiguration of the academic calendar, more opportunities for online learning, [Commonwealth Honors Program](#), and MassTransfer.

Supplemental Instruction and Tutoring

The Academic Centers for Enrichment ([ACE](#)) provide Supplemental Instruction ([SI](#)) and peer tutoring services to students. These programs are based on successful national models designed to provide various types of academic support. In AY 2018, ACE supported over 4,000 students through SI and the tutoring centers.

Supplemental Instruction (SI) is a program in which Middlesex students work as SI leaders for STEM, Nursing, English Composition I, and English Language Learner (ELL) courses. SI leaders provide weekly study groups for students enrolled in courses in these disciplines. The number of courses supported by SI continues to grow. In fall 2017, SI was available in 71 course sections. A total of 1,098 students registered into the 71 sections. In all there were 1,385 enrollments (students could enroll in more than one class). Of 1,098 unique students, 564 attended an (SI) session on at least one occasion. In spring 2018, SI was available in 73 course sections. A total of 1,076 students registered into the 73 sections. In all there were 1,315 enrollments. Of the 1,076 unique students, 525 attended an SI session on at least one occasion.

Data reflects that students who attend SI sessions often do much better in their courses than students who do not attend. For example, in fall 17, the average course grade for SI users was 2.5 compared to 2.0 for non-SI users; completion rate for SI users was 84% compared to 71% for non-SI users; DFW (D grade/Fail/Withdraw) rate was 22% for SI users compared to 36% for non-SI users; and percentage earning an A or B was 60% for SI users compared to 46% for non-SI users.

Staffed by discipline-specific professional learning specialists and Middlesex peer tutors, the academic tutoring centers offer individual and group tutoring and study skills support, both online and in person in the following subjects: ELL, reading, writing, math, computer science, science, and accounting. As peer tutors help other students, their own confidence in their knowledge of the subject in which they tutor increases significantly. In response to a question related to their understanding of content within their major or program of interest, 21% felt they possessed a “very good” understanding of the content prior to becoming a tutor. The percentage rose to 69.7% after the students’ tutoring experience, reflecting a 228% increase.

An [AANAPISI grant](#) has made possible the hiring of an ELL specialist who works 18 hours per week in the tutoring center and offers a range of workshops for ELLs, writing tutors, and faculty. In summer 2018, the learning specialist held a three-week intensive pilot to assist ELLs who needed additional support to pass ENG 101. Of the seven students who participated in the pilot, six completed a portfolio of work and were deemed eligible to enroll in ENG 102. A variation of the pilot is being offered again this summer.

Revision of New Student Orientation and Onboarding Process

In fall 2017, 77% of students attending the orientation program persisted to the next semester compared to 61% for students who did not attend orientation. This result is consistent with national data that points to student orientation as an effective persistence and retention tool. The challenge for Middlesex is to increase the percentage of students participating in the orientation program. Although incoming students were informed orientation was required in both 2017 and 2018, 43% of incoming students did not attend orientation in 2017, and 53% did not attend in 2018. To increase participation, Middlesex has significantly revised the 2019 orientation.

The new program runs from April to September and encompasses the following significant components: [Online Orientation](#), [Accelerated IDS 101/First Year Experience](#) (FYE) course, Advising and Registration through the new Student Portal, Engagement Weeks, and Welcome Month. With the new, four-phase onboarding process that includes multiple touchpoints for new students to engage with faculty and student service professionals, Middlesex expects at least 70% of first-time, degree-seeking students to participate in at least one component in 2019, which would represent a 13% increase in participation over 2017 and a 23% increase in participation over 2018. The interactive, self-paced online orientation program was rolled out in May 2019. Data analytics built into the program will allow the college to track who has completed online orientation. Recognizing the success of the one-credit Interdisciplinary Studies (IDS) courses on persistence and retention, a special IDS 101/FYE course has been redesigned to support the orientation/onboarding process and is now offered throughout the summer in two- and three-day versions and in a half-semester format beginning in September 2019. Students are introduced to essential student success skills/behaviors and create personalized academic and financial plans. The new student portal, supported by EAB IPAS, provides more self-service options, greater efficiencies, and better on-boarding processes. Enrollment processes and procedures have been reworked to be more student-

friendly and accessible. During New Student Advising and Registration, students will learn to use two new apps, My Explorer and My Planner, which help students examine their academic and professional goals and accurately plot their time at Middlesex. The college is expanding its orientation offerings designed for at-risk populations and unique cohorts with expansion of engagement weeks. Additionally, programming in September will include more opportunities to engage in major-related activities.

Expanding the student onboarding process to a several-month, multi-modal program is expected to contribute to a 5% increase in persistence and retention between 2016-2021. The revised orientation, with its combination of hands-on support and introduction to new technology tools to help students complete registration, course selection, and financial aid, supports a successful transition to college.

Expansion of Interdisciplinary Studies (IDS)/First Year Experience Program

Middlesex has expanded its Interdisciplinary Studies (IDS)/First Year Experience Program from four, one-credit first year experience (FYE) courses (First Year Experience, Service-Learning, Leadership, and Undergraduate Research) to a comprehensive program with more than 20 courses that not only meets the varying needs of a diverse population, but also allows students to combine three one-credit courses into one transferrable general education course. As of fall 2018, nearly 75% of the college's associate degree programs require at least one IDS course with most requiring three, which are bundled to form a transferrable social sciences general education elective.

The FYE/IDS program continues to grow; since 2014, 7,272 enrolled students have taken at least one IDS course. Overall, persistence and retention rates of all students enrolled in an IDS course consistently range between 6-8% higher than rates of students not enrolled in IDS courses.

New Course Schedule

In 2015, Middlesex redesigned and expanded its course schedule as one of several strategies to position the institution to respond more effectively to the diverse needs of 21st century students. With nearly 40% of students reporting they work more than 20 hours per week and many others citing demanding family obligations, shifting to a more flexible, expansive schedule contributes to the college's completion agenda.

Middlesex moved from a traditional three-semester (fall, winter, summer) schedule with 50-minute classes on Monday, Wednesday, and Friday and 75-minute classes on Tuesday and Thursday to a year-round, multi-semester academic year with primarily 75-minute course periods and an expansion of online offerings. An increase in the graduation rate suggests the new schedule provides more opportunities for students to take the classes they need for degree completion when they need them. Below outlines major changes to the academic schedule.

Longer Class Periods

For more than a quarter-century, research has been mounting regarding the efficacy of longer class periods. Instructors find that the traditional 50-minute Monday, Wednesday, and Friday class schedule impedes efforts to engage in active learning techniques. Group work, interactive exercises, and problem-solving activities, while proven to be pedagogically sound, require more class time to be effective. Moving to a Monday/Wednesday and Tuesday/Thursday schedule with 75-minute class periods and offering 150-minute, once per week classes on

Friday have allowed Middlesex to meet better the needs of its busy students and provide a stronger pedagogical environment. Although data related to the effectiveness of the longer class periods are still inconclusive, anecdotally, both students and faculty have indicated their satisfaction with the quality of instruction the 75-minute period makes possible.

Full-Year Scheduling

Over the past three years, the college has continued to add semesters of varying lengths to the traditional 16-week schedule to offer additional opportunities for students to satisfy degree requirements identified in the Academic Maps. [WinterSession](#), [Quick-Start](#), [Mini-mesters](#) and [Summer Session](#) enhance the ability and convenience for students to complete their programs and required courses within two years.

WinterSession is a three-week session offered during winter break. Launched in 2016, with 598 students enrolled in 49 courses, one year later, a total of 777 students enrolled in 56 course sections for a total of 894 enrollments. These numbers represent a 30% increase in students and a 34% increase in enrollments. In 2017, 81% were returning Middlesex students, and 19% were new to the institution. Completion rate for WinterSession 2017 was 88%, higher than all previous spring semesters. Quick-Start is a three-week session at the end of May and end of August. First offered in summer 2017, the session enrolled 496 students and 578 enrollments; 87% of the courses were offered online, and 13% in the classroom. Twenty-two percent of the students were new to the institution. Mini-mesters are eight-week sessions offered fall and winter semesters, allowing students to take a two-course sequence in one semester. Initially rolled out in spring 2017, by spring 2018, Mini-mester I enrolled 206 students taking 619 credits, and Mini-mester II enrolled 201 students taking 672 credits. To continue to boost summer enrollment, the summer schedule has been changed for 2019 to capture more enrollments and offer students additional chances to keep degree progress on track. Summer Session 2019 will hold two eight-week sessions and two five-week sessions, both online and in the classroom. Plans to expand flexible semester offerings will continue. The college has taken advantage of the 2017 changes in Federal Financial Aid policy that allow students to access Pell Grants all year long.

Expanded Online Programming

Middlesex has expanded its offerings to include 11 degree programs and six certificate programs that can be completed primarily online; lab science courses are still taught in a face-to-face or hybrid format. Plans to add fully online programs and hybrid programs are underway. Investing in online training and inviting experienced full- and part-time faculty to teach in both full-semester and mini-mester formats have created high quality programming in which course completion rates have recently emerged as slightly higher than in the face-to-face environment. Clearly, online learning represents a strong growth area with successful completion rates. From 2011-2012 to 2017-2018, the number of online enrollments has risen from 8,209 to 11,288, and the number of online course sections has grown from 441 to 671.

Many Middlesex students take courses in face-to-face, hybrid, and online formats. The completion rate for hybrid and online courses has increased 3.4% from 73.79% in AY14 to 76.27% in AY18. This completion rate is only 1.5% lower than the college-wide completion rate in FY18 of 77.7%. The table below reflects completion rates in online and hybrid courses between AY14 – AY18.

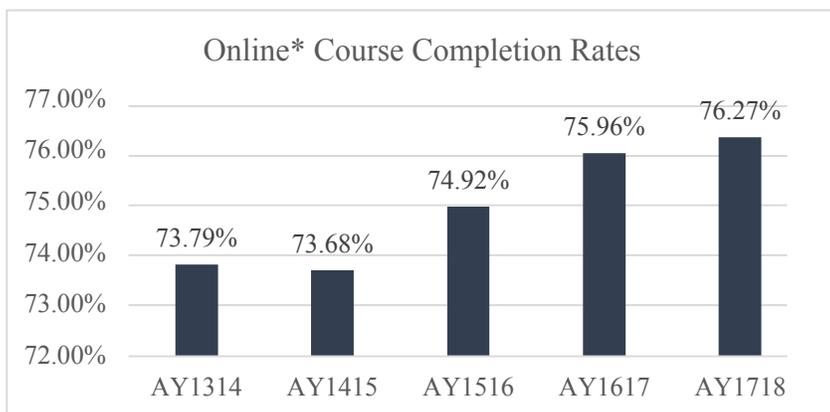


Figure 5

Source: Middlesex Community College Office of Institutional Research and Analytics

*Online courses in the table above include web only, hybrid courses, and web lecture with an on-campus lab.

Note: AY (Academic Year) includes fall, spring, and summer terms. For example, AY18 includes fall 2017, spring 2018, and summer 2018.

Commonwealth Honors Program

In 2017, the Middlesex [Commonwealth Honors Program \(CHP\)](#), the largest in Massachusetts, received reaccreditation from the Department of Higher Education (DHE). The program is recognized for its course completion and transfer rates; because of this success, expansion of the program is a priority in the college's current Strategic Plan. Students take specialized honors seminars and courses designed to enhance their undergraduate experience by concentrating on the development of critical thinking, individual research, verbal presentation, and interpretive analysis skills. CHP's course completion and transfer rates are strong. Between spring 2016 - fall 2018 completion rates for Honors courses averaged 84.41% compared to a completion rate of 78.27% in non-Honors courses. The program enjoys a 100% transfer rate among graduates.

Students from all majors participate in the CHP. The program provides a strong pathway to transfer because it offers students matriculating to Massachusetts public institutions automatic entry into their honors programs. Additionally, students are provided with the academic preparation to be accepted into and succeed at private transfer institutions including Amherst College, Boston College, Johns Hopkins University, Massachusetts Institute of Technology, Cornell University, Smith College, Wellesley College, and Tufts University, among others.

To build student enrollment in the program, the CHP director also serves as advisor to the [Phi Theta Kappa \(PTK\) Honor Society](#). Common programming for social, academic, and community events encourages students in one program to join the other and forms a strong sense of community. Enrollment in the CHP grew steadily from FY11 and FY17, increasing 85% from 212 students to 392. A decline to 281 students in fall 2018 seems to stem from four factors: overall enrollment decline, a drop in enrollment in Honors English Composition I among eligible incoming Honors students enrolling, the difficulty for STEM students to meet CHP requirements, and CHP students transferring out before graduating. Implementation of several interventions should reverse this trend: recruiting students with strong high school GPAs or SAT scores, including Honors information in new orientation process, developing a mentoring system pairing Honors faculty with students, and adding STEM courses into the Honors curriculum.

The goal over the next five years is to raise the total number of Honors students to 400 and to increase graduation rates. Although CHP student graduation rates rose from 11 students in 2011 to 36 in 2019, the percentage of graduates is relatively small in comparison to the total number of CHP students enrolled each year. Some students are not able to complete the program because they either enter late in their degree progression or transfer out of the college before completing associate degree requirements. The program plans to conduct an analysis both of average time to completion for Honors students and of students who enter but do not complete the CHP requirements. These analyses will inform plans to further strengthen the Honors program.

MassTransfer

As part of the college's guided pathways mission, Middlesex has participated in the DHE [MassTransfer](#) initiative to ensure its students can transfer 60 credits to a four-year institution and graduate in a timely fashion. This new statewide initiative, begun in 2016, has resulted in Middlesex's development or amendment of the following programs for MassTransfer (listed in order of completion): Biology, Chemistry, Psychology, Business, Computer Science, Communication, Criminal Justice, Early Childhood Education, English, Liberal Arts, Mathematics, STEM Metamajor in Natural and Physical Sciences, Art, Elementary Education, Engineering, Nursing, and Human Services. The following lists the number of students who transferred within the MassTransfer program in 2018: Psychology (48), Business (167), Computer Science (21), Communications (8), Criminal Justice (41), Early Childhood Education (15), English (6), Liberal Arts (155), and Mathematics (2). With respect to transfer readiness, in the annual survey of students who graduated one year prior and subsequently completed additional college coursework, 71.3% indicated Middlesex provided either "very good" or "excellent" preparation for upper level college course work.

5. PROGRESS ON INSTITUTIONAL, PROGRAM, AND COURSE STUDENT LEARNING OUTCOMES

In 2017, Middlesex received the National Institute of Learning Outcomes Assessment ([NILOA](#)) [Excellence in Assessment](#) award because of its development of a culture of assessment, which includes an effectively scaffolded assessment infrastructure of shared expectations and alignment of student learning outcomes at the course, program, and institutional levels. Changes to the assessment process include reform of the General Education Curriculum, which required every General Education course to include a minimum of three institutional student learning outcomes (ISLOs), redesign of the program review cycle and regular assessment of program student learning outcomes (PSLOs), and the development of course student learning outcomes (CSLOs) for every course in the curriculum. Moving the bulk of assessment work into FSA committees and academic departments has resulted in cross-college participation in assessment of student learning.

At the institutional level, the General Education Committee oversees both the applications for a course's inclusion in the General Education core and conducts an annual assessment of a single ISLO. At the program level, chairs and coordinators complete E-series forms to document changes made to curricula as a result of assessment. At the course level, external factors such as Advisory Boards, MassTransfer, Multiple Measures, National Exam Cut Scores, and Developmental Education Reform result in the need for departments to constantly examine and revise courses to ensure their responsiveness to changes in the academic and work environments.

Institutional Level: General Education Reform - Infusing ISLOS into General Education Courses

Since 2014, Middlesex has undertaken a college-wide process to infuse the following six institutional student learning outcomes (ISLOs) throughout the General Education curriculum: [Written](#) and [Oral](#) Communication, [Multicultural/Global Literacy](#), [Critical Thinking](#), [Social Responsibility](#), [Quantitative Literacy](#), and [Personal and Professional Development](#). Infusion of these learning outcomes provides students multiple opportunities throughout their time at Middlesex to foster skills related to their academic, personal, professional, and civic development.

Reform of General Education (Gen Ed) was facilitated by an FSA Committee and chaired by a senior faculty member. Academic departments were asked to choose courses from the Behavioral Science, Humanities, Mathematics, Natural or Physical Science and Social Science areas suitable for inclusion in the General Education curriculum. Faculty teams revised each course to incorporate at least three ISLOs, which were included in the course description and embedded in the course outcomes. Students are provided multiple opportunities to practice working with ISLOs in authentic and meaningful ways and receive feedback on their development of the intended outcome. An [application](#) was completed for each course and submitted to the committee.

Gen Ed assessment is primarily conducted at the course and institutional levels with some assessment at the program level. In individual courses, faculty design assessments that allow students to demonstrate increased ability with the ISLO. At the institutional level, each year randomly selected sections of Gen Ed courses are asked to provide full sets of assessments which reflects students' demonstrations of their developing competency with a particular ISLO. All identifying course, section, instructor and student information is removed from collected artifacts before they are used for institutional assessment purposes.

In spring 2018, the Gen Ed FSA Committee assessed the Multicultural/Global Literacy ISLO. A group of full- and part-time faculty from several disciplines analyzed 118 artifacts collected in AY17-18. The assessment indicated students exceeded the established benchmark in rubrics for Cultural Diversity and Knowledge: Cultural Self-Awareness. On the other hand, students fell short of the benchmark in two rubrics: Perspective Taking and Understanding Global Systems. Preliminary evidence suggests that for three rubrics (Perspective Taking, Personal and Social Responsibility, and Knowledge: Cultural Self-Awareness) students' competency increased as they accumulated more credits. In May 2019, the committee assessed Multicultural/ Global Literacy again with a larger number of artifacts and will present the data when complete.

Each year, the college conducts a post-graduation student survey to assess graduates' exposure to ISLOs. Data from the 2018 graduating class reflects that students across the college received the most exposure to the Critical Thinking ISLO. Students in the Liberal Arts and Science Global Studies Concentration took an average of 18 courses (~54 credits) that included critical thinking. Similarly, students in the Elementary Education program took 17.5 courses (~52.5 credits) that included critical thinking. The middle four, in order of students' exposure to the ISLO, are as follows: Written and Oral Communication, Multicultural/Global Literacy, Social Responsibility, and Personal and Professional Development. Students had the least exposure to Quantitative Literacy with many students taking only one course throughout their Middlesex career that included Quantitative Literacy as an ISLO. The data can be misleading because many courses that include assignments related to developing quantitative literacy may not be classified as general education courses.

ISLO Focus: Development of Social Responsibility and Personal and Professional Development through Service-Learning

ISLOs are integrated throughout courses, co-curricular activities, and experiential education. One example of students' exposure to ISLOs outside the typical classroom setting occurs with service-learning. Middlesex has a more than twenty-year history of service-learning. The National Service-Learning Clearinghouse defines service-learning as "a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities." At Middlesex, the percentage of students engaged in service-learning in the fall semester who persist to the spring has consistently been high: in 2014, 81%; in 2015, 82%; in 2016, 83%, and 2017, 79%.

Recent program improvements include a revamped service-learning database to allow students to more easily identify community partners; streamlined service-learning process (i.e., service-learning contract, new site application, verification of hours, etc.); increased outreach to students to ensure they are properly supported throughout their service experience; additional administrative support provided to faculty teaching service-learning courses; and new partnerships developed with local community organizations.

These improvements have contributed to a dramatic increase in persistence. In fall 2018, 87% of the 262 students participating in service-learning returned in spring 2019, marking the highest persistence rate in the program's recent history. Of students not engaged in service-learning, 60% returned in the spring. Results from this fall show a significant difference in persistence between students who engage in service-learning and students who do not. Students participating in service-learning experience the opportunity to develop social responsibility and personal and professional development skills at a deep level through their work in the community.

Program Student Learning Outcomes (PSLOs) and Course Student Learning Outcomes (CSLOs)

Academic departments annually assess students' progress with respect to various program-level outcomes for certificate, transfer, and career programs. During the assessment process, faculty, department chairs, and coordinators assess student artifacts, then collaborate to develop curricular changes to increase success. Recent success strategies that have been implemented include expansion of experiential education opportunities, development of capstone courses, and addition of soft skills development into courses. The following examples highlight how programs from each division assess program-level outcomes and make changes to courses and curricula.

Arts, Humanities, and World Languages Institute Division

Music: Annually, full- and part-time music faculty watch and evaluate videos of student performances to ensure consistency with grading and to determine where curricular changes are needed. To increase students' success in performing in an audition, recital, concert, or other musical performance, the department has implemented several changes. Among them are increasing the number of independent studies offered in various instruments and voice; the scheduling of additional "spotlight recitals" to accommodate students performing longer pieces and to offer students more opportunities to perform in front of an audience; the inclusion of student performance at recitals and performance juries in the departmental capstone courses, Music Theory I and II; and the incorporation of teaching "stage presence" in various courses.

Graphic Design: Full- and part-time faculty as well as members of the [Advisory Board](#) engage in several assessment practices to evaluate institutional-, program- and course-level student learning outcomes to continuously improve the graphic design program. Recent assessments include a longitudinal evaluation of student portfolio presentations over a 15-year period, annual review of the juried art show, and review of graduating student and alumni surveys. These assessments have resulted in major changes related to assignment redesign, course progression, and technology integration. Regarding assignment re-design, the department added more complex campaign work in the graphic design portfolio and more interactive digital features in magazine projects in web design classes. With respect to course progression, faculty met and identified lesson plans/projects to scaffold skills between 100- and 200-level courses. Another improvement included the department's addition of instruction in interactive elements, animations, moving type, and digital projects in line with industry standards.

Business, Legal Studies, Public Service Division

Criminal Justice: Through the use of Blackboard Outcomes, the Criminal Justice program annually norms and scores student artifacts to make changes to PSLOs and to review progress regarding attainment of ISLOs. Faculty then meet on Assessment Day to review and discuss results and make suggestions for changes. Recent changes include reconfiguring the Introduction to Criminal Justice and Criminology courses to concentrate more heavily on developing critical thinking skills. To address the Social Responsibility and Multicultural/Global Literacy ISLOs, these two courses will now include assignments related to the impact of poverty on communities and the impact of language barriers between law enforcement and the community. Additionally, the research project was redesigned to focus on the issue of diversity; skills emphasized include responsible information gathering and how to use academic sources. Artifacts will be reassessed using the same criteria to see if the interventions have increased student performance on the research project.

Fashion Merchandising: The Fashion Merchandising Program's assessment process includes gathering feedback from Business faculty, employers, other industry professionals, alumni, and representatives from transfer institutions. Faculty review student artifacts such as journals from the Business Internship capstone course as well as other assignments from other courses spanning the curriculum. Recent changes include the expansion of field experiences such as having students meet professionals from the fashion industry, visiting business sites, and attending industry trade shows. Assignment redesign includes requiring students to use industry formulas obtained from actual businesses when creating buying plans. Changes to instruction include teaching students how to use industry software programs in the Merchandising course to expose students to 21st century fashion industry expectations.

Education and K-16 Partnerships Division

Assessment in the Early Childhood Education (ECE) programs involves gathering feedback from a number of sources including field placement supervisors, service-learning placement supervisors, representatives from transfer institutions, and full- and part-time education faculty. The department applies the National Association for the Education in Young Children ([NAEYC](#)) rubrics in all courses when evaluating student portfolios, reviews of supervised field placement performance, and other assignments in courses across the curriculum. Recent changes include the requirement of APA citation

stated in all course syllabi, increase in the number of research assignments across courses, and an emphasis on the expectation that students seek tutoring assistance. Additionally, an ECE Technical Training Center was created with funds from a Performance Incentive Fund grant, which is designed to support ECE faculty in strengthening teaching techniques related to hybrid and online courses and to increase face-to-face course interface with Blackboard tools and platform. The Center will also be available to ECE students to help further development of online learning skills.

Social Sciences, Online, Evening, and Interdisciplinary Programs

Psychology: The department chair and full-time faculty review artifacts annually to assess and make changes to the psychology program. Using Blackboard Outcomes, the department has reviewed student artifacts to assess progress on one or more PSLOs each year. Recent changes include adding Statistics as a math prerequisite for [Research Methods](#), the development of a specific orientation session for all incoming psychology students to assist students in managing program requirements and to build community among students, and the development of a program-wide Blackboard shell for faculty to strengthen communication and to provide easier access to artifacts for assessment work.

Communication Transfer and Career: The Communication department chair and full- and part-time faculty use Blackboard Outcomes to review and score student artifacts to assess student achievement of PSLOs across the Communication curriculum from introductory courses to capstone independent studies and/or internships. Additionally, student surveys are used to include the student voice in assessment of curriculum components. Recent changes to the curriculum included changes to the scheduling and course content of [IDS 130](#), General Education Seminar: Arts, Humanities, Communication Career and redesign of the media content analysis paper requirements and associated rubric in COM 102: Media Ethics.

Health Careers Division

Dental Hygiene: Program assessment in Dental Hygiene is wide-ranging. Student performance on the National Board Exam (NBDHE), Regional Board Exam (CDCA), and State Jurisprudence Exam; annual review of student artifacts to assess performance on a PSLO by the program director and faculty; and feedback from surveys from employers, graduates, alumni and faculty all factor into curricular changes. Recent changes include enhancing the CDCA exam preparation process. The program director held monthly meetings with students to review CDCA exam preparation materials; in addition, all clinical faculty now provide instructions on calculus identification in ways similar to that required by the CDCA exam. As a result, the student passing rate on CDCA improved from 34 out of 36 in 2014 to 26 out of 26 in 2018. Additionally, the following changes were made to Admissions requirements: elimination of clinical observation and essay, increase in minimum GPA requirement, and requiring attendance at a mandatory Dental Hygiene Overview Session.

Diagnostic Medical Sonography: The program coordinator and faculty annually review student scores on national certification examinations through the American Registry of Diagnostic Medical Sonography (ARDMS) and survey results from employers, alumni and the advisory board to make programmatic changes. One recent change involved adding Vascular Technology I and II and a Pediatric course to the general sonography program. Changes to admissions criteria implemented to improve

student retention included raising the minimum GPA, requiring completion of college Physics and Anatomy & Physiology I&II within the previous five years, and requiring attendance at a mandatory Diagnostic Medical Sonography Informational Session to inform students of the demands of the profession and program. Since being implemented in 2015, these changes have resulted in a decrease in attrition from 39% in 2014 to 17% in 2017.

The table below indicates the consistently high pass rates of Middlesex students taking national licensure examinations, a further indication of the degree to which students in those majors are achieving program outcomes.

National Licensure Pass Rates								
	3 Years Prior		2 Years Prior		1 Year Prior		Most Recent	
	(AY 2015)		(AY 2016)		AY (2017)		(AY 2018)	
Name of Exam	# taking exam	# passing						
Nursing (NCLEX-RN)	69	67	82	80	67	67	57	54
Radiologic Technology	19	16	17	14	19	19	15	13
Dental Hygiene	28	28	28	28	24	24	26	26
Dental Assisting National Board	10	10	14	14	12	11	10	8

Source: Middlesex Community College Office of Institutional Research and Analytics

Science, Technology, Engineering and Mathematics (STEM) Division

Engineering Science Transfer: Assessment of the [Civil/Environmental](#), [Electrical and Computer](#), and [Mechanical Engineering](#) Transfer Programs involves gathering feedback from the [advisory board](#), employers, and alumni and tracking student performance at UMass-Lowell, the programs' largest transfer institution. The department chair and faculty from Middlesex and UMass-Lowell examined performance of transfer students at UMass-Lowell at an April 2016 Academic Summit. They reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps. Among changes that have been implemented from 2014 - 2018 are the revision and increase of math and science content and development of concentrations in Mechanical, Civil/Environmental, Electrical/Computer, and Chemical engineering. Additionally, a summer Bridge program that involves Middlesex students taking a higher level UMass-Lowell science course was created to assist students transferring.

Mathematics Concentration: The Mathematics Department engages in cross-college assessment of students' performance in math courses. Math faculty consult with faculty in physics, chemistry, business, economics, and other courses to determine how students are applying mathematical concepts. Annually, the department chair and full- and part-time faculty review projects and exams from a range of courses. Faculty compare student performance in a specific math course to student performance the

previous semester that course was offered to identify trends and changes in performance. For example, in 2018, faculty compared the success rate of students who took MAT 196 (Accelerated Pre-Calculus for Engineering and Science) before MAT 290 (Calculus I for Engineering and Science) instead of MAT 195 and MAT 165. They determined students who took MAT 196 had a higher successful completion rate (69% vs 62.8%). This led the department to offer more sections of the MAT 196 in 2018-2019. Math faculty also participated in the summit with UMass-Lowell mentioned above. Similar to engineering, a summer bridge program was developed to assist students transferring.

6. RESPONSE TO THE MASSACHUSETTS BOARD OF HIGHER EDUCATION (DHE) EQUITY AGENDA

In January 2019, DHE Commissioner Carlos Santiago presented the Commonwealth’s Equity Strategic Framework in which he stated the top statewide policy and performance priority to be the following: [“Significantly raise the enrollment, attainment and long-term success outcomes among under-represented student populations.”](#) When examining persistence, retention, and graduation rates, Middlesex recognizes work needs to be done to move more Latinx, African American, Asian, first-generation, Pell-eligible or low socioeconomic status (SES) students to degree attainment. Two additional populations deserving attention in the equity framework are part-time students and English Language Learner (ELL) students. Statewide, Latinx males have the lowest degree completion rates, and they remain a fast-growing segment in the K-20 system. Another vulnerable population is African American males. The table below reflects the retention, persistence, and graduation rates of full- and part-time Asian, Black/African American, Latinx, and White students. Overall, part-time students, who comprise 68% of the student body, fare the worst across categories. Using more sophisticated data tools will enable further disaggregation of student groups, which will allow design of targeted interventions. Clearly, separating out the various student groups who comprise part-time students and disaggregating Latinx and Asian students by gender, SES, and ELL status will provide information needed to strengthen the college’s capacity to serve its neediest students.

Comparison of Retention and Persistence Rates by Race/Ethnicity and Full-time/Part-time Status								
	FT Retention %		PT Retention %		FT Persistent %		PT Persistence %	
	Cohort F14	Cohort F17	Cohort F14	Cohort F17	Cohort F14	Cohort F18	Cohort F14	Cohort F18
Overall College	61.7	61.4	45.1	43.2	79.6	78.2	61.5	57.7
Asian/PI	66.4	67.3	51.3	50.0	88.4	76.9	60.3	59.3
Black/AfAm	50.9	60.9	50.9	40.0	72.7	75.5	80.0	54.0
Hispanic/Lat	61.9	62.9	39.3	41.3	79.2	75.1	58.4	46.6
White	61.3	59.5	47.1	43.8	78.9	82.0	61.8	62.3

Source: Middlesex Community College Office of Institutional Research and Analytics

Similarly, graduation rates for part-time students lag behind those of full-time students. Based on [IPEDS Outcomes Measures](#) data, 16% of first-time, part-time students from the 2010-11 cohort graduated within six years in comparison to 25% of first-time, full-time students from the 2010-11 cohort. The significant difference between graduation rates of full- and part-time students further demonstrates the need to include part-time students in the equity agenda.

Middlesex has made progress in advancing the equity agenda through several initiatives. A key priority is to continue efforts to diversify full-time faculty and full- and part-time staff ranks. The highest success rate has occurred with full-time faculty. Since 2014, the percentage of full-time faculty of color has risen from 17% to 28%. A study by Fairlie, Hoffman and Oreopoulos (2014) focused on community colleges finds that a significant rise in the achievement of satisfactory grades and course completion rates occurs when students of color take courses with faculty of color. Additionally, increases in persistence, retention and graduation rates are also evident.

Another effort that supports students who are part of the Equity Agenda is the US Department of Education funded collegiate TRIO programs designed to increase the academic success and college completion for students from low-income, first-generation-to-college backgrounds, and individuals with disabilities. Services include academic tutoring; advice and assistance in post-secondary course selection; information and assistance with applications for scholarships and financial aid; personal, career, and academic advising; and assistance with the college transfer process including touring four-year college campuses, applying for admission, and completion of financial aid applications. The tables below demonstrate that Middlesex TRIO students consistently exceed the performance rates proposed by the college for year-to-year retention, academic standing, associate's degree attainment, and transfer to four-year institutions.

Middlesex TRIO Student Success Program Student Performance Compared to Approved US DOE Rates				
Criteria	Approved rate per US Department of Education Standard Objectives	Actual Rates for SSS students		
		2015-16	2016-17	2017-18
Percentage of students retained annually within program	70%	85%	86%	85%
Good academic standing	75%	95%	95%	91%
Associate's degree or certificate attainment*	35%	42%	50%	54%
Graduation and transfer to four-year institution	20%	27%	29%	33%

*Based on number of students who graduated with a certificate or associate's degree within four years of the academic year the student entered the TRIO project.

Source: Middlesex Community College TRIO Student Success Program

Middlesex TRIO Program for Student Achievement for Students with Disabilities Student Performance Compared to Approved US DOE Rates				
Criteria	Approved rate per US Department of Education Standard Objectives	Actual Rates for SSS/D students		
		2015-16	2016-17	2017-18
Percentage of students retained annually within program	65%	83%	85%	83%
Good academic standing	75%	89%	93%	88%
Associate's degree or certificate attainment*	12%	38%	52%	50%
Graduation and transfer to four-year institution	12%	9%	26%	27%

*Based on number of students who graduated with a certificate or associate's degree within four years of the academic year the student entered the TRIO project.

Source: Middlesex Community College TRIO Program for Student Achievement for Students with Disabilities

Additionally, the awarding of a Title III Asian American and Native American Pacific Islander-serving Institutions ([AANAPISI](#)) Grant, "Program for Asian American Student Advancement," has resulted in several initiatives including the following: creation of the Asian American Connections Center ([AACC](#)), programming to increase access to college financial aid and financial wellness education for students and their families, improvement of the academic transition of Asian American ELL students to college-level coursework, and professional development for faculty and staff designed to increase competence and expertise to better serve Asian American students and their families.

In the two years since the grant was awarded, the results are promising. Key data points include the following: in year two of the grant, the AACC served over 2000 participants; 315 individual students used the AACC on a regular basis. Programming included financial literacy workshops, film screenings, speaker events, and family and community events. Academic Centers for Enrichment ([ACE](#)) provided targeted Supplemental Instruction ([SI](#)) training for SI leaders working with ELL students in pre-college and college-level courses. The training focused on working with linguistically diverse populations with a special emphasis on Southeast Asian students. Results from year one of the grant indicate 66% of the Asian American population attended SI sessions for English or ELL at least one time; 84% of Asian American students who attended SI successfully completed the course compared to 77% of Asian American students who did not attend SI; and the average GPA in ELL and English courses was 1.68 points higher for students participating in SI sessions as compared to students who did not receive SI services (3.03 as compared to 1.38). Regarding professional development, to date 202 faculty, staff, and administrators have attended cultural competency workshops designed to enhance and improve cultural awareness, understanding, and interactions with Asian American students and the community. Faculty fellows and ambassadors from several disciplines have developed 22 curriculum modules focusing on Southeast Asia that are posted on the college's website for faculty to adapt to their own courses.

The DHE recently announced that by 2032 nearly one in four students in the Massachusetts K-20 pipeline will be Latinx. Recent Middlesex data reflects this trend; over the past decade the percentage of Latinx students has risen from 12% to 18%. Middlesex must increase support for this growing population. Middlesex now offers designated Latinx advising; the Latinos Unidos student club; and La Guagua, a community reading group. These programs are contributing to the growing retention rates among Latinx students. For example, among students participating in La Guagua, established in 2015, 50% have completed either their associate's or bachelor's degree and have transferred to UMass-Lowell, Amherst College, Northeastern University, Wellesley College, Merrimack College, and others. Plans to scale up programs for Latinx students are underway.

Enrollment of African American students also continues to grow, but at a slower pace. From 2008 - 2018, the percentage grew from 6 - 8%. An initiative beginning in fall 2019 involving a team composed of staff from the Multicultural Center, faculty, and graduate student intern will directly support efforts to increase the success of African American students, specifically males.

Finally, the Health Career degree programs are advancing the equity agenda. Black/African Americans continue to fare well as the percentage of degree recipients was 11% higher than the percentage of White degree recipients in 2016 and 4% higher in 2017. Regarding Latinx students, in 2016 the percentage of degree recipients was 3% lower than that of White students. However, by 2017, the percentage of Latinx degree recipients rose to 7% higher than that of White students.

The table below shows three-year graduation rates for first-time, full-time students. While percentages are fairly low, an important indicator is the increase in percentage of graduates across every demographic, with the percentage of Black/African Americans experiencing the greatest increase, moving from 9.7% in 2016 to 21.1% in 2019.

Graduation Rates (150% of time) First-time, Full-time Students		
	2016 (Percentage)	2019 (Percentage)
Overall College	17.0	21.0
Asian/PI	17.9	21.5
Black/ AfAM	9.7	21.1
Hispanic/Latinx	10.0	14.7
White	18.8	22.3

Source: Middlesex Community College Office of Institutional Research and Analytics

Comparison of Full- and Part-time Student Graduation Rates

There is a significant difference between full- and part-time student graduation rates. For example, for the 2010-2011 cohort, a total of 25% of full-time students earned a degree within six years, while only 16% of part-time students did, a difference of 9 percentage points.

IPEDS Outcomes Measures Data	Cohort	Cohort	Cohort	Cohort
	Fall 2007*	Fall 2008*	2009-10	2010-11
First-time, Full-time Students	1306	1387	1659	1507
Awarded a degree within six years	26%	26%	26%	25%
Awarded a degree within eight years	29%	29%	28%	27%
Not awarded a degree within eight year but still enrolled	4%	4%	3%	3%
First-time, Part-time Students	617	694	959	972
Awarded a degree within six years	13%	20%	15%	16%
Awarded a degree within eight years	18%	22%	18%	19%
Not awarded a degree within eight years but still enrolled	5%	5%	2%	2%

Source: Middlesex Community College Office of Institutional Research and Analytics

*After two years of requiring fall cohorts, IPEDS began requiring annual cohort data.

Targeted interventions for Latinx students, African American males, and Southeast Asian students will continue to be a focus, as well as new interventions for part-time students.

CONCLUSION

Middlesex looks to the future with the recognition that its mission has expanded from one of access to one of access and completion. The college understands that completion may differ from student-to-student; some students seek to complete an associate's degree in a career program; others want to complete an associate's degree en route to a bachelor's degree and beyond; others aim to complete a certificate to enter a new career; and still others want to complete a semester or two worth of courses before transferring to a baccalaureate or graduate program. Clearly, the common denominator among these goals is completion. As the graduation rate is steadily climbing, Middlesex is confident many of its practices are working. The college is investing significant resources to make this happen. Middlesex spends more on student instruction and support than any other community college in Massachusetts. Nationally, community colleges spend \$5.14 on student instruction and support for every dollar spent on institutional support. In Massachusetts, expenditures per student range from \$3.49 to \$6.93 with Middlesex being the highest. However, the college recognizes that more focused work and resources are needed to improve the outcomes for all underserved populations. The college's investment in data analytics professionals and tools will build the institutional capacity to identify students at risk and design programs and interventions to guide these students to completion. Middlesex is poised to gather the data, design the interventions, focus its resources, and continue to develop a culture committed to increasing the persistence, retention, and graduation rates for all students.

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INSTITUTIONAL PLANS

With the current strategic plan, *Transformative Education FY 2016-2020*, nearing the final year of its implementation, the college is entering a transitional period during which initiatives from the existing plan are reaching fulfillment and the process for developing a new plan is beginning. The current plan has helped to guide the college over a period of significant change by prioritizing initiatives for student success, developing meaningful metrics, and encouraging rigorous evaluation. The rapidly evolving context for public higher education, however, requires that Middlesex take stock of its present realities and engage in an inclusive strategic planning process to address the challenges and opportunities that face the college in the next three to five years.

In spring 2019, the Strategic Planning Steering Committee began to consider how to manage the transition from the current plan to the development of a new one. Because the previous planning process included a full review and rewriting of the mission, vision, and values, the committee decided that these should be revisited and affirmed – or revised – but that the extensive process of four years ago would not need to be repeated. Similarly, the five strategic directions in the current plan are broad and represent fundamental aspects of the college’s work. Although the committee agreed they should be revisited, discussions held throughout Steering Committee meetings this past spring indicate these core elements of the plan will largely be retained as the primary framework for the 2020-2023 plan. The composition of the Steering Committee was also considered in order to ensure representation from across the institution and a variety of viewpoints. The Steering Committee recommended that as many current members as possible continue into the new planning cycle for the purpose of continuity. Following this recommendation, the President appointed a new committee, inviting several members from across the college to join a core group from the existing committee; this balance of new and returning members is designed to generate new approaches and fresh ideas while maintaining stability. In July, the reconstituted Steering Committee met with the Cabinet for a two-day facilitated orientation/retreat to establish the parameters and methodology for the new planning process that begins in fall 2019.

The examination of the initiatives the college has undertaken and the accomplishments achieved through the current plan provide both direction and a foundation for the future as Middlesex’s next planning cycle gets underway. Because of its broad range and the depth of its analysis, this NECHE Interim Report will provide a valuable resource looking forward. The following outlines Middlesex’s projections for addressing NECHE criteria in the coming years:

Standard One - Mission and Purposes

As the college begins a new strategic planning process in AY19-20, the mission, vision, and values of the college will be reviewed and, if needed, modified by the Strategic Planning Committee. As part of the college's plans for the upcoming 50th anniversary, the mission, vision, and values, along with the new strategic plan, will be visibly incorporated into anniversary events.

Standard Two - Planning and Evaluation

The college recently engaged a facilitator/consultant from CBT Collaborative Brain Trust to assist the Strategic Planning Committee in developing a comprehensive planning process and final product that will guide the college from 2020-2023.

Standard Three - Organization and Governance

The Faculty Staff Association Bylaws Committee will complete its review/revision of its current bylaws, and the college community will vote in spring 2020 on any revisions/recommendations.

Standard Four - The Academic Program

The Enrollment Working Group along with the Academic and Student Affairs Council will complete an assessment of the college's Guided Pathways implementation to identify areas of effectiveness and components for expansion to bring this work to scale by 2021.

Standard Five - Students

The Provost and Vice President of Academic and Student Affairs and the Dean of Students/Senior Student Affairs Officer will expand assessment/program review in the areas of direct student service to better allocate resources to improve the student experience.

The Provost and Vice President of Academic and Student Affairs and the Dean of Enrollment Management will lead the Enrollment Working Group in the execution of the Enrollment Management and Retention Plan (2018-2021) to improve retention and sustain enrollment.

Standard Six - Teaching and Learning

As enrollment declines and hopefully stabilizes, the Provost and Vice President of Academic and Student Affairs and the Academic Deans Council will continue to analyze program data to recommend replacements for retiring full-time faculty to maintain the college's full-time/part-time ratio.

The new Director of Academic Technology and Digital Learning will lead planning efforts in the expansion of the college's online and technology mediated educational programs, and instructional design will be incorporated into the college's strategic plan.

Standard Seven - Institutional Resources

Based on the 2018-19 Business Process Review (BPR) conducted by consultant Grant Thornton, the Human Resources Department will:

- Reengineer procedures to focus on innovative, efficient, and effective delivery of HR solutions throughout the employee life cycle in the areas of talent acquisition, diversity and equity, onboarding, pay and benefits, analytics, coaching and performance management, professional development, and employee and labor relations;
- Foster a high functioning HR organization by leveraging technology to build responsive and consistent processes to reduce redundancies, leverage best practices, respond nimbly to changing demands, and meet the needs of all stakeholders by building a culture of employee success and organizational learning; and
- Create value by enhancing employee services through self-help tools and on-demand information that empowers, aligns, and connects employees across the college to achieve their goals by providing access to timely, accurate HR information and applications to support data-informed decisions.

The Vice President of Finance will continue to utilize an economic sustainability rubric for strategic and operating projections. This rubric tracks changes in key economic factors (credit hours, state funding, consumer price index, contribution to fund balance). The rubric will allow the college to assess trends, create “what if” scenarios, and address economic shortfalls through balancing student fee increases and/or operating expense reductions.

The Vice President of Finance will work with the Provost and Vice President of Academic and Student Affairs to track MA Department of Education K-12 student enrollment data to optimize feeder school capture rates and to support strategic planning.

The Finance area will continue to report with its quarterly financial statements the National Association of College and University Business Officers (NACUBO) benchmarks for assessment of actual operating performance contribution to fund balance, days cash on hand to cover operating expenses, current ratio, cash coverage of fund balance, and net position fund balance as a percent of the operating budget. The NACUBO benchmarks are an effective tool to measure the impact of operating investment scenarios to ensure both short- and long-term economic sustainability.

Middlesex’s strategic and operating plans will incorporate departmental funding, investment, and resource allocation for strategic plan alignment to support teaching and learning, student success, community partnerships, technology, capital and deferred maintenance, and institutional effectiveness.

Standard Eight - Educational Effectiveness

The Provost and Vice President of Academic and Student Affairs and the Dean of Enrollment Management and the department chairs for English and Mathematics will develop a plan to bring Multiple Measures course placement to scale by 2020 in compliance with the Department of Higher Education policy articulated in fall 2019.

The Dean of STEM and the Dean of Liberal Arts, in collaboration with the English and the Mathematics departments, will continue to assess and expand the co-requisite model to decrease the barriers created by developmental education and to increase student progression through and completion of critical gateway courses.

The President and his Cabinet will work closely with the Leading for Change working group and the Strategic Plan Steering Committee to implement the recommendations of the Middlesex Equity Plan to close achievement gaps by 2025.

Standard Nine - Integrity, Transparency, and Public Disclosure

The Director of Marketing and Communications will lead the college in a comprehensive assessment of the effectiveness of the college website and begin the redesign process in 2020 to further enhance effectiveness and public disclosure.

Appendix A – Affirmation of Compliance



COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION

NEW ENGLAND ASSOCIATION OF SCHOOLS AND COLLEGES

3 Burlington Woods, Suite 100, Burlington, MA 01803-4514

Voice: 781) 425 7785 Fax: (781) 425 1001 Web: <https://cihe.neasc.org>

AFFIRMATION OF COMPLIANCE WITH FEDERAL REGULATIONS RELATING TO TITLE IV

Periodically, member institutions are asked to affirm their compliance with federal requirements relating to Title IV program participation, including relevant requirements of the Higher Education Opportunity Act.

- 1. Credit Hour:** Federal regulation defines a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than: (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours. (CIHE Policy 111. See also *Standards for Accreditation* 4.34.)

URL	https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2042#Credit_Hour_Policy
Print Publications	Catalog (only published online)
Self-study/Interim Report Page Reference	Page 26

- 2. Credit Transfer Policies.** The institution’s policy on transfer of credit is publicly disclosed through its website and other relevant publications. The institution includes a statement of its criteria for transfer of credit earned at another institution of higher education along with a list of institutions with which it has articulation agreements. (CIHE Policy 95. See also *Standards for Accreditation* 4.38, 4.39 and 9.19.)

URL	https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2041#Transfer_IN_Receiving_MCC_Credit_for_Academic_Work_Completed_Elsewhere
Print Publications	Catalog (only published online)
Self-study/Interim Report Page Reference	Page 26

- 3. Student Complaints.** “Policies on student rights and responsibilities, including grievance procedures, are clearly stated, well publicized and readily available, and fairly and consistently administered.” (*Standards for Accreditation* 5.18, 9.8, and 9.19.)

URL	http://catalog.middlesex.mass.edu/content.php?catoid=23&navoid=2066
Print Publications	Catalog (only published online)
Self-study/Interim Report Page Reference	Page 26

- 4. Distance and Correspondence Education: Verification of Student Identity:** If the institution offers distance education or correspondence education, it has processes in place to establish that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives the academic credit. . . .The institution protects student privacy and notifies students at the time of registration or enrollment of any projected additional student charges associated with the verification of student identity. (CIHE Policy 95. See also *Standards for Accreditation* 4.48.)

Method(s) used for verification	College issued User ID and student password
Self-study/Interim Report Page Reference	Page 26

- 5. FOR COMPREHENSIVE EVALUATIONS ONLY: Public Notification of an Evaluation Visit and Opportunity for Public Comment:** The institution has made an appropriate and timely effort to notify the public of an upcoming comprehensive evaluation and to solicit comments. (CIHE Policy 77.)

URL	
Print Publications	
Self-study Page Reference	

The undersigned affirms that Middlesex Community College meets the above federal requirements relating to Title IV program participation, including those enumerated above.

Chief Executive Officer: James C. Mealy

Date: August 1, 2019

Appendix B - Audited Financial Statement

**MIDDLESEX COMMUNITY
COLLEGE**

(an agency of the Commonwealth of Massachusetts)

**FINANCIAL STATEMENTS AND MANAGEMENT'S
DISCUSSION AND ANALYSIS**

JUNE 30, 2018

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

**Financial Statements and
Management's Discussion and Analysis**

June 30, 2018

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INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of
Middlesex Community College
Lowell, Massachusetts

Report on the Financial Statements

We have audited the accompanying financial statements of Middlesex Community College (an agency of the Commonwealth of Massachusetts) (the "College"), which comprise the statement of net position as of June 30, 2018, the related statement(s) of revenues and expenses, changes in net position and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We did not audit the financial statements of Middlesex Community College Foundation, Inc., as discussed in Note 1. The financial statements of this component unit were audited by other auditors, whose report thereon has been furnished to us, and our opinion, insofar as it relates to the amounts included for the entity not audited by us included in the discretely presented component unit of the College, is based solely upon the report of the other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion.

An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Middlesex Community College as of June 30, 2018, and the changes in net position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 2 to the financial statements, GASB Statement Number 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, is effective for fiscal year 2018 and required the College to restate beginning net position at July 1, 2017 to recognize its proportionate share of the net postemployment benefits other than pensions obligation determined for the State Retirees' Benefit Trust.

As discussed in Note 2 to the financial statements, we have previously issued an unmodified opinion on the financial statements dated October 25, 2018. Subsequent to the issuance of the financial statements, it was discovered that the calculation of postemployment benefits other than pensions as of June 30, 2018 and July 1, 2017 was misstated.

Our opinion is not modified with respect to these matters.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis and the required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2018, on our consideration of the College's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the College's internal control over financial reporting and compliance.

O'Connell and Duen, P.C.

**Certified Public Accountants
Braintree, Massachusetts**

October 25, 2018 (except for Management's Discussion and Analysis, Note 2, Note 9, Note 11, Note 14, Note 16, and Schedule of Proportionate Share of the Net OPEB Liability, as to which the date is February 28, 2019)

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Introduction

The following discussion and analysis provides management's view of the financial position of Middlesex Community College (the "College" or "MCC") as of June 30, 2018 and 2017, and the changes in its financial position for the years then ended. This analysis should be read in conjunction with the College's financial statements and notes thereon, which are also presented in this document.

The College is an entrepreneurial learning community committed to providing educational programs and services that support personal growth and economic opportunity for our diverse student populations. A public institution of higher education in the Commonwealth of Massachusetts, MCC maintains campuses in Bedford and Lowell. The College offers 80 programs leading to degrees or certificates, as well as many noncredit career and professional development programs serving approximately 11,217 credit bearing students and 2,561 noncredit students. In addition, the College has more than 30 partnerships with schools and colleges throughout the Merrimack Valley.

The Middlesex Community College Foundation (the "Foundation") is a legally separate tax-exempt component unit of Middlesex Community College. The Foundation acts primarily as a fund-raising organization to supplement the resources that are available to the College in support of its programs. Although the College does not control the timing or the amount of receipts from the Foundation, the majority of resources received or held by the Foundation are restricted to the activities of the College by the donors. Because these resources held by the Foundation can only be used for the benefit of the College, the Foundation is considered a component unit of the College and is discretely presented in the College's financial statements.

Management's Discussion and Analysis focuses on the College, not its component unit.

Financial Highlights

- As of the close of the fiscal year, June 30, 2018, the College's financial position is stable. The College's final state maintenance appropriation for FY2018 and FY2017 was \$23.4 and \$23.3 million, respectively. The decrease of \$1.5 million in net student fees was due to the changing demographics and decreased enrollments. The College's decrease of \$5.6 million in total operating revenue was due mainly to the relinquishing of the operation of the two career centers in Woburn and Cambridge.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Highlights - Continued

- For FY2018, the mandatory per credit cost of education was \$198 per credit. This is an increase of \$3 per credit – up from \$195 per credit. The Safety Net Scholarship program was stable at \$1,100,000 in FY18.
- The College's FY2018 total operating expenses from restricted and unrestricted funds totaled \$71.4 million and \$77.2 million in FY2017. This decrease is attributable to, once again, the relinquishing of the two career centers.
- There were no material deviations from the approved budget and final expenditures and all records were in order and maintained in accordance with trust fund guidelines.
- Total credits generated in FY2018 was 150,544 and decreased 6% from the FY2017 total of 160,151.
- Consistent with the College's strategic plan, investment continued in technology and physical plant. Technology investment projects totaled \$1,485,774 including life cycle management for computer replacement, software updates, upgrade of Wi-Fi system, network upgrade, purchase of data mining software, and completion of the installation of new document imaging system.
- Physical plant renovations not being capitalized, including improvements and adaptation & renewal projects totaled \$661,211. This includes life safety improvements, and various deferred maintenance projects, including the refreshing of some classrooms.
- MCC partnered with DCAMM on the restoration of the former Boston and Maine Railroad building in downtown Lowell. This building will be used as an academic arts center for the College. MCC sent DCAMM a total of \$8,125,110 as the College's share of the project cost including furniture, fixtures and equipment. The balance of the cost of the project will come from DCAMM funds. This new Academic Arts Center is scheduled to open for students in September 2018.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Overview of the Financial Statements

The College's financial statements are comprised of two primary components: (1) the financial statements and (2) the notes to the financial statements. Additionally, the financial statements focus on the College as a whole, rather than upon individual funds or activities.

The Financial Statements

The financial statements are designed to provide readers with a broad overview of the College's finances and are comprised of three basic statements.

The *statement of net position* presents information on all of the College's assets and liabilities, with the difference between the two reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the College is improving or deteriorating.

The *statements of revenues and expenses, and changes in net position* present information showing how the College's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g., the payment for accrued for compensated absences, or the receipt of amounts due from students and other for services rendered).

The *statement of cash flows* is reported on the direct method. The direct method of cash flow reporting presents net cash flows from operations as major classes of operating receipts (e.g., tuition and fees) and disbursements (e.g., cash paid to employees for services). The Government Accounting Standards Board ("GASB") Statements 34 and 35 require this method to be used.

The financial statements can be found on pages 16-20 of this report.

The College reports its activity as a business type activity using the economic resources measurement focus and full accrual basis of accounting. The College is part of the Commonwealth of Massachusetts. Therefore, the results of the College's operations, its net position and cash flows are included in the Commonwealth's Comprehensive Annual Financial Report.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Overview of the Financial Statements - Continued

The Financial Statements - Continued

In FY2018, GASB Statement Number 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* was implemented. This liability is now a liability of the College, and as such is now showing on the financial statements of the College.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes provide information regarding both the accounting policies and procedures the College has adopted as well as additional detail of certain amounts contained in the financial statements. The notes to the financial statements can be found on pages 21-55 of this report.

Financial Analysis

Net position may serve over time as a useful indicator of the College's financial position. For FY2018 and FY2017, MCC's assets exceeded liabilities by \$14.6 million and \$33.6 million, respectively. This increase in liabilities was due to the addition of the OPEB liability in FY2018.

By far the largest portion of the College's net position reflects its investment in capital assets (e.g., land, building, machinery, and equipment), less any related debt financing used to acquire those assets that is still outstanding. The College uses these capital assets to provide services to students, faculty and administration; consequently, these assets are not available for future spending.

Although the College's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. Also, in addition to the debt noted above, which is reflected in the College's financial statements, the Commonwealth of Massachusetts regularly provides financing for certain capital projects through the issuance of general obligation bonds. These borrowings by the Commonwealth are not reflected in these financial statements.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Analysis - Continued

Following is a condensed summary of net position:

	<u>2018</u>	<u>2017</u>
Current assets	\$ 23,463,524	\$ 18,037,358
Capital assets	45,923,944	37,334,315
Noncurrent assets	<u>7,506,330</u>	<u>7,157,119</u>
Total assets	<u>76,893,798</u>	<u>62,528,792</u>
Deferred Outflows	<u>4,413,444</u>	<u>6,998,856</u>
Total assets and deferred outflows	<u>81,307,242</u>	<u>69,527,648</u>
Current liabilities	12,792,143	9,630,090
Noncurrent liabilities	<u>41,493,554</u>	<u>21,453,773</u>
Total liabilities	<u>54,285,697</u>	<u>31,083,863</u>
Deferred Inflows	<u>12,392,903</u>	<u>4,805,787</u>
Total liabilities and deferred inflows	<u>66,678,600</u>	<u>35,889,650</u>
Net position:		
Net investment in capital assets	43,865,368	34,837,595
Restricted, expendable	1,502,325	1,321,463
Unrestricted	<u>(30,739,051)</u>	<u>2,178,831</u>
Total net position	<u>\$ 14,628,642</u>	<u>\$ 38,337,889</u>

- Assets and deferred outflows of \$81.3 million exceeded liabilities and deferred inflows of \$66.7 million by \$14.6 million in FY2018.
- Operating expenses from all sources incurred during FY2018 and FY2017 totaled \$71.4 million and \$77.2 million, respectively. Revenues from tuition and fees, state capital support and state appropriations, and other sources totaled \$82.7 million and \$79.7 million in FY2018 and FY2017, respectively.

Capital Assets

The College's investment in capital assets as of June 30, 2018 and 2017 amounts to \$45.9 million and \$37.3 million, respectively, net of accumulated depreciation. This investment in capital assets includes land, building (including improvements), and furnishings and equipment. Capital assets increased during the year by 23% or approximately \$8.6 million due to an investment in capital assets of \$10.9 million, which was offset by depreciation expense of \$2.3 million.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management’s Discussion and Analysis (Unaudited)

Financial Analysis - Continued

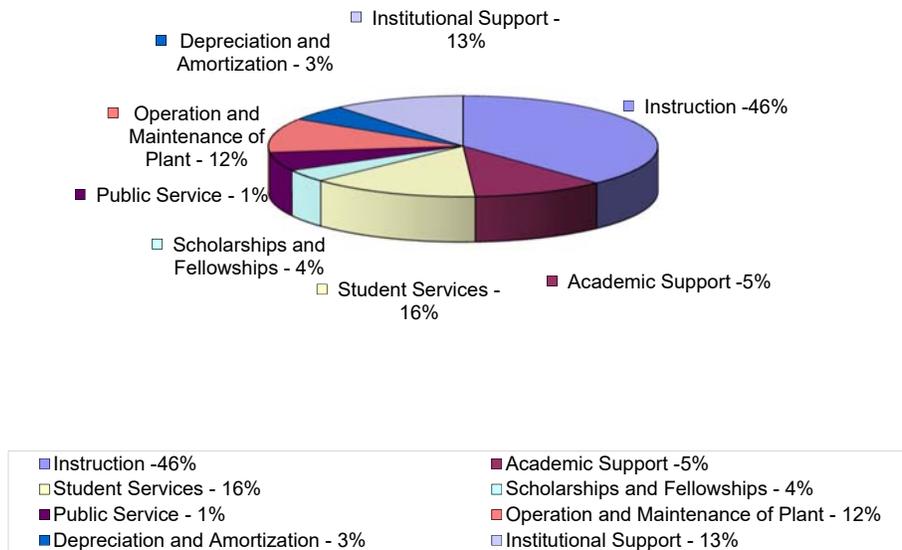
Liabilities and Debt

In addition to accruals for compensated absences and workers compensation, the College carries long-term debt for revenue bonds issued. The accrual for compensated absences consists of sick and vacation pay relating to employees on the College’s payroll. As of June 30, 2018 and 2017, the College had bonds payable amounting to \$2,058,576 and \$2,496,720, respectively. This reduction is due to scheduled principal payments.

Revenues, Expenses, and Changes in Net Position

The following is a summary of the College’s expenses using the Functional Classification Format.

FY2018 Expenses



MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Analysis - Continued

Revenues, Expenses, and Changes in Net Position - Continued

Highlights of revenue activity for FY2018 include:

- Total operating revenue decreased slightly from \$46.7 million to \$41.1 million, primarily due to the relinquishing of the operation of the career centers in Woburn and Cambridge.
- Total net non-operating revenue increased \$515,507 due to a slight increase in state funding.
- Grants and contracts, exclusive of state and federal financial aid awards (e.g., Pell, SEOG, Mass Grants) received by the College for FY2018 and FY2017 total approximately \$5.4 million and \$8.8 million, respectively.

Major grants and contracts for the year include the following:

- The Career Place and the Career Source grants from the Metro North Regional Employment Board and other sources in the amount of \$887,863 for career and related job services. MCC has operated the career centers for approximately 20 years and as of September 30, 2017, the career center grants programs were subject to an RFP process. The RFP was awarded to a new operator. The reduction in career center grants revenue and expense were approximately \$3.4 million.
- The College was awarded a Title III grant in FY2017. This grant was written in order to improve overall student persistence, retention, and completion outcomes. This will occur through two primary components to improve the student experience and academic performance by harnessing the College's technology infrastructure and how information is used in service to student success overall. In FY2018 \$263,786 was spent.
- In 2016, Middlesex Community College was awarded a five-year Asian American and Native American Pacific Islander-Serving Institution (AANAPISI) grant by the U.S. Department of Education. The mission of the Asian American Student Advancement Program is to offer a holistic support system with a dedicated staff that advises, mentors and provides leadership development opportunities for Asian American students. Total funds spent in FY2018 was \$320,255.
- The Talent Search Program exposes students to higher education opportunities and provides information and assistance with the college application process, emphasizing academic advising, college visits, life skills, test taking skills and college prep workshops. The total funds spent on this grant in FY2018 were \$ 306,297.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Analysis – Continued

Revenues, Expenses, and Changes in Net Position – Continued

- The TRIO Student Success Program serves approximately 200 low income and first-generation college students and individuals with disabilities. This program assists students with course selection, academic planning, and career decision-making. The total funds spent on this program in FY2018 were \$348,360.
- The Gear Up Program is a program designed to give low-income students the skills, encouragement and preparation needed to pursue post-secondary education. It also strengthens academic programs and student services at participating schools. Gear Up has strong objectives that align to the public schools' adequate yearly progress (AYP), as required by the federal No Child Left Behind Act. Total expenses for FY2018 were \$221,073.

Highlights of expense activity include:

- The fringe benefit rate for College employees changed from 35.16% to 36.27% resulting in a \$358,702 increase in the fringe expense across all spending categories.
- Overall operating expenses decreased by \$6 million in FY2018 over FY2017. The decrease is largely attributable to the relinquishing of the operation of the career centers and decreased depreciation expenses due to the age of some buildings.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Analysis – Continued

Revenues, Expenses, and Changes in Net Position – Continued

Following is a condensed summary of changes in net position:

	<u>2018</u>	<u>2017</u>
Operating Revenues:		
Net Student Fees	\$ 21,293,485	\$ 22,845,375
Federal, state, local and private grants and contracts	18,225,226	21,653,488
Other sources	<u>1,563,269</u>	<u>2,188,815</u>
Total Operating Revenues	<u>41,081,980</u>	<u>46,687,678</u>
Operating Expenses:		
Instruction	32,929,599	28,982,325
Academic support	3,764,941	8,594,640
Student services	11,362,206	12,096,055
Scholarships and fellowships	2,741,631	2,889,334
Public service	785,744	5,075,653
Operation and maintenance of plant	8,428,324	7,818,459
Institutional support	9,037,925	7,833,125
Depreciation and amortization	<u>2,338,265</u>	<u>3,948,655</u>
Total Operating Expenses	<u>71,388,635</u>	<u>77,238,246</u>
Operating Loss	<u>(30,306,655)</u>	<u>(30,550,568)</u>
Net Non-Operating Revenues	<u>32,347,332</u>	<u>31,831,825</u>
Change in Net Position before Capital Appropriations	2,040,677	1,281,257
Capital appropriations	<u>9,220,528</u>	<u>1,082,126</u>
Change in Net Position	11,261,205	2,363,383
Net Position, Beginning of Year	33,637,998	31,274,615
Restatement of net position (OPEB)	<u>(30,270,561)</u>	<u>-</u>
Net Position, End of Year	\$ <u>14,628,642</u>	\$ <u>33,637,998</u>

Non-Operating Revenues and Expenses

As required by the Governmental Accounting Standards Board, appropriations from the state are considered non-operating. However, the expenditures that result from non-operating revenue are classified as operating expenses. As a result, public higher education institutions will usually incur a loss from operations.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Financial Analysis – Continued

Non-Operating Revenues and Expenses - Continued

Non-operating revenues from the Commonwealth, exclusive of fringe benefits, totaled \$23.9 million in unrestricted appropriations in FY2018 and \$23.6 million in FY2017. The \$23.9 million in FY2018 includes \$147,951 in retained, out-of-state tuition in addition to the state maintenance appropriation. In FY2018, Middlesex received an additional allocation of \$50,000 in workforce development performance-based funding.

The fringe benefit rate increased from 35.16% in FY2017 to 36.27% in FY2018. The Commonwealth's fringe benefit amount for full time employees on the state payroll was \$8.1 million in FY2018 and \$7.8 million in FY2017. These funds are appropriated to the State Treasurer's office for the benefit of the College for employees funded by the state maintenance appropriation. The College must budget and expense the cost of fringe benefits for all College employees funded from local trust funds. The expense of these funds is allocated among the functional expense classifications.

Net investment income was \$503,491 and \$767,741 in FY2018 and FY2017, respectively. This decrease was due to a slight downturn in the market. The market value of the College's equity mutual funds was \$4,293,908 in FY2018 and \$4,083,894 in FY2017.

Additional Information

The College contributes some of its personnel's time and its resources through the fiscal year to support the Foundation and the Lowell Middlesex Academy Charter School. These contributed services are shown below for FY2018 and FY2017:

	<u>2018</u>	<u>2017</u>
• Foundation	\$ 260,573	\$ 260,489
• Charter School	\$ 142,893	\$ 142,893

The cost of education for FY2018 was increased by \$3 per credit, or 1.5%, to \$198 per credit. Enrollments were down slightly by 6.6% and local revenue from tuition and fees was down by 3.5% due to decreased enrollments. Decline in enrollments is projected to be in the double digits through 2020 largely due to smaller graduating class sizes from our local high schools.

As a result of this continued decline in enrollments, the College will be facing significant challenges that can only be addressed through the active engagement of the entire college community. To meet these challenges, the College has embarked on a *Strategic Transformation* process to better understand the changing context and engage in an inclusive and creative process to develop a plan of action. The College will continue to explore further options in developing a plan of action.

MIDDLESEX COMMUNITY COLLEGE

(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Additional Information - Continued

The Massachusetts Community College Council/Massachusetts Teachers Association representing the Adjunct Faculty had a Division of Continuing Education agreement in place with community colleges for the period June 1, 2013 through May 31, 2016. The parties have agreed that the provisions of the expired contract shall remain in force and effect until either December 31, 2017, or until a new collective bargaining agreement for the period June 1, 2016-May 31, 2019 is executed and ratified by both parties, whichever is earlier. This period may be further extended by written agreement of the parties.

The Massachusetts Community College Council (MCCC) representing the Full Time Faculty and Full-Time Unit Professionals at the community colleges has an agreement in place for the period July 1, 2015 through June 30, 2018. The new contract is currently in negotiations.

The American Federation of State, County and Municipal Employees (AFSCME) representing the support staff of the state and community colleges have an agreement in place through June 30, 2017. The new contract is currently waiting to be ratified by union members.

In FY2017, the College continued to work in furtherance of the next phase of the Academic Arts Classroom building project that will be housed in the historic Boston & Maine Railroad building in downtown Lowell. The building was acquired from the federal government in 2008 and will be used to provide critically needed music, dance and performing arts classroom space. The study, funded by the College, was completed in 2015. In September 2013, the state included funds in its budget for the project's design and construction. The design work was completed in FY2015 and construction commenced in the fall of 2015. In FY2017, the College sent \$7,657,900 to DCAMM to cover the College's portion of the project cost. In FY2018, the College sent an additional \$467,210 to cover furniture, fixtures and equipment. DCAMM spent the full amount sent to them on this project in FY2018, with an additional \$9.2 million of DCAMM funds.

The project is expected to be opened for students in September 2018.

In June of 2017, the College, in partnership with DCAMM, signed an agreement with Massachusetts Life Sciences Center and subsequently received \$3 million to help cover the costs of renovating a portion of the Talbot Building located on the College's Lowell Campus into a biotechnology training facility. The College's match for this project will be approximately \$3 million, for a total project cost based on the grant documents of \$6 million. DCAMM will oversee the project which is expected to begin in FY2019. The College has designated \$3 million of the unrestricted net position for the College match and additional cost of the new biotechnology center.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Management's Discussion and Analysis (Unaudited)

Additional Information - Continued

As of June 30, 2018, the College has designated \$3.4 million of the unrestricted net position of the College for the new dental clinic labs on Middle Street in Lowell, required for state of the art student learning, technology, and accreditation standards.

Through a competitive bidding process, the College's contract with the Massachusetts Regional Employment Board for the management of the two career centers in Cambridge and Woburn was not renewed. On September 30, 2017, the College relinquished its management of the centers.

Requests for Information

This financial report is designed to provide a general overview of the College's finances for all those with an interest in the College's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Office of the Executive Director of Finance/CFO, Middlesex Community College, 591 Springs Road, Bedford, Massachusetts, 01730.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Net Position

June 30, 2018

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Net Position

June 30, 2018

Assets and Deferred Outflows of Resources

	<u>Primary Government</u>	<u>Component Unit</u>
	<u>College</u>	<u>Foundation</u>
Current Assets:		
Cash and equivalents	\$ 15,605,173	\$ 2,405,696
Cash held by State Treasurer	508,942	-
Short-term investments	1,352,799	3,873,590
Accounts and other receivables, net	5,988,611	149,712
Prepaid expenses	<u>7,999</u>	<u>41,800</u>
Total Current Assets	<u>23,463,524</u>	<u>6,470,798</u>
Non-Current Assets:		
Long-term investments	7,506,330	200,000
Capital assets, net of accumulated depreciation	<u>45,923,944</u>	<u>480,598</u>
Total Non-Current Assets	<u>53,430,274</u>	<u>680,598</u>
Total Assets	<u>76,893,798</u>	<u>7,151,396</u>
Deferred Outflows of Resources:		
Deferred outflows related to pension plan	3,990,506	-
Deferred outflows related to OPEB	<u>422,938</u>	<u>-</u>
Total Deferred Outflows of Resources	<u>4,413,444</u>	<u>-</u>
 Total Assets and Deferred Outflows of Resources	 <u>\$ 81,307,242</u>	 <u>\$ 7,151,396</u>

See accompanying notes to the financial statements.

Liabilities, Deferred Inflows of Resources and Net Position

	Primary <u>Government</u>	Component <u>Unit</u>
	<u>College</u>	<u>Foundation</u>
Current Liabilities:		
Accounts payable and accrued liabilities	\$ 3,021,893	\$ 28,671
Accrued payroll	1,755,634	-
Accrued compensated absences and workers' compensation	3,068,976	-
Students' deposits and unearned revenues	4,228,585	3,270
Funds held for others	265,197	-
Current portion of bonds payable	<u>451,858</u>	<u>-</u>
Total Current Liabilities	<u>12,792,143</u>	<u>31,941</u>
Non-Current Liabilities:		
Accrued compensated absences and workers' compensation	1,775,771	-
Bonds payable	1,606,718	-
Net pension liability	12,940,922	-
Net OPEB liability	<u>25,170,143</u>	<u>-</u>
Total Non-Current Liabilities	<u>41,493,554</u>	<u>-</u>
Total Liabilities	<u>54,285,697</u>	<u>31,941</u>
Deferred Inflows of Resources:		
Deferred inflows related to pension plan	6,393,938	-
Deferred inflows related to OPEB	<u>5,998,965</u>	<u>-</u>
Total Deferred Inflows of Resources	<u>12,392,903</u>	<u>-</u>
Total Liabilities and Deferred Inflows of Resources	<u>66,678,600</u>	<u>31,941</u>
Net Position:		
Net investment in capital assets	43,865,368	480,598
Restricted:		
Expendable	1,502,325	4,191,390
Unrestricted	<u>(30,739,051)</u>	<u>2,447,467</u>
Total Net Position	<u>14,628,642</u>	<u>7,119,455</u>
Total Liabilities, Deferred Inflows of Resources and Net Position	<u>\$ 81,307,242</u>	<u>\$ 7,151,396</u>

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Revenues and Expenses

For the Year Ended June 30, 2018

	<u>Primary Government</u>	<u>Component Unit</u>
	<u>College</u>	<u>Foundation</u>
Operating Revenues:		
Tuition and fees	\$ 34,082,194	\$ -
Less: scholarship allowances	<u>(12,788,709)</u>	<u>-</u>
Net Student Fees	21,293,485	-
Federal, state, local and private grants and contracts	18,225,226	-
License income	-	119,215
Other auxiliary enterprises	292,771	-
Other sources	<u>1,270,498</u>	<u>1,364,980</u>
Total Operating Revenues	<u>41,081,980</u>	<u>1,484,195</u>
Operating Expenses:		
Instruction	32,929,599	-
Academic support	3,764,941	-
Student services	11,362,206	-
Scholarships and fellowships	2,741,631	65,183
Public service	785,744	257,883
Operation and maintenance of plant	8,428,324	-
Institutional support	9,037,925	286,923
Depreciation and amortization	<u>2,338,265</u>	<u>41,186</u>
Total Operating Expenses	<u>71,388,635</u>	<u>651,175</u>
Operating Income (Loss)	<u>(30,306,655)</u>	<u>833,020</u>
Non-Operating Revenues (Expenses):		
State appropriations - unrestricted	31,790,093	-
Net investment income (expense)	503,491	190,214
Interest expense	(69,157)	-
Payments between the College and the Foundation	<u>122,905</u>	<u>(122,905)</u>
Net Non-Operating Revenues (Expenses)	<u>32,347,332</u>	<u>67,309</u>
Change in Net Position before Capital Appropriations	2,040,677	900,329
Capital appropriations	<u>9,220,528</u>	<u>-</u>
Change in Net Position	<u>\$ 11,261,205</u>	<u>\$ 900,329</u>

See accompanying notes to the financial statements.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Changes in Net Position

For the Year Ended June 30, 2018

	College				
	<u>Investment in capital assets, net</u>	<u>Restricted Expendable</u>	<u>Restricted Non-expendable</u>	<u>Unrestricted Net Position</u>	<u>Total</u>
Balance at June 30, 2017, as previously reported	\$ 34,837,595	\$ 1,321,463	\$ -	\$ (2,521,060)	\$ 33,637,998
Prior period adjustment - See Note 2	-	-	-	(30,270,561)	(30,270,561)
Balance at June 30, 2017, as restated	34,837,595	1,321,463	-	(32,791,621)	3,367,437
Changes in net position	<u>9,027,773</u>	<u>180,862</u>	-	<u>2,052,570</u>	<u>11,261,205</u>
Balance at June 30, 2018	<u>\$ 43,865,368</u>	<u>\$ 1,502,325</u>	<u>\$ -</u>	<u>\$ (30,739,051)</u>	<u>\$ 14,628,642</u>

	Foundation				
	<u>Investment in capital assets, net</u>	<u>Restricted Expendable</u>	<u>Restricted Non-expendable</u>	<u>Unrestricted Net Position</u>	<u>Total</u>
Balance at June 30, 2017	\$ 521,785	\$ 3,879,337	\$ -	\$ 1,818,004	\$ 6,219,126
Changes in net position	<u>(41,187)</u>	<u>312,053</u>	-	<u>629,463</u>	<u>900,329</u>
Balance at June 30, 2018	<u>\$ 480,598</u>	<u>\$ 4,191,390</u>	<u>\$ -</u>	<u>\$ 2,447,467</u>	<u>\$ 7,119,455</u>

See accompanying notes to the financial statements.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Cash Flows

For the Year Ended June 30, 2018

Cash Flows from Operating Activities:

Tuition and fees	\$ 21,682,939
Grants and contracts	19,806,420
Payments to suppliers	(6,095,095)
Payments to employees	(51,232,254)
Payments to students	(2,741,632)
Collection of loans to students	234,367
Income from contract services	292,771
Other cash receipts	<u>1,233,887</u>
Net Cash Applied to Operating Activities	<u>(16,818,597)</u>

Cash Flows from Non-Capital Financing Activities:

State appropriations	23,941,738
Payments from Foundation	122,905
Tuition remitted to state	(281,156)
Funds held for others	<u>(8,398)</u>
Net Cash Provided by Non-Capital Financing Activities	<u>23,775,089</u>

Cash Flows from Capital Financing Activities:

Purchases of capital assets	(1,707,366)
Principal paid on bond payable	(438,144)
Interest paid on bond payable	<u>(69,157)</u>
Net Cash Applied to Capital Financing Activities	<u>(2,214,667)</u>

Cash Flows from Investing Activities:

Proceeds from sales and maturities of investments	2,665,424
Purchases of investments	(2,137,220)
Interest on investments	<u>41,371</u>
Net Cash Provided by Investing Activities	<u>569,575</u>

Net Increase in Cash and Equivalents **5,311,400**

Cash and Equivalents, Beginning of Year **10,802,715**

Cash and Equivalents, End of Year **\$ 16,114,115**

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Statement of Cash Flows - Continued

For the Year Ended June 30, 2018

Reconciliation of Net Operating Loss to Net Cash Applied to

Operating Activities:

Net operating loss	\$ (30,306,655)
Adjustments to reconcile net operating loss to net cash applied to operating activities:	
Depreciation and amortization	2,338,265
Net pension activity	168,005
Net OPEB activity	475,609
Bad debts	1,041,896
Fringe benefits provided by the State	8,129,511
Changes in assets and liabilities:	
Accounts receivable, net	(1,739,315)
Prepaid expenses and deferred charges	3,187
Loans receivable, net	164,170
Accounts payable and accrued liabilities	951,190
Accrued payroll and compensated absences	(799,933)
Students' deposits and unearned revenues	<u>2,755,473</u>
Net Cash Applied to Operating Activities	<u>\$ (16,818,597)</u>

Non-Cash Transactions:

Fringe benefits provided by the State	<u>\$ 8,129,511</u>
Capital assets acquired through capital appropriations	<u>\$ 9,220,528</u>

See accompanying notes to the financial statements.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies**

Organization

Middlesex Community College (the “College”) is one of the largest community colleges in the Commonwealth of Massachusetts (the “Commonwealth”) and serves the largest county in the Commonwealth with campuses in urban Lowell and suburban Bedford. The College’s mission is to provide educational, occupational and cultural opportunities for an academically, economically and culturally diverse population. The College offers 80 associate degree and certificate programs to 11,217 credit and 2,561 noncredit students. The College is involved in numerous community partnership programs and more than 30 different partnerships with schools and colleges throughout the Merrimack Valley. The College also provides comprehensive, customized training, consulting and technical assistance programs to area businesses. The College is accredited by the New England Association of Schools and Colleges.

Basis of Presentation

The accompanying financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America, as prescribed by the Governmental Accounting Standards Board (“GASB”).

Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue, as soon as all eligibility requirements have been met. The accompanying statement of revenues and expenses demonstrates the degree to which the direct expenses of a given function are offset by program revenues. Direct expenses are those that are clearly identifiable within a specific function. Program revenues primarily include charges to students or others who enroll or directly benefit from services that are provided by a particular function. Items not meeting the definition of program revenues are instead reported as general revenue.

The College has determined that it functions as a business-type activity, as defined by GASB. The effect of interfund activity has been eliminated from these financial statements. The basic financial statements and required supplementary information for general purpose governments consist of management’s discussion and analysis, basic financial statements including the College’s discretely presented component unit, the Foundation, and required supplementary information.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

Basis of Presentation - continued

The College presents statements of net position, revenues and expenses, changes in net position and cash flows on a combined College-wide basis.

The College's policies for defining operating activities in the statement of revenues and expenses are those that generally result from exchange transactions such as the payment received for services and payment made for the purchase of goods and services. Certain other transactions are reported as non-operating activities in accordance with GASB Statement No. 35, *Basic Financial Statements and Management's Discussion and Analysis - for Public Colleges and Universities*. These non-operating activities include the College's operating and capital appropriations from the Commonwealth of Massachusetts, net investment income, and interest expense.

The Middlesex Community College Foundation, Inc. (the "Foundation"), a component unit of the College, was formed in 1987 to render financial assistance and to support the educational programs and development of the College. The Foundation is legally separate from the College, and the College is not financially accountable for the Foundation. The Foundation has been included within these financial statements because of the nature and significance of its relationship with the College. The Foundation is located at the College's Bedford, Massachusetts campus. Complete financial statements for the Foundation can be obtained from Middlesex Community College Foundation, Inc., P.O. Box 716, Springs Road, Bedford, MA 01730.

During the years ended June 30, 2018, the Foundation distributed \$122,905 to the College for both restricted and unrestricted purposes. During the year, the College paid a license fee in the amount of \$100,425 to the Foundation for use of the Nesmith House in Lowell, Massachusetts and the Meetinghouse in Billerica, Massachusetts.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

Net Position

Resources are classified for accounting purposes into the following three net position categories:

Investment in capital assets, net: Capital assets, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction, repair or improvement of those assets.

Restricted - expendable: Net position whose use is subject to externally imposed conditions that can be fulfilled by the actions of the College or by the passage of time.

Unrestricted: All other categories of net position. Unrestricted net assets may be designated by actions of the College's Board of Trustees.

The College has adopted a policy of generally utilizing restricted - expendable funds, when available, prior to unrestricted funds.

Cash and Equivalents

The College considers all highly liquid debt instruments purchased with an original maturity date of three months or less, and cash and deposits held by state agencies on behalf of the College to be cash equivalents.

Allowance for Doubtful Accounts

Provisions for losses on receivables are determined on the basis of loss experience, known and inherent risks, and current economic conditions.

Investments

Investments in marketable securities are stated at fair value. The College has no donor restricted endowments at June 30, 2018.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

Capital Assets

Real estate assets, including improvements, are generally stated at cost. Furnishings, equipment and collection items are stated at cost at date of acquisition or, in the case of gifts, at fair value at date of donation. In accordance with the Commonwealth's capitalization policy, only those items with a unit cost of more than \$50,000 are capitalized. Interest costs on debt related to capital assets are capitalized during the construction period. College capital assets, with the exception of land and construction in progress, are depreciated on a straight-line basis over their estimated useful lives, which range from 5 to 40 years. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are expensed. The College does not hold collections of historical treasures, works or art or other items not requiring capitalization or depreciation.

Pensions

For purposes of measuring the net pension liability, deferred outflow of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Massachusetts State Employees' Retirement System plan ("SERS") and the additions to/deductions from SERS' fiduciary net position have been determined on the same basis as they are reported by SERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Postemployment Benefits Other Than Pensions ("OPEB")

For purposes of measuring the College's net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the State Retirees' Benefit Trust ("SRBT") and additions to/deductions from SRBT's fiduciary net position have been determined on the same basis as they are reported by SRBT. For this purpose, SRBT recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

Fringe Benefits

The College participates in the Commonwealth's fringe benefit programs, including health insurance, unemployment, pension and workers' compensation benefits. Health insurance, unemployment and pension costs are billed through a fringe benefit rate charged to the College. Workers' compensation costs are assessed separately based on the College's actual experience.

Compensated Absences

Employees earn the right to be compensated during absences for vacation and sick leave. Accrued vacation is the amount earned by all eligible employees through June 30, 2018. The accrued sick leave balance represents 20% of amounts earned by those employees with or expected to have ten or more years of Commonwealth service at June 30, 2018. Upon retirement, these employees are entitled to receive payment for this accrued balance.

Students' Deposits and Unearned Revenue

Student deposits and unearned revenues consist primarily of deposits and advance payments received for tuition and fees related to certain summer programs, and the following academic year, and are recorded as revenues when earned.

Student Fees

Student tuition and fees are presented net of scholarships and fellowships. Certain other scholarships are paid directly to the student and are generally reflected as expenses.

Tax Status

The College is a governmental component unit of the Commonwealth and is therefore exempt from income taxes under Section 115 of the Internal Revenue Code.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions about future events. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as reported amounts of revenues and expenses during the reporting period.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

Use of Estimates - continued

Management evaluates the estimates and assumptions on an ongoing basis using historical experience and other factors that management believes to be reasonable under the circumstances. Adjustments to estimates and assumptions are made as facts and circumstances require. As future events and their effects cannot be determined with certainty, actual results may differ from the estimates used in preparing the accompanying financial statements. Significant estimates and assumptions are required as part of estimating an allowance for doubtful accounts, depreciation, and determining the net pension and OPEB liabilities.

New Governmental Accounting Pronouncements

GASB Statement 83 – *Certain Asset Retirement Obligations* (“AROs”) is effective for periods beginning after June 15, 2018. An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs and requires that recognition occur when the liability is both incurred and reasonably estimable. Management has not completed its review of the requirements of this standard and its applicability.

GASB Statement 84 – *Fiduciary Activities* is effective for periods beginning after December 15, 2018. The objective of this Statement is to establish criteria for identifying fiduciary activities. Activity meeting the established criteria would then be presented in a statement of fiduciary net position and a statement of changes in fiduciary net position. Pension and other employee benefit trust funds, investment trust funds, private-purpose trust funds and custodial funds would be reported, as applicable, according to this Statement. Information of component units of a primary government would be combined and shown in the aggregate with the fiduciary funds of the primary government. Under this Statement, a liability could be recognized to the beneficiaries in a fiduciary fund if the government has been compelled to disburse fiduciary resources. Management has not completed its review of the requirements of this standard and its applicability.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 1 - **Summary of Significant Accounting Policies - Continued**

New Governmental Accounting Pronouncements - continued

GASB Statement 87 – *Leases* is effective for periods beginning after December 15, 2019. Implementation of this standard will require lessees to recognize on their statement of net position the rights and obligations resulting from leases categorized as operating leases as assets, liabilities, or deferred inflows / outflows of resources. It provides for an election on leases with terms of less than twelve months to be excluded from this Standard. Management has not completed its review of the requirements of this standard and its applicability.

GASB Statement 88 – *Certain Disclosures Related to Debt, Including Direct Borrowings and Placements* is effective for years beginning after June 15, 2018. Implementation of this standard will require additional disclosures in the notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. Management has not completed its review of the requirements of this standard and its applicability.

GASB Statement 89 – *Accounting for Interest Costs Incurred before the End of a Construction Period* is effective for reporting periods beginning after December 15, 2019. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. Management has not completed its review of the requirements of this standard and its applicability.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 2 – Implementation of Newly Effective Accounting Standard and Restatement of Previously Issued Financial Statements

The College implemented GASB Statement Number 75 (“GASB 75”), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* as of July 1, 2017.

Subsequent to the original issuance of these financial statements, management was advised of an error in the calculation of OPEB pertaining to projected pay increases for employees in the allocation of the actuarial present value of projected benefit payments to past and future services as of June 30, 2018 and July 1, 2017.

The table below presents the effects of implementing GASB 75 and the correction to the previously issued financial statements.

	As Previously Reported <u>at June 30, 2017</u>	Implementation of <u>GASB 75</u>	As Previously Reported <u>at July 1, 2017</u>	Correction of <u>the Error</u>	As Restated <u>at July 1, 2017</u>
Statement of Net Position:					
Deferred outflows related to OPEB	\$ -	633,623	633,623	-	\$ 633,623
Net OPEB liability	\$ -	35,604,075	35,604,075	(4,699,891)	\$ 30,904,184
Unrestricted net position	\$ (2,521,060)	(34,970,452)	(37,491,512)	4,699,891	\$ (32,791,621)
	As Previously Reported <u>at June 30, 2018</u>	Correction of <u>the Error</u>	As Restated <u>at June 30, 2018</u>		
Statement of Net Position:					
Deferred outflows related to OPEB	\$ 430,950	(8,012)	\$ 422,938		
Net OPEB liability	\$ 28,467,373	(3,297,230)	\$ 25,170,143		
Deferred inflows related to OPEB	\$ 7,296,462	(1,297,497)	\$ 5,998,965		
Unrestricted net position	\$ (35,325,766)	4,586,715	\$ (30,739,051)		
Statement of Revenues and Expenses:					
Operating expenses	\$ 71,275,459	113,176	\$ 71,388,635		

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 3 - **Cash and Investments**

Investment Policy

In accordance with Chapter 15A of the Massachusetts General Laws, the Board of Trustees has adopted an investment policy that applies to locally held funds that are not appropriated by the Commonwealth legislature or derived from federal allocations. The principal objectives of the investment policy are: (1) safety of principal, (2) liquidity for operating needs, (3) return on investment, and (4) diversification of risk. The Board of Trustees supports the investments of trust funds in a variety of vehicles, including bank instruments, equities, bonds, government and commercial paper of high quality and mutual funds holding any or all of the above. The Board will, from time to time, establish investment fund ceilings and broad asset allocation guidelines, and authorizes the chief financial officer to invest, or instruct the comptroller to invest, the College's funds within the guidelines established by the investment policy.

Summary of Deposits and Investments

Deposits and investments consist of the following at June 30, 2018:

<u>Cash and equivalents:</u>	
Cash deposits	\$ 13,806,184
Money market funds	<u>1,798,989</u>
Cash and equivalents	15,605,173
 <u>Short-term investments:</u>	
Certificates of deposit	1,352,799
 <u>Long-term investments:</u>	
Bond mutual funds	3,212,422
Equity mutual funds	<u>4,293,908</u>
Long-term investments	<u>7,506,330</u>
Total Deposits and Investments	<u>\$ 24,464,302</u>

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 3 - **Cash and Investments - Continued**

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the College's deposits may not be recovered. Deposits, including certificates of deposit, are made in domestic banks that are federally insured and in some banks that are Massachusetts banks with supplemental insurance for those accounts exceeding the federally insured limits. The College's bank balances, including certificates of deposit, as of June 30, 2018, totaled \$15,100,263. Of these balances, \$12,044,722 were exposed to custodial credit risk as uninsured and uncollateralized. To mitigate custodial credit risk for deposits, the College obtains ratings for all banks and credit unions which hold the College's investments. A star rating of 3+ stars from Bauer Financial is required before investing any College funds in an institution.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Maturities of investments exposed to interest rate risk at June 30, 2018 consist of:

<u>Investment type</u>	<u>Fair value</u>	<u>2018</u>			
		<u>Investment Maturities (in Years)</u>			
		<u>Less than 1</u>	<u>1 to 5</u>	<u>6 to 10</u>	<u>More than 10</u>
Certificates of deposit	\$ 1,352,799	\$ 1,352,799	\$ -	\$ -	\$ -
Money market funds	1,798,989	1,798,989	-	-	-
Bond mutual funds	<u>3,212,422</u>	<u>3,212,422</u>	-	-	-
	<u>\$ 6,364,210</u>	<u>\$ 6,364,210</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

To mitigate interest rate risk, it is the policy of the College to generally not exceed one (1) year in its maturities of Operating Fund investments.

Credit Risk of Debt Securities

Credit risk for investments is the risk that an issuer or other counter party to a debt security will not fulfill its obligations. The following is a listing of credit quality ratings, using Moody's and Standard & Poor's, of the College's investments at June 30,:

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 3 - **Cash and Investments - Continued**

<u>Rated debt investments</u>	<u>Fair value</u>	2018						
		<u>Quality Ratings</u>						
		<u>AAA</u>	<u>AA</u>	<u>A</u>	<u>BBB</u>	<u>BB</u>	<u>B</u>	<u>Unrated</u>
Certificates of deposit	\$ 1,352,799	\$ 1,352,799	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Money market funds	1,798,989	1,429,720	-	-	-	-	-	369,269
Bond mutual funds	<u>3,212,422</u>	<u>944,708</u>	<u>382,972</u>	<u>175,077</u>	<u>124,792</u>	<u>702,167</u>	<u>285,876</u>	<u>596,830</u>
Total	<u>\$ 6,364,210</u>	<u>\$ 3,727,227</u>	<u>\$ 382,972</u>	<u>\$ 175,077</u>	<u>\$ 124,792</u>	<u>\$ 702,167</u>	<u>\$ 285,876</u>	<u>\$ 966,099</u>

The College manages credit risk by purchasing investment-grade securities with a high concentration in securities rated AAA and above.

Concentration of Credit Risk

The College had no single investment that exceeded 5% of its total investments at June 30, 2018.

Investments of the Foundation

The Foundation's investments consist of the following at June 30, 2018, and are summarized as follows:

Fixed income securities	\$ 1,510,598
Equity securities	2,147,013
Bank certificates of deposit	<u>415,979</u>
	<u>\$ 4,073,590</u>

Note 4 - **Cash Held by State Treasurer**

Accounts payable and accrued salaries to be funded from state-appropriated funds totaled \$508,942 at June 30, 2018. The College has recorded a comparable dollar amount of cash held by the State Treasurer for the benefit of the College, which was subsequently utilized to pay for such liabilities.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 5 - **Fair Value Measurements**

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described as follows:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the College has the ability to access.

Level 2 Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; and
- Inputs that are derived principally from, or corroborated by, observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. With the adoption of GASB Statement 72, there have been no changes in the methodologies used to measure fair value.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 5 - **Fair Value Measurements - Continued**

Certificates of deposit: Valued at initial investment cost plus accrued interest.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the College are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value ("NAV") and to transact at that price.

At June 30, 2018, all assets of the College are considered Level 1 investments.

Note 6 - **Accounts and Other Receivables**

Accounts receivable include the following at June 30, 2018:

Student accounts receivable	\$ 4,690,334
Grants receivable	256,789
Other receivables	<u>2,895,556</u>
	7,842,679
Less: allowance for doubtful accounts	<u>(1,854,068)</u>
	<u>\$ 5,988,611</u>

Note 7 - **Loans Receivable**

Loans receivable consist of the Federal Perkins Loan Program ("Perkins") and the Federal Nursing Loan Program ("NSL"). The Federal Government originally provided the majority of the funds to support these programs. The portion of the Perkins and NSL Programs provided by the Federal Government is refundable to the Federal Government upon the ending ("liquidation") of the College's participation in the programs. The College is no longer lending under these programs and is working to perform the final wind-down of these programs. During 2018, the College assigned the remaining population of the loans receivable to the U.S. Department of Education as part of the final liquidation procedures. The College expects the liquidation process to be fully completed during fiscal year 2019.

As of June 30, 2018, the remaining loan receivable is \$17,642 and the allowance for loss provision totaled \$17,642, resulting in a net loan receivable reported of \$0.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 8 - **Capital Assets**

Capital assets of the College consist of the following at June 30, 2018:

	Estimated lives <u>(in years)</u>	Beginning <u>balance</u>	<u>Additions</u>	<u>Retirements</u>	<u>Reclassifications</u>	Ending <u>balance</u>
Capital assets not depreciated:						
Construction in progress	-	\$ 11,174,358	\$ 10,509,549	\$ -	\$ (525,605)	\$ 21,158,302
Land	-	<u>1,986,303</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,986,303</u>
Total Not Depreciated		<u>13,160,661</u>	<u>10,509,549</u>	<u>-</u>	<u>(525,605)</u>	<u>23,144,605</u>
Capital assets depreciated:						
Building, including improvements	20-40	92,784,746	352,085	-	148,598	93,285,429
Furnishings and equipment	5-10	<u>3,025,329</u>	<u>66,260</u>	<u>-</u>	<u>377,007</u>	<u>3,468,596</u>
Total depreciated		<u>95,810,075</u>	<u>418,345</u>	<u>-</u>	<u>525,605</u>	<u>96,754,025</u>
Less accumulated depreciation:						
Building, including improvements		(69,326,991)	(1,997,383)	-	-	(71,324,374)
Furnishings and equipment		<u>(2,309,430)</u>	<u>(340,882)</u>	<u>-</u>	<u>-</u>	<u>(2,650,312)</u>
Total accumulated depreciation		<u>(71,636,421)</u>	<u>(2,338,265)</u>	<u>-</u>	<u>-</u>	<u>(73,974,686)</u>
Capital assets, net		<u>\$ 37,334,315</u>	<u>\$ 8,589,629</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 45,923,944</u>

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 9 - **Long-Term Liabilities**

Long-term liabilities at June 30, 2018 consist of the following:

	(Restated) Beginning <u>balance</u>	<u>Additions</u>	<u>Reductions</u>	Ending <u>balance</u>	Current <u>portion</u>	Long-term <u>portion</u>
Bonds payable	\$ <u>2,496,720</u>	\$ <u>-</u>	\$ <u>(438,144)</u>	\$ <u>2,058,576</u>	\$ <u>451,858</u>	\$ <u>1,606,718</u>
Other long-term liabilities:						
Accrued sick and vacation	5,249,376	-	(646,672)	4,602,704	3,017,663	1,585,041
Net pension liability	17,369,418	701,366	(5,129,862)	12,940,922	-	12,940,922
Net OPEB liability	30,904,184	898,547	(6,632,588)	25,170,143	-	25,170,143
Grants refundable	36,611	-	(36,611)	-	-	-
Workers' compensation	<u>322,777</u>	<u>-</u>	<u>(80,734)</u>	<u>242,043</u>	<u>51,313</u>	<u>190,730</u>
	<u>53,882,366</u>	<u>1,599,913</u>	<u>(12,526,467)</u>	<u>42,955,812</u>	<u>3,068,976</u>	<u>39,886,836</u>
Total	<u>\$ 56,379,086</u>	<u>\$ 1,599,913</u>	<u>\$ (12,964,611)</u>	<u>\$ 45,014,388</u>	<u>\$ 3,520,834</u>	<u>\$ 41,493,554</u>

In December 2013, the College issued \$3,900,598 of Series D bonds with a fixed rate of 2.95%. The bonds were issued through the Massachusetts Development Finance Agency for the purpose of refunding, together with other funds available for such purpose, the outstanding principal amount of the Series B bonds. Principal and interest is payable monthly through October 1, 2022. The College completed the refunding to reduce its total debt service payments by \$574,591 and to obtain an economic gain of \$287,973. The bonds are collateralized by certain property and include financial covenants.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 9 - **Long-Term Liabilities - Continued**

Remaining principal and interest payments for the years subsequent to June 30, 2018, on bonds payable are as follows:

Year Ending <u>June 30,:</u>	<u>Principal</u>	<u>Interest</u>
2019	\$ 451,858	\$ 55,443
2020	465,452	41,858
2021	479,673	27,627
2022	494,219	13,082
2023	<u>167,374</u>	<u>2,141</u>
	<u>\$ 2,058,576</u>	<u>\$ 140,151</u>

Total interest expense for 2018 was \$69,157.

Note 10 - **Pensions**

Defined Benefit Plan Description

Certain employees of the College participate in a cost-sharing multiple-employer defined-benefit pension plan – the Massachusetts State Employees’ Retirement System – administered by the Massachusetts State Board of Retirement (the “Board”), which is a public employee retirement system (“PERS”). Under a cost-sharing plan, pension obligations for employees of all employers are pooled and plan assets are available to pay the benefits through the plan, regardless of the status of the employers’ payment of its pension obligations to the plan. The plan provides retirement and disability benefits and death benefits to plan members and beneficiaries.

The Massachusetts State Employees’ Retirement System does not issue stand-alone financial statements. Additional information regarding the Plan is contained in the Commonwealth’s financial statements, which is available on-line from the Office of State Comptroller’s website.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Benefit Provisions

SERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws (“MGL”) establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member’s highest three-year average annual rate of regular compensation.

For employees hired after April 1, 2012, retirement allowances are calculated based on the last five years or any five consecutive years, whichever is greater in terms of compensation. Benefit payments are based upon a member’s age, length of creditable service, group creditable service, and group classification. The authority for amending these provisions rests with the Massachusetts State Legislature (the “Legislature”).

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of twenty years of service or upon reaching the age of 55 with ten years of service. Normal retirement for most employees occurs at age 65; for certain hazardous duty and public safety positions, normal retirement is at age 55. Most employees who joined the system after April 1, 2012 are not eligible for retirement until they have reached age 60.

Contributions

The SERS’ funding policies have been established by Chapter 32 of the MGL. The Legislature has the authority to amend these policies. The annuity portion of the SERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Contributions - continued

Member contributions for SERS vary depending on the most recent date of membership:

<u>Hire Date</u>	<u>Percent of Compensation</u>
Prior to 1975	5% of regular compensation
1975 - 1983	7% of regular compensation
1984 to 6/30/1996	8% of regular compensation
7/1/1996 to present	9% of regular compensation except for State Police which is 12% of regular compensation
1979 to present	An additional 2% of regular compensation in excess of \$30,000

The Commonwealth does not require the College to contribute funding from its local trust funds for employee paid by state appropriations. Pension funding for employees paid from state appropriations are made through a benefit charge assessed by the Commonwealth. Such pension contributions amounted to \$2,747,150, \$3,180,886 and \$2,987,403 for the years ended June 30, 2018, 2017 and 2016, respectively.

For employees covered by SERS but not paid from state appropriations, the College is required to contribute at an actuarially determined rate. The rate was 11.78%, 9.45% and 10.39% of annual covered payroll for the fiscal years ended June 30, 2018, 2017 and 2016, respectively. The College contributed \$489,038, \$788,893 and \$904,530 for the fiscal years ended June 30, 2018, 2017 and 2016, respectively, equal to 100% of the required contributions for each year. Annual covered payroll was approximately 70%, 73% and 70% of total related payroll for fiscal years ended 2018, 2017 and 2016, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2018, the College reported a liability of \$12,940,922 for its proportionate share of the net pension liability related to its participation in SERS.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - continued

The net pension liability as of June 30, 2018, the reporting date, was measured as of June 30, 2017, the measurement date, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2017 rolled forward to June 30, 2017.

The College's proportion of the net pension liability was based on its share of the Commonwealth of Massachusetts' collective pension amounts allocated on the basis of actual fringe benefit charges assessed to the College for the fiscal year 2018. The Commonwealth's proportionate share was based on actual employer contributions to the SERS for fiscal year 2018 relative to total contributions of all participating employers for the fiscal year. At June 30, 2017, the College's proportion was 0.10%.

For the year ended June 30, 2018, the College recognized pension expense of \$657,040. The College reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources at June 30, 2018:

Deferred Outflows of Resources

Contributions subsequent to the measurement date	\$ 489,038
Change in plan actuarial assumptions	1,346,700
Differences between expected and actual experience	500,348
Changes in proportion from Commonwealth	44,323
Changes in proportion due to internal allocation	<u>1,610,097</u>
Total	<u>\$ 3,990,506</u>

Deferred Inflows of Resources

Difference between projected and actual earnings on pension plan investments	\$ 154,191
Differences between expected and actual experience	352,090
Changes in proportion from Commonwealth	4,613
Changes in proportion due to internal allocation	<u>5,883,044</u>
Total	<u>\$ 6,393,938</u>

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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - continued

The College's contribution of \$489,038 made during the fiscal year ending 2018, subsequent to the measurement date will be recognized as a reduction of the net pension liability in each of the succeeding years. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as increases (decreases) in pension expense as follows:

Year Ending <u>June 30,</u>	<u>Amount</u>
2019	\$ (630,916)
2020	(255,859)
2021	(709,982)
2022	(1,286,368)
2023	<u>(9,345)</u>
	<u>\$ (2,892,470)</u>

Actuarial Assumptions

The total pension liability was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Measurement date	June 30, 2017
Inflation	3.00%
Salary increases	4.00% to 9.00%
Investment rate of return	7.50%
Interest rate credited to annuity savings fund	3.50%

For measurement dates June 30, 2017, mortality rates were based on:

- Pre-retirement - reflects RP-2014 Blue Collar Employees table projected generationally with Scale MP-2016 set forward 1 year for females

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Actuarial Assumptions - continued

- Post-retirement - reflects RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2016 set forward 1 year for females
- Disability - reflects RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year of 2015 (gender distinct)

The 2018 pension liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of January 1, 2017 and rolled forward to June 30, 2017.

Investment assets of SERS are with the Pension Reserves Investment Trust (“PRIT”) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage. Best estimates of geometric rates of return for each major asset class included in the PRIT Fund’s target asset allocation as of June 30, 2018 are summarized in the following table:

Asset Class	Target Allocation	expected real rate of return
Global Equity	40%	5.00%
Core Fixed Income	12%	1.10%
Hedge Funds	0%	3.60%
Private Equity	11%	6.60%
Real Return	10%	3.60%
Portfolio Completion Strategies	13%	3.60%
Value Added Fixed Income	10%	3.80%
Timber/Natural Resources	<u>4%</u>	3.20%
	<u>100%</u>	

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 10 - **Pensions - Continued**

Discount Rate

The discount rate used to measure the total pension liability was 7.5% at June 30, 2018. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Commonwealth's contributions will be made at rates equal to the difference between actuarially determined contributions rates and the member rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following table illustrates the sensitivity of the net pension liability calculated using the discount rate as well as what the net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower or one-percentage-point higher than the current rate.

1.00% Decrease (6.5%)	Current Discount Rate (7.5%)	1.00% Increase (8.5%)
<u>\$ 17,624,997</u>	<u>\$ 12,940,922</u>	<u>\$ 9,167,787</u>

Note 11 - **Other Postemployment Benefits ("OPEB")**

Plan Description

As an agency of the Commonwealth, certain employees of the College participate in the Commonwealth's single employer defined benefit-OPEB plan – the State Retirees' Benefit Trust ("SRBT"). Benefits are managed by the Group Insurance Commission ("GIC") and investments are managed by the Pension Reserves Investment Management ("PRIM") Board. The GIC has representation on the Board of Trustees of the State Retirees' Benefits Trust ("Trustees").

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

Plan Description - continued

The SRBT is set up solely to pay for OPEB benefits and the cost to administer those benefits. It can only be revoked when all such health care and other non-pension benefits, current and future, have been paid or defeased. The GIC administers benefit payments, while the Trustees are responsible for investment decisions.

Management of the SRBT is vested with the board of trustees, which consists of seven members including the Secretary of Administration and Finance (or their designee), the Executive Director of the GIC (or their designee), the Executive Director of PERAC (or their designee), the State Treasurer (or their designee), the Comptroller (or a designee), one person appointed by the Governor and one person appointed by the State Treasurer. These members elect one person to serve as chair of the board.

The SRBT does not issue a stand-alone audited financial statement but is reflected as a fiduciary fund in the Commonwealth's audited financial statements.

Benefits Provided

Under Chapter 32A of the Massachusetts General Laws, the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth, housing authorities, redevelopment authorities and certain other governmental agencies. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care / benefit costs, which are comparable to contributions required from employees. Dental and vision coverage may be purchased by these groups with no subsidy from the Commonwealth.

Contributions

Employer and employee contribution rates are set by MGL. The Commonwealth recognizes its share of the costs on an actuarial basis. As of June 30, 2017, and as of the valuation date (January 1, 2017), participants contributed 0% to 20% of premium costs, depending on the date of hire and whether the participant's status is active, retired, or survivor. As part of the fiscal year 2010 General Appropriation Act, all active employees pay an additional 5% of premium costs.

MIDDLESEX COMMUNITY COLLEGE
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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

Contributions - continued

Effective beginning in fiscal year 2014, by statute the Commonwealth is required to allocate, to the SRBT, a portion of revenue received under the Master Settlement Agreement with tobacco companies, increasing from 10% in fiscal year 2014 to 100% by fiscal year 2023. In fiscal year 2017, 10% of tobacco settlement proceeds or approximately \$25 million was allocated to the SRBT. The percentage of proceeds to be transferred to the SRBT in fiscal year 2017 was set at 10%, overriding existing statute.

The Massachusetts General Laws governing employer contributions to SRBT determine whether entities are billed for OPEB costs. Consequently, SRBT developed an effective contribution methodology which allocates total actual contributions amongst the employers in a consistent manner (based on an employer's share of total covered payroll). The College is required to contribute based on Massachusetts General Laws; the rate was 8.92% of annual covered payroll for the fiscal year ended June 30, 2018. The College contributed \$370,260 for the fiscal year ended June 30, 2018 equal to 100% of the required contribution for the year.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2018, the College reported a liability of \$25,170,143 for its proportionate share of the net OPEB liability related to its participation in SRBT. The net OPEB liability was measured as of June 30, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2017. The College's proportion of the net OPEB liability was based on its share of the Commonwealth's collective OPEB amounts allocated on the basis of an effective contribution methodology which allocates total actual contributions amongst the employers in a consistent manner based on the College's share of total covered payroll for the fiscal year 2017. The College's proportionate share was based on the actual employer contributions to the SRBT for fiscal year 2017 relative to total contributions of all participating employers for the fiscal year. At June 30, 2018, the College's proportion was 0.144%.

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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB - continued

For the year ended June 30, 2018, the College recognized OPEB expense of \$885,337. The College reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources at June 30, 2018:

Deferred Outflows of Resources

Contributions subsequent to the measurement date	\$ 370,260
Changes in proportion from Commonwealth	<u>52,678</u>
Total	<u>\$ 422,938</u>

Deferred Inflows of Resources

Difference between projected and actual earnings on OPEB plan investments	\$ 45,922
Differences between expected and actual experience	57,871
Changes in OPEB plan actuarial assumptions	2,850,778
Changes in proportion due to internal allocation	<u>3,044,394</u>
Total	<u>\$ 5,998,965</u>

The College's contribution of \$370,260 reported as deferred outflows of resources related to OPEB resulting from College contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB - continued

Years Ending <u>June 30,</u>	
2019	\$ (1,243,292)
2020	(1,243,292)
2021	(1,243,292)
2022	(1,243,292)
2023	<u>(973,119)</u>
	<u>\$ (5,946,287)</u>

Actuarial Assumptions

The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Measurement date	June 30, 2017
Inflation	3.00%
Salary increases	4.5% per year
Investment rate of return	7.5%, net of OPEB plan investment expense, including inflation
Health care cost trend rates	8.5%, decreasing by 0.5% each year to an ultimate rate of 5.0% in 2024 for Medical; 5.0% for EGWP; 5.0% for administrative costs

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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

Actuarial Assumptions - continued

The mortality rate was in accordance with RP 2014 Blue Collar Mortality Table projected with scale MP-2016 from the central year, with females set forward one year.

The participation rates are actuarially assumed as below:

- coverage, except that retirees under age 65 with POS/PPO coverage switch to Indemnity at age 65 and those over 65 with POS/PPO coverage switch to HMO.
- All current retirees, other than those indicated on the census data as not being eligible by Medicare, have Medicare coverage upon attainment of age 65, as do their spouses. All future retirees are assumed to have Medicare coverage upon attainment of age 65.
- 80% of current and future contingent eligible participants will elect health care benefits at age 65, or current age if later.
- Actives, upon retirement, take coverage, and are assumed to have the following coverage:

	<u>Retirement Age</u>	
	<u>Under 65</u>	<u>Age 65+</u>
Indemnity	40.0%	85.0%
POS/PPO	50.0%	0.0%
HMO	10.0%	15.0%

The actuarial assumptions used in the January 1, 2017 valuation were based on the results of an actuarial experience study for the periods ranging July 1, 2015 through December 31, 2016, depending upon the criteria being evaluated. As a result of this actuarial experience study, the mortality assumption was adjusted in the January 1, 2017 actuarial valuation to more closely reflect actual experience as a result of the recent experience study completed by the Public Employee Retirement Administration Commission ("PERAC").

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class.

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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

Actuarial Assumptions - continued

These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

The SRBT is required to invest in the PRIT Fund. Consequently, information about SRBT's target asset allocation and long-term expected real rate of return as of June 30, 2018, are the same as discussed in the Pension footnote number 9.

Discount Rate

The discount rate used to measure the total OPEB liability was 3.63%. This rate was based on a blend of the Bond Buyer Index rate (3.58%) as of the measurement date and the expected rate of return. The OPEB plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2023. Therefore, the long-term expected rate of return on OPEB plan investments of 7.50% per annum was not applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the College's Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate

The following presents the College's proportionate share of the net OPEB liability, as well as what the College's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

1.00% Decrease (2.63%)	Current Discount Rate (3.63%)	1.00% Increase (4.63%)
\$ 29,878,973	\$ 25,170,143	\$ 21,426,256

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Notes to the Financial Statements - Continued

June 30, 2018

Note 11 - **Other Postemployment Benefits ("OPEB") - Continued**

Sensitivity of the College's Proportionate Share of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the College's proportionate share of the net OPEB liability, as well as what the College's proportionate share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

1.00% Decrease (B)	Current Healthcare Cost Trend Rate (A)	1.00% Increase (C)
\$ 20,825,092	\$ 25,170,143	\$ 30,887,967

(A) - The current healthcare cost trend rates are as follows:

9.0% for Medicare, 5.0% for EGWP and 5.0% for administration costs.

(B) - The healthcare cost trend rates after a 1% decrease are as follows:

8.0% for Medicare, 4.0% for EGWP and 4.0% for administration costs.

(C) - The healthcare cost trend rates after a 1% increase are as follows:

10.0% for Medicare, 6.0% for EGWP and 6.0% for administration costs.

Note 12 - **Other Fringe Benefits**

The College participates in the Commonwealth's Fringe Benefit programs, including active employee and post-employment health insurance, unemployment, pension and workers' compensation benefits. Health insurance for active employees and retirees is paid through a fringe benefit rate charged to the College by the Commonwealth.

Group Insurance Commission

The Commonwealth's Group Insurance Commission ("GIC") was established by the Legislature in 1955 to provide and administer health insurance and other benefits to the Commonwealth's employees and retirees, and their dependents and survivors. The GIC also covers housing and redevelopment authorities' personnel, certain authorities and other offline agencies, retired municipal teachers from certain cities and towns and a small amount of municipalities as an agent multiple employer program, accounted for as an agency fund activity of the Commonwealth, not the College.

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Notes to the Financial Statements - Continued

June 30, 2018

Note 12 - **Other Fringe Benefits - Continued**

Group Insurance Commission - continued

The GIC is a quasi-independent state agency governed by a seventeen-member body (the "Commission") appointed by the Governor. The GIC is located administratively within the Executive Office of Administration and Finance, and it is responsible for providing health insurance and other benefits to the Commonwealth's employees and retirees and their survivors and dependents.

During the fiscal year ended June 30, 2018, the GIC provided health insurance for its members through indemnity, PPO, and HMO plans. The GIC also administers carve-outs for pharmacy, mental health, and substance abuse benefits for certain of its health plans. In addition to health insurance, the GIC sponsors life insurance, long-term disability insurance (for active employees only), dental and vision coverage (for employees not covered by collective bargaining), retiree discount vision and dental plans, and a pre-tax health care spending account and dependent care assistance program (for active employees only).

Other Retirement Plans

The employees of the College can elect to participate in two defined contribution plans offered and administered by the Massachusetts Department of Higher Education – an IRC 403(b) Tax-Deferred Annuity Plan and an IRC 457 Deferred Compensation SMART Plan. Employees can contribute by payroll deduction a portion of before-tax salary into these plans up to certain limits. The College has no obligation to contribute to these plans and no obligation for any future pay-out.

Note 13 - **Restricted Net Position**

The College is the recipient of funds that are subject to various external constraints upon their use, either as to purpose or time. As of June 30, 2018, these funds are composed of restricted-expendable funds held for the use of academic purposes in the amount of \$1,502,325.

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Notes to the Financial Statements - Continued

June 30, 2018

Note 14 - **Net Position Classification**

The following presents the breakout of each classification of net position as of June 30, 2018:

Net investment in capital assets	<u>\$ 43,865,368</u>
 Restricted:	
Federal and state student aid	49,123
Grants	906,313
Parking fines scholarship	468,728
Perkins and nursing loans	<u>78,161</u>
	<u>1,502,325</u>
 Unrestricted:	
Investments	4,051,596
Facilities development fee	5,025,065
Student fees	1,260,625
Reserve for compensated absences	(4,844,076)
Effect of pension adjustments	(15,344,354)
Effect of OPEB adjustments	(30,746,170)
Board designation for dental lab	3,400,000
Board designation for biotech lab	3,000,000
Undesignated	<u>3,458,263</u>
	<u>(30,739,051)</u>
 Total Net Position	 <u>\$ 14,628,642</u>

Note 15 - **Contingencies**

The College receives significant financial assistance from federal and state agencies in the form of grants. Expenditures of funds under these programs require compliance with the grant agreements and are subject to audit. Any disallowed expenditures resulting from such audits become a liability of the College.

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Notes to the Financial Statements - Continued

June 30, 2018

Note 15 - **Contingencies - Continued**

In the opinion of management, such adjustments, if any, are not expected to materially affect the financial condition of the College.

The College participates in the Massachusetts College Savings Prepaid Tuition Program (the "Program"). Individuals pay into the Program in advance for future tuition at the cost of tuition at the time of election to participate, increased by changes in the Consumer Price Index plus 2%. The College is obligated to accept from the Program as payment of tuition the amount determined by this Program without regard to the standard tuition rate in effect at the time of the individual's enrollment at the College. The effect of this program cannot be determined as it is contingent on future tuition increases and the Program participants who attend the College.

As a recipient of federal and state funds, the College is subject to oversight by various agencies. Expenditure of funds from federal and state programs requires compliance with agreements and may be subject to oversight audits by applicable agencies. The audit of federal funds (also known as the Uniform Guidance Audit) for academic years 2016-2017 and 2017-2018 submitted to the Department of Education ("ED") contained findings related to student financial aid eligibility. ED required the College to examine the aid of all students affected by the findings. Management has recognized a liability, included in accounts payable and accrued liabilities, of \$650,000 related to the examination. The College has submitted the analysis to ED and await their determination. Management believes that the liability fairly represents the potential liability relating to these expenditures.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 16 - **Operating Expenses**

The College's operating expenses, on a natural classification basis, are composed of the following for the years ended June 30, 2018:

Compensation and benefits	\$ 51,438,369
Supplies and services	14,870,370
Depreciation and amortization	2,338,265
Scholarships and fellowships	<u>2,741,631</u>
	<u>\$ 71,388,635</u>

Note 17 - **Operating Leases**

The College leases space to provide student, faculty and staff parking at its Lowell campus. In addition, the College leases space from LMACS as further described in Note 18. Leases expire through June 30, 2019. Future minimum payments due under non-cancelable operating leases as of June 30, 2018 are \$615,177.

Rental expense for operating leases was \$614,132 for the year ended June 30, 2018.

Note 18 - **Related Party Transactions**

The College provides management, oversight, supervision and administration of the Lowell Middlesex Academy Charter School's ("LMACS") regular business activities under a formal agreement. Income related to this arrangement recognized by the College totaled approximately \$433,000 for the year ending June 30, 2018.

The College leases approximately 17,069 square feet of office and classroom space from LMACS. The lease agreement had an expiration date of June 30, 2018 and was formally renewed on July 1, 2018 for the period of July 1, 2018 through June 30, 2019. The College is not responsible for operating or maintenance expenses of the space. Monthly rental expense totaled approximately \$14,224 per month during 2018, for an annual total rental expense of approximately \$171,000 for the year ending June 30, 2018.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 18 - **Related Party Transactions - Continued**

Under the terms of the lease, the College has the right to extend the expiration date by giving written notice to LMACS within 30 days prior to the then scheduled expiration date. Further, the lease agreements allow for LMACS to revoke the lease agreements at any time upon 45 days written notice to the College. Currently, management of the College and LMACS have no plans that would result in the termination of the lease.

Note 19 - **Massachusetts Management Accounting and Reporting System**

Section 15C of Chapter 15A of the Massachusetts General Laws requires Commonwealth Colleges and Universities to report activity of campus based funds to the Comptroller of the Commonwealth on the Commonwealth's Statewide Accounting System, Massachusetts Management Accounting and Reporting System ("MMARS"), on the statutory basis of accounting.

The statutory basis of accounting is a modified accrual basis of accounting and differs from the information included in these financial statements. Management believes the amounts reported on MMARS meet the guidelines of the Comptroller's *Guide for Higher Education Audited Financial Statements*.

No timing differences occurred where the College had additional revenue that was reported to MMARS after June 30, 2018.

The College's state appropriations are composed of the following at June 30,:

Direct unrestricted appropriations	\$ 23,941,738
Add fringe benefits for benefited employees on the state payroll	8,129,511
Less day school tuition remitted to the state and included in tuition and fee revenue	<u>(281,156)</u>
Total Unrestricted Appropriations	<u>\$ 31,790,093</u>
State capital contribution (restricted appropriations)	<u>\$ 9,220,528</u>

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Financial Statements - Continued

June 30, 2018

Note 20 - **Pass-through Grants**

The College distributed \$4,194,675 during 2018 for student loans through the U.S. Department of Education Federal Direct Student Loans program. These distributions and related funding sources are not included as expenses and revenues or as cash disbursements and cash receipts in the accompanying financial statements.

REQUIRED SUPPLEMENTARY INFORMATION

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Schedules of the Proportionate Share of the Net Pension Liability (Unaudited)

Year ended	<u>June 30, 2018</u>	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>
Valuation date	January 1, 2017	January 1, 2016	January 1, 2015	January 1, 2014
Measurement date	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Proportion of the collective net pension liability	0.101%	0.126%	0.186%	0.146%
Proportionate share of the collective net pension liability	\$ 12,940,922	\$ 17,369,418	\$ 21,147,785	\$ 10,845,528
Covered payroll	\$ 7,928,573	\$ 9,571,746	\$ 11,194,880	\$ 10,836,179
Proportionate share of the net pension liability as a percentage of its covered payroll	163.22%	181.47%	188.91%	100.09%
Plan fiduciary net position as a percentage of the total pension liability	67.21%	63.48%	67.87%	76.32%

Notes:

The GASB pronouncement requiring the presentation of the information on this schedule became effective for years beginning after June 15, 2014 and is intended to provide data for the most recent ten years.

See accompanying notes to the required supplemental information.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Schedules of Contributions - Pension (Unaudited)

For the Years Ended June 30,

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contribution	\$ 489,038	\$ 788,893	\$ 904,530	\$ 1,163,148
Contributions in relation to the contractually required contribution	<u>489,038</u>	<u>788,893</u>	<u>904,530</u>	<u>1,163,148</u>
Contribution excess	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 4,151,426	\$ 7,928,573	\$ 9,571,746	\$ 11,194,880
Contribution as a percentage of covered payroll	11.78%	9.95%	9.45%	10.39%

Notes:

Employers participating in the Massachusetts State Employees' Retirement System are required by MA General Laws, Section 32, to contribute an actuarially determined contribution rate each year.

The GASB pronouncement requiring the presentation of the information on this schedule became effective for years beginning after June 15, 2014 and is intended to provide data for the most recent ten years.

See accompanying notes to the required supplemental information.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Required Supplementary Information - SERS (Unaudited)

June 30, 2018, 2017, 2016 and 2015

Note 1 - **Change in Plan Actuarial and Assumptions**

Fiscal year June 30, 2018

Change of Benefits:

Chapter 79 of the Acts of 2014 established an early retirement (“ERI”) program for certain members of the SERS plan. As a result, the total pension liability of SERS increased by approximately \$10 million as of June 30, 2017.

Assumptions:

The mortality rates were changed as follows:

- Pre-retirement – was changed from RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct) to RP-2014 Blue Collar Employees Table projected generationally with Scale MP-2016 and set forward 1 year for females
- Post-retirement – was changed from RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct) to RP-2014 Blue Collar Healthy Annuitant Table projected generationally with Scale MP-2016 and set forward 1 year for females
- Disability – did not change

These mortality rate changes resulted in an increase of approximately \$304 million in the total pension liability of SERS as of June 30, 2017.

Fiscal year June 30, 2017

Change of Benefits:

Chapter 176 of the Acts of 2011 created a one-time election for eligible members of the Optional Retirement Plan (“ORP”) to transfer into the SERS and purchase service for the period while members of the ORP. As a result, the total pension liability of SERS increased by approximately \$400 million as of June 30, 2016.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

**Notes to the Required Supplementary Information - SERS (Unaudited) -
Continued**

June 30, 2018, 2017, 2016 and 2015

Note 1 - **Change in Plan Actuarial and Assumptions - Continued**

Fiscal year June 30, 2016

Change of Benefits:

Chapter 19 of the Acts of 2015 established an ERI program for certain members of the SERS plan. As a result, the total pension liability of SERS increased by approximately \$230 million as of June 30, 2015.

Assumptions:

The discount rate to calculate the pension liability decreased from 7.75% to 7.5%. This change resulted in an increase of approximately \$933 million in the total pension liability of SERS as of June 30, 2015.

The mortality rates were changed as follows:

- Pre-retirement – was changed from RP-2000 Employees table projected 20 years with Scale AA (gender distinct) to RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- Post-retirement – was changed from RP-2000 Healthy Annuitant table projected 15 years with Scale AA (gender distinct) to RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- Disability – was changed from RP-2000 table projected 5 years with Scale AA (gender distinct) set forward three years for males to RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct)

These mortality changes resulted in an increase of approximately \$1.397 billion in the total pension liability of SERS as of June 30, 2015.

Fiscal year June 30, 2015

Assumptions:

An updated experience study encompassed the period January 1, 2006 to December 31, 2011. The study reviewed salary increases and rates of retirement, disability, turnover and mortality. This study adjusted the mortality assumption which resulted in an increase of approximately \$102 million in the total pension liability as of June 30, 2014.

See Independent Auditor's Report.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Schedule of Proportionate Share of Net OPEB Liability (Unaudited)

State Retirees' Benefit Trust

Year ended	June 30, 2018
Measurement date	June 30, 2017
Valuation date	January 1, 2017
Proportion of the collective net OPEB liability	0.144%
Proportionate share of the collective net OPEB liability	\$ 25,170,143
College's covered payroll	\$ 7,928,573
College's proportionate share of the net OPEB liability as a percentage of its covered payroll	317.5%
Plan fiduciary net position as a percentage of the total OPEB liability	5.39%

Notes:

The GASB pronouncement requiring the presentation of the information on this schedule became effective for years beginning after June 15, 2017 and is intended to provide data for the most recent ten years.

See accompanying notes to the required supplementary information.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Schedule of Contributions - OPEB (Unaudited)

State Retirees' Benefit Trust

For the Year Ended June 30, 2018

Statutorily required contribution	\$ 370,260
Contributions in relation to the statutorily required contribution	<u>(370,260)</u>
Contribution excess	<u>\$ -</u>
College's covered payroll	\$ 4,151,429
Contribution as a percentage of covered payroll	8.92%

Notes:

Employers participating in the State Retirees' Benefit Trust are required by MA General Laws, Section 32, to contribute an actuarially determined contribution rate each year.

The GASB pronouncement requiring the presentation of the information on this schedule became effective for years beginning after June 15, 2017 and is intended to provide data for the most recent ten years.

See accompanying notes to the required supplementary information.

MIDDLESEX COMMUNITY COLLEGE
(an agency of the Commonwealth of Massachusetts)

Notes to the Required Supplementary Information – SRBT (Unaudited)

June 30, 2018

Note 1 - **Change in Plan Assumptions**

Fiscal year June 30, 2018

Assumptions:

The discount rate was increased to 3.63% based upon a blend of the Bond Buyer Index rate as of the measurement date as required by GASB Statement 74. The June 30, 2016 discount rate was calculated to be 2.80%. This increase in the discount rate resulted in a decrease in the net OPEB liability of approximately \$3.08 billion as of June 30, 2017.

See Independent Auditor's Report.

**Independent Auditors' Report on Internal Control Over
Financial Reporting and on Compliance and Other Matters
Based on an Audit of Financial Statements Performed in
Accordance with *Government Auditing Standards***

Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Trustees of
Middlesex Community College
Lowell, Massachusetts

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Middlesex Community College (the “College”) which comprise the statement of net position as of June 30, 2018, and the related statement of revenues and expenses, changes in net position and cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise the College’s basic financial statements and have issued our report thereon with a dual date of October 25, 2018 and February 28, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Middlesex Community College’s internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the College’s internal control. Accordingly, we do not express an opinion on the effectiveness of the College’s internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Middlesex Community College's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the College's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

O'Connell and Drew, P.C.

Certified Public Accountants
Braintree, Massachusetts

October 25, 2018 (except for Management's Discussion and Analysis, Note 2, Note 9, Note 11, Note 14, Note 16, and Schedule of Proportionate Share of the Net OPEB Liability, as to which the date is February 28, 2019)

Appendix C – Auditor’s Management Letter

Auditor’s Management Letter

No management letter was issued with the 2018 Audited Financial Statement.

Appendix D - Interim Report Forms

INTERIM REPORT FORMS GENERAL INFORMATION

Institution Name:

OPE ID:

Financial Results for Year Ending:		Annual Audit	
		Certified: Yes/No	Qualified/Unqualified
Most Recent Year	<input type="text" value="06/30"/>	Yes	Unqualified
1 Year Prior	2017	Yes	Unqualified
2 Years Prior	2016	Yes	Unqualified

Fiscal Year Ends on: (month/day)

Budget / Plans

Current Year	2018
Next Year	2019

Contact Person:

Title:	Assistant Director, Institutional Research and Analytics
Telephone No:	978 656 3428
E-mail address	salamones@middlesex.mass.edu

Standard 1: Mission and Purposes

Attach a copy of the current mission statement.

Document	Website Location	Date Approved by the Governing Board
Institutional Mission Statement	www.middlesex.mass.edu/about/	4/6/2016

Standard 2: Planning and Evaluation

PLANNING

Strategic Plans

	Year approved by governing board	Effective Dates	Website location
Immediately prior Strategic Plan		2011-2014	https://www.middlesex.mass.edu/strategicplanning/downloads/stratdir.pdf
Current Strategic Plan	2016	2016-2020	https://www.middlesex.mass.edu/strategicplanning/downloads/splan2020.pdf
Next Strategic Plan			

Other institution-wide plans*

	Year completed	Effective Dates	Website location
Master plan	2007		http://a.cms.omniupdate.com/10/#middlesex/MCC/2012MCC/preview/neasc/default.pcf
Financial plan	FY2018	FY2018	https://www.middlesex.mass.edu/neasc/Downloads/2financefy18.pdf
Technology plan		2016-2020	https://www.middlesex.mass.edu/technologycenter/downloads/mccisp16_19.pdf#zoom=75
Enrollment plan	2019	2018-2021	https://www.middlesex.mass.edu/neasc/Downloads/2enrplan2019.pdf
Retention plan	2019	2018-2021	https://www.middlesex.mass.edu/neasc/Downloads/2enrplan2019.pdf
Facilities plans			https://www.middlesex.mass.edu/neasc/Downloads/2rickesbed15.pdf
			https://www.middlesex.mass.edu/neasc/Downloads/2rickeslow16.pdf
			https://www.middlesex.mass.edu/neasc/Downloads/2sightfeb16.pdf

Plans for major units (e.g., departments, library)*

Marketing	2016	2016-2018	https://www.middlesex.mass.edu/marketing/downloads/mcc_marplan.pdf
Safety	2017	2017	https://www.middlesex.mass.edu/disclosuresstatements/downloads/assr2017.pdf

EVALUATION

Academic program review

Program review system (colleges and departments). System last updated:
 Program review schedule (e.g., every 5 years)

Website location
2019
5 year cycle

*Insert additional rows, as appropriate.

**Standard 3: Organization and Governance
 (Board and Internal Governance)**

Please attach to this form:

- 1) A copy of the institution's organization chart(s).

If there is a "sponsoring entity," such as a church or religious congregation, a state system, or a corporation, describe and document the relationship with the accredited institution.

Name of the sponsoring entity	Commonwealth of Massachusetts/Dept. of Higher Education
Website location of documentation of relationship	www.mass.edu

Governing Board

By-laws

Board members' names and affiliations

Website location
https://malegislature.gov/Laws/GeneralLaws/
http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2051

Please enter any explanatory notes in the box below

The most recent library plan has expired. The librarian is retired recently; the new librarian will create a new plan by May 2020.

**Standard 3: Organization and Governance
(Locations and Modalities)**

Campuses, Branches and Locations Currently in Operation (See definitions in comment boxes)

(Insert additional rows as appropriate.)

	Location (City, State/Country)	Date Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(FY2017)	(FY 2018)	(FY 2019)
Main campus	Bedford, MA/USA	9/1/1968	12009*	11217*	10656*
Other principal campuses	Lowell, MA/USA	9/1/1987			
Branch campuses (US)					
Other instructional locations (US)					
Branch campuses (overseas)					
Other instructional locations (overseas)					

Educational modalities

	Number of programs	Date First Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(FY2017)	(FY 2018)	(FY 2019)
Distance Learning Programs					
Programs 50-99% on-line	69**		8482**	7579**	7200**
Programs 100% on-line					
Correspondence Education					
Low-Residency Programs					
Competency-based Programs					
Dual Enrollment Programs	2***		817***	876***	1111***
Contractual Arrangements involving the award of credit	1****		118****	124****	124****

*Enter the annual unduplicated headcount for each of the years specified below.

Please enter any explanatory notes in the box below

*Fiscal Year Enrollment is for site enrollments that are unduplicated at the site but not unduplicated overall because students take courses at multiple sites. Middlesex Community College has two equal campus locations with a free shuttle service between campuses.

**Enrollment in distance learning programs is enrollment in programs that could be 50%-99% completed online. Not all students in those programs will pursue the option to do online courses.

***The two dual enrollment programs are dual enrolled at MCC and concurrent enrollment at the following high schools: Bedford HS, Burlington HS, Chelmsford HS, Dracut HS, Greater Lowell Technical HS, Groton-Dunstable HS, Innovation Academy, Littleton HS, Lowell Career Academy, Lowell HS, Methuen HS, Minuteman Technical HS, Nashoba Valley Technical HS, Shawsheen Technical HS, Tewksbury HS, Woburn HS.

Dual Enrollment count for FY17 and FY18 gets students from HEIRS 12-month Enrollment file. The final count is an exclusive list of students who have had a DE rate code in any of the four possible terms within the fiscal year for courses starting between July 1 to June 30th of the fiscal year. The projection for FY19 dual enrollment is based on the number of fall 2018 dual enrollment students reported to the state HEIRS system. The actual number will be higher.

Other FY19 enrollment numbers are projected to be 5% lower than FY18 enrollment numbers. Fall 2019 credits are projected to be 4.06% lower than Fall 2018.

****Contractual arrangements involving the award of credit: MCC contracts with Prdestar EMS for a 9 credit EMT course. It is an elective course within the Fire Science program. Projection for FY2019 based on level enrollment with FY2018.

**Standard 4: The Academic Program
(Summary - Degree-Seeking Enrollment and Degrees)**

Fall Enrollment* by location and modality, as of Census Date

Degree Level/ Location & Modality	Associate's	Bachelor's	Master's	Clinical doctorates (e.g., Pharm.D., DPT, DNP)	Professional doctorates (e.g., Ed.D., Psy.D., D.B.A.)	M.D., J.D., DDS	Ph.D.	Total Degree-Seeking
Main Campus FT	2,320							2,320
Main Campus PT	3,203							3,203
Other Principal Campus FT								0
Other Principal Campus PT								0
Branch campuses FT								0
Branch campuses PT								0
Other Locations FT								0
Other Locations PT								0
Overseas Locations FT								0
Overseas Locations PT								0
Distance education FT	90*							90
Distance education PT	736*							736
Correspondence FT								0
Correspondence PT								0
Low-Residency FT								0
Low-Residency PT								0
Unduplicated Headcount Total	5,523	0	0	0	0	0	0	5,523
Total FTE	4,003.00							4,003.00
Enter FTE definition:	Total Credits Generated/15							
Degrees Awarded, Most Recent Year	1,036							1,036

Notes:

- 1) Enrollment numbers should include all students in the named categories, including students in continuing education and students enrolled through any contractual relationship.
- 2) Each student should be recorded in only one category, e.g., students enrolled in low-residency programs housed on the main campus should be recorded only in the category "low-residency programs."
- 3) Please refer to form 3.2, "Locations and Modalities," for definitions of locations and instructional modalities.

* For programs not taught in the fall, report an analogous term's enrollment as of its Census Date.

Please enter any explanatory notes in the box below

Degrees Awarded -from IPEDES Completions FY18 - just associate degrees.
 *Distance Ed counts are students taking all credits in fall semester as courses 50% or 80% distance. Enrollment in distance learning programs is enrollment in programs that could be 50%-99% completed online. Not all students in those programs will pursue the option to do online courses. Because distance education is an option for many programs but not a requirement, the number of students enrolled in Fall 2018 is much smaller than the number reported in Standard 3 which includes all enrollment in programs for which students have the option of doing much of their coursework as distance ed. Again, students have the option to do the coursework for their program as distance ed but can choose not to.

Standard 4: The Academic Program
(Summary - Non-degree seeking Enrollment and Awards)

Fall Enrollment* by location and modality, as of Census Date

Degree Level/ Location & Modality	Title IV-Eligible Certificates: Students Seeking Certificates	Non-Matriculated Students	Visiting Students	Total Non-degree-Seeking	Total degree-seeking (from previous page)	Grand total
Main Campus FT	80	72		152	2,320	2,472
Main Campus PT	156	1,292		1,448	3,203	4,651
Other Principal Campus FT				0		0
Other Principal Campus PT				0		0
Branch campuses FT				0		0
Branch campuses PT				0		0
Other Locations FT				0		0
Other Locations PT				0		0
Overseas Locations FT				0		0
Overseas Locations FT				0		0
Distance education FT	0	4		4	90	94
Distance education PT	35	102		137	736	873
Correspondence FT				0		0
Correspondence PT				0		0
Low-Residency FT				0		0
Low-Residency PT				0		0
Unduplicated Headcount Total	271	1,470	0	1,741	6,349	8,090
Total FTE	152.47	443.00		595	4,003.00	4,598.47
Enter FTE definition:	Total Credits/15	Total Credits/15				
Certificates Awarded, Most Recent Year	221					

Notes:

- 1) Enrollment numbers should include all students in the named categories, including students in continuing education and students enrolled through any contractual relationship.
- 2) Each student should be recorded in only one category, e.g., students enrolled in low-residency programs housed on the main campus should be recorded only in the category "low-residency programs."
- 3) Please refer to form 3.2, "Locations and Modalities," for definitions of locations and instructional modalities.

* For programs not taught in the fall, report an analogous term's enrollment as of its Census Date.

Please enter any explanatory notes in the box below

Enrolled certificates include students in Transition Program. Certificates Awarded, Most Recent Year count does not include Transition students. The Transition Program ends Spring 2019.

Distance education counts include students only taking distance ed courses that semester. Distance education is an unduplicated number (i.e. students counted in Distance Education are not counted in Main Campus number.) FT is 12 or more credits.

**Standard 4: The Academic Program
(Headcount by UNDERGRADUATE Program Type)**

	3 Years Prior (Fall 2015)	2 Years Prior (Fall 2016)	1 Year Prior (Fall 2017)	Current Year (Fall 2018)	Next Year Forward (goal) (Fall 2019)
For Fall Term, as of Census Date					
Certificate	331	334	332	271	257
Associate	7871	7375	6851	6349	6032
Baccalaureate					
Total Undergraduate	8,202	7,709	7,183	6,620	6,289

**Standard 4: The Academic Program
(Headcount by GRADUATE Program Type)**

	3 Years Prior (Fall 2015)	2 Years Prior (Fall 2016)	1 Year Prior (Fall 2017)	Current Year (Fall 2018)	Next Year Forward (goal) (Fall 2019)
For Fall Term, as of Census Date					
Master's	n/a	n/a	n/a	n/a	n/a
Doctorate	n/a	n/a	n/a	n/a	n/a
First Professional	n/a	n/a	n/a	n/a	n/a
Other	n/a	n/a	n/a	n/a	n/a
Total Graduate	0	0	0	0	0

**Standard 4: The Academic Program
(Credit Hours Generated at the Undergraduate and Graduate Levels)**

	3 Years Prior (Fall 2015)	2 Years Prior (Fall 2016)	1 Year Prior (Fall 2017)	Current Year (Fall 2018)	Next Year Forward (goal) (Fall 2019)
Undergraduate	82291	76908	73450	68977	66177
Graduate	n/a	n/a	n/a	n/a	n/a
Total	82,291	76,908	73,450	68,977	66,177

**Standard 4: The Academic Program
(Information Literacy sessions)**

Main campus

	FY2015	FY2016	FY2017	FY2018	FY2019
Sessions embedded in a class (Summer)	n/a	5	7	7	8
Sessions embedded in a class (Fall)	214	278	218	220	179
Sessions embedded in a class (Spring)	170	188	186	151	148
Free-standing sessions					
Branch/other locations					
Sessions embedded in a class					
Free-standing sessions					
Online sessions					
URL of Information Literacy Reports					

Please enter any explanatory notes in the box below

Certificates include TR(Transition Program), LSC(Liberal Studies Certificate). Information Literacy initiatives beyond classroom instruction include video tutorials and over 206 online course guides that support both on campus and online courses. Over 1,100 individual research consultations annually build upon and enrich library class sessions. Librarian programs of outreach to various centers on campus, i.e. Veterans, Pathways, Multicultural, Asian-American Connections, extend and advance our information literacy goals.

**Standard 5: Students
(Admissions, Fall Term)**

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

P

Credit Seeking Students Only - Including Continuing Education

	3 Years Prior (FY 2016)	2 Years Prior (FY 2017)	1 Year Prior (FY 2018)	Current Year (FY 2019)	Goal (specify year) (FY 2020)
	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
Freshmen - Undergraduate	P				
Completed Applications	4,765	4,544	4,509	4,462	4,239
Applications Accepted	4,343	4,146	4,269	4,134	3,927
Applications Enrolled	1,910	1,621	1,591	1,484	1,410
% Accepted of Applied	91.1%	91.2%	94.7%	92.6%	92.6%
% Enrolled of Accepted	44.0%	39.1%	37.3%	35.9%	35.9%
Percent Change Year over Year					
Completed Applications	na	-4.6%	-0.8%	-1.0%	-5.0%
Applications Accepted	na	-4.5%	3.0%	-3.2%	-5.0%
Applications Enrolled	na	-15.1%	-1.9%	-6.7%	-5.0%
Average of statistical indicator of aptitude of enrollees: (define below)	P				
Starting in Fall 2014, MCC conducted a small pilot using students' high school GPA of 2.7 or higher for placement into college math. The pilot was limited to a select number of diverse high schools. After a successful pilot, all recent high school graduates were eligible to use their HS GPA for placement into the college math course for their program. Then, beginning in fall 2018, multiple measures included 2.7 or above HS GPA for placement into college level math and English; verbal SAT of 500 or above for placement into college level English; verbal SAT of 600 or above or combined score of 1150 or above for placement into English Honors and other honors courses. Students whose high school transcript is more than 3 years old use placement by accuplacer or start in developmental math. Going forward, the Department of Higher Ed's Common Assessment Policy will be amended to allow students who have graduated HS with a 2.7 or higher GPA within 10 years to enroll in college level English courses.					
	College Level Math by HS GPA: 16% Accuplacer:15% Developmental:6 9%	College Level Math by HS GPA: 20% Accuplacer:14% Developmental:6 6%	College Level Math by HS GPA: 30% Accuplacer:10% Developmental:60 %	College Level Math by HS GPA: 44% Accuplacer:9% Developmental:4 7%	College Level Math by HS GPA: 45% Accuplacer:9% Developmental:4 6%
				Honors Level English by HS GPA/SAT: 22%	Honors Level English by HS GPA/SAT: 23%
				College Level English by HS GPA/SAT: 22% Accuplacer:19% Developmental:3 7%	College Level English by HS GPA/SAT: 25% Accuplacer:17% Developmental:3 5%
Transfers - Undergraduate	P				
Completed Applications	1,443	1,514	1,550	1,453	1,380
Applications Accepted	1,224	1,305	1,373	1,264	1,201
Applications Enrolled	724	704	688	646	614
% Accepted of Applied	84.8%	86.2%	88.6%	87.0%	87.0%
% Enrolled of Accepted	59.2%	53.9%	50.1%	51.1%	51.1%
Readmits - Undergraduate	P				
Completed Applications	1,140	1,142	1,169	1,125	1,069
Applications Accepted	890	896	944	859	816
Applications Enrolled	159	183	168	147	140
% Accepted of Applied	78.1%	78.5%	80.8%	76.4%	76.4%
% Enrolled of Accepted	17.9%	20.4%	17.8%	17.1%	17.1%
Master's Degree	P				
Completed Applications					
Applications Accepted					
Applications Enrolled					
% Accepted of Applied	-	-	-	-	-
% Enrolled of Accepted	-	-	-	-	-
First Professional Degree	P				
Completed Applications					
Applications Accepted					
Applications Enrolled					
% Accepted of Applied	-	-	-	-	-
% Enrolled of Accepted	-	-	-	-	-
Doctoral Degree	P				
Completed Applications					
Applications Accepted					
Applications Enrolled					
% Accepted of Applied	-	-	-	-	-
% Enrolled of Accepted	-	-	-	-	-

Please enter any explanatory notes in the box below

FY2016 data is Fall 2015. FY2017 is Fall 2016. FY2018 is Fall 2017. FY2019 data is Fall 2018.

Multiple measure percentages based on population of first time degree seeking students.

Students not placed using multiple measures or placement testing are assumed to be developmental.

In Fall 2014, MCC also conducted a small pilot to determine whether students with high school gpa's between 2.4 and 2.69 courses. It was determined that they should not.

Readmitted students have not been enrolled in 5 or more years.

**Standard 5: Students
(Enrollment, Fall Term)**

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

?

Credit-Seeking Students Only - Including Continuing Education

		3 Years Prior (FY 2016)	2 Years Prior (FY 2017)	1 Year Prior (FY 2018)	Current Year (FY 2019)	Goal (specify year) (FY 2020)
		Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
UNDERGRADUATE						
First Year	Full-Time Headcount	2,267	1,969	1,901	1,701	1,616
	Part-Time Headcount	3,289	3,257	3,064	3,435	3,263
	Total Headcount	5,556	5,226	4,965	5,136	4,879
	Total FTE	3,448	3,152	3,032	2,887	2,743
Second Year	Full-Time Headcount	1,110	1,058	955	865	822
	Part-Time Headcount	2,355	2,333	2,286	2,089	1,985
	Total Headcount	3,465	3,391	3,241	2,954	2,806
Third Year	Total FTE	2,038	1,975	1,865	1,711	1,625
	Full-Time Headcount					
	Part-Time Headcount					
Fourth Year	Total Headcount	0	0	0	0	0
	Total FTE					
	Full-Time Headcount					
	Part-Time Headcount					
Unclassified	Total Headcount	0	0	0	0	0
	Total FTE					
	Full-Time Headcount					
	Part-Time Headcount					
Total Undergraduate Students	Total Headcount	9,021	8,617	8,206	8,090	7,686
	Total FTE	5,486	5,127	4,897	4,598	4,368
	Full-Time Headcount	3,377	3,027	2,856	2,566	2,438
	Part-Time Headcount	5,644	5,590	5,350	5,524	5,248
	% Change FTE Undergraduate	na	-6.5%	-4.5%	-6.1%	-5.0%
GRADUATE						
	Full-Time Headcount					
	Part-Time Headcount					
	Total Headcount	0	0	0	0	0
	Total FTE					
% Change FTE Graduate		na	-	-	-	-
GRAND TOTAL						
Grand Total Headcount		9,021	8,617	8,206	8,090	7,686
Grand Total FTE		5,486	5,127	4,897	4,598	4,368
% Change Grand Total FTE		na	-6.5%	-4.5%	-6.1%	-5.0%

Please enter any explanatory notes in the box below

First Year students have earned credits of 30 or less. Second year students have more than 30 earned credits.

**Standard 5: Students
(Financial Aid, Debt, Developmental Courses)**

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

Where does the institution describe the students it seeks to serve?

<https://www.middlesex.mass.edu/about/mission.aspx>

	FY2014	(FY 2015)	(FY 2016)	(FY 2017)
Three-year Cohort Default Rate	11.1%	9.3%	9.2%	
Three-year Loan repayment rate (from College Scorecard)		57.45%	57.27%	56.77%

3 Years Prior	2 Years Prior	Most Recently Completed Year	Current Year	Goal (specify year)
(FY 2015)	(FY 2016)	(FY 2017)	(FY 2018)	(FY 2019)

Student Financial Aid

Total Federal Aid	\$17,370,367	\$16,172,091	\$14,799,802	\$14,438,941	\$13,716,994
Grants	\$12,137,987	\$11,000,549	\$9,862,066	\$9,891,236	\$9,396,674
Loans	\$5,049,333	\$5,024,763	\$4,794,940	\$4,395,518	\$4,395,518
Work Study	\$183,047	\$146,779	\$142,796	\$152,187	\$144,578
Total State Aid	\$2,436,535	\$2,318,094	\$2,224,239	\$2,146,645	\$2,039,313
Total Institutional Aid	\$1,000,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,045,000
Grants	\$1,000,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,045,000
Loans	\$0	\$0	\$0	\$0	\$0
Total Private Aid	\$155,800	\$101,225	\$104,750	\$89,900	\$85,405
Grants	\$155,800	\$101,225	\$104,750	\$89,900	\$85,405
Loans	\$0	\$0	\$0	\$0	\$0

Student Debt

Percent of students graduating with debt (include all students who graduated in this calculation)

Undergraduates	34%	34%	33%	30%	30%
Graduates	n/a	n/a	n/a	n/a	n/a
First professional students	n/a	n/a	n/a	n/a	n/a

For students with debt:

Average amount of debt for students leaving the institution with a degree

Undergraduates	\$7,563	\$8,131	\$7,988	\$8,323	\$8,323
Graduates	n/a	n/a	n/a	n/a	n/a
First professional students	n/a	n/a	n/a	n/a	n/a

Average amount of debt for students leaving the institution without a degree

Undergraduates	\$5,288	\$5,182	\$5,399	\$5,154	\$5,154
Graduate Students	n/a	n/a	n/a	n/a	n/a
First professional students	n/a	n/a	n/a	n/a	n/a

Fall 2015 Fall 2016 Fall 2017 Fall 2018 Fall 2019

Percent of First-year students in Developmental Courses (courses for which no credit toward a degree is granted)

English as a Second/Other Language	3%	3%	2%	1%	1%
English (reading, writing, communication skills)	18%	18%	18%	11%	11%
Math	25%	28%	26%	20%	20%
Other					

Please enter any explanatory notes in the box below

Three year loan repayment rate is based on 13% of students having loans in most recently published year on College Scorecard website. Students with debt leaving institution without a degree: students enrolled in the fall of the fiscal year not enrolled the following fall semester or who didn't receive a degree in the fall, spring, and summer semesters before the following fall semester. Although we expect student enrollment to decline, after changes in the tuition and fee structure for Fiscal Year 2019, we expect that loan volume and average student debt will stay the same or increase.

ELL courses have subject of ELL. Developmental English is any ENG courses below ENG 101. MCC has fully implemented a corequisite model for English courses and some math courses.

Standard 6: Teaching, Learning, and Scholarship
(Faculty by Category and Rank; Academic Staff by Category, Fall Term)

3 Years Prior (FY 2016)	2 Years Prior (FY 2017)	1 Year Prior (FY 2018)	Current Year (FY 2019)
Fall 2015	Fall 2016	Fall 2017	Fall 2018

? Number of Faculty by category

Full-time	125	121	120	118
Part-time	404	389	395	381
Adjunct				
Clinical				
Research				
Visiting				
Other; specify below:	9			
Total	538	510	515	499

Percentage of Courses taught by full-time faculty

32.51%	30.81%	30.99%	29.01%
--------	--------	--------	--------

? Number of Faculty by rank, if applicable

Professor	84	75	78	75
Associate	17	22	21	19
Assistant Instructor	24	24	21	24
Other; specify below:				
Part-time	404	389	395	381
Exclusively non-credit (Bridge)	9			
Total	538	510	515	499

? Number of Academic Staff by category

Librarians/Library Technicians	22	24	22	20
Advisors	187	172	171	170
Instructional Designers	2	2	2	2
Other; specify below:				
Total	211	198	195	192

Please enter any explanatory notes in the box below

Nine Bridge "other faculty" reported in fiscal year 2016 were taken over by City of Lowell starting in fiscal year 2017.

The number of FTE's in librarian/library technician roles has increased from 12 in FY16 to 14 in FY19.

Advisor counts are from advisor assignment databases. Advisors include full-time staff advisors as well as full-time faculty advisors. The number of advisors has decreased at the institution, with a decline in enrollment, a subsequent decrease in full-time faculty, and the conversion of part-time staff advisors to full-time staff advisors. This change increased the capacity of our advising centers and lowered the number of assigned students to our full-time staff advisors. Full-time advising staff used to average 200-225 students in the past. Staff advisors now typically have 130-150 students each term. Faculty advisors typically advise 18 students as part of their work load.

Standard 6: Teaching, Learning, and Scholarship
(Appointments, Tenure, Departures, Retirements, Teaching Load Full Academic Year)

3 Years Prior		2 Years Prior		1 Year Prior		Current Year	
(FY 2016)		(FY 2017)		(FY 2018)		(FY 2019)	
FT	PT	FT	PT	FT	PT	FT	PT

	Fall 2015		Fall 2016		Fall 2017		Fall 2018	
	FT	PT	FT	PT	FT	PT	FT	PT
? Number of Faculty Appointed								
Professor					1			
Associate							1	
Assistant	2		11		5		7	
Instructor								
No rank		54*		34*		37**		23**
Other								
Total	2	54	11	34	6	37	8	23

	Fall 2015		Fall 2016		Fall 2017		Fall 2018	
	FT	PT	FT	PT	FT	PT	FT	PT
? Number of Faculty in Tenured Positions								
Professor	84	0	75	0	77	0	74	0
Associate	5	0	5	0	1	0	1	0
Assistant		0	1	0	0	0		0
Instructor		0	0	0	0	0		0
No rank		0	0	0	0	0		0
Other (Exclusively NonCredit)	0	0	0	0	0	0		0
Total	89	0	81	0	78	0	75	0

	Fall 2015		Fall 2016		Fall 2017		Fall 2018	
	FT	PT	FT	PT	FT	PT	FT	PT
? Number of Faculty Departing								
Professor			2				1	
Associate	1		1				1	
Assistant	3		2		1		1	
Instructor								
No rank		55		77		63		46
Other								
Total	4	55	5	77	1	63	3	46

	Fall 2015		Fall 2016		Fall 2017		Fall 2018	
	FT	PT	FT	PT	FT	PT	FT	PT
? Number of Faculty Retiring								
Professor	8	0	8	0	6	0	5	0
Associate	1	0	1	0	1	0		0
Assistant		0		0		0		0
Instructor		0		0		0		0
No rank		0		0		0		0
Other		0		0		0		0
Total	9	0	9	0	7	0	5	0

Please enter any explanatory notes in the box below

(1) * (Number of Faculty Appointed-FY 2018) The number includes new employee group - Part-Time Day Faculty - World Language Institute (5 new appointments);FY 2019 The number includes Part-Time Day Faculty - World Language Institute (1 new appointment); FY16 and FY17 the group was a part of Professional Staff - Flexible Study.

(2) * (Number of Faculty Appointed) The number for FY2016 includes eight (8) Full-Time faculty who retired/ departed from their Full-Time positions but continue to teach Part-Time_ "Part-Time Appointment"; FY2017- five (5) retired/ departed Full-Time faculty continue with "Part-Time Appointment"; FY2018- three (3) retired/ departed Full-Time faculty continue with "Part-Time Appointment"; FY2019 - six (6) retired or departed Full-time faculty continue with "Part-Time Appointment".

(3) The number of Faculty Departing for Part-Time Group includes Faculty who departed and have been not assigned for any classes for at least two (2) years.

(4) Unlike IPEDS Human Resources submissions, appointments, departures, and retirement numbers are based on full academic years and new appointments include employees who are not new to MCC but new to the particular employee category.

Standard 7: Institutional Resources
(Headcount of Employees by Occupational Category)

For each of the occupational categories below, enter the data reported on the IPEDS Human Resources Survey (Parts B and D1) for each of the years listed.

If your institution does not submit IPEDS, visit this link for information about how to complete this form:

https://surveys.nces.ed.gov/IPEDS/Downloads/Forms/package_1_43.pdf

	3 Years Prior			2 Years Prior			1 Year Prior			Current Year		
	(FY 2016)			(FY 2017)			(FY 2018)			(FY 2019)		
	FT	PT	Total	FT	PT	Total	FT	PT	Total	FT	PT	Total
Instructional Staff	134	404	538	121	389	510	120	395	515	118	381	499
Research Staff	0	0	0	0	0	0	0	0	0	0	0	0
Public Service Staff	0	0	0	0	0	0	0	0	0	0	0	0
Librarians	5	7	12	7	6	13	8	1	9	7	2	9
Library Technicians	3	7	10	4	7	11	5	8	13	4	7	11
Archivists, Curators, Museum staff	0	0	0	0	0	0	0	0	0	0	0	0
Student and Academic Affairs	78	84	162	94	74	168	82	43	125	73	44	117
Management Occupations	56	2	58	46	2	48	38	2	40	40	4	44
Business and Financial Operations	57	8	65	68	4	72	32	8	40	34	8	42
Computer, Engineering and Science	25	4	29	22	2	24	20	2	22	24	4	28
Community, Social Service, Legal, Arts, Design, Entertainment, Sports, and Media	6	6	12	4	9	13	3	12	15	5	8	13
Healthcare Practitioners and Technical	1	0	1	1	0	1	1	0	1	1	0	1
Service Occupations	30	42	72	30	45	75	28	54	82	28	51	79
Sales and Related Occupations	0	0	0	0	0	0	0	0	0	0	0	0
Office and Administrative Support	70	154	224	63	68	131	53	67	120	54	64	118
Natural Resources, Construction, Maintenance	0	0	0	0	0	0	0	0	0	0	0	0
Production, Transportation, Material Moving	0	0	0	0	0	0	0	0	0	0	0	0
Total	465	718	1,183	460	606	1,066	390	592	982	388	573	961

Please enter any explanatory notes in the box below

FY 2016 Full Time Instructional Staff include 9 Bridge Staff. FY20xx counts are as reported in FY20xx. For example, FY2019 counts were as of November 1, 2018 due in April 2019 as part of IPEDS fiscal 2019 reporting.

Standard 7: Institutional Resources
(Statement of Financial Position/Statement of Net Assets)

	Fiscal Year ends - month & day: (06/30)	2 Years Prior (FY 2016)	1 Year Prior (FY 2017)	Most Recent Year (FY 2018)	Percent Change	
					2 yrs-1 yr prior	1 yr-most recent
ASSETS (in 000s)						
?	Cash and Short Term Investments	\$13,838	\$12,400	\$16,958	-10.4%	36.8%
?	Cash held by State Treasurer		\$0	\$0	-	-
?	Deposits held by State Treasurer	\$1,000	\$335	\$509	-66.5%	51.9%
?	Accounts Receivable, Net	\$3,703	\$5,291	\$5,989	42.9%	13.2%
?	Contributions Receivable, Net	\$0	\$0	\$0	-	-
?	Inventory and Prepaid Expenses	\$82	\$11	\$8	-86.6%	-27.3%
?	Long-Term Investments	\$9,382	\$6,993	\$7,506	-25.5%	7.3%
?	Loans to Students	\$221	\$164	\$0	-25.8%	-100.0%
?	Funds held under bond agreement	\$0	\$0	\$0	-	-
?	Property, plants, and equipment, net	\$31,959	\$37,334	\$45,924	16.8%	23.0%
?	Other Assets	\$7,883	\$6,999	\$4,413	-11.2%	-36.9%
	Total Assets	\$68,068	\$69,527	\$81,307	2.1%	16.9%
LIABILITIES (in 000s)						
?	Accounts payable and accrued liabilities	\$4,124	\$3,862	\$4,777	-6.4%	23.7%
?	Deferred revenue & refundable advances	\$1,463	\$1,473	\$4,229	0.7%	187.1%
?	Due to state	\$0	\$0	\$0	-	-
?	Due to affiliates	\$0	\$0	\$0	-	-
?	Annuity and life income obligations	\$0	\$0	\$0	-	-
?	Amounts held on behalf of others	\$161	\$274	\$265	70.2%	-3.3%
?	Long-term investments	\$0	\$0	\$0	-	-
?	Refundable government advances	\$0	\$0	\$0	-	-
?	Other long-term liabilities	\$31,045	\$30,281	\$57,407	-2.5%	89.6%
	Total Liabilities	\$36,793	\$35,890	\$66,678	-2.5%	85.8%
NET ASSETS (in 000s)						
	Unrestricted net assets					
	Institutional	\$765	(\$2,521)	(\$30,739)	-429.5%	1119.3%
?	Foundation	\$0	\$0	\$0	-	-
	Total	\$765	(\$2,521)	(\$30,739)	-429.5%	1119.3%
	Temporarily restricted net assets					
	Institutional	\$30,510	\$36,158	\$45,368	18.5%	25.5%
?	Foundation	\$0	\$0	\$0	-	-
	Total	\$30,510	\$36,158	\$45,368	18.5%	25.5%
	Permanently restricted net assets	\$0.00	\$0.00	\$0.00		
	Institutional	\$0	\$0	\$0	-	-
?	Foundation		\$0	\$0	-	-
	Total	\$0	\$0	\$0	-	-
	Total Net Assets	\$31,275	\$33,637	\$14,629	7.6%	-56.5%
	TOTAL LIABILITIES and NET ASSETS	\$68,068	\$69,527	\$81,307	2.1%	16.9%

Please enter any explanatory notes in the box below

**Standard 7: Institutional Resources
(Statement of Revenues and Expenses)**

	3 Years Prior (FY2016)	2 Years Prior (FY2017)	Most Recently Completed Year (FY 2018)	Current Year (FY 2019)	Next Year Forward (FY 2020)	
Fiscal Year ends - month& day: (06 / 30)						
OPERATING REVENUES (in 000s)						
?	Tuition and fees	\$35,720	\$35,294	\$34,082	\$34,500	\$34,000
?	Room and board					
?	Less: Financial aid	-\$13,513	-\$12,449	-\$12,789	-\$12,000	-\$11,500
	Net student fees	\$22,207	\$22,845	\$21,293	\$22,500	\$22,500
?	Government grants and contracts	\$22,871	\$21,653	\$18,225	\$18,000	\$17,500
?	Private gifts, grants and contracts	\$0	\$0	\$0	\$0	\$0
?	Other auxiliary enterprises	\$334	\$308	\$293	\$290	\$280
	Endowment income used in operations	\$0	\$0	\$0	\$0	\$0
?	Other revenue (specify):	\$1,821	\$1,881	\$1,270	\$1,200	\$1,100
	Other revenue (specify):					
	Net assets released from restrictions					
	Total Operating Revenues	\$47,233	\$46,687	\$41,081	\$41,990	\$41,380
OPERATING EXPENSES (in 000s)						
?	Instruction	\$29,779	\$28,982	\$32,929	\$33,000	\$33,120
?	Research	\$0	\$0	\$0	\$0	\$0
?	Public Service	\$4,909	\$5,076	\$786	\$780	\$700
?	Academic Support	\$8,631	\$8,595	\$3,765	\$3,760	\$3,765
?	Student Services	\$10,844	\$12,096	\$11,362	\$11,338	\$11,400
?	Institutional Support	\$9,036	\$7,833	\$9,038	\$9,200	\$9,300
	Fundraising and alumni relations	\$0	\$0	\$0	\$0	\$0
?	Operation, maintenance of plant (if not allocated)	\$8,748	\$7,818	\$8,428	\$8,500	\$8,800
?	Scholarships and fellowships (cash refunded by public institution)	\$3,179	\$2,889	\$2,742	\$2,750	\$2,800
?	Auxiliary enterprises	\$0	\$0	\$0	\$0	\$0
?	Depreciation (if not allocated)	\$3,758	\$3,949	\$2,338	\$3,000	\$4,000
?	Other expenses (specify):					
	Other expenses (specify):					
	Total operating expenditures	\$78,884	\$77,238	\$71,388	\$72,328	\$73,885
	Change in net assets from operations	-\$31,651	-\$30,551	-\$30,307	-\$30,338	-\$32,505
NON OPERATING REVENUES (in 000s)						
?	State appropriations (net)	\$29,995	\$31,006	\$31,790	\$33,000	\$33,500
?	Investment return	\$3	\$768	\$503	\$500	\$500
?	Interest expense (public institutions)	-\$93	-\$82	-\$69	-\$58	-\$47
	Gifts, bequests and contributions not used in operations	\$0	\$0	\$0	\$0	\$0
?	Other (specify):	\$0	\$0	\$0	\$0	
	Other (specify): Payments between College and Foundation	\$131	\$140	\$123	\$120	\$120
	Other (specify):					
	Net non-operating revenues	\$30,036	\$31,832	\$32,347	\$33,562	\$34,073
	Income before other revenues, expenses, gains, or losses	-\$1,615	\$1,281	\$2,040	\$3,224	\$1,568
?	Capital appropriations (public institutions)	\$3,672	\$1,082	\$9,221	\$1,000	\$1,500
?	Other (specify):					
	TOTAL INCREASE/DECREASE IN NET ASSETS	\$2,057	\$2,363	\$11,261	\$4,224	\$3,068

**Standard 7: Institutional Resources
(Statement of Debt)**

FISCAL YEAR ENDS month & day (06 / 30)		3 Years Prior (FY2016)	2 Years Prior (FY2017)	Most Recently Completed Year (FY 2018)	Current Year (FY 2019)	Next Year Forward (FY 2020)
	Long-term Debt					
	Beginning balance	\$3,336,020	\$2,921,984	\$2,496,720	\$2,058,160	\$1,606,302
	Additions	\$0	\$0	\$0	\$0	\$0
	? Reductions	(\$414,036)	(\$425,264)	(\$438,560)	(\$451,858)	(\$465,452)
	Ending balance	\$2,921,984	\$2,496,720	\$2,058,160	\$1,606,302	\$1,140,850
	Interest paid during fiscal year	\$93,265	\$82,037	\$69,157	\$55,443	\$41,848
	Current Portion	\$414,036	\$425,264	\$438,560	\$451,858	\$465,452
	Bond Rating					
	Debt Service Coverage Operating Income / (Annual Interest + Current Portion of Debt)	12.00	13.00	27.00	14.00	14.00
	Debt to Net Assets Ratio Long-term Debt / Total Net Assets	9%	7%	20%	11%	7%
	Debt to Assets Ratio Long-term Debt / Total Assets	4%	4%	3%	2%	1%

Debt Covenants: (1) Describe interest rate, schedule, and structure of payments; and (2) indicate whether the debt covenants are being met. If not being met, describe the specific covenant violation (i.e., requirement of the lender vs. actual achieved by the institution). Also, indicate whether a waiver has been secured from the lender and/or if covenants

The College issued Series D bonds with a fixed rate of 2.95% in December, 2013. The bonds were issued through the Mass Development Finance Agency for the purpose of refunding, together with the other funds available for such purpose, the outstanding principal amount of the Series B bonds. Principal and interest is payable monthly through October 1, 2022. The bonds are collateralized by certain property and include non-financial and financial covenants. All covenants are being met.

Line(s) of Credit: List the institutions line(s) of credit and their uses.

Future borrowing plans (please describe).

**Standard 7: Institutional Resources
(Supplemental Data)**

FISCAL YEAR ENDS month & day (06 /30)	3 Years Prior (FY2016)	2 Years Prior (FY2017)	Most Recently Completed Year (FY 2018)	Current Year (FY 2019)	Next Year Forward (FY 2020)
NET ASSETS					
Net assets beginning of year	\$29,217,231	\$31,274,615	\$33,637,998	\$10,041,927	\$14,265,927
Total increase/decrease in net assets	\$2,057,384	\$2,363,383	(\$23,596,071)	\$4,224,000	\$3,068,000
Net assets end of year	\$31,274,615	\$33,637,998	\$10,041,927	\$14,265,927	\$17,333,927
FINANCIAL AID					
Source of funds					
Unrestricted institutional	\$1,100,000	\$ 1,100,000	\$1,100,000	\$1,100,000	\$1,200,000
Federal, state and private grants	\$14,306,781	\$ 12,904,631	\$13,072,170	\$13,000,000	\$13,200,000
Restricted funds	\$0	\$0	\$0	\$0	\$0
Total	\$15,406,781	\$ 14,004,631	\$14,172,170	\$14,100,000	\$14,400,000
% Discount of tuition and fees	37.8%	35%	37.5%	34.8%	33.8%
? % Unrestricted discount	0.0%	0.0%	0.0%	0.0%	0.0%
Net Tuition Revenue per FTE	\$3,917	\$4,280	\$4,243	\$4,770	\$5,074
? FEDERAL FINANCIAL RESPONSIBILITY COMPOSITE SCORE					
Please indicate your institution's endowment spending policy:					
Please enter any explanatory notes in the box below.					

**Standard 7: Institutional Resources
(Liquidity)**

FISCAL YEAR ENDS month & day (06 /30)	3 Years Prior (FY2016)	2 Years Prior (FY2017)	Most Recently Completed Year (FY 2018)	Current Year (FY 2019)	Next Year Forward (FY 2020)
CASH FLOW					
Cash and Cash Equivalents beginning of year	\$5,989,146	\$11,342,820	\$10,802,715	\$16,114,115	\$19,614,115
Cash Flow from Operating Activities	\$3,510,725	\$3,489,481	\$6,956,492	\$5,000,000	\$4,500,000
Cash Flow from Investing Activities	\$3,397,371	\$4,719,771	\$569,575	\$500,000	\$500,000
Cash Flow from Financing Activities	(\$1,554,422)	(\$8,749,357)	(\$2,214,667)	(\$2,000,000)	(\$3,000,000)
Cash and Cash Equivalents end of year	\$11,342,820	\$10,802,715	\$16,114,115	\$19,614,115	\$21,614,115
LIQUIDITY RATIOS					
Current Assets	\$18,623,281	\$18,037,358	\$23,463,524	\$23,000,000	\$23,000,000
Current Liabilities	\$9,640,569	\$9,630,090	\$12,792,143	\$12,000,000	\$12,000,000
Current Ratio	1.93	1.87	1.83	1.92	1.92
Days Cash on Hand [Cash and Cash Equivalents / (Operating Expenses + Depreciation and other noncash expenses)]/ 365	52.48	51.05	82.52	98.98	106.78
Please enter any explanatory notes in the box below that may impact the institution's cash flow.					
Has the institution needed to access its restricted net assets or liquidate other financial assets to fund operations? If so, please describe and indicate when approvals (if required) were obtained from the state's authority.					
Please enter any explanatory notes in the box below.					

**Standard 8: Educational Effectiveness
(Undergraduate Retention and Graduation Rates)**

Student Success Measures / Prior Performance and Goals	3 Years	2 Years	1 Year		Next Year
	Prior	Prior	Prior	Current Year	Forward (goal)
	(FY 2016)	(FY2017)	(FY 2018)	(FY 2019)	(FY 2020)
IPEDS Retention Data	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
First Time Full-Time Associate degree students	61%	63%	61%	61%	62%
Bachelors degree students	n/a	n/a	n/a	n/a	n/a
IPEDS Graduation Data (150% of time)	Cohort F12	Cohort F13	Cohort F14	Cohort F15	Cohort F16
Associate degree students	16%	18%	19%	20%	21%
Bachelors degree students	n/a	n/a	n/a	n/a	n/a
IPEDS Outcomes Measures Data	Cohort	Cohort	Cohort	Cohort	Cohort
First-time, full time students	Fall 2007	Fall 2008	2009-10	2010-11	2011-12
	1306	1387	1659	1507	
Awarded a degree within six years	26%	26%	26%	25%	26%
Awarded a degree within eight years	29%	29%	28%	27%	28%
Not awarded within eight years but still enrolled	4%	4%	3%	3%	4%
First-time, part-time students	617	694	959	972	
Awarded a degree within six years	13%	20%	15%	16%	17%
Awarded a degree within eight years	18%	22%	18%	19%	20%
Not awarded within eight years but still enrolled	5%	5%	2%	2%	3%
Non-first-time, full-time students	280	255	654	602	
Awarded a degree within six years	36%	36%	29%	28%	29%
Awarded a degree within eight years	39%	39%	31%	28%	29%
Not awarded within eight years but still enrolled	3%	4%	1%	1%	2%
Non-first-time, part-time students	375	316	808	807	
Awarded a degree within six years	24%	21%	22%	19%	20%
Awarded a degree within eight years	28%	23%	24%	21%	22%
Not awarded within eight years but still enrolled	2%	2%	1%	2%	2%
Other Undergraduate Retention/Persistence Rates (Add definitions/methodology in #1 below)					
	Cohort F14	Cohort F15	Cohort F16	Cohort F17	Cohort F18
1 IPEDS First Time Full Time Associate/Certificate Retention Rate	62%	63%	62%	61%	62%
2 IPEDS First Time Part Time Associate/Certificate Retention Rate	45%	44%	39%	43%	44%
3 DHE Retention of First Time Full Time Degree Seeking	Cohort F13	Cohort F14	Cohort F15	Cohort F16	Cohort F17
4 Full-time First-Time Degree-Seeking Students	1,109	1,103	1,099	920	915
5 # Retained at Institution	684	677	695	562	557
6 % Retained at Institution	61.7%	61.4%	63.2%	61.1%	60.9%
7 # Retained Anywhere	770	762	804	660	652
8 % Retained Anywhere	69.4%	69.1%	73.2%	71.7%	71.3%
9 Other Retention Rates - First Time Degree Seeking (FT&PT)	Cohort F14	Cohort F15	Cohort F16	Cohort F17	Cohort F18
10 First Time Degree Seeking (FT&PT)	1,845	1,839	1,620	1,497	1,309
11 Overall	55.1%	55.5%	52.2%	54.4%	55.0%
12 Full Time	61.7%	63.5%	61.6%	61.4%	62.0%
13 Part Time	45.1%	43.4%	39.4%	43.2%	44.0%
14 Gender					
15 Male	50.6%	51.9%	52.6%	50.1%	51.0%
16 Female	59.5%	58.8%	51.8%	58.9%	59.0%
17 Ethnicity					
18 American Indian/Alaskan Native	66.7%		0.0%	50.0%	51.0%
19 Asian/Pacific Islander	61.2%	62.9%	54.5%	61.4%	62.0%
20 Black/African-American	50.9%	56.7%	57.0%	49.5%	50.0%
21 Hispanic/Latino	52.1%	56.0%	42.6%	54.2%	55.0%
22 Non-Resident Alien	50.0%	69.0%	53.1%	63.0%	64.0%
23 Two or More Races	43.2%	50.0%	49.0%	46.8%	47.0%
24 Unreported	66.7%	44.4%	33.3%	44.4%	45.0%
25 White	55.9%	53.4%	55.3%	53.6%	54.0%
26 Low Income					
27 Yes	54.2%	55.1%	51.1%	53.9%	55.0%
28 No	55.9%	55.8%	53.0%	55.0%	56.0%
29 Age Groups					
30 <20	57.8%	58.4%	55.5%	57.1%	58.0%
31 20-24	45.2%	44.3%	43.9%	44.0%	45.0%

32	25-29	45.9%	51.1%	44.9%	42.9%	43.0%
33	30 and over	51.0%	48.2%	39.6%	51.1%	52.0%
34	Unreported				100.0%	100.0%
35	Placed into at least one developmental class					
36	Yes	54.9%	55.4%	52.6%	54.5%	55.0%
37	No	60.6%	57.1%	40.6%	51.3%	52.0%
38	Developmental Combinations					
39	No Developmental Courses	60.6%	57.1%	40.6%	51.3%	52.0%
40	Developmental Math Only	53.9%	57.5%	54.8%	54.9%	55.0%
41	Developmental Reading Only	37.5%	28.6%	33.3%	33.3%	34.0%
42	Developmental Writing Only	75.0%	50.0%	100.0%	100.0%	100.0%
43	Developmental Math and Reading	56.0%	64.9%	54.6%	62.5%	63.0%
44	Developmental Math and Writing	57.2%	53.2%	52.4%	54.1%	55.0%
45	Developmental Reading and Writing	66.7%	71.4%	80.0%	66.7%	67.0%
46	Developmental Math, Reading, and Writing	54.2%	52.2%	47.5%	52.5%	53.0%
47						
48	Retention - First Time Degree Seeking (FT)	1,109	1,106	930	923	
49	Overall	61.7%	63.5%	61.6%	61.4%	62.0%
50	Gender					
51	Male	56.7%	58.8%	61.6%	58.2%	59.0%
52	Female	67.0%	68.3%	61.6%	65.0%	66.0%
53	Ethnicity					
54	American Indian/Alaskan Native	66.7%			50.0%	51.0%
55	Asian/Pacific Islander	66.4%	71.9%	60.2%	67.3%	68.0%
56	Black/African-American	50.9%	65.8%	71.2%	60.9%	61.0%
57	Hispanic/Latino	61.9%	67.9%	53.5%	62.9%	63.0%
58	Non-Resident Alien	82.4%	82.4%	77.8%	75.0%	76.0%
59	Two or More Races	45.8%	54.5%	53.3%	55.9%	56.0%
60	Unreported	75.0%	60.0%	0.0%	40.0%	40.0%
61	White	61.3%	59.7%	64.1%	59.5%	60.0%
62	Low Income					
63	Yes	60.5%	62.8%	57.1%	61.7%	62.0%
64	No	62.8%	64.1%	65.3%	61.2%	62.0%
65	Age Groups					
66	<20	62.2%	64.7%	60.7%	62.1%	63.0%
67	20-24	60.0%	50.0%	64.2%	56.5%	57.0%
68	25-29	52.2%	70.0%	78.9%	60.0%	61.0%
69	30 and over	60.0%	66.7%	72.2%	55.6%	56.0%
70	Unreported				100.0%	100.0%
71	Placed into at least one developmental class					
72	Yes	61.4%	63.3%	61.9%	61.1%	62.0%
73	No	78.9%	73.7%	55.3%	75.0%	76.0%
74	Developmental Combinations					
75	No Developmental Courses	78.9%	73.7%	55.3%	75.0%	76.0%
76	Developmental Math Only	57.9%	61.6%	61.6%	57.9%	58.0%
77	Developmental Reading Only	33.3%	100.0%	100.0%		
78	Developmental Writing Only	100.0%	50.0%	100.0%	100.0%	100.0%
79	Developmental Math and Reading	68.0%	81.8%	63.2%	79.3%	80.0%
80	Developmental Math and Writing	65.8%	62.2%	61.3%	63.6%	64.0%
81	Developmental Reading and Writing	100.0%	100.0%			
82	Developmental Math, Reading, and Writing	64.0%	64.6%	62.8%	61.9%	62.0%
1	Retention - First Time Degree Seeking (PT)	736	733	690	574	
2	Overall	45.1%	43.4%	39.4%	43.2%	44.0%
3	Gender					
4	Male	40.5%	39.9%	38.2%	35.7%	36.0%
5	Female	49.2%	46.2%	40.4%	50.0%	51.0%
6	Ethnicity					
7	American Indian/Alaskan Native			0.0%	50.0%	51.0%
8	Asian/Pacific Islander	51.3%	47.4%	47.0%	50.0%	51.0%
9	Black/African-American	50.9%	46.2%	44.9%	40.0%	41.0%
10	Hispanic/Latino	39.3%	41.0%	29.2%	41.3%	42.0%
11	Non-Resident Alien	23.8%	50.0%	21.4%	28.6%	29.0%

12	Two or More Races	40.0%	42.9%	42.1%	23.1%	24.0%
13	Unreported	50.0%	25.0%	100.0%	50.0%	51.0%
14	White	47.1%	43.2%	42.1%	43.8%	44.0%
15	Low Income					
16	Yes	44.8%	42.9%	43.5%	41.3%	42.0%
17	No	45.5%	43.8%	35.7%	45.1%	46.0%
18	Age Groups					
19	<20	48.3%	44.5%	44.2%	45.3%	46.0%
20	20-24	33.8%	40.0%	33.7%	34.2%	35.0%
21	25-29	43.1%	42.2%	33.9%	38.5%	39.0%
22	30 and over	48.2%	44.1%	33.0%	50.0%	51.0%
23	Placed into at least one developmental class					
24	Yes	45.3%	43.5%	40.2%	43.8%	44.0%
25	No	35.7%	37.5%	19.2%	26.3%	27.0%
26	Developmental Combinations					
27	No Developmental Courses	35.7%	37.5%	19.2%	26.3%	27.0%
28	Developmental Math Only	44.5%	48.4%	41.9%	48.5%	49.0%
29	Developmental Reading Only	38.5%	16.7%	27.3%	33.3%	34.0%
30	Developmental Writing Only	66.7%	50.0%	100.0%		100.0%
31	Developmental Math and Reading	44.0%	53.7%	49.2%	48.6%	49.0%
32	Developmental Math and Writing	46.9%	40.4%	39.5%	36.5%	37.0%
33	Developmental Reading and Writing	50.0%	50.0%	80.0%	66.7%	67.0%
34	Developmental Math, Reading, and Writing	44.6%	38.1%	34.9%	43.1%	44.0%
35						
36	Other Retention Rates-New Transfer-Highest Prior Credential	Cohort F14	Cohort F15	Cohort F16	Cohort F17	Cohort F18
37	High School Diploma	44.7%	41.6%	43.3%	47.3%	48.0%
38	GED	48.4%	38.5%	23.8%	55.9%	56.0%
39	Associate Degree	53.6%	40.9%	36.8%	48.6%	49.0%
40	Bachelor Degree	41.1%	36.2%	50.5%	33.9%	34.0%
41	Master Degree	53.3%	34.8%	18.2%	42.1%	43.0%
1	Persistence Rates - First Time Degree Seeking (FT&PT)	Cohort F14	Cohort F15	Cohort F16	Cohort F17	Cohort F18
2	First Time Degree Seeking (FT&PT)	1,845	1,839	1,620	1,497	1,309
3	Overall	72.4%	72.3%	67.5%	69.0%	69.8%
4	Full Time	79.6%	79.7%	76.9%	76.1%	78.2%
5	Part Time	61.5%	61.1%	54.9%	57.7%	57.7%
6	Gender					
7	Male	69.5%	69.7%	66.6%	67.0%	68.9%
8	Female	75.3%	74.6%	68.5%	71.0%	70.7%
9	Ethnicity					
10	American Indian/Alaskan Native	66.7%		0.0%	75.0%	50.0%
11	Asian/Pacific Islander	78.6%	75.1%	70.2%	74.0%	70.7%
12	Black/African-American	76.4%	73.0%	64.8%	65.3%	65.0%
13	Hispanic/Latino	70.2%	73.9%	59.9%	66.6%	64.0%
14	Non-Resident Alien	63.2%	79.3%	59.4%	74.1%	82.9%
15	Two or More Races	56.8%	63.9%	77.6%	68.1%	52.7%
16	Unreported	83.3%	77.8%	66.7%	55.6%	100.0%
17	White	72.4%	71.0%	70.5%	69.2%	73.8%
18	Low Income					
19	Yes	71.7%	73.7%	70.0%	68.8%	68.8%
20	No	73.2%	70.8%	65.4%	69.2%	70.8%
21	Age Groups					
22	<20	74.6%	76.2%	71.1%	70.7%	71.4%
23	20-24	64.3%	60.9%	53.7%	59.3%	65.7%
24	25-29	64.9%	55.3%	62.8%	65.3%	59.2%
25	30 and over	70.1%	64.0%	63.2%	71.3%	63.6%
26	Unreported				100.0%	
27	Placed into at least one developmental class					
28	Yes	69.7%	60.0%	53.1%	66.7%	66.7%
29	No	72.5%	72.5%	68.1%	69.1%	70.0%
30	Developmental Combinations					
31	No Developmental Courses	69.7%	60.0%	53.1%	66.7%	66.7%
32	Developmental Math Only	71.8%	72.9%	70.8%	69.5%	72.9%

33	Developmental Reading Only	62.5%	52.4%	83.3%	66.7%	50.0%
34	Developmental Writing Only	75.0%	25.0%	50.0%	100.0%	100.0%
35	Developmental Math and Reading	74.0%	74.8%	69.1%	70.3%	495.7%
36	Developmental Math and Writing	74.5%	74.0%	67.1%	67.4%	62.0%
37	Developmental Reading and Writing	100.0%	100.0%	80.0%	66.7%	66.7%
38	Developmental Math, Reading, and Writing	70.5%	69.8%	62.5%	70.0%	68.7%
39						
40	Persistence - First Time Degree Seeking (FT)	1,109	1,106	930	923	775
41	Overall	79.6%	79.7%	76.9%	76.1%	78.2%
42	Gender					
43	Male	78.2%	76.0%	75.9%	73.1%	76.7%
44	Female	81.2%	83.4%	78.0%	79.3%	79.7%
45	Ethnicity					
46	American Indian/Alaskan Native	66.7%			100.0%	
47	Asian/Pacific Islander	88.4%	83.7%	78.7%	78.9%	76.9%
48	Black/African-American	72.7%	82.9%	79.7%	78.3%	75.5%
49	Hispanic/Latino	79.2%	81.2%	69.2%	75.8%	75.1%
50	Non-Resident Alien	88.2%	88.2%	83.3%	80.0%	93.8%
51	Two or More Races	58.3%	72.7%	80.0%	79.4%	55.6%
52	Unreported	87.5%	80.0%	50.0%	50.0%	100.0%
53	White	78.9%	77.9%	78.8%	75.1%	82.0%
54	Low Income					
55	Yes	77.7%	80.0%	77.6%	77.3%	78.4%
56	No	81.6%	79.3%	76.3%	74.8%	78.0%
57	Age Groups					
58	<20	79.8%	81.3%	76.8%	75.7%	78.1%
59	20-24	79.1%	66.7%	75.3%	78.3%	83.1%
60	25-29	69.6%	73.3%	73.7%	70.0%	76.5%
61	30 and over	82.9%	81.0%	88.9%	83.3%	64.7%
62	Unreported				100.0%	
63	Placed into at least one developmental class					
64	Yes	79.4%	79.5%	77.2%	75.7%	78.0%
65	No	89.5%	89.5%	68.4%	90.0%	82.1%
66	Developmental Combinations					
67	No Developmental Courses	89.5%	89.5%	68.4%	90.0%	82.1%
68	Developmental Math Only	77.7%	76.5%	77.4%	73.9%	80.1%
69	Developmental Reading Only	66.7%	100.0%	100.0%		
70	Developmental Writing Only	100.0%		0.0%	100.0%	100.0%
71	Developmental Math and Reading	84.0%	84.1%	73.7%	82.8%	75.0%
72	Developmental Math and Writing	82.9%	82.4%	77.4%	74.2%	67.8%
73	Developmental Reading and Writing	100.0%	100.0%			
74	Developmental Math, Reading, and Writing	78.0%	82.9%	77.9%	81.9%	80.0%
75						
76	Persistence - First Time Degree Seeking (PT)	736	733	690	574	534
77	Overall	61.5%	61.1%	54.9%	57.7%	57.7%
78	Gender					
79	Male	55.2%	58.9%	51.8%	56.3%	54.6%
80	Female	67.3%	62.9%	57.2%	58.9%	59.7%
81	Ethnicity					
82	American Indian/Alaskan Native				50.0%	100.0%
83	Asian/Pacific Islander	60.3%	60.3%	59.0%	64.5%	59.3%
84	Black/African-American	80.0%	61.5%	52.2%	54.5%	54.0%
85	Hispanic/Latino	58.4%	64.7%	48.4%	52.9%	46.6%
86	Non-Resident Alien	42.9%	66.7%	28.6%	57.1%	73.7%
87	Two or More Races	55.0%	50.0%	73.7%	38.5%	47.4%
88	Unreported	75.0%	75.0%	100.0%	62.5%	
89	White	61.8%	59.7%	57.9%	59.2%	62.3%
90	Low Income					
91	Yes	62.8%	63.9%	60.4%	55.2%	53.3%
92	No	60.2%	58.5%	49.9%	60.1%	61.2%
93	Age Groups					
94	<20	63.1%	65.0%	58.7%	59.1%	58.4%
95	20-24	52.8%	56.6%	42.9%	44.4%	55.1%

96	25-29	62.7%	46.9%	59.3%	64.1%	50.0%
97	30 and over	66.1%	60.2%	58.0%	68.4%	63.3%
98	Placed into at least one developmental class					
99	Yes	61.9%	61.9%	55.9%	58.2%	58.1%
100	No	42.9%	25.0%	30.8%	42.1%	50.0%
101	Developmental Combinations					
102	No Developmental Courses	42.9%	25.0%	30.8%	42.1%	50.0%
103	Developmental Math Only	58.0%	65.1%	58.5%	60.2%	59.2%
104	Developmental Reading Only	61.5%	44.4%	81.8%	66.7%	50.0%
105	Developmental Writing Only	66.7%	50.0%	100.0%		100.0%
106	Developmental Math and Reading	64.0%	68.7%	66.1%	60.0%	53.3%
107	Developmental Math and Writing	64.3%	62.0%	52.1%	54.7%	53.2%
108	Developmental Reading and Writing	100.0%	100.0%	80.0%	66.7%	66.7%
109	Developmental Math, Reading, and Writing	63.1%	55.0%	49.7%	58.1%	59.2%
110						
111	Other Persistence Rates-New Transfer-Highest Prior Credential	Cohort F14	Cohort F15	Cohort F16	Cohort F17	Cohort F18
112	High School Diploma	68.7%	65.4%	64.1%	70.8%	63.8%
113	GED	65.5%	62.2%	57.1%	62.9%	77.8%
114	Associate Degree	71.4%	47.6%	62.2%	71.4%	65.6%
115	Bachelor Degree	66.3%	63.8%	63.2%	58.7%	56.2%
116	Master Degree	93.3%	65.2%	36.4%	63.2%	75.0%
117	Unreported			50.0%	100.0%	
?	Other Undergraduate Graduation Rates (Add definitions/methodology in # 2 below)					
		Cohort F12	Cohort F13	Cohort F14	Cohort F15	Cohort F16
1	IPEDS Graduation Data - Assoc & Certs (150% of time)	17%	19%	19%	21%	22%
2	IPEDS Graduation Data - Assoc & Certs (200% of time)	25%	26%	27%		28%
3	Other Graduation Rates - First Time Full Time Degree Seeking	1,174	1,118	1,109	1,106	930
4	IPEDS Graduation Assoc & Certs (150% of time)	Cohort F12	Cohort F13	Cohort F14	Cohort F15	Cohort F16
5	Gender					
6	Male	15.5%	14.8%	15.1%	16.7%	17.0%
7	Female	17.4%	22.1%	23.9%	24.7%	25.0%
8	Ethnicity					
9	American Indian/Alaskan Native	0.0%	0.0%	0.0%		
10	Asian/Pacific Islander	17.9%	15.7%	19.9%	21.5%	22.0%
11	Black/African-American	9.7%	10.6%	9.1%	21.1%	22.0%
12	Hispanic/Latino	10.0%	12.3%	13.0%	14.7%	15.0%
13	Non-Resident Alien	30.0%	25.0%	10.5%	24.1%	25.0%
14	Two or More Races	16.7%	12.5%	16.7%	13.6%	14.0%
15	Unreported	50.0%	15.4%	25.0%	0.0%	0.0%
16	White	18.8%	22.4%	22.4%	22.3%	23.0%
17	Low Income					
18	Yes	13.8%	15.1%	15.2%	17.3%	18.0%
19	No	19.0%	22.2%	23.5%	23.9%	24.0%
20	Placed into at least one developmental class					
21	Yes	15.5%	17.8%	18.3%	19.9%	20.0%
22	No	55.2%	50.0%	73.7%	63.2%	64.0%
23	Age Groups					
24	<20	15.6%	18.1%	20.2%	20.6%	21.0%
25	20-24	18.4%	23.0%	13.6%	16.7%	17.0%
26	25-29	14.3%	20.0%	13.0%	30.0%	31.0%
27	30 and over	30.0%	11.4%	17.1%	28.6%	29.0%
28	Developmental Combinations					
29	No Developmental Courses	55.2%	50.0%	73.7%	63.2%	64.0%
30	Developmental Math Only	19.3%	18.4%	21.4%	22.2%	23.0%
31	Developmental Reading Only	0.0%	0.0%	0.0%	33.3%	34.0%
32	Developmental Writing Only		100.0%	0.0%	50.0%	51.0%
33	Developmental Math and Reading	16.7%	9.8%	8.0%	9.1%	10.0%
34	Developmental Math and Writing	13.8%	18.7%	17.5%	20.6%	21.0%
35	Developmental Reading and Writing		0.0%	100.0%	33.3%	34.0%
36	Developmental Math, Reading, and Writing	7.8%	16.3%	12.2%	13.3%	14.0%
37	Other Grad Rates-New Transfer-Highest Prior Credential	784	745	698	722	695

38	High School Diploma	28.0%	27.3%	25.2%	21.3%	22.0%
39	GED	17.6%	14.3%	17.2%	13.5%	14.0%
40	Associate Degree	43.2%	33.3%	35.7%	21.4%	22.0%
41	Bachelor Degree	33.0%	35.8%	37.9%	27.7%	28.0%
42	Master Degree	35.7%	21.4%	60.0%	30.4%	31.0%
43						
44	Transfer Rates Prior To Graduation	Cohort F12	Cohort F13	Cohort F14	CohortF15	CohortF16
	First Time Full Time Degree Seeking	1,174	1,118	1,109	1,106	930
45	Overall -	25.6%	21.8%	21.3%	19.1%	20.0%
46	Gender					
47	Male	25.9%	23.4%	22.1%	21.8%	22.0%
48	Female	25.2%	20.3%	20.3%	16.2%	17.0%
49	Ethnicity					
50	American Indian/Alaskan Native	66.7%	33.3%	0.0%		
51	Asian/Pacific Islander	20.8%	19.4%	25.3%	20.7%	21.0%
52	Black/African-American	37.1%	31.8%	36.4%	24.0%	25.0%
53	Hispanic/Latino	28.8%	20.9%	18.2%	12.4%	13.0%
54	Non-Resident Alien	10.0%	25.0%	5.9%	5.9%	6.0%
55	Two or More Races	33.3%	25.0%	29.2%	13.6%	14.0%
56	Unreported	25.0%	7.7%	12.5%	40.0%	41.0%
57	White	23.9%	21.6%	20.5%	20.9%	21.0%
58	Low Income					
59	Yes	25.4%	20.2%	20.0%	17.9%	18.0%
60	No	25.7%	23.5%	22.6%	20.3%	21.0%
61	Placed into at least one developmental class					
62	Yes	15.3%	12.2%	12.9%	11.7%	12.0%
63	No	10.3%	7.7%	10.5%	0.0%	11.0%
64	Age Groups					
65	<20	27.2%	23.5%	22.2%	20.1%	21.0%
66	20-24	19.2%	54.3%	18.2%	11.1%	12.0%
67	25-29	21.4%	14.3%	4.3%	16.7%	17.0%
68	30 and over	12.0%	5.7%	17.1%	19.0%	20.0%
69	Developmental Combinations					
70	No Developmental Courses	10.3%	7.7%	10.5%	0.0%	10.0%
71	Developmental Math Only	30.0%	25.7%	24.9%	20.6%	21.0%
72	Developmental Reading Only	0.0%	0.0%	0.0%	33.3%	34.0%
73	Developmental Writing Only		0.0%	0.0%	0.0%	
74	Developmental Math and Reading	11.9%	31.7%	14.0%	13.6%	14.0%
75	Developmental Math and Writing	23.7%	19.4%	18.2%	17.9%	18.0%
76	Developmental Reading and Writing		50.0%	0.0%	0.0%	
77	Developmental Math, Reading, and Writing	22.0%	14.7%	18.3%	18.2%	19.0%
78	Other Transfer Before Grad Rates-New Transfer-Highest Prior Credential	784	745	698	722	695
79	High School Diploma	50.8%	50.6%	49.9%	50.2%	60.3%
80	GED	50.0%	54.8%	58.6%	59.5%	57.1%
81	Associate Degree	31.8%	46.2%	39.3%	40.5%	59.5%
82	Bachelor Degree	42.7%	39.5%	37.9%	40.4%	45.3%
83	Master Degree	42.9%	35.7%	40.0%	43.5%	36.4%
	Unkown		100.0%			50.0%

Definition and Methodology Explanations

- 1 in IPEDS Fall Enrollment submissions are for the prior fall's cohort. The retention rates here are for degrees and certificates.
- 2 Graduation Rate includes certificate students. Cohort for graduation rate 150% and 200% same in the column.
- 9 Unless otherwise specified, other Persistence/Retention rates based on first-time degree seeking students including full-time and part-time. First-Time retention rates includes retained students and graduates. Persistence rates include fall students enrolled in the spring term.
- Other Undergraduate Graduation and Transfer Rates prior to Graduation based on IPEDS cohorts of first-time full-time students
- 37 Other grad rates - New Transfer - Highest Academic Credential: New Transfer students from HEIRS and awarded Assoc/Cert any time after start

Note: complete this form for each distinct student body identified by the institution (See Standard 8.1)

Standard 8: Educational Effectiveness
(Student Success and Progress Rates and Other Measures of Student Success)

Category of Student/Outcome Measure	Bachelor Cohort Entering		Associate Cohort Entering	
	6 years ago	4 years ago	6 years ago	4 years ago
	Fall 2011		Fall 2013	
First-time, Full-time Students	1343		1118	
Degree from original institution	n/a	n/a	27%	24%
Not graduated, still enrolled at original institution	n/a	n/a	5%	11%
Degree from a different institution	n/a	n/a	9%	5%
Transferred to a different institution	n/a	n/a	17%	18%
Not graduated, never transferred, no longer enrolled	n/a	n/a	42%	42%
First-time, Part-time Students	733		916	
Degree from original institution	n/a	n/a	13%	10%
Not graduated, still enrolled at original institution	n/a	n/a	5%	12%
Degree from a different institution	n/a	n/a	3%	3%
Transferred to a different institution	n/a	n/a	19%	16%
Not graduated, never transferred, no longer enrolled	n/a	n/a	60%	59%
Non-first-time, Full-time Students	367		304	
Degree from original institution	n/a	n/a	37%	30%
Not graduated, still enrolled at original institution	n/a	n/a	2%	5%
Degree from a different institution	n/a	n/a	10%	11%
Transferred to a different institution	n/a	n/a	26%	26%
Not graduated, never transferred, no longer enrolled	n/a	n/a	26%	29%
Non-first-time, Part-time Students	516		441	
Degree from original institution	n/a	n/a	24%	20%
Not graduated, still enrolled at original institution	n/a	n/a	4%	7%
Degree from a different institution	n/a	n/a	15%	9%
Transferred to a different institution	n/a	n/a	20%	24%
Not graduated, never transferred, no longer enrolled	n/a	n/a	37%	39%

Measures of Student Achievement and Success/Institutional Performance and Goals					
	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 2015)	(FY2016)	(FY 2017)	(FY 2018)	(FY 2019)

Success of students pursuing higher degrees (add more rows as needed; add definitions/methodology in #1 below)

1	Graduates transferred to 4 yr within 1 year	37.21%	39.18%	41.07%	44.49%	45.00%
2	Graduates transferred to 4 yr within 2 years	43.43%	46.78%	49.12%	not available until 2020	50.00%
3						

public service, global citizenship, leadership, spiritual formation) and success of graduates in fields for which they were not explicitly

1					
2					
3					
4					

Definition and Methodology Explanations

1	Non-first time students are non-first time degree seeking students---undeclared excluded.
2	Exclude from "Still Enrolled at Institution", students who graduated from MCC.
1	Proportion of graduates from fiscal year who transferred to 4-year institution within one year of graduation month/year.
2	Proportion of graduates from fiscal year who transferred to 4-year institution within two years of graduation month/year. This percentage also includes graduates who transferred within one year.

**Standard 8: Educational Effectiveness
(Licensure Passage and Job Placement Rates and
Completion and Placement Rates for Short-Term Vocational Training Programs)**

	3-Years Prior (AY 2015)	2 Years Prior (AY 2016)	1 Year Prior (AY 2017)	Most Recent Year (AY 2018)
3. State Licensure Examination Passage Rates				

Name of exam	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed
1								
2								
3								
4								
5								

3. National Licensure Passage Rates								
Name of exam	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed
1 Nursing (NCLEX-RN)	69	67	82	80	67	67	57	54
2 Radiologic Technology	19	16	17	14	19	19	15	13
3 Dental Hygiene	28	28	28	28	24	24	26	26
4 Dental Assisting Nat'l Board Exam	10	10	14	14	11	11	10	8
5								

3. Job Placement Rates

Major/time period	FY 2014				FY 2015				FY 2016				FY 2017			
	# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate
1 AS, Biotechnology, 1 year	48	28	18	64%	31	14	11	79%	42	20	16	80%	39	22	10	45%
AS, Business Administration - Accounting, 1 year	8	3	3	100%	10	3	1	33%	8	5	5	100%	7	3	3	100%
AS, Business Administration - Career General, 1 year	47	16	14	88%	46	9	7	78%	33	10	6	60%	28	14	6	43%
AS, Business Administration - Hospitality Management, 1 year	7	2	1	50%	8	4	2	50%	8	6	5	83%	7	3	1	33%
AS, Business Administration - Transfer, 1 year	158	53	45	85%	155	44	33	75%	179	69	45	65%	170	116	32	28%
AS, CAD Technology, 1 year	5	2	1	50%	13	8	6	75%	11	5	3	60%	1	1	1	100%
AS, Computer Forensics, 1 year	7	3	1	33%	9	2	1	50%	2	2	2	100%				
AS, Computer Science, 1 year	9	6	4	67%	17	8	3	38%	21	12	5	42%	26	20	4	20%
AS, Computer/Software & Networking, 1 year	11	5	2	40%					2	1	1	100%	1	1	1	100%
AS, Criminal Justice - Administration of Justice, 1 year	5	2	1	50%	4	1	1	100%	6	3	1	33%	7	4	2	50%
AS, Criminal Justice - Law Enforcement, 1 year	23	8	4	50%	16	2	2	100%	14	4	2	50%	16	7	3	43%
AS, Criminal Justice - Transfer, 1 year	41	13	12	92%	52	14	7	50%	58	22	14	64%	47	32	10	31%
AS, Culinary Arts, 1 year	6	3	2	67%									4	2	1	50%
AS, Dental Assisting, 1 year	18	8	7	88%	9	5	3	60%	13	8	4	50%	7	2	1	50%
AS, Dental Hygiene, 1 year	36	17	17	100%	31	12	12	100%	28	9	8	89%	24	9	8	89%
AS, Dental Laboratory Technology, 1 year	13	5	4	80%	13	10	7	70%	7	4	4	100%	6	3	3	100%
AS, Diagnostic Medical Sonography, 1 year	12	8	8	100%	14	6	6	100%	11	3	2	67%	17	5	5	100%
AS, Early Childhood Education, 1 year	42	14	10	71%	30	10	9	90%	43	15	15	100%	38	18	13	72%
AS, Early Childhood Education Transfer, 1 year	13	4	3	75%	11	6	4	67%	15	8	4	50%	9	5	3	60%

20	AA, Elementary Education, 1 year	15	4	4	100%	20	7	3	43%	16	7	3	43%	12	10	1	10%
21	AS, Energy Utility Technology, 1 year					5	4	2	50%	4	2	2	100%	4	2	2	100%
22	AS, Engineering Science, 1 year	15	6	3	50%	22	12	3	25%	12	4	3	75%	15	12	4	33%
23	AS, Engineering Science - Civil/Environmental, 1 year													5	5	1	20%
24	AS, Engineering Science - Mechanical, 1 year													9	9	2	22%
25	AS, Engineering Technology - Computer Aided Design, 1 year													8	4	3	75%
26	AS, Fashion Merchandising, 1 year	3	2	2	100%	4	1	1	100%	8	2	1	50%	7	4	3	75%
27	AA, Fine & Perf Arts - General, 1 year					2	1	1	100%								
28	AA, Fine & Perf Arts - Fine Arts, 1 year					3	2	1	50%	3	2	2	100%				
29	AA, Fine & Perf Arts - Music, 1 year	1	1	1	100%												
30	AA, Fine & Perf Arts - Theatre													4	3	2	67%
31	AS, Fire Protection & Safety Technology, 1 year	22	11	11	100%	25	11	11	100%	15	6	6	100%	26	10	7	70%
32	AS, Human Services, 1 year	10	4	4	100%	11	5	5	100%	8	3	1	33%	11	5	1	20%
33	AS, Human Services Transfer, 1 year	3	1	1	100%	14	7	3	43%	22	8	6	75%	15	9	3	33%
34	AS, Information Technology - Cyber Security													8	5	2	40%
35	AA, Liberal Arts - Communication, 1 year	21	9	6	67%	20	7	4	57%	27	10	4	40%	15	8	1	13%
36	AA, Liberal Arts - Creative Writing, 1 year									5	2	1	50%	3	2	2	100%
37	AA, Liberal Arts - English Lit													6	4	1	25%
38	AA, Liberal Arts - Global Studies, 1 year									2	2	1	50%				#DIV/0!
39	AA, Liberal Arts - History, Politics, Global													4	3	1	33%
40	AA, Liberal Arts - Life Science, 1 year					13	6	5	83%	6	3	2	67%				
41	AA, Liberal Arts - Physical Science, 1 year	4	2	1	50%	2	2	2	100%								
42	AA, Liberal Arts - Psychology, 1 year	30	9	8	89%	49	19	12	63%	48	16	10	63%	46	35	10	29%
43	AA, Liberal Arts - Social Science, 1 year	1	1	1	100%									5	5	3	60%
44	AA, Liberal Arts - World Languages, 1 year	3	1	1	100%					2	2	1	50%				
45	AA, Liberal Arts & Sciences, 1 year	151	55	29	53%	187	57	34	60%	163	79	44	56%	151	93	35	38%
46	AS, Liberal Studies, 1 year	188	68	47	69%	219	59	40	68%	212	71	43	61%	111	74	40	54%
47	AS, Liberal Studies - Automotive, 1 year	2	1	1	100%												
48	AS, Liberal Studies - Aviation Maintenance Technology, 1 year	5	2	2	100%					5	3	3	100%	3	3	3	100%
49	AS, Liberal Studies - Building Construction Technology, 1 year									2	2	1	50%	2	1	1	100%
50	AS, Liberal Studies - Graphic Design, 1 year	15	5	5	100%	19	3	2	67%	10	5	4	80%	11	4	2	50%
51	AS, Liberal Studies - IT General Studies Concentration, 1 year					3	2	1	50%	2	1	1	100%				
52	AS, Liberal Studies - IT Transfer Concentration, 1 year	6	1	1	100%	9	2	2	100%	11	6	5	83%	8	4	1	25%

26	Studio Arts Certificate	0%	0%	0%	0%	0%	0%
27	Travel Services Management	0%	17%	0%	0%	0%	0%

Placement Rates

		FY2014				FY2015				FY2016				FY2017			
		# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate	# of grads	# of survey respondents	# with jobs	Placement Rate
1	Cert, Addictions Counselor Program Certificate, 1 year	*	17	8	73%	11	4	3	75%	11	5	3	60%	8	6	4	67%
2	Cert, Biotechnology Certificate, 1 year	*	28	20	77%	35	16	13	81%	51	19	16	84%	45	25	11	44%
3	Cert, Clinical Laboratory Assistant, 1 year	*	2	1	100%	16	6	5	83%	5	2	2	100%	4	2	1	50%
4	Cert, Computer Aided Design Draft, 1 year	*	6	4	100%	9	3	3	100%	2	1	1	100%				
5	Cert, Computerized Accounting, 1 year	*	6	4	100%												
6	Cert, Dental Assisting Certificate, 1 year	*	6	3	100%	10	7	5	71%	18	12	10	83%	16	4	2	50%
7	Cert, Digital Forensics Certificate, 1 year	*								3	2	2	100%				
8	Cert, Direct Support Certificate in Human Services, 1 year	*	3	1	100%	9	3	2	67%	12	6	3	50%	9	4	3	75%
9	Cert, Early Childhood Education Certificate, 1 year	*	14	7	86%	34	10	9	90%	35	15	12	80%	30	17	13	76%
10	Cert, Energy Utility Technology Certificate, 1 year	*	17	6	100%	7	3	2	67%	11	2	2	100%	6	1	1	100%
11	Cert, Engineering Tech Computer Aided Design Certificate, 1 year	*	1	1	100%												
12	Cert, Entrepreneurship Certificate, 1 year	*	2	2	100%	12	1	1	100%	17	9	7	78%				
13	Cert, Hospitality Management Certificate, 1 year	*								1	1	1	100%				
14	Cert, Law Enforcement Certificate, 1 year	*				5	1	1	100%								
15	Cert, Medical Assisting Certificate, 1 year	*	13	5	60%	18	3	3	100%	14	7	7	100%	16	6	4	67%
16	Cert, Medical Office Administration Certificate, 1 year	*	11	5	100%	8	1	1	100%								
17	Cert, Medical Receptionist Certificate, 1 year	*	15	8	88%	17	3	3	100%								
18	Cert, Nursing Assistant Certificate, 1 year	*	19	4	75%	32	7	4	57%	14	3	2	67%	16	4	2	50%
19	Cert, Paralegal Studies, 1 year	*	14	7	71%	26	9	7	78%	11	5	4	80%	16	8	6	75%
20	Cert, Phlebotomy Certificate, 1 year	*	12	4	100%	35	11	8	73%	14	6	5	83%	19	8	7	88%
21	Cert, Travel Services Management, 1 year	*				1	1	1	100%								

Please enter any explanatory notes in the box below

Completion Rates are based on students who completed any program within 3 years of declaration. Entries of 0% mean no students graduated within the timeframe to be considered on time. Blank entries mean there were no enrollments in that certificate program for that time period. Blank goal percentages are for certificates no longer enrolling new students.

**Standard 8: Educational Effectiveness
(Graduate Programs, Distance Education, Off-Campus Locations)**

Student Success Measures/ Prior Performance and Goals	3 Years Prior (FY 2016)	2 Years Prior (FY2017)	1 Year Prior (FY 2018)	Current Year (FY 2019)	Next Year Forward (goal) (FY 2020)
Master's Programs (Add definitions/methodology in #1 below)					
Retention rates first-to-second year	n/a	n/a	n/a	n/a	n/a
Graduation rates @ 150% time	n/a	n/a	n/a	n/a	n/a
Average time to degree	n/a	n/a	n/a	n/a	n/a
Other measures, specify:					
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
Doctoral Programs (Add definitions/methodology in #2 below)					
Retention rates first-to-second year	n/a	n/a	n/a	n/a	n/a
Graduation rates @ 150% time	n/a	n/a	n/a	n/a	n/a
Average time to degree	n/a	n/a	n/a	n/a	n/a
Other measures, specify:					
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
First Professional Programs (Add definitions/methodology in #3 below)					
Retention rates first-to-second year	n/a	n/a	n/a	n/a	n/a
Graduation rates @ 150% time	n/a	n/a	n/a	n/a	n/a
Average time to degree	n/a	n/a	n/a	n/a	n/a
Other measures, specify:					
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
Distance Education (Add definitions/methodology in #4 below)					
Course completion rates	74.92%*	75.96%*	76.27%*	75.06%*	76.94%*
Retention rates	**	**	**	**	**
Graduation rates	**	**	**	**	**
Other measures, specify:					
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a
Branch Campus and Instructional Locations (Add definitions/methodology in #5 below)					
Course completion rates	**	**	**	**	**
Retention rates	**	**	**	**	**
Graduation rates	**	**	**	**	**
Other measures, specify:					
	**	**	**	**	**
	**	**	**	**	**
	**	**	**	**	**

Definition and Methodology Explanations

*Distance Education course completion rates include web only courses as well as hybrid courses that are both web and on-campus. At this point, Middlesex does not have programs identified as 100% completely on-line. FY completion rates based on academic year of fall, spring, and summer (e.g. fall17, spring18, summer18). FY19 is for fall 2018 and spring 2019. The rate is expected to increase after summer grades are included. Summer 2019 is in progress.

**Middlesex has completely embraced the "one college" philosophy that allows students to freely select to enroll in courses in Bedford or Lowell; days or evenings; on-campus or on-line. Because so many students mix their schedules to accommodate their work, family, and personal obligations, it is not practical to assign them to a specific location, pedagogy, or time period for the purpose of tracking retention or graduation. There are two main campuses at Middlesex Community College with a fully functioning shuttle transporting students, faculty, and staff between campuses. The shuttle schedule is available on Middlesex's Mobile Web App.

**Standard 9: Integrity, Transparency, and Public Disclosure
(Integrity)**

Policies	Last Updated	Website location where policy is posted	Responsible Office or Committee
Academic honesty	2016	www.middlesex.mass.edu/studenthandbook	Dean of Students/Community Standards
Intellectual property rights	7/27/2018	https://www.middlesex.mass.edu/copyright/	Academic Affairs
Conflict of interest	7/27/2018	https://www.middlesex.mass.edu/humanresources/campplays.aspx	Human Resources
Privacy rights	2018-19	http://catalog.middlesex.mass.edu/content.php?catoid=15&navoid=1242#Privacy	Enrollment Management/Technology Center
Fairness for students	2016	https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2049#policy_on_affirmative_action	Dean of Students/Community Standards
Fairness for faculty	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	Human Resources
Fairness for staff	12/2015	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	Human Resources
Academic freedom	2018-19	https://catalog.middlesex.mass.edu/content.php?catoid=23&navoid=2060	Dean of Students/Community Standards
Academic freedom	2013-2016	https://www.middlesex.mass.edu/humanresources/downloads/mccc.pdf	MCCC Faculty Contract
Academic freedom	2013-2016	https://www.middlesex.mass.edu/humanresources/downloads/dec1316.pdf	DCE Faculty Contract
Research	7/27/2018	https://www.middlesex.mass.edu/irb/	Asst Dean of Students
Title IX	2014	https://www.middlesex.mass.edu/disclosurestatements/sexualviolpo.aspx	Director of Compliance/General Counsels Office
Other, specify			
Annual Safety & Security Report (Clergy Act)	Fall 2016	https://www.middlesex.mass.edu/disclosurestatements/campscrrpt.aspx	Public Affairs/Director of Compliance

Non-discrimination policies

Recruitment and admissions	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	HR/Diversity and Equity Affairs Division and General Counsels Office
Employment	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	HR/Diversity and Equity Affairs Division and General Counsels Office
Evaluation	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	HR/Diversity and Equity Affairs Division and General Counsels Office
Disciplinary action	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	HR/Diversity and Equity Affairs Division and General Counsels Office
Advancement	12/2014	https://www.middlesex.mass.edu/humanresources/downloads/paam.pdf	HR/Diversity and Equity Affairs Division and General Counsels Office
Other, specify			

Resolution of grievances

Students		http://catalog.middlesex.mass.edu/index.php?catoid=23	Dean of Students/Community Standards
Faculty (MCCC Contract)	2015-2018	https://www.middlesex.mass.edu/humanresources/downloads/mccc.pdf	Human Resources
Staff (AFSCME Contract)	2017-2020	https://www.middlesex.mass.edu/humanresources/downloads/contract2019.pdf	Human Resources
Other, specify			
DCE Contract	2018-2020	https://www.middlesex.mass.edu/humanresources/downloads/decba2.pdf	Human Resources
Non-Unit Management Handbook	July 2016	https://www.middlesex.mass.edu/humanresources/downloads/nup2017.pdf	Human Resources

Other	Last Updated	Website location or Publication	Responsible Office or Committee
Honor Code	2013	https://www.middlesex.mass.edu/deanofstudents/downloads/hcodeflyer.pdf	Dean of Students
Core Commitments	2018	https://www.middlesex.mass.edu/studentlife/communityengagement/corecommit.aspx	Dean of Students

Student Code of Conduct	2018	https://www.middlesex.mass.edu/deanofstudents/downloads/2018conduct.pdf	Dean of Students
Student Social Media Policy	2018	https://www.middlesex.mass.edu/webpolicy/socialmedia.aspx	Dean of Students
Web Policy	2018	https://www.middlesex.mass.edu/webpolicy/privacy.aspx	Technology Center
Academic Catalog	2018	https://catalog.middlesex.mass.edu	Enrollment Management
Student Handbook	2018	https://catalog.middlesex.mass.edu/index.php	Dean of Students
Faculty Handbook	2018	https://www.middlesex.mass.edu/professionaldevelopment/handbook/freemunion.aspx	Professional Development
Faculty Staff Association	2018	https://teamsites.middlesex.mass.edu/fssa/default.aspx	Faculty Staff Association Executive Committee
Student Union Government Association	2018	https://www.middlesex.mass.edu/studentactivities/sug.aspx	Office of Student Activities
Management Association Committee on Employee Relations	2015	https://www.middlesex.mass.edu/humanresources/downloads/mecr.pdf	Human Resources
Higher Education Opportunity Act	6/25/2010	https://www2.ed.gov/policy/highered/leg/hea08/index.html	External link
Massachusetts State Ethics Commission Policy	2018	https://www.middlesex.mass.edu/humanresources/campplaws.aspx	Human Resources
Gainful Employment Regulation	2018	http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2037	Institutional Research
Academic Advising	8/16/2018	https://www.middlesex.mass.edu/advISING/	Academic, Career, Transfer Advising
National Association of Student Financial Aid Administrators Code of Conduct	7/30/2018	https://www.middlesex.mass.edu/financialaid/conduct.aspx	Office of Financial Aid
Massachusetts Community College Council	7/2015-6/2018	https://www.middlesex.mass.edu/humanresources/downloads/mccc.pdf	Human Resources
Institutional Review Board	7/27/2018	https://www.middlesex.mass.edu/irb/	Academic Affairs
Office of Diversity and Equity Affairs	7/27/2018	https://www.middlesex.mass.edu/diversityandequityaffairs/	Human Resources
Affirmative Action Office	7/27/2018	https://www.middlesex.mass.edu/diversityandequityaffairs/aa.aspx	Human Resources
Massachusetts Department of Higher Education Affirmative Action Plans	2014	http://www.mass.gov/hed/affirmativeactionpolicies/affirmativeaction.asp	Human Resources
Family Educational Rights and Privacy Act	2018	https://www.middlesex.mass.edu/financialaid/ferpa.aspx	Registrar/Financial Aid
Family Educational Rights and Privacy Act	12/15/2010	https://www.middlesex.mass.edu/humanresources/downloads/ferpatrain.pdf	Human Resources
Personally Identifiable Information	2018	https://www.middlesex.mass.edu/security/pipol.aspx	Data Security Committee
Professional Development	7/27/2018	https://www.middlesex.mass.edu/professionaldevelopment/	Office of Professional Development
Program Review	2018	https://www.middlesex.mass.edu/programreview/assessment/programassessment.aspx	Assessment Committee
Director of Compliance	2017	https://www.middlesex.mass.edu/disclosurestatements/downloads/clery2017.pdf	Department of Compliance
Student Completion Rate	2018	https://www.middlesex.mass.edu/disclosurestatements/	Department of Compliance
Campus Security Report	2018	https://www.middlesex.mass.edu/disclosurestatements/campsecrpt.aspx	Department of Compliance
Drug and Alcohol Policy	2018	https://www.middlesex.mass.edu/disclosurestatements/drugpolicy.aspx	Department of Compliance
Sexual Harassment Policy	2018	https://www.middlesex.mass.edu/disclosurestatements/sexharasspo.aspx	Department of Compliance
Sex Offender Procedure	2018	https://www.middlesex.mass.edu/disclosurestatements/offender.aspx	Department of Compliance
Sexual Violence Policy	2018	https://www.middlesex.mass.edu/disclosurestatements/sexualviolpo.aspx	Department of Compliance
Adjunct Junction	2018	https://www.middlesex.mass.edu/adjunctjunction/	Assistant Professor Deb Botker
Sexual Harassment Disclosure	2018	https://www.middlesex.mass.edu/humanresources/downloads/aap2015.pdf	Department of Compliance

Please enter any explanatory notes in the box below

Standard 9: Integrity, Transparency, and Public Disclosure (Transparency)

Information	Website location and/or Relevant Publication(s)
How can inquiries be made about the institution? Where can questions be addressed?	<p>Middlesex has a free app available for download from Apple's App Store and Google Play. The apps are described on Middlesex's web-site: https://www.middlesex.mass.edu/technologycenter/mccmobile.aspx</p> <p>The college's directory of faculty and staff email addresses and college phone numbers is available on Middlesex's Mobile App as well as the Middlesex web-site at: https://www.middlesex.mass.edu/directory/</p> <p>Middlesex can be contacted through the MCC website. There is an email address, phone number, Frequently Asked Questions list, links to Admissions and Class schedules. https://www.middlesex.mass.edu/contactus/</p> <p>The college's email address is: middlesex@middlesex.mass.edu</p> <p>The college's phone number for in-state calls is: 1-800-818-3434</p> <p>For out-of-state calls the phone number is: 1-978-656-3370</p>
How can inquiries be made about the institution? Where can questions be addressed?	<p>The college also uses social media platforms: https://www.instagram.com/middlesex_cc/ https://www.facebook.com/TheMiddlesexCC https://twitter.com/Middlesex_CC https://www.youtube.com/user/TheMiddlesexcc http://community.middlesex.mass.edu/blogs/mccblog/ https://www.pinterest.com/middlesexcc/ https://www.linkedin.com/school/middlesexcommunitycollege/</p> <p>In addition, the college publishes information about making public records requests: https://www.middlesex.mass.edu/disclosurestatements/publicrecord.aspx</p>
Notice of availability of publications and of audited financial statement or fair summary	<p>https://catalog.middlesex.mass.edu/index.php?catoid=20</p> <p>http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2049#Financial_Information</p> <p>https://www.middlesex.mass.edu/disclosurestatements/downloads/63016fs.pdf</p> <p>https://www.middlesex.mass.edu/registration/</p>
Processes for admissions	https://www.middlesex.mass.edu/admissions/
Processes for employment	https://www.middlesex.mass.edu/employmentatmcc/
Processes for grading	<p>http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2042#Credit_Hour_Policy</p> <p>https://www.middlesex.mass.edu/adjunctjunction/grading.aspx</p>
Processes for assessment	https://www.middlesex.mass.edu/programreview/default.aspx

Processes for student discipline	http://catalog.middlesex.mass.edu/index.php?catoid=23 http://catalog.middlesex.mass.edu/content.php?catoid=23&navoid=2062
Processes for consideration of complaints and appeals	http://catalog.middlesex.mass.edu/content.php?catoid=23&navoid=2066

List below the statements or promises made regarding program excellence, learning outcomes, success in placement, and achievements of graduates or faculty and indicate where valid documentation can be found.

Statement/Promise	Website location and/or publication where valid documentation can be found
Nursing: NCLEX Pass Rate, Job Placement Rate, Program Completion	https://www.middlesex.mass.edu/nursing/
Radiologic Technology: Program Goals, Student Learning Outcomes, First Time Credential Exam Pass Rate, Job Placement Rate, Program Completion Rate	https://www.middlesex.mass.edu/radiologicstechnology/
Diagnostic Medical Sonography: Credential Success Rate, Job Placement Rate, Program Completion Rate	https://www.middlesex.mass.edu/diagnosticmedicalsonography/
Graduate and Transfer information in Middlesex Community College's Fact Books	https://www.middlesex.mass.edu/institutionaleffectiveness/
Gainful Employment Disclosures listed under each certificate program of study	http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2037
ISLO Assessment Results - Assessment Day April 2015	https://www.middlesex.mass.edu/programreview/assessment/unfiled.aspx
Assessment Day Agendas 2015-2017	https://www.middlesex.mass.edu/programreview/assessment/assessdays.aspx
FSA Assessment Committee folder	https://teamsites.middlesex.mass.edu/fsa/Assessment%20Committee/Forms/AllItems.aspx
Institutional Student Learning Outcomes, Rubrics, Assessment	https://www.middlesex.mass.edu/programreview/assessment/assessres.aspx
General Education Assessment Work	https://www.middlesex.mass.edu/programreview/assessment/genedassess.aspx
Program/Area Assessment Work	https://www.middlesex.mass.edu/programreview/assessment/proareassess.aspx
Alumni Success Stories	https://www.middlesex.mass.edu/studentsuccess/

Date of last review of:	
Print publications	
Digital publications	

Please enter any explanatory notes in the box below

(Public Disclosure)

Information	Website location
Institutional catalog	http://catalog.middlesex.mass.edu/
Obligations and responsibilities of students and the institution	<p>Catalog: http://catalog.middlesex.mass.edu/ The catalog is also available on Middlesex's Mobile App under Catalog as well as a link under Handbook.</p> <p>Student Handbook: http://catalog.middlesex.mass.edu/index.php?catoid=23 The Student Handbook can also be accessed with Middlesex's Mobile App by clicking on Handbook within the app.</p> <p>Code of Conduct: https://catalog.middlesex.mass.edu/content.php?catoid=23&navoid=2060</p> <p>Honor Code: https://www.middlesex.mass.edu/deanofstudents/downloads/hcodeflyer.pdf</p> <p>Adjunct Junction: https://www.middlesex.mass.edu/adjunctjunction/</p> <p>Human Resource Policies and Contracts: https://www.middlesex.mass.edu/humanresources/policy.aspx</p>
Information on admission and attendance	https://www.middlesex.mass.edu/Online/attendance.aspx
Institutional mission and objectives	https://www.middlesex.mass.edu/about/mission.aspx
Expected educational outcomes	http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2028
Status as public or independent institution; status as not-for-profit or for-profit; religious affiliation	https://www.middlesex.mass.edu/about/mccfastfacts.aspx
Requirements, procedures and policies re: admissions	https://www.middlesex.mass.edu/admissions/ https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2191
Requirements, procedures and policies re: transfer credit	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2194
A list of institutions with which the institution has an articulation agreement	https://www.middlesex.mass.edu/admissions/whymcc/hsarticulat.aspx https://www.middlesex.mass.edu/transfer/transartic.aspx
Student fees, charges and refund policies	https://www.middlesex.mass.edu/studentaccounts/
Rules and regulations for student conduct	http://catalog.middlesex.mass.edu/ https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2182 www.middlesex.mass.edu/studenthandbook https://www.middlesex.mass.edu/deanofstudents/downloads/2018conduct.pdf https://catalog.middlesex.mass.edu/index.php?catoid=25 Middlesex's Mobile App gives students access to the student hand book
Procedures for student appeals and complaints	http://catalog.middlesex.mass.edu/ https://catalog.middlesex.mass.edu/index.php?catoid=25 www.middlesex.mass.edu/studenthandbook Middlesex's Mobile App gives students access to the student hand book
Other information re: attending or withdrawing from the institution	http://catalog.middlesex.mass.edu/
Academic programs	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2190
Courses currently offered	https://middlenet.middlesex.mass.edu/pls/prod/twbkwbis.P_WWLogin EAB Navigate
Other available educational opportunities	https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2038#NECCUM https://www.middlesex.mass.edu/careertraining/
Other academic policies and procedures	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2195
Requirements for degrees and other forms of academic recognition	<p>Programs of study with requirements: http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2037</p> <p>PTK Eligibility: https://www.middlesex.mass.edu/ptk/ptkfaq.aspx</p> <p>Commonwealth Honors Program: https://www.middlesex.mass.edu/honors/criteria.aspx</p>
List of continuing faculty, indicating department or program affiliation, degrees held, and institutions granting them	https://catalog.middlesex.mass.edu/ https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2203#Faculty_and_Staff

Names and positions of administrative officers	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2203
Names, principal affiliations of governing board members	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2204
Locations and programs available at branch campuses, other instructional locations, and overseas operations at which students can enroll for a degree, along with a description of programs and services available at each location	http://catalog.middlesex.mass.edu/
Programs, courses, services, and personnel not available in any given academic year.	
Size and characteristics of the student body	https://public.tableau.com/views/HHSwithFall17/Programs?embed=y&display=columns&publish=yes
Description of the campus setting	Middlesex's Mobile App has a satellite visual of the campus under Map
Description of the campus setting	https://www.middlesex.mass.edu/about/belford.aspx
Description of the campus setting	https://www.middlesex.mass.edu/about/howell.aspx
Availability of academic and other support services	<p>http://www.middlesex.mass.edu/studentlife/ https://www.middlesex.mass.edu/ace/ https://www.middlesex.mass.edu/paasa/ https://www.middlesex.mass.edu/internationalstudents/ https://www.middlesex.mass.edu/studentlife/support.aspx https://www.middlesex.mass.edu/studentlife/mccfoodpantry/ https://www.middlesex.mass.edu/veteransresources/ https://www.middlesex.mass.edu/trioservices/ https://www.middlesex.mass.edu/personalcounseling/ https://www.middlesex.mass.edu/disabilityservices/ https://www.middlesex.mass.edu/pathwayscenter/ https://www.middlesex.mass.edu/advising/ https://www.middlesex.mass.edu/studentlife/communityengagement/ https://www.middlesex.mass.edu/links/ https://www.middlesex.mass.edu/studentactivities/sportswellns.aspx</p> <p>EAB Navigate: students can explore majors, possible careers in that major, map out their courses and set up a schedule.</p> <p>From Middlesex's Mobile App, students can access MCC library databases and read e-books and pdfs of articles, view library tutorials, search library catalogs, place holds and see locations of books. They can also access Middlesex's bookstore through the app.</p>
Range of co-curricular and non-academic opportunities available to students	<p>https://www.middlesex.mass.edu/studentactivities/ https://www.middlesex.mass.edu/careerservices/default.aspx https://www.middlesex.mass.edu/studentactivities/clubsorgs.aspx https://www.middlesex.mass.edu/studyabroad/ https://www.middlesex.mass.edu/facilities/recycle.aspx https://www.middlesex.mass.edu/studyabroad/fellowships.aspx</p> <p>Middlesex's Mobile App has clubs, meetings, networking opportunities, sports, and other events under Events</p>
Institutional learning and physical resources from which a student can reasonably be expected to benefit	<p>https://www.middlesex.mass.edu/transportation/transportation/shuttle.aspx https://www.middlesex.mass.edu/admissions/campustours/crform.aspx https://www.middlesex.mass.edu/studentlife/explorecc.aspx https://www.middlesex.mass.edu/studentlife/campusrv.aspx</p> <p>Inter-Campus Shuttle schedules as well as map, campus, building, and parking information are available on Middlesex's Mobile App.</p>
Institutional goals for students' education	https://www.middlesex.mass.edu/academicstanding/default.aspx
Success of students in achieving institutional goals including rates of retention and graduation and other measure of student success appropriate to institutional mission. Passage rates for licensure exams, as appropriate	<p>https://www.middlesex.mass.edu/institutionaleffectiveness/ https://www.middlesex.mass.edu/nursing/ https://www.middlesex.mass.edu/radiologitechnology/ https://www.middlesex.mass.edu/diagnosticmedicalsonography/</p>
Total cost of education and net price, including availability of financial aid and typical length of study	<p>https://www.middlesex.mass.edu/financialaid/ https://www.middlesex.mass.edu/financialaid/costs.aspx https://www.middlesex.mass.edu/netpricecalc/ https://www.middlesex.mass.edu/studentaccounts/ https://www.middlesex.mass.edu/TuitionEstimator/ https://www.middlesex.mass.edu/studentaccounts/paymentopts.aspx http://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2039 https://www.middlesex.mass.edu/admissions/paying/default.aspx</p>
Expected amount of student debt upon graduation and loan payment rates	https://www.middlesex.mass.edu/financialaid/aboutloans.aspx
Statement about accreditation	https://catalog.middlesex.mass.edu/content.php?catoid=24&navoid=2205



Student Success Starts Here

President's Cabinet

MCC Board of Trustees

Board

James C. Mabry
President

Patrick Cook
Executive Director
Public Safety
& Government Affai

Judy Burke
Executive Direct
Institutional Advanc

Colleen Co
Chief Administrat

Mary Emerick
Vice President
Human Resources

Phillip J. Sisson
Provost and VP of Academic
& Student Affairs

Frank Nocella
Vice President
Finance and Facilities

Joseph Patuto
Chief Technology Officer

Susan Anderson
Executive Director of
Institutional Effectiveness

Donna Corbin
Executive Assistant

Beth Noel
Interim Director of Marketing
Communications

Pamela Flaherty
Senior Student Affairs
Officer/Dean of Students

Brian Butler
Director of Facilities

Audrey Nahabedian
Dean of Enrollment

Chamawia Harris
Staff Assistant to President
and CFO

Revised 7/29/2019

Appendix E – Degree Programs and Certificates

APPENDIX E
E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS
ASSOCIATE DEGREE PROGRAMS

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
At the Institutional Level: Institutional Student Learning Outcomes	Catalog https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2028	Review of student artifacts related to individual ISLOs	Faculty and the Chair of the General Education Assessment Committee review artifacts and make recommendations.	Changes have been made at department and program level (see below).	
Accounting	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2560&revturnto=2037	Review of level of student achievement related to ISLO/PSLO quantitative literacy and critical thinking based on financial statements Review of assignments and exams	Department Chair and faculty reviewed final exam artifacts from several courses taught by different faculty to assess student performance related to the explanation and calculation of specific problems. Reviews have taken place in Department Meetings and Assessment Day. Department Chair and faculty reviewed assignments and exams to determine if they	Revised Areas of Course Emphasis More emphasis placed on the major types of financial analysis and requiring students to document their calculation process through written and oral presentations	1999/2020

APPENDIX E

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT

OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS
ASSOCIATE DEGREE PROGRAMS

CATEGORY	(1) Where are these learning outcomes level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
At the Institutional Level: Institutional Student Learning Outcomes	Catalog https://catalog.middlesex.mass.edu/content.php?catoid=22&navoid=2028	Review of student artifacts related to individual ISLOs	Faculty and the Chair of the General Education Assessment Committee review artifacts and make recommendations.	Changes have been made at department and program level (see below).	
Accounting	Catalog https://catalog.middlesex.mass.edu/previous_program.php?catid=22&record=2037	Review of level of student achievement related to ISLO/PSLO quantitative literacy and critical thinking based on financial statements Review of assignments and exams	Department Chair and faculty reviewed final exam artifacts from several courses taught by different faculty to assess student performance related to the explanation and calculation of specific problems. Reviews have taken place in Department Meetings and Assessment Day. Department Chair and faculty reviewed assignments and exams to determine if they	Revised Areas of Course Emphasis More emphasis placed on the major types of financial analysis and requiring students to document their calculation process through written and oral presentations	1999/2020

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Aviation Maintenance Technology	Catalog http://catalog.middlesex.mass.edu/previous_program.php?catid=22&poiid=2563&returnto=2037	Performance on National Aviation Academy (NAA) Licensure Exam Course artifacts	reinforce course and program outcomes related to building professional development skills including using technology to develop effective business communications. Dean of Business, Legal Studies and Public Service and NAA faculty meet twice a year to review and discuss level of student performance in courses and on licensure exam. Artifacts are uploaded into Blackboard Outcomes; on Assessment Day, faculty review and discuss artifacts to determine if a course and/or program outcome is being met.	Curriculum and Course Changes Readjusted number of hours in the general, air frame, and powerplant modules Middlesex has added content in the Computer Applications course including use of ACCESS software.	None to Date/2021
Biotechnology	Catalog http://catalog.middlesex.mass.edu/previous_program.php?catid=22&poiid=2564	Student performance in Biotechnology Internship course, a capstone course	Department Chair and faculty review student performance and feedback information.	New Technology Course A specialized technology course, Computer Programs for the Biotechnology Industry, was developed in response to internship	2007/2020 Program review done biannually as part of MLSC endorsement

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	<p>&turnto=2037</p>	<p>Student performance on lab reports and lab skill assessments in specific courses</p> <p>Feedback from transfer colleges, employers, advisory board, and alumni</p>	<p>Biannually, they prepare information for the Massachusetts Life Sciences Center (MLSC) endorsement, which involves evaluation of student performance against industry outlined competencies.</p>	<p>assessment and advisory board input.</p> <p>Revision of Internship Assessment Form</p> <p>New form developed to review and assess student performance.</p>	<p>process.</p>
<p>Business Administration Transfer</p> <p>Business Administration Career</p>	<p>Catalog Business Administration Transfer https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2570&returnto=2037</p> <p>Business Administration Career https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2568&returnto=2037</p>	<p>Review of student performance related to an ISLO/PSLO, such as critical thinking, creative problem solving, multicultural & global literacy, written & oral communication</p> <p>Review of assignments and exams</p>	<p>Department Chair, full-time and adjunct faculty review student artifacts annually either during department meetings and/or at Assessment Day; also reviewed artifacts as part of the Program Review process.</p> <p>Program Chair, full-time and adjunct faculty assessed strategies for building student professional skills; assessment included reviewing faculty assignments, exams, and student artifacts; the</p>	<p>Revision of Course Assignments</p> <p>A writing component, such as a case study analysis or reflective paper, is now included in each course.</p> <p>Increased Tutoring Referrals</p> <p>Greater emphasis on encouraging students to access writing and math tutoring</p> <p>Increased Use of Library Tools</p> <p>Greater emphasis on students using library research guides and related database tools to complete a research assignment</p> <p>Curriculum Alignment</p> <p>Beginning the process of aligning faculty assignments to SLOs that meet the Professional Development PSLO</p>	<p>Transfer - 2016/2024 Career - 2016/2023</p>

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Business Entrepreneurship	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2821&returnto=2037	Student performance in capstone Entrepreneurship LaunchPad course that includes development of a business plan and a pitch presentation Project-based assignments in several courses Pitch presentations in several courses	use of technology to support business communication; and various related activities, such as field trips to corporate sites, internships, guest speakers, and MCC Career Day. Program Coordinator and faculty review data related to student performance results in capstone course, projects, and pitch presentations. A summer meeting is held with graduates to obtain their input on program and assess their progress as entrepreneurs.	Explore Development of Career Ready Course Faculty will explore the feasibility of developing a new course addressing the lack of student development of professional presentation skills; course would specifically focus on design and oral delivery through the medium of PowerPoint presentation software. Revised Assignments Ongoing "tweaking" of reading, writing, and reflection assignments to improve student understanding and skill development Imbedded Certifications into LaunchPad Capstone Course Curriculum Students will complete online education in Basic Accounting and Social Media that include certificates of completion.	None to Date/2022 This program was established in 2018.
Communication Transfer Communication Career	Catalog Communication Transfer http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2821&returnto=2037	Student performance in capstone Independent Study or Internship course Annual assessment of a program student learning outcome	Department Chair and faculty review student performance results. Department Chair and faculty collect student artifacts and use	Curriculum Changes Changes were made to the schedule and curriculum of IDS 130 – General Education Seminar: Arts, Humanities, Communication Career; follow-up analysis was conducted to determine impact of changes.	2012/2024

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	<p>http://catalog.middlesex.mass.edu/previous_program.php?catalog_id=22&poiid=2694&returnto=2037</p> <p>Communication Career</p>	<p>Student performance in IDS 130 – General Education Seminar: Arts, Humanities, Communication – Career</p>	<p>Blackboard Outcomes to facilitate assessment of a specific student learning outcome; artifacts and student survey results are reviewed. Department Chair and faculty created a rubric and reviewed artifact from IDS 130 as well as student survey.</p>	<p>Based on 2019 assessment, further changes will be made to learning activities and assignments in IDS 130 including those related to researching careers, building a professional network, generating a target employer list, and participating in mock interviews.</p> <p>Propose Revision to Length of IDS Course Change the timeframe from a weekend course to offering the course for 75 minutes per week for five weeks.</p> <p>Assignment Changes Adjustments to the assignment and rubric for the Media Content Analysis Paper (COM 102).</p>	
Computer Science Transfer	<p>Catalog http://catalog.middlesex.mass.edu/previous_program.php?catalog_id=22&poiid=2578&returnto=2037</p>	<p>Student performance in transfer programs Assessment Day projects analyzed student performance on RPS project using JAVA programming language.</p>	<p>Department Chair and faculty examined performance of transfer students at UML at April 2016 Academic Summit. Faculty from MCC and UML reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps.</p>	<p>Curriculum Revisions As a result of summits with UML and statewide transfer meetings, course curriculum was changed to reflect common subjects and languages and adjusted regarding credits and electives including math.</p> <p>Summer Bridge Program A summer Bridge program was created to assist students transferring to UML and involves MCC students</p>	2008/2019

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Computer Science Transfer - Secure Software Development (SSD)	Catalog http://catalog.midlesex.mass.edu/pd/review_program.php?catid=22&poiid=2664&returnto=2037	Note: This program has experienced very low enrollments, making it difficult to do any form of assessment. In 2018-2019, a faculty member was granted a sabbatical to review the curriculum.		taking a higher-level UML science course.	None to Date/2019
Criminal Justice Law Enforcement Option	Catalog Criminal Justice Law Enforcement Option https://catalog.middlesex.mass.edu/preview_program.php?catid=22&poiid=2583&returnto=2037	Assessment of PSLOs and review of ISLOs for annual Assessment Days	Department Chair and faculty annually identify a project for Assessment Day. Prior to Assessment Day, they use Blackboard Outcomes for norming and evaluating artifacts; on Assessment Day, they review and discuss results and make suggestions for changes, if needed.	Change in PSLOs Changed PSLOs to ensure program better prepares students	2009/2020
Criminal Justice Transfer Option	Criminal Justice Transfer Option https://catalog.middlesex.mass.edu/preview_program.php?catid=22&poiid=2584&returnto=2037 Department Website			Redesigned Teaching and Assignments for Introduction to Criminal Justice and Criminology Increased emphasis was placed on teaching critical thinking and discussing the impact of poverty on communities and the impact of language barriers between law enforcement and the community. Research project was redesigned to cover the issues of diversity, information gathering, and academic sources; reassessed again following year.	Redesign of CRJ 111 Research Project

CATEGORY	(1) Where are these learning outcomes for this level/program published? https://www.middlesex.mass.edu/criminaljustice/	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Culinary Arts – Business Administration	Catalog https://catalog.middlesex.mass.edu/previous_program.php?catid=22&pid=2694&hl=Communication+Arts&returnto=search	Student performance in Business Internship capstone course; internship final reflective paper Feedback from students, employers, alumni, and advisory board	Program Coordinator and adjunct faculty meet to review and discuss student internship performance and final paper as well as feedback information from employers, students, alumni, and advisory board including 2019 student survey on equipment used for training.	Several changes will be made to course, including redesigning the rubric, changing assignment instructions, revamping suggested resources, providing a more purposeful introduction to research assignment, and scaffolding initial research to a more demanding project in an upper level course. Increased Internship Partnerships More diverse internship opportunities have been created to provide stability for student placements and a path to assessment within the program. Updated Course and Program-Level Learning Outcomes Learning outcomes have been updated for both program and course level to reflect trends in the industry and expectations for students seeking employment following graduation. Professional Development Opportunities Additional professional development opportunities have been added for culinary students including guest speakers, career panels, and field trips.	2009/2020

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Dental Assisting	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=228&pooid=2585&returnto=2037	Student performance on Dental Assisting National Board Exam Student performance in Clinical Practicum capstone course Student performance on milestone global assessment test - Objective Structured Clinical Examination (OSCE) Feedback surveys from graduates and employers Feedback from advisory board	Program Coordinator and faculty review student performance results on exam and in clinical practicum as well as data from surveys at program meetings. Program Coordinator and faculty analyzed OSCE to determine if it measured all program outcomes.	Purchase of New Equipment The purchase of some new culinary equipment is planned. Change in Curriculum Dental Practice Management and Dental Science II have been condensed and offered during Spring Semester 1. An additional externship day was added to the two externships days per week in order to meet the Commission of Dental Accreditation standards for over 300 hours of clinical practicum for students. Change in Admission Process A mandatory program overview prior to application submission was instituted to prepare applicants for the rigor of the program. Changes in OSCE and Method for Administering the Exam Tablets will be used to present actual examples of electronic clinical data for students to analyze; videos of simulated patient situations will be used to determine student use of soft skills in communicating with patient;	2012/2024

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Dental Hygiene	Catalog www.catalog.middlesex.mass.edu/preview_program.php?catoid=22&poiid=2587&returnto=2037 Dental Hygiene Department website: https://www.middlesex.mass.edu/dhdepartment/competen.aspx Dental Hygiene Department Student Handbook	Student performance on licensure examinations <ul style="list-style-type: none"> National Board Exam (NBDHE) Regional Board Exam (CDCA) State Jurisprudence Exam Feedback on surveys from employers, graduates, alumni, and faculty. Annual Assessment Day project Ongoing evaluation of a Student Learning Outcome (SLO)	Program Director and faculty review results of student performance on the licensure exams and information obtained from the surveys as well as outcomes of faculty evaluation of summative student clinical experiences. SLO review process includes review of artifacts and analysis on results on Assessment Day. Program Director reviews admissions annually for efficacy and objectivity related to selecting students and	incorporation of “point and click” capabilities on electronic assessment programs related to using digital equipment and software; and ongoing elimination of testing of outdated dental treatment procedures pending changes in the Dental Assisting National Board Exam (DANB) content. CDCA Exam Preparation After determining that students were having difficulty with the complex CDCA exam preparation materials, the Department implemented monthly meetings between students and the Program Director to review CDCA exam preparation materials; in addition, all clinical faculty now provide instructions on calculus identification in ways similar to that required by the CDCA exam. Adjustment of Admission Criteria Changes included eliminating clinical observation and essay, increasing minimum GPA requirement, and requiring attendance at a mandatory Dental Hygiene Overview Session. Develop New Online Calibration Modules	2010/2024

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Dental Laboratory Technology	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2588&returnto=2037	Student performance on Recognized Graduate Examination administered by National Board of Certification Student performance in Dental Laboratory Technology Specialty Practicum capstone course Feedback from employer and graduate surveys	retention; information is shared with faculty. Program Coordinator and faculty annually review exam results, student performance in capstone course, and survey results. Program Coordinator and faculty reviewed results of 2019 employer survey that ranked graduates' skills related to professional development, performance, and leadership.	Modules will assist faculty to be consistent in how they evaluate students across clinical experiences, ensuring more uniform clinical instruction and student achievement of PSLOs. Redesign of Dental Laboratory Technology Specialty Practicum Students now complete the practicum under direct supervision of the Dental Laboratory Technology faculty, instead of supervisors in commercial dental laboratories. Faculty assessment of student competency is aligned with Commission on Dental Accreditation Standards, creating a direct connection between the program goals and student learning outcomes. Acquire and Integrate Digital Technology into Curriculum The use of digital technology for fabrication will become the primary method for training and hand fabrication the auxiliary method. This will ensure students are better prepared to meet employer requirements.	2011/2024
Diagnostic Medical Sonography	Catalog http://catalog.middlesex.mass.edu/content	Student performance on national certification examinations through the	Program Coordinator and faculty review exam	Curriculum Change and Realignment of Course Content	2013/2022

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	<p>t.php?catoid=22&navoid=2037 Diagnostic I Medical Sonography Handbook Course Syllabi Trajecsys Reporting System</p>	<p>American Registry of Diagnostic Medical Sonography (ARDMS) Feedback from employer and graduate surveys and advisory board Assessment of student soft skills</p>	<p>results and surveys annually. Program Coordinator and faculty reviewed pre-assessment results of student soft skills related to communication and emotional intelligence.</p>	<p>Vascular Technology I and II, along with a Pediatric course, were added to the general sonography program.</p> <p>Changes in Admission Criteria Changes were made to improve retention of students including raising minimum GPA, requiring completion of college Physics and A&P I&II within the last five years, and requiring attendance at a mandatory Diagnostic Medical Sonography Informational Session to inform students of the demands of the profession and program. Since being implemented in 2015, these changes have resulted in a decrease in attrition from 39% in 2014 to 17% in 2017.</p> <p>Continuance of Soft Skills Lectures and Assessments As soft skills lectures are presented to students during their clinical rotations, students will complete pre- and post- assessments linked to clinical rotations in their first and second years. Specific emphasis will be on listening, emotional intelligence, and written communication.</p>	

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Digital Forensics	Catalog http://catalog.middl.esex.mass.edu/previous_program.php?catoid=22&poiid=2576&returnto=2037	Student performance on Certified Computer Examiner (CCE) exam of Mobile Examiner exam (external certification) Feedback from advisory board	Program faculty review student performance and feedback.	New Courses Three new courses were developed: Digital Forensics I, II and III.	None to Date/2021 This program was established in 2014.
Early Childhood Education – Career Early Childhood Education – Transfer Elementary Education Transfer Concentration	Catalog Early Childhood Education - Career https://catalog.middl.esex.mass.edu/previous_program.php?catoid=22&poiid=2592&returnto=2037 Early Childhood Education - Transfer https://catalog.middl.esex.mass.edu/previous_program.php?catoid=22&poiid=2595&returnto=2037 Elementary Education – Transfer https://catalog.middl.esex.mass.edu/previous_program.php?catoid=22&poiid=2596&returnto=2037	Performance in Supervised Field Placement and Seminar capstone course Information obtained by applying National Association for the Education in Young Children (NAEYC) rubrics in all courses Student portfolios Feedback from Service-Learning Placement supervisor Feedback from transfer institutions	On Assessment Day, Dean of Education and faculty review results of application of skills rubrics on student products and performance.	Changes in Course Assignments To improve citation skills, included the APA Guide in all course syllabi; increased the number of research assignments Increased emphasis on students using e-tutoring and face-to-face tutoring Expanded Access to Technology Created an ECE Technical Training Center for faculty and students	2012/2020

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Energy Utility Technology	Department website: https://www.middlesex.mass.edu/academics/ MCC NAEYC Blackboard Site https://blackboard.middlesex.mass.edu/wel/ej	Note: This program is being sunsetted.			
Engineering Science Transfer Civil/Environmental Electrical and Computer Mechanical	Catalog https://catalog.middlesex.mass.edu/previous_program.php?catid=22&poiid=2598&returnto=2037 Civil/ Environmental http://catalog.middlesex.mass.edu/previous_program.php?catid=22&poiid=2599&returnto=2037 Electrical/ Computer http://catalog.middlesex.mass.edu/previous	Student performance at UML Feedback from advisory board, employers, and alumni	Department Chair and faculty examined performance of transfer students at UML. At an April 2016 Academic Summit, faculty from both MCC and UML reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps.	Curriculum Revision Curriculum was revised in 2014, 2017 and 2018 as a result of review of student performance in transfer programs and curricular review and alignment by program faculty. Math and science content was revised and increased. Concentrations for Mechanical, Civil/Environmental, Electrical/Computer, and Chemical were developed. Summer Bridge Program	2014/2021

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Engineering Technology – Computer Aided Design	<p>http://catalog.middlesex.mass.edu/previous_program.php?catoid=22&pooid=2815&returnto=2037</p> <p>Mechanical http://catalog.middlesex.mass.edu/previous_program.php?catoid=22&pooid=2599&returnto=2037</p> <p>Catalog http://catalog.middlesex.mass.edu/content.php?catoid=20&navoid=1838</p>	<p>Student grades and quality of projects in the capstone CAD practicum course</p> <p>Students pass rate on two Solidworks certification exams taken after completion of the Solid Modeling II and Solid Modeling III courses</p> <p>Feedback from advisory board</p>	<p>Faculty teaching CAD practicum course assess and evaluate the students' work.</p> <p>Faculty will review student performance on Solidworks exams that students began taking in 2019.</p>	<p>A Summer Bridge program was created to assist students transferring to UML and involves MCC students taking a higher-level UML science course.</p> <p>Project Changes for CAD Practicum The projects assigned to students change each year to prepare them to meet industry standards.</p> <p>Revision of Capstone Project Assessment (2019-2020) Project will be divided into parts with a rubric for each (Oral Presentation, Engineering Drawings, Formal Report, Group Evaluation).</p>	2014/2021
English/Creative Writing	<p>Catalog https://catalog.middlesex.mass.edu/previous_program.php?catoid=22&pooid=2815&returnto=2037</p>	<p>Holistic review of end-of-semester fiction student portfolios</p>	<p>Faculty in the Creative Writing Concentration review the student portfolios</p>	<p>Assignment Changes Review and revision of generating assignment to get more consistent responses.</p>	<p>None to Date/2020 This program was established in 2014.</p>

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English/Literature	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2661&highlight=Literature+Concentration&returnto=search	Student performance related to papers and presentations	Department Chair and faculty collect and review papers and presentations across a range of literature electives to assess student performance with respect to written and oral communication, critical thinking, and multi-cultural global literacy.	<p>Literary Conference Review of papers showed a wide range of proficiency with some students having superior writing and critical thinking skills. The department established a literary conference to provide an outlet for literature concentration students to present their work and to attract beginning students into the concentration.</p> <p>No Capstone Course There was discussion of adding a capstone course to the program. After reviewing course outcomes and limiting the number of courses required for the program to three to satisfy MassTransfer Requirements and limit program credits to 60, the department decided not to move forward with a proposed capstone course.</p>	None to Date/2020 This program was established in 2014.
Environmental Health	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2601&returnto=2037	Note: This program will no longer be offered because it was designed to be a feeder to a UML program, which has been sunsetted.			

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Fashion Merchandising	Catalog (http://catalog.middlesex.mass.edu/preview_program.php?catoid=15&pooid=1795&returnto=1237)	Student performance in Business Internship capstone course as the students journal their semester-long progress every week Final project artifacts from a variety of courses to examine demonstration of a Program Learning Outcome Feedback from employers, other industry professionals, transfer colleges, and alumni	Program Coordinator reviews student performance in internship and feedback information obtained from employers, transfer colleges, and alumni. On Assessment Day, Program Coordinator and other Business faculty review student project artifacts and make suggestions. Program Coordinator meets with fashion merchandising faculty from transfer colleges every semester to compare the course content.	Increase in Field Experiences To enable students to understand course material more fully, more field experience opportunities are offered, such as having students meet professionals from the fashion industry, visit business sites, and attend industry trade shows. Change in Assignments Students are required to use industry formulas obtained from actual businesses when creating buying plans. Change in Instruction Integrated information on industry software programs into Merchandising course	2001/ 2019
Fine and Performing Arts Concentration – Fine Arts Option	Catalog (https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2604&returnto=2037)	Portfolio reviews Juried Student Show Annual review of PSLOs/ISLOs as part of General Education Assessment	Department Chair and faculty review portfolios as part of advising sessions and student work as entries in annual juried show.	Improvements in Lessons and Assessment Processes To better assess student development, faculty made changes to specific lesson plans and to collection methods to gather evidence of multiple steps and changes students make in processes	2008/2023

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Fine and Performing Arts Concentration – Theatre Option	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2604&returnto=2037	Feedback from student surveys Student performance related to class assignments, monologue presentations, productions, journal reflections, and critical conversations with each other.	Artifacts are collected for General Education assessments and rubric developed. A faculty member volunteers to join assessment team so that discipline-specific voice is included. Department Chair and full-time faculty review artifacts of student work collected for Assessment Day. Rubrics are developed to assess artifacts. Department Chair and faculty observe and assess student performance and work; also analyze written assignments to determine depth of student's critical analysis skills. Rubrics are used to track improvements in student performance.	of critical thinking, rather than just looking at final products. Transfer Portfolio Preparation A one-credit portfolio preparation course was added as a program requirement. Upgraded Art Advising All second semester art students are assigned an art advisor, who helps them to become aware of career directions and guides them in the transfer process throughout the program. This is a change from previous practice where some students were not assigned an art advisor until third semester. Students who were left to wait for program advisors were behind in preparing portfolios and for transfer. Changes in timing of assignments Provide more time for students to prepare monologues or other performances in class as well as out of class	2003/2022

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
<p>Fine and Performing Arts Concentration – Music Option</p>	<p>Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2604&returnto=2037</p>	<p>Student performance at recitals and performance juries Student performance in capstone courses: Music Theory I and II</p>	<p>The Department Chair and faculty review and discuss grades and evaluations of the end-of-semester student performances. On Assessment Day, faculty have reviewed and evaluated videos of student performances.</p>	<p>Additional Independent Studies and Recitals More independent studies are offered in various instruments and voice; more spotlight recitals are scheduled to accommodate students performing longer pieces, which gives them more experience. Additional Emphasis Faculty now stress stage presence including how to prepare for a recital, concert or audition as well as musical performance.</p>	<p>2003/2022</p>
<p>Fire Protection & Safety Technology</p>	<p>Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2608&returnto=2037 Opin 37</p>	<p>Review of student performance related to exams and research papers</p>	<p>Program Chair and faculty individually review student performance in specific classes; also discuss student performance at Fire Protection and Safety Technology faculty meetings. On a regular basis, courses are reviewed for compliance with learning outcomes set by the Fire and Emergency Service</p>	<p>Revision of Instructional Method More frequent review of course content was integrated into Fire Science Hydraulics to assist students in understanding material and passing exams. Textbook Changes Textbooks have been changed in selected courses to provide better support and information to student.</p>	<p>2002/2021</p>

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Graphic Design	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2610&returnto=2037	Portfolio presentations Juried Student Show Annual review of specific PSLOs/ISLOs at Assessment Day Departmental surveys of graduating students and alumni Review of portfolios over a 15-year period Feedback from advisory board	Higher Education curriculum model promulgated by the National Fire Science Academy. Faculty, Program Chair and advisory board review portfolios and student work.	Changes in Assignments Added more complex campaign work in graphic design portfolio and more interactive digital features in magazine projects in web design classes Integration of Digital Skills Added instruction in interactive elements, animations, moving type, digital projects in line with industry standards; implemented new technology in user interface Scaffolding Skills Faculty met and identified lesson plans/projects to scaffold skills between 100 and 200 level courses.	2006/2020
Health Care Administration	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2692&returnto=2037	Student performance on the American Association of Professional Coders (AAPC) Licensure Examination and in capstone course Healthcare Administration Internship	Program Director and faculty will review outcome data and information.	This is a new program, begun in fall 2017. No changes have been made.	None to Date/2023 This program was established in 2017.

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
History, Politics & Global Studies	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2670&returnto=2037	Feedback from graduate and employer surveys Artifacts collected from courses to assess critical thinking Full-time faculty developed questions and instructions for a 30-minute essay that was administered in class to measure critical thinking and multicultural & global literacy program outcomes.	Department Chair, full-time faculty and adjunct faculty used a norming process to determine students' critical thinking skills. Faculty developed rubric to assess randomly selected essays; results were discussed at Assessment Day.	Streamlined Program Outcomes Number of program outcomes reduced from seven to four to reflect realistic goals for students	None to Date/2021 This program was established in 2015.
Hospitality Management	Catalog	Performance in Business Internship capstone course Review of internship final reflective paper Employer, alumni, and advisory board feedback	Program Coordinator and adjunct faculty review information at Assessment Day.	Increased internship partnerships More diverse internship opportunities have been created to provide stability for student placements and a path to assessment within the program. Use of ProSim Restaurant Simulation Software Software prepares students for software programs used in industry. Professional Development Opportunities	2009/2019

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Human Services Career	Catalog Human Services Career https://catalog.middlesex.mass.edu/previous_program.php?poiid=2218&catiod=18	Capstone Supervised Field Placement course for both transfer and career programs	Faculty review student performance in capstone course.	Additional professional development opportunities have been added for hospitality students including career panel events, guest speakers, and field trips.	2014/2023
Human Services Transfer	Human Services Transfer https://catalog.middlesex.mass.edu/previous_program.php?poiid=2219&catiod=18	Student feedback data related to factors affecting a successful internship placement, such as understanding the application process, change in supervisor, and appropriate clinical documentation skills Transfer completion rates	Coordinator of Human Services and faculty review student data on Assessment Day.	Information Provided to Students about Field Placement Course In the pre-requisite courses for Field Placement, faculty now discuss requirements and the process of preparing for a field placement, such as completing a CORI check. Student Survey Administer student survey related to field placement process. Implement Advisor Training Faculty will be trained to assist them in advising students regarding the field placement and transfer processes.	2013/2020
Information Technology - Cybersecurity Transfer	Catalog http://catalog.middlesex.mass.edu/previous_program.php?catoid=22&poiid=2668&returnto=2037	Student performance related to final course projects, the Information Technology Cybersecurity capstone course, and on certification exams associated with certain specific courses Feedback from advisory board, alumni and	Department Chair and faculty review performance information and feedback.	Curriculum Revision Updated course curriculum to meet industry needs and new certification standards including incorporating more server, wireless, storage and virtual computing concepts; discontinued Web Development option	2013/2020

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Liberal Arts & Sciences	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2622&returnto=2037	Student performance in individual courses included in the Liberal Arts and Sciences program Assessment of two PSLOs as part of 2017 program review	Faculty, department chairs and division deans associated with the English, humanities, social sciences, mathematics and science courses included in the Liberal Arts and Sciences curriculum review student performance in courses and make suggestions for changes; this review includes Assessment Day projects. As part of the Program Review, faculty and students from mathematics, science, English and psychology used a rubric to assess artifacts submitted for two PSLOs.	Pre-requisites are being evaluated to determine if students have the knowledge required to succeed in a course. Revised Math Requirement Program was revised to include the requirement of a college-level mathematics course, such as Math for Liberal Arts or Statistics, rather than Algebra II, which was not considered college-level. Revised PSLO Assessment Adopted process to collect artifacts and assess the level of competency students have achieved in their last 15 credits by using the Liberal Arts and Sciences Degree Assessment rubric (adapted from AAC&U rubrics)	2017/2022
Liberal Studies	Catalog http://catalog.middlesex.mass.edu/preview	Student performance in individual courses included	Faculty, department chairs and division deans associated with the	Revised Math Requirement Program was revised to include the requirement of a college-level	2002/2019

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Life Science Transfer	Catalog http://catalog.middlesex.mass.edu/previous_program.php?catalogid=22&pooid=2622&returnto=2037	in the Liberal Arts and Sciences program. Student performance in transfer programs Student performance in lab courses	English, humanities, social sciences, mathematics and science courses included in the Liberal Studies curriculum review student performance in courses and make suggestions for changes; this review includes Assessment Day projects.	mathematics course rather than Algebra II, which was not considered college-level.	2007/2022
		Student performance in transfer programs Student performance in lab courses	Department Chair and faculty examined performance of transfer students at UML. At an April 2016 Academic Summit, data was presented on student performance in specific UML majors. Faculty from both institutions reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps. Additional statewide convenings of biology, chemistry, and physics faculty from both	Curriculum Revision Curriculum was revised to decrease the number of social science and humanities courses and increase the number and level of required math, biology, physics, and chemistry courses. Summer Bridge Program A Summer Bridge program was created to assist students transferring to UML and involves MCC students taking a higher-level UML science course.	

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Mathematics Concentration	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2669&returnto=2037	Final grades in each required mathematics course Student performance in courses such as physics that require specific knowledge of mathematics Assessment of student success in MAT 290 after completing MAT 196	sectors compared curriculum to determine obstacles to success. Faculty compare student performance in a specific mathematics course to student performance the previous semester that course was offered to identify trends and changes in performance. Review and analysis of projects and exams from courses Department Chair and faculty analyzed data related to student success in MAT 290 (Calculus I) after students completed MAT 196 (combined Precalculus and Trigonometry). Faculty speak with faculty from other disciplines to determine how students are	Change in Course Assignments Some instructors have incorporated projects into courses to provide additional opportunities for students to apply mathematical skills. Added Sections of MAT 196 Based on data that demonstrated student success in MAT 290 after having completed MAT 196, additional course sections were offered. Added New Courses Linear, Linear Algebra II and Discrete will now be offered. Review of Course Materials Textbooks and other resources are reviewed to ensure they provide the support students need to understand mathematical concepts. Addition of Co-requisite A co-requisite has been added to MAT 195 Precalculus for Science and Engineering. Summer Bridge Program	2009/2019

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Medical Assisting	Catalog https://catalog.middlesex.mass.edu/preview_program.php?pid=2627&catid=22	Student performance on the American Association of Medical Assistants certification examination and OSHA exam and in the Medical Assisting Externship capstone course Student development of soft skills Feedback from employers and advisory board	applying mathematical concepts. Department Chair and faculty examined performance of transfer students at UML. At an April 2016 Academic Summit, data was presented on student performance in specific UML majors. Faculty from both institutions reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps. Annually, Program Coordinator and faculty review results of licensure examination, student performance in externship, and student performance on OSHA exam. Program Coordinator and faculty reviewed employer survey related to student soft skills.	A Summer Bridge program has been created to assist students transferring to UML. Developed Licensure Review Course A review course to prepare students for the Medical Assisting licensure examination is offered. Implemented OSHA Certificate A pre- and post-test related to OSHA standards is given to assess knowledge gained by students. Students now receive a certificate of completion for successfully completing the OSHA course exam.	2007/2022

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Medical Laboratory Technology	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poiid=2662&returnto=2037 MLT Student Handbook https://www.middlesex.mass.edu/medical/abtech/downloads/mlthandbook.pdf MLT Website https://www.middlesex.mass.edu/medical/abtech/default.aspx	Student performance on the American Society for Clinical Pathology certification exam Feedback from graduate and employer surveys and advisory board	Program Coordinator, faculty, and advisory board review exam and survey results annually.	Integration of Soft Skills Content into Courses Soft skills content will be integrated into two courses, one in the fall and one in the spring. Clinical Internship Preparation To address the challenge of fewer internship opportunities, a competency-based “boot camp” has been implemented to ensure students achieve required skill levels prior to completing a shorter clinical internship experience. Increased Emphasis on Soft Skills In addition to including soft skills content in Introduction to Clinical Lab Science, faculty will introduce multiple soft skill modules during the first-year courses and reassess the students after they have completed the clinical practicums at the end of year two.	None to Date/2022 The program was established in 2013.
Performing Arts - Music	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poiid=2639&returnto=2037	Student performance at recitals and performance juries Student achievement in capstone courses: Music Theory I and II	The Department Chair and faculty review and discuss grades and evaluations of the end-of-semester student performances.	Additional Independent Studies and Recitals More independent studies are offered in various instruments and voice; more spotlight recitals to accommodate students performing longer pieces, which gives them more experience.	2004/2022

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
	Music Department Website https://www.middlesex.mass.edu/advising/downloads/music.pdf		On Assessment Day, faculty have reviewed and evaluated videos of student performances.	Additional Emphasis Faculty now stress stage presence, including how to prepare for a recital, concert or audition, as well as musical performance.	
Nursing Day Nursing (Evening and Weekend)	Catalog Nursing Day https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2631&returnto=2037 Nursing (Evening and Weekend) https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2632&returnto=2037 Nursing Student Handbook	The number of students who pass each nursing course with a grade of C or better Student performance on Nursing Licensure Exam (NCLEX) Determining extent to which each SLO and PSLO is integrated into the curriculum	The Director of Nurse Education and course faculty evaluate trends and compare them to previous course pass rates. The Director of Nurse Education and faculty on the Nursing Evaluation Committee evaluate trends and compare MCC student results on NCLEX to state and national results. The Director of Nursing and faculty reviewed extent to which each SLO and PSLO is integrated into the curriculum.	Academic Preparation Instituted Test Taking Strategies workshop offered by Assessment Technologies Institute Instituted NCLEX Preparation workshop offered by Assessment Technologies Institute Added SI (Student Instructor) for Pharmacology Increased cognitive level (Bloom's Taxonomy) of course exam questions Student Advising Faculty use a new advising tool when meeting with students earning a C or lower on an exam; the tool lists barriers that can impact student performance as well as suggestions for addressing these barriers.	2009/2022

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Office Systems & Administration	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2634&returnto=2037	Review of student performance related to an ISLO/PSLO, such as critical thinking, creative problem solving, global literacy, written communication Student performance in capstone internship Review of assignments and exams	Program Chair, full-time and adjunct faculty review student artifacts annually either during department meetings and/or at Assessment Day; review student internship performance annually. Department Chair and faculty reviewed assignments and exams to determine if they reinforce course and program outcomes related to building professional development skills including using technology to develop effective business communications.	Update Clinical Evaluation Tools Clinical evaluation tools will be updated to reflect the full spectrum of learning opportunities as they relate to the course outcomes and connect to the program framework. Revision of course assignments A writing component, such as a case study analysis or reflective paper, is now included in each course. Increased Tutoring Referrals Greater emphasis on encouraging students to access writing and math tutoring Increased Use of Library Tools Greater emphasis on students using library research guides and related database tools to complete a research assignment	1999/2021

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
<p>Paralegal Studies Career</p> <p>Paralegal Studies Transfer</p>	<p>Catalog Paralegal Studies Career https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2637&returnto=2037</p> <p>Paralegal Studies Transfer https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2638&returnto=2037</p>	<p>Student artifacts from various courses</p> <p>Feedback from employers and graduate exit surveys</p>	<p>Program Chair and faculty use Blackboard Outcomes to assess student artifacts and meet on Assessment Day to discuss results and make suggestions for improvement. Results and discussion notes are then shared with all paralegal faculty for additional input.</p> <p>Results from the graduate survey are sent to the Program Chair and then shared with all paralegal faculty and members of the Paralegal Studies Advisory Board for feedback and suggestions.</p>	<p>Additional Assignments Based on analysis of student artifacts, additional assignments focusing on ethics for the paralegal have been introduced earlier and more often throughout the curriculum.</p> <p>Assist Faculty with Designing Legal Ethics Assignments An assignment design session pertaining to the topic of legal ethics will be offered.</p>	<p>2001/2023 Note: Program approved by American Bar Association in 2010,2013,2018.</p>
<p>Performing Arts - Music</p>	<p>Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2639&returnto=2037</p>	<p>Student performance at recitals and performance jurtes</p> <p>Student achievement in capstone courses: Music Theory I and II</p>	<p>The Department Chair and faculty review and discuss grades and evaluations of the end-of- semester student performances.</p>	<p>Additional Independent Studies and Recitals More independent studies are offered in various instruments and voice; more spotlight recitals to accommodate students performing longer pieces, which gives them more experience.</p>	<p>2004/2022</p>

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Performing Arts – Theatre Option	Music Department Website https://www.middlesex.mass.edu/advising/downloads/music.pdf	Student performance related to class assignments, monologue presentations, productions, journal reflections, and critical conversations with each other Analysis of written assignments	On Assessment Day, faculty have reviewed and evaluated videos of student performances. Department Chair and faculty observe and assess student performance and work; also analyze written assignments to determine depth of students' critical analysis skills. Rubrics are used to track improvements in student performance	Additional Emphasis Faculty now stress stage presence including how to prepare for a recital, concert or audition as well as musical performance. Changes in Timing of Assignments Faculty provide more time for students to prepare monologues or other performances in class as well as out of class.	2004/2022
Physical Science Concentration	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2640&returnto=2037	Performance in transfer programs Performance in lab courses	Department Chair and faculty examined performance of transfer students at UML. At an April 2016 Academic Summit, faculty from both MCC and UML reviewed analytical data, compared syllabi, and discussed interventions and curricular changes that would bridge gaps. Additional statewide convenings of chemistry	Curriculum Revision Curriculum revised to decrease the number of social science and humanities courses and increase the number and level of required math, biology, physics and chemistry courses. Summer Bridge Program A Summer Bridge program was created to assist students transferring to UML and involves MCC students taking a higher-level UML science course.	2007/2022

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Psychology Concentration	Catalog http://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2644&returnto=2037	Review of student artifacts related to one or more PSLOs Performance in Research Methods course	and physics faculty from both sectors compared curriculum to determine obstacles to success. Department Chair and full-time faculty review artifacts annually as an element of a curriculum enhancement project.	Changed Prerequisite Added Statistics as a math prerequisite for Research Methods course Developed Orientation Program A specific orientation session for all incoming psychology students is offered to assist students in managing program requirements and to build community among students. Use of Blackboard Outcomes Faculty developed a Blackboard shell for all psychology students to strengthen communication and to provide easier access to artifacts for assessment work. Modification of Writing Assignment Prompts for writing assignment will be rewritten and clarified to ensure students will compare and contrast major psychological theories, concepts, and empirical findings.	2014/2019
Radiologic Technology	Catalog https://catalog.middlesex.mass.edu/preview	Performance of students on American Registry of Radiologic Technologists	Radiologic Technology Assessment Committee, composed of other	Implemented a Certification Examination Review	2008/2024

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
	<p>w_program.php?catid=22&poiid=2647&result=2037</p> <p>Radiologic Technology Student Handbook</p> <p>Radiologic Technology website https://www.middlesex.mass.edu/RadiologicTechnology/</p>	<p>Radiography Certification Examination</p> <p>Student performance in individual courses based upon use of rubrics; results compiled into the Assessment and Student Learning Outcomes Report for Radiologic Technology</p>	<p>department chairs from nursing and allied health, as well as the Department Chair, program faculty and the Radiologic Technology Advisory Board review exam results and the Assessment and SLO Report and make suggestions for changes and continuous program improvement.</p>	<p>Kettering Seminars conducts a two-day examination preparation seminar.</p> <p>Curriculum Changes Added a physics review to the Topics in Radiography course, a capstone course, to prepare students better for the certification exam</p> <p>Increased Number of Open Labs Additional labs are offered to provide students more opportunities to practice clinical procedures.</p> <p>Development of Competency Completion Plan Faculty reach out to students at the beginning of the last semester to have them develop a plan for completing program competencies in a timely manner.</p> <p>Implement Evening Clinical Rotations Evening rotations will be added to provide students with more experience conducting difficult procedures, such as trauma radiology.</p>	
Studio Art	<p>Catalog https://catalog.middlesex.mass.edu/previous_program.php?catid=2008</p>	<p>Portfolio reviews</p> <p>Juried Student Show</p>	<p>Department Chair and faculty review portfolios as part of advising sessions and student</p>	<p>Improvements in Lessons and Assessment Processes Faculty made changes to specific lesson plans and to collection</p>	2008/2023

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
	<p>id=22&pooid=2649&returnto=2037</p>	<p>Annual Review of PSLOs/ISLOs as part of General Education Assessment</p> <p>Feedback from student surveys</p>	<p>work as entries in annual juried show.</p> <p>Artifacts are collected for General Education assessments and rubric developed. A faculty member volunteers to join assessment team so that discipline specific voice is included.</p> <p>Department Chair and full-time faculty review artifacts of student work are collected for Assessment Day. Rubrics developed to assess artifacts.</p>	<p>methods to gather evidence of multiple steps and changes students make in processes of critical thinking, rather than just looking at final products, to better assess development.</p> <p>Transfer Portfolio Preparation A one-credit portfolio preparation course for Studio Art and Fine Art majors was added as a program requirement.</p> <p>Upgraded Art Advising All second semester art students are assigned an art advisor, who helps them to become aware of career directions and guides them in the transfer process throughout the program. This is a change from previous practice where some students were not assigned an art advisor until the third semester.</p>	
World Languages Option	<p>Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2655&returnto=2037</p>	<p>Final exam for each course that includes a written and oral component</p>	<p>Faculty review student performance on exams.</p>	<p>Changes in Instructional Approaches Faculty use the specific world language to communicate with students and to instruct.</p>	2008/2019

APPENDIX E
E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS
CERTIFICATE PROGRAMS

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Addictions Counselor Program (ACP) Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?pooid=2561&catoid=22	Student performance related to exams, oral presentations, case studies, and research papers Student performance in internship that includes an agency evaluation, student oral presentation, and a summary review of experiences	Program Coordinator and faculty review student performance in each course; also reviewed are research papers and the results of internship agency evaluations and written and oral presentations related to internship.	Updated Course Information All courses have been expanded to include updated information on opioid treatments and current evidence-based clinical practices. Change in Assignments Across the curriculum, the number of oral presentations has been increased from two to three and the number of research papers has been increased from two to four. Note: This program will begin in 2019-2020.	2011/2023 Note: The Department of Public Health – Bureau of Substance Addiction Services conducted an external review of the program and reapproved it on December 5, 2018.
Arts Administration Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2822&returno=2037	Student performance in the capstone course Arts Management Seminar	Department Chair and faculty will review student performance in capstone course.	Note: This program will begin in 2019-2020.	New/2024

APPENDIX E

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT

OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS
CERTIFICATE PROGRAMS

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Addictions Counselor Program (ACP) Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?poiid=22561&catiod=22	Student performance related to exams, oral presentations, case studies, and research papers Student performance in internship that includes an agency evaluation, student oral presentation, and a summary review of experiences	Program Coordinator and faculty review student performance in each course; also reviewed are research papers and the results of internship agency evaluations and written and oral presentations related to internship.	Updated Course Information All courses have been expanded to include updated information on opioid treatments and current evidence-based clinical practices. Change in Assignments Across the curriculum, the number of oral presentations has been increased from two to three and the number of research papers has been increased from two to four.	2011/2023 Note: The Department of Public Health – Bureau of Substance Addiction Services conducted an external review of the program and reapproved it on December 5, 2018.
Arts Administration Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poiid=2822&returno=2037	Student performance in the capstone course Arts Management Seminar	Department Chair and faculty will review student performance in capstone course.	Note: This program will begin in 2019-2020.	New/2024

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Biotechnology Technician Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2565&returno=2037	Student performance in Biotechnology Internship course, a capstone course Student performance on lab reports and lab skill assessments in specific courses Feedback from employers, advisory board, and alumni	Department Chair and faculty review student performance and feedback information. Biannually, faculty prepare information for the Massachusetts Life Sciences Center (MLSC) endorsement, which involves evaluation of student performance against industry outlined competencies.	Revision of Internship Assessment Form New form developed to review and assess student performance	2007/2020 Note: Program review done biannually as part of MLSC endorsement process.
Children's Behavioral Health Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2820&returno=2037	Annual review of student artifacts related to an ISLO/PSLO and course outcomes Student performance in internship, including input from supervisors Employer and graduate surveys	Human Services Department Chair and faculty will assess artifacts and review data and information related to student internship performance.	Note: The program began in fall 2018.	New/2023

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Computerized Accounting	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2580&returnto=2037	Review of level of student achievement related to ISLO/PSLO quantitative literacy and critical thinking based on financial statements Review of assignments and exams	Department Chair and faculty reviewed final exam artifacts from several courses taught by different faculty to assess student performance related to the explanation and calculation of specific problems. Reviews have taken place in Department Meetings and on Assessment Day.	Revised Areas of Course Emphasis Faculty are placing more emphasis on the major types of financial analysis and requiring students to document their calculation process through written and oral presentations.	1999/2020
Culinary Arts Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2615&returnto=2037	Student performance in Business Internship capstone course; internship final reflective paper Feedback from employers, alumni, and advisory board	Program Coordinator and adjunct faculty meet to review and discuss student internship performance and final paper as well as feedback information from employers, students, alumni, and advisory board, including 2019 student survey on equipment used for training.	Increased Internship Partnerships More diverse internship opportunities have been created to provide stability for student placements and a path to assessment within the program. Updated Course and Program-Level Learning Outcomes Learning outcomes have been updated for both program and course level to reflect trends in the industry and expectations for students seeking employment following graduation. Eliminated Curriculum Requirement English Composition I is no longer required; however, students must	2009/2020

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Dental Assisting Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poid=2586&returnto=2037	Student performance on Dental Assisting National Board Exam and in Clinical Practicum capstone course Feedback surveys from graduates and employers Feedback from advisory board	Program Coordinator and faculty review student performance results on exam and in clinical practicum as well as data from surveys at program meetings	<p>demonstrate eligibility for English Composition I.</p> <p>Professional Development Opportunities Additional professional development opportunities have been added for culinary students including guest speakers, career panels and field trips.</p> <p>Purchase of New Equipment The purchase of some new culinary equipment is planned.</p> <p>Change in Curriculum Dental Practice Management and Dental Science II have been condensed and offered during Spring Minimester 1. An additional externship day was added to the two externships days per week in order to meet the Commission of Dental Accreditation standards for over 300 hours of clinical practicum for students.</p> <p>Change in Admission Process A mandatory program overview prior to application submission was instituted to prepare applicants for the rigor of the program.</p>	2012/2024

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Dental Laboratory Technology Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2819&returnto=2037	Review of student performance on exams and projects Feedback from employer and graduate surveys	Program Coordinator and faculty annually review student performance and feedback from surveys. Program Coordinator and faculty reviewed results of 2019 employer survey that ranked graduates' skills related to professional development, performance, and leadership.	Acquire and Integrate Digital Technology into Curriculum The use of digital technology for fabrication will become the primary method for training and hand fabrication the auxiliary method. This will ensure students are better prepared to meet employer requirements.	2011/2024
Digital Forensics Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2577&returnto=2037	Student performance on Certified Computer Examiner (CCE) exam of Mobile Examiner exam (external certification) Feedback from advisory board	Program faculty review student performance and feedback.	New Courses Three new courses were developed: Digital Forensics I, II and III.	New/2021 This program was established I 2014.

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Direct Support in Human Services	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poid=2591&returnto=2037	Student performance in capstone Supervised Field Placement course, including completion of a portfolio documenting their proficiency in the 12 skills the Department of Labor has identified as key for human services workers Evaluation completed by field placement supervisors at the agencies where internships are completed	Faculty review student performance in the capstone program and supervisors' evaluations.	Change in Course Content The content of the Special Topics in Developmental Disabilities course has been significantly revised based on assessment process and input from the Board of Higher Education, MA Department of Developmental Services, agencies, and students. Revised Internship Evaluation Forms New evaluation forms for the capstone class are being developed.	2014/2023
Early Childhood Education Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poid=2593&returnto=2037	Performance in Supervised Field Placement and Seminar capstone course Information obtained by applying National Association for the Education of Young Children (NAEYC) rubrics in all courses Student portfolios Feedback from Service-Learning Placement supervisor	On Assessment Day, Dean of Education and faculty review results of application of skills rubrics on student products and performance.	Changes in Course Assignments To improve citation skills, inclusion of the APA Guide in all course syllabi; increase in the number of research assignments Increased emphasis on students using e-tutoring and face-to-face tutoring Expanded Access to Technology Created an ECE Technical Training Center for faculty and students	2012/2020

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Engineering Technology – CAD Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2667&returnto=2037	Evaluation of course assignments and projects Students pass rate on Solidworks Certification Exam taken after completion of the Solid Modeling II course	Faculty teaching CAD courses assess and evaluate the students' work. Faculty will review student performance on Solidworks Exam that students began taking in 2019.	Updating of Course Assignments Faculty update course assignments to ensure they prepare students to meet industry standards.	2014/2021
Engineering Technology – Precision Machining	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2686&returnto=2037	Performance of students on NIMS (National Institute for Metalworking Skills) certification exams	Program Coordinator and faculty review student performance on NIMS exams.	Note: This program began in fall 2019.	New/2023
Entrepreneurship Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2817&returnto=2037	Student development of a business plan Project-based assignments in several courses Pitch presentations in several courses	Program Coordinator and faculty review data related to student performance results in capstone course, projects, and pitch presentations.	Revised Assignments Ongoing “tweaking” of reading, writing, and reflection assignments to improve student understanding and skill development. Updated Surveys and Forms Restructured Launch Your Business Now entrance and exit surveys and Everyday Entrepreneurship Venture Fund and mentor forms to obtain more specific information that will help with assessing student achievement of program outcomes.	New/2022 This program was established in 2018.

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Graphic Design	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2610&returno=2037	Portfolio presentations Juried Student Show Annual review of specific PSLOs/ISLOs at Assessment Day Departmental surveys of graduating students and alumni Review of portfolios over a 15-year period Feedback from advisory board	Program Chair, faculty, and advisory board review portfolios and student work.	<p>Changes in Assignments Added more complex campaign work in graphic design portfolio and more interactive digital features in magazine projects in web design classes</p> <p>Integration of Digital Skills Added instruction in interactive elements, animations, moving type, digital projects in line with industry standards; implemented new technology in user interface</p> <p>Scaffolding Skills Faculty met and identified lesson plans/projects to scaffold skills between 100 and 200 level courses.</p>	2006/2020
Hospitality Management Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2613&returno=2037	Performance in Business Internship capstone course Review of internship final reflective paper Employer, alumni, and advisory board feedback	Program Coordinator and adjunct faculty review information at Assessment Day.	<p>Increased Internship Partnerships More diverse internship opportunities have been created to provide stability for student placements and a path to assessment within the program.</p> <p>Introduced use of ProSim Restaurant Simulation Software Software prepares student for software programs used in industry.</p> <p>Eliminated Curriculum Requirement</p>	2009/2019

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
IT Cybersecurity – Advanced Certificate	Catalog Advanced Certificate https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2687&returno=2037	Student performance related to final course projects and on certification exams associated with certain specific courses Feedback from advisory board, alumni, and employers	Department Chair and faculty review performance and information and feedback.	English Composition I is no longer required; however, students must demonstrate eligibility for English Composition I. Professional Development Opportunities Additional professional development opportunities have been added for hospitality students including career panel events, guest speakers, and field trips.	
IT Cybersecurity Entry-Level Certificate	Catalog Entry-Level Certificate https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2685&returno=2037			Curriculum Revision Updated course curriculum to meet industry needs and new certification standards including incorporating more server, wireless, storage and virtual computing concepts Pre-requisites are being evaluated to determine if students have the knowledge required to succeed in a course.	New/2021 These programs were established in 2016.

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Launch Your Business Now Program	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2817&returnto=2037	Student performance in capstone Entrepreneurship LaunchPad course that includes development of a business plan and a pitch presentation Student entrance and exit surveys Anecdotal review of what students say about the program Alumni surveys	Program Coordinator and faculty review data related to student performance results in capstone course, projects, and pitch presentations. Program Coordinator and faculty review results of surveys. A summer meeting is held with graduates to obtain their input on program and assess their progress as entrepreneurs.	Revised Assignments Ongoing “tweaking” of reading, writing, and reflection assignments to improve student understanding and skill development. Updated Surveys and Forms Restructured Launch Your Business Now entrance and exit surveys and Everyday Entrepreneurship Venture Fund and mentor forms to obtain more specific information that will help with assessing student achievement of program outcomes. Imbed certifications into LaunchPad Capstone Course Curriculum Students will complete online education in Basic Accounting and Social Media that include certificates of completion.	New/2024 This program was established in 2018.
Liberal Studies Certificate	Note: This program is being sunsetted				

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Medical Assisting Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?poiid=2627&catiod=22	Student performance on the American Association of Medical Assistants certification examination and OSHA exam and in the Medical Assisting Externship capstone course Student development of soft skills Feedback from employers and advisory board	Annually, Program Coordinator and faculty review results of licensure examination, student performance in externship, student performance on OSHA exam, and employer surveys.	Developed Licensure Review Course A review course to prepare students for the Medical Assisting licensure examination is offered. Implemented OSHA Certificate A pre- and post-test related to OSHA standards is given to assess knowledge gained by students. Students now receive a certificate of completion for OSHA training. Changed Format for Soft Skills Content Rather than teaching soft skills content for one hour twice a week, content will be taught in a two-hour block.	2007/2022
Medical Billing and Coding Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&poiid=2691&returno=2037	Student performance on the American Association of Professional Coders (AAPC) Licensure Examination Feedback from graduate and employer surveys	Program Director and faculty review outcome data and information.	Change in Course Delivery Two courses (Computers in the Medical Office and Medical Office Administration) are now offered only as online courses so students gain more experience with online technology.	None to Date/2019

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Nursing Assistant Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2633&returno=2037	Note: This program is no longer being offered.			
Paralegal Studies	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2636&returno=2037	Student artifacts from various courses Feedback from employers and graduate exit surveys	Program Chair and faculty use Blackboard Outcomes to assess student artifacts and meet on Assessment Day to discuss results and make suggestions for improvement. Results and discussion notes are then shared with all paralegal faculty for additional input. Results from the graduate survey are sent to the Program Chair and then shared with all paralegal faculty and members of the Paralegal Studies Advisory Board for feedback and suggestions.	Additional Assignments Based on analysis of student artifacts, additional assignments focusing on ethics for the paralegal have been introduced earlier and more often throughout the curriculum. Assist Faculty with Designing Legal Ethics Assignments An assignment design session pertaining to the topic of legal ethics will be offered.	2001/2023 Note: Program approved by American Bar Association in 2010,2013,2018.

CATEGORY	(4) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Phlebotomy Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2641&returnto=2037	Student performance on the National Accrediting Agency for Clinical Laboratory Sciences exam (NAACL) Feedback from employers and graduates	Faculty and Program Director review exam outcome data and feedback information.	Restructuring of Course In order to prepare students to perform better on the written NAACL exam, the six-credit phlebotomy course was divided into two courses: Phlebotomy Theory (4 credits) and Phlebotomy Lab (2 credits).	None to Date/2019
Studio Art Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2650&returnto=2037	Portfolio Reviews Juried Student Show Annual review of PSLOs/ISLOs as part of General Education Assessment Feedback from student surveys	Department Chair and faculty review portfolios as part of advising sessions and student work as entries in annual juried show. Artifacts are collected for General Education assessments and rubric developed. A faculty member volunteers to join assessment team so that discipline-specific voice is included. Department Chair and full-time faculty review artifacts of student work collected for Assessment Day. Rubrics are developed to assess artifacts.	Improvements in Lessons and Assessment Processes Rather than just looking at final student work to assess student development, faculty made changes to specific lesson plans and to collection methods to gather evidence of multiple steps and changes students make in processes of critical thinking. Transfer Portfolio Preparation A one-credit portfolio preparation course for Studio Art and Fine Art majors was added as a program requirement. Upgraded Art Advising All second semester art students are assigned an art advisor who helps them to become aware of career directions and guides them in the transfer process throughout the program.	2009/2023

CATEGORY	(1) Where are these learning outcomes for this level/program published?	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the certificate?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Program Review Last/ Next
Technical Theatre Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2823&returno=2037	Student performance in courses including exams and projects	Program Coordinator and faculty will review student performance.	Note: This is a new program scheduled to begin in September 2019.	New/2024
Travel Services Management Certificate	Catalog https://catalog.middlesex.mass.edu/preview_program.php?catoid=22&pooid=2652&returno=2037	Student performance in Business Internship capstone course Review of internship final reflective paper Employer, alumni, and advisory board feedback	Program Coordinator and adjunct faculty review student internship performance and feedback from employers and alumni.	<u>Internship Partnerships in the Hospitality Industry</u> Additional internships created diverse opportunities for students. They provide stability within the program and create a path to assessment. <u>Use of ProSim Restaurant Simulation software</u> Software prepares student for software programs used in industry <u>Eliminated Curriculum Requirement</u> English Composition I is no longer required; however, students must demonstrate eligibility for English Composition I. <u>Professional Development Opportunities</u> Additional professional development opportunities have been added for hospitality students including career panel events, guest speakers, and field trips.	2009/2022



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