Five-Year Capital Outlay – Staffing and Enrollment for FY 2021-2025

A. *Description of current full- and part-time student enrollment levels by academic program and define how the programs are accessed by the student (i.e., main or satellite campus instruction, collaboration efforts with other institutions, Internet or distance learning, etc.)*

Student Body Composition

Fall 2019 census unduplicated headcount:

Major	Full-Time	Part-Time	Summary
Accounting	10	28	38
Administrative Office Systems	0	1	1
Applications Development	10	8	18
Applied Science - General	9	11	20
Art	8	14	22
Associate in General Studies	67	100	167
Automation Engineering	2	2	4
Biology	21	13	34
Business	76	84	160
Business Administration	47	70	117
Casino Management	0	6	6
Casino Management - Cert	0	1	1
Chemistry	7	4	11
Child Development	7	19	26
Child Development - Cert	1	3	4
CIS - Information Technology	0	1	1
CIS - Networking	0	2	2
CIS - Programming	0	1	1
CIS Programming - Level 1 CERT	0	1	1
Cisco - Cert	0	2	2
Computer Science	7	10	17
Criminal Justice	36	23	59
Culinary Management	15	19	34
Dental Assisting	4	36	40
Dental Assisting - Cert	0	6	6
Diagnostic Medical Sonography	17	15	32
Elementary Education WMU SW	0	1	1
Energy Production Technology	3	3	6
Engineering Technology	1	16	17
English	8	9	17
Environmental Science	0	1	1
Foreign Language	3	4	7
General Technology	2	13	15

Geosp Info Sci&Tech Lev 1 CERT	0	3	**3**
Graphic Design	17	13	**30**
Graphic Design - Level 1 CERT	0	3	**3**
Health	12	33	**45**
History	5	4	**9**
Hospitality Management	10	13	**23**
Hospitality Management - Cert	1	0	**1**
Humanities	1	0	**1**
Information Tech -Level 1 CERT	1	4	**5**
Machine Tool - Level 1 CERT	0	9	**9**
Machine Tool Technology	7	16	**23**
Machine Tool Technology - Cert	2	4	**6**
Magnetic Resonance Imaging	0	4	**4**
Mathematics	3	5	**8**
Mechatronics Technology	3	6	**9**
Medical Assisting	11	20	**31**
Medical Assisting - Cert	1	4	**5**
Music	10	10	**20**
Networking	11	14	**25**
Nursing-RN	2	143	**145**
Personal Interest	23	570	**593**
Pharmacy Technician	0	3	**3**
Pharmacy Technician - Cert	0	4	**4**
Philosophy	1	0	**1**
Phlebotomy Tech-Level 1 CERT	1	5	**6**
Physical Education & Wellness	11	5	**16**
Physical Science	5	0	**5**
Political Science	7	11	**18**
Pre-Dentistry	0	1	**1**
Pre-Diagnostic Medical Sonogram	14	45	**59**
Pre-Engineering	28	14	**42**
Pre-Magnetic Resonance Imaging	2	16	**18**
Pre-Nursing (Registered)	64	135	**199**
Pre-Pharmacy	0	1	**1**
Pre-Radiologic Technology	7	32	**39**
Pre-Veterinary Medicine	0	1	**1**
Psychology	37	29	**66**
Radiological Technology	13	16	**29**
Skilled Trades	0	1	**1**
Skilled Trades Technology	3	92	**95**
Skilled Trades Technology-Cert	0	2	**2**
Sociology/Pre-Social Work	21	26	**47**
Supervisory Skill-Level 1 CERT	0	1	**1**
Teacher Education	31	21	**52**
Theatre	6	3	**9**

Undecided (Arts - Transfer)	89	184	**273**
Undecided (Liberal Arts)	0	1	**1**
Undecided (Science - Transfer)	42	38	**80**
Web Development - Level 1 CERT	0	2	**2**
Welding Prod Tech-Level 1 CERT	1	5	**6**
Welding Production Technology	23	15	**38**
Wine & Viticulture Technology	4	17	**21**
Summary	**891**	**2,131**	**3,022**

Innovative Instructional Delivery

Lake Michigan College now offers courses in a Virtual Learning Environment (VLE). Students have the option of attending class face-to-face or remotely, in real-time, using video conferencing software. Students access the virtual classroom by using device-independent web conferencing software, directly through Canvas, our learning management system. Lecture content, activities, assignments, and assessments are seamlessly integrated. Lectures are recorded, so students may (re)view these sessions at their convenience. Regardless of mode of delivery, all students get the same content, complete the same coursework, and take the same assessments.

Virtual Reality (VR) provides a multitude of opportunities for learning that would otherwise require cost-prohibitive travel or consumable resources. VR also allows students to practice safety procedures, such as those required of nursing or manufacturing, without risking any real physical injury. Augmented Reality (AR) can be used to collaborate with other students, faculty, and professionals who are geographically disconnected by essentially combining the benefits of VLE and VR technologies in real-time.

The Teaching and Learning Center

Created in Fall 1996 with the aid of a federal Title III grant, the purpose of LMC's Teaching and Learning Center (TLC) is to introduce new teaching methods and classroom technology; to provide administration, training, and support for the College's Learning Management System (LMS); and to offer year-round professional development activities. The TLC is staffed with a full-time Director, the Director of Distance Education, a full-time Instructional Technologist, and a Curriculum Designer. The Center is comprised of a 13-station computer lab, an adjacent gathering room with an additional 7 computing spaces, and three offices. TLC staff provide support for numerous software applications and instructional technologies, including interactive projectors, audience response systems, video screen capture and conferencing, and plagiarism detection.

The College's LMS system (Canvas) supports traditional classroom instruction and is also the primary platform for our distance education program. Demand for distance learning continues to be strong with online course sections typically filling first. Enrollments in distance education have grown significantly over the last five years, with FTE and billable hours generated comparable to that of the satellite campuses. As enrollments increased in distance

education, the TLC staff became increasingly involved in both the administration and training aspects of a maturing distance education program, leading to the creation of a Director of Distance Education position, which was filled in Fall 2015.

The Director of Distance Education is responsible for all required training on the use of the College's learning management system for online course delivery and for coordinating and providing all pedagogical and course design training that faculty must complete in order to implement or teach distance learning courses. The Director is also responsible for the review process and for advising and supporting the faculty throughout that process.

Finally, the TLC provides additional professional development activities crucial to assuring student success in LMC classrooms. These activities have included hosting various webinars on a wide variety of instructional topics, topical training requested by individual departments, and meetings or training activities with various publishers (Cengage, McGraw Hill, Pearson) that integrate with Canvas. Spirited discussions, collective problem-solving, and learning the art and science of teaching take place daily in LMC's Teaching and Learning Center.

Over the past ten years, changes have occurred in educational programs at the College that reflect changing programmatic and educational needs for students, advances in educational technology, and reorganization of personnel and departments. During this time-frame, the College-installed computer base grew to over 2,500 computers. Seventy open laboratories are available to students. Overall, the College has over 1,600 computers dedicated to Academic usage. One hundred fifteen classrooms are now equipped with a teacher station, desktop computer and data projector. Information Technologies has implemented a five-year technology refresh plan to support instructional programs, faculty and staff. To further support the student technology needs, wireless Internet access points have been updated to the latest Wi-Fi technologies across all campuses. New email and collaboration services were implemented in 2015 using Office 365. LMC core network services, such as firewalls and switch closets have been upgraded. LMC has been expanding Digital Signage across all campuses. LMC has upgraded our video security servers to provide additional storage for longer retention periods and have been increasing the amount of cameras at all campuses. In 2021, LMC will be replacing our current copier (MFP).

The College network is also being developed to ensure that faculty and students have access to the Canvas learning management system and other online course content. Currently, in addition to Canvas, the College employs an array of online resources, academic software and other technology-based tools to boost the learning environment of nearly all courses offered at the College. Educational technologies are continuing to revolutionize the way the College functions, both administratively and academically. The addition of educational technologies has enhanced the student experience and has helped shape the learning environment.

The College has offered credit classes in modular, open-entry/defined-exit (OE/DE) format in Dental Assisting and Technology for more than ten years. Instruction delivered in a flexible, modular format facilitates the transition from traditional classes to the OE/DE format and encourages employers to send employees for targeted training.

Assessment of Student Learning

The College's commitment to educational achievement and improvement through ongoing assessment of student learning is evidenced by the Student Learning Outcomes Assessment Policy. However, this commitment is most clearly demonstrated through our decision to select assessment of student learning as our Open Pathways Quality Initiative and participate in the Spring 2015 cohort of the Higher Learning Commission's Assessment Academy. At the time, it was clear that the College's assessment culture and processes were somewhat lacking, which had led to a disengagement in assessment work. The development of our revitalized assessment process centers around the idea of developing a culture of inquiry, whereby the assessment process would become so ingrained in the College's everyday tasks that students, faculty, and staff would be aware of, and continuously focused on, the goal of assessment to improve student learning.

The assessment process is guided by the Student Learning Committee, which includes faculty and staff. The Committee has taken this task very seriously and has made the whole notion of a culture of inquiry an integral part of our assessment discussions and our collegewide professional development activities. Presentations and workshops on assessment and building a culture of inquiry have been a part of almost every agenda for beginning-of-the-semester meetings and professional development days since the College joined the Assessment Academy in 2015.

Beginning with the premise that the College must be diligent in its efforts to create a culture of inquiry, the Student Learning Committee began work on a new, more robust process. This included creation of a new Student Learning Assessment Handbook, complete with updated processes and procedures. As outlined in the Handbook, assessment of student learning is a *continuous process aimed at examining and improving student learning*. "Continuous" is key here. The steps involved in the process include:

- Teaching to the course, program, and institutional outcomes identified in the syllabus
- Determining outcomes to be measured
- Determining methods of measurement (classroom assessment techniques)
- Sharing expected outcomes with those whose learning is being measured
- Completing the measurement
- Assessing the results and individually or collectively determining changes needed in learning opportunities
- Requesting funds/materials necessary to make a change, if necessary
- Making the change
- Measuring again to see if a change was effective in "closing the loop"

In 2016/2017, the Student Learning Committee, with broad input from faculty, staff, and administration, established clearly stated goals for student learning in the form of seven Institutional Outcomes including Quantitative Literacy, Scientific Literacy, Communication Competence, Culture and Society, Arts and Humanities, Critical Thinking, and Professional and Life Skills. Per the College's new Student Learning Assessment Handbook, competency is based on a Likert-type scale of "Exceptional," "Above Average," "Average," or

"Unsatisfactory." The development of Institutional Outcomes has made it easier for academics and co-curricular areas to focus assessment across the College at the institutional level.

In order to better focus on assessment and build a culture receptive to assessment, the Student Learning Committee began rotating the assessment reporting of the Institutional Outcomes on a 3-year cycle, until all outcomes can be measured continuously. Each year will focus on collection and analysis of data for two to three outcomes. In the intervening years between reporting on each outcome, the changes developed in the yearly assessment plans can be implemented. Beginning in the 2018 Spring Semester, and every academic year thereafter, faculty and staff are responsible for submission of an Assessment of Student Learning Plan to the Student Learning Committee.

As part of the new Student Learning Assessment process, the College is implementing a system whereby it can assess the achievement of learning outcomes for both its curricular and co-curricular programs. While courses within disciplines and programs have been reviewed historically, the College is fairly new to measuring co-curricular activities/programs. To assure that co-curricular outcomes become part of the culture of inquiry, the Student Learning Committee asked for and received permission to add a third chairperson to the Committee whose primary focus will be on co-curricular learning outcomes. A coordinator from student services assumed this role in June of 2017. After attending the 2017 HLC Assessment Academy session, a process was identified, a timeline created, and a plan to implement co-curricular assessment was adopted.

During Fall 2017, the co-chair conducted training sessions on the co-curricular assessment process to be implemented by student services departments including Admissions, Advising, Athletics, Employer Outreach, Financial Aid, International/Veterans, and Residence Life. The co-chair added co-curricular assessment to the Student Learning Assessment Handbook and began coordinating meetings with student services departments. A separate reporting document was created so that co-curricular areas of the College may likewise report their findings. The Student Learning Committee rolled out the process during the 2018 Spring Semester and student services groups began to assess their co-curricular outcomes.

The key to the Assessment of Student Learning Plan is its focus on last academic year's assessment results and the reported action plan for the current academic year.

The 2017/2018 academic year was the first year of data collection from faculty using our new assessment cycle and tracking Institutional Outcomes. The assessment process for this first year of implementation began in September 2017 with the distribution of the new handbook and a short presentation on our revised process given by the Student Learning Committee co-chairs. It was emphasized that the institutional-wide focus for the year was on the Critical Thinking and Communication outcomes. A total of 58 assessment plans were submitted by 29 full-time faculty (54 percent participation). A total of 40 courses assessed Critical Thinking and 18 courses assessed Communication competence. Instructors of these courses conducted a total of 5,377 student assessments.

The 2018/2019 academic year was the second year of data collection. During this academic year, the Student Learning Committee shifted its focus to the Institutional Outcomes of

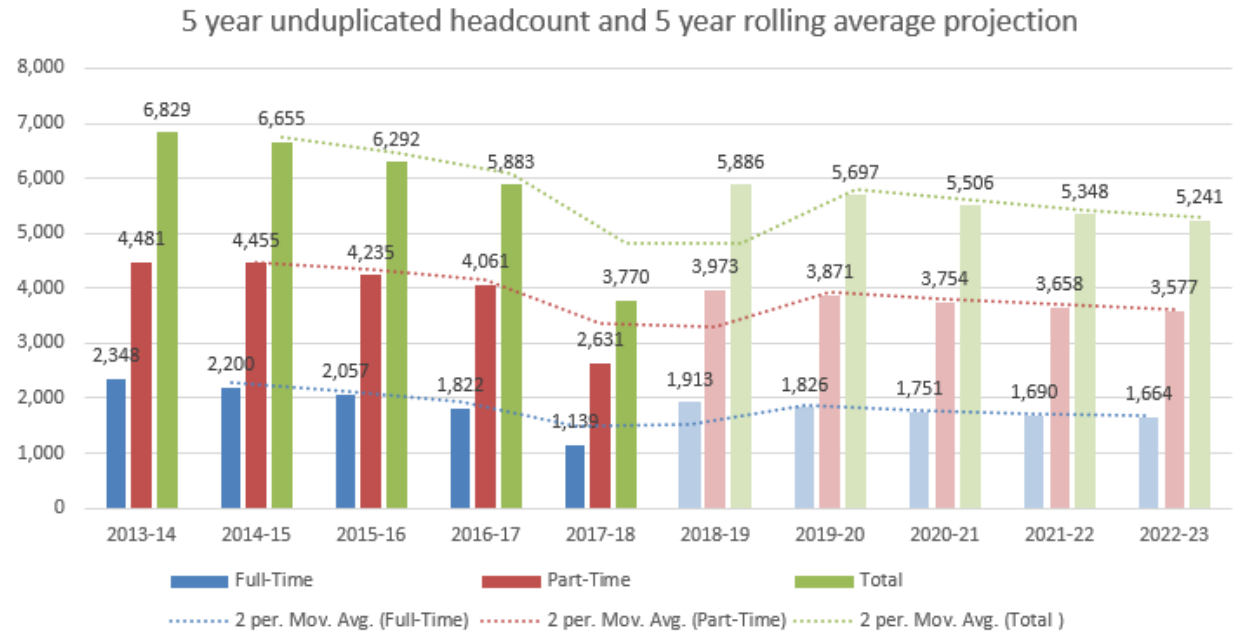
Quantitative Literacy, Scientific Literacy, and Professional and Life Skills. Participation by faculty increased immensely from the first year. In fact, a total of 109 assessment plans were submitted by full-time and part-time faculty (56 total). Of the 109 submitted plans, 88 were compatible with the requested format. Several faculty used multiple measures or evaluated the incorrect objective. A total of 27 courses assessed Quantitative Literacy, 34 courses assessed Scientific Literacy, and 27 courses assessed Professional and Life Skills. Instructors of these courses conducted a total of 2912 student assessments.

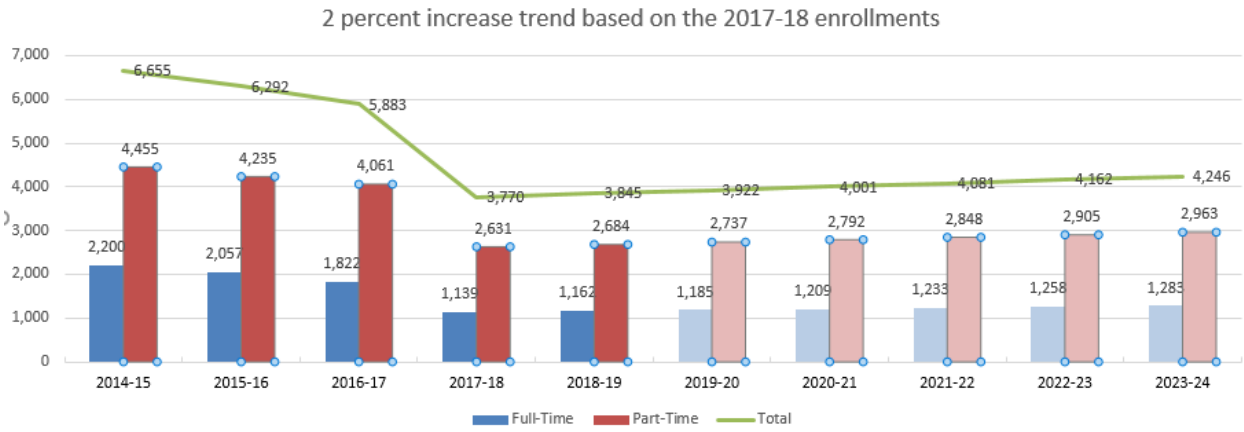
Upon review and analysis of the first and second year of data collection using our revised assessment process, it is clear that while we have made positive steps toward improving assessment practices at the College, the process still needs refinement. One refinement from our data analysis is to ensure meaningful data; further standardization of our measures is important. In 2018/2019, a holistic rubric, which later became the Framework and Guidelines for the Institutional Outcomes, was created to more clearly define each outcome and the different levels of achievement. While we acknowledge that we are still in the initial phases of a truly robust and meaningful assessment process, our early data collection efforts have provided us with valuable information, which we are fully utilizing to make improvements in our assessment efforts.

The plan going forward, for the 2019/2020 academic year, is to pilot the new Framework and Guidelines using the Critical Thinking Outcome – universally. The goal is to expand the measurement of outcomes to include all Institutional Outcomes, as this will provide a better baseline for comparison of all student learning data across courses that use the same outcomes. Further refinement of the handbook and its linkage to the Discipline/Program review process will also be a focus, as well as the implementation of Canvas as an electronic venue for measuring student learning outcomes. "Lunch and Chats" will likewise be added during the 2019/2020 academic year, so that each department may meet with members of the Student Learning Committee to discuss and explore how to improve the assessment of the student learning process.

The Student Learning Committee has worked diligently to ensure that our new processes and methodologies for assessing student learning reflect good practices.

B. Projection of enrollment patterns over the next five years (including distance learning initiatives)





Projection of enrollment patterns over the next five years – Even though the region's overall populations are projected to decline over the next several years and low unemployment rates will continue to negatively impact community college enrollment, Lake Michigan College's enrollment projections for the next four years will be flat. The College continues with the work of its Strategic Enrollment Management Team (SEMT) to focus on enrollment. The College will continue to focus on four areas for enrollment: (1) greater penetration of the current high school market, (2) unique academic programs not offered by area competitors including: expanding our emerging technologies programs, continued growth of the new wine and viticulture technology program, and the new Culinary program, (3) increasing distance learning (online) courses and program options, and (4) increasing persistence and retention

rates. The College is committed to retaining the students who already attend a given semester. Early College Program numbers will continue to be strong and represents approximately 30% of the overall College enrollment.

C. Evaluation of enrollment patterns over the last five years.

A number of factors have been identified which have positively impacted overall enrollment. These factors have been identified as: 1) increase in high school penetration rates, 2) new and revised academic programming, 3) partnerships with K-12s for the College's Early College program, 4) addition of student housing, and 5) increased student life.

Specifically:

- New programs have been developed in CIS, Culinary Management, Manufacturing, Health Sciences, and Wine and Viticulture. Current programs such as welding have been expanded to full certificate and degree programs.
- College recruiters visit all area high school seniors each year at their home schools and provide visitation tours to Lake Michigan College.
- The College has strong partnerships with area business and industry, which depend on the College for a skilled workforce.
- Partnerships in Berrien, Allegan, and Van Buren Counties offer robust Early Middle College programs.
- The College provides dual enrollment, direct credit, and academies in cooperation with area high schools.
- The College provides outreach services to parents and prospective students including informational events held at all campuses on the following topics:
    - Financial Aid Workshops
    - Dual Enrollment Orientation Sessions for Students and Parents
    - Onsite registration and advising at some area high schools each spring
    - Participation in K-12 administrative meetings throughout the year
    - Transfer Day/College Night
    - Six 8th grade career days to introduce the College to students in this age group

D. Provide instructional staff/student and administrative staff/student ratios for major academic programs or colleges

Lake Michigan College faculty and staff exhibit high levels of excellence, leadership, and innovation for the benefit of students, the institution, and the community.

There are 490 full and part-time employees at the College including 65 full-time and 151 part-time faculty, 39 administrators, 76 technical/professional staff, 18 full-time classified staff, 20 facilities personnel, 47 part-time staff (non-faculty), and 74 student workers. Twenty-four employees hold doctoral degrees.

The ratio of full-time students to full-time teaching faculty was 14:1 for Fall 2019.

E. Projection of future staffing needs based on 5-year enrollment estimates and future programming changes.

# **of FTEs**	**Employee Classifications**
2.0	Administrator
1.5	Classified Staff
1.0	Professional/Technical Staff
1.0	Facilities Staff
9.0	Faculty, Full-time

F. Identify current average class size and projected average class size based on institution's mission and planned programming changes.

One College educational priority is to maintain small class sizes so instructors can work with each student and so all students can have opportunities to engage in class discussions and dialogues.

Special circumstances such as room design or number of workstations available cause exceptions to the cap of thirty. These can result in smaller or larger class sizes. English composition classes are limited to 22 to ensure adequate exposure to our writing faculty for each student. Many science classes are capped at 24 to 27, depending on laboratory capacity. Communication classes are capped at 24, so students all have opportunities to make multiple presentations. For accreditation and safety purposes — and to enhance student/faculty interactions — class sizes in dental assisting, nursing, radiologic technology, sonography, machine tool, robotics, welding, drafting, wine and viticulture, and hydraulics/pneumatics laboratories range from 8 to 24.