

FIVE-YEAR CAPITAL OUTLAY PLAN

(FY 2022 – FY 2026)



NORTH CENTRAL MICHIGAN COLLEGE

1515 Howard St.

Petoskey, MI 49770

North Central Michigan College: Five-Year Capital Outlay Plan (FY 2022 – FY 2026)

I. Mission Statement

NCMC provides exceptional, accessible, relevant higher education of and for the community.

II. Instructional Programming

a. Instructional Programming – Existing Academic Programs

North Central Michigan College (North Central) offers Associate of Arts, Associate of Science, Associate of General Studies and Associate of Applied Science degrees. The Associate of Applied Science degrees prepare students for careers or advanced study in eighteen (18) program areas as shown below:

Accounting	Hospitality and Casino Management
Business Management	Law Enforcement
Computer Information Systems	Legal Assistant
Computer Support Specialist	Marketing
Computer Networking	Nursing
Criminal Justice	Office Administrative Services
Early Childhood Education	Surgical Technology
EMS/Paramedic	Welding
Geographic Information Systems	

In addition, North Central offers certificate programs in the following areas:

Accounting Assistant	Graphic Arts
Advertising Assistant	General Office Professional
Art - Fine Craft	Hospitality and Casino Management
Art - Studio Art	Hospitality and Hotel
Animation	Law Enforcement Aide
Bookkeeping	Legal Assistant
Business of Art	Management
Business Development	Marketing Assistant
Certified Nurse Aide	Medical Assistant
Communications	Medical Billing and Coding
Computer Aided Design	Microsoft Office Specialist
Computer Information Systems	New Media
Computer Networking Administrator	Office Administrative Services (OAS)
CNC Machinist Technology	(OAS) Medical Office Emphasis
Computer Support Specialist	Office Support Specialist
Corrections (State)	Phlebotomy Technician
EMS/Paramedic	Receptionist
EMS/Basic	Small Business Management
Entrepreneurship	Surgical Technologist
Entrepreneurship Essentials	Textiles

Over the next few years, North Central anticipates revisions and/or expansions to our existing healthcare program offerings (such as Nursing and Fire Science), as well as additions to our manufacturing and technology curriculum. In addition, we are considering expansions into Mechatronics and also to our existing Computer Information Systems program.

The following table shows the various locations or means by which the college offered credits in 2019-2020, along with the percentage of total credits represented by each location:

Location/medium	% of total credits
Petoskey	58%
University Center in Gaylord	4%
Straits Area Center in Cheboygan	2%
Online	24%
Various other	12%

b. Unique Characteristics of North Central's Academic Program

The college's academic programs are designed to provide students with a solid foundation for launching their careers (applied or "occupational" programs) or transferring to a four-year university (liberal arts programs). North Central has adopted the Lumina Foundation-sponsored Degree Qualifications Profile as its assessment platform. All degree offerings incorporate five key dimensions of knowledge and skill development:

1. Specialized knowledge in a focused area of study;
2. Broad integrative knowledge in a range of academic disciplines;
3. Intellectual skills including the ability to identify, categorize, compare and communicate theoretical and practice approaches to problems;
4. Applied knowledge that connects the classroom to real-world settings; and
5. Community engagement and civic learning.

Within the occupational areas, careers in the health professions are of greatest interest: 51% of all students in the Associate of Applied Science programs and 45% of all students seeking occupational certificates are enrolled in health-related programs. The high level of student interest corresponds to the workforce development needs of our state in health care industries, in which there are more jobs than there are available and trained workers.

Recognizing the need for knowledge and skill development in the applied sciences, including those in the health-based sectors, North Central opened its new Health Education and Science Center (The Jack and Dorothy Harris Center) in 2012. The building is the hub for all health and science education on the Petoskey campus and has enabled the college to move forward on the expansion of its academic programs including the following:

- Medical First Responder training — in response to Emmet County's need for more consistently trained first responders (The certificate in Basic EMS was updated to allow for financial aid considerations to apply for these students.)
- The integration of simulation technology into the Nursing, EMS, Medical Assistant and Surgical Technologist curricula; since the opening of the HESC in 2012, faculty in all of these disciplines have made a concerted effort to include simulation training into the health curricula. In addition, in 2020 (and in part due to the COVID-19 pandemic that has severely limited clinical opportunities), our nursing program began making additional use of VSim software that enables nursing students to practice essential nursing skills in a virtual environment.
- In 2017, North Central received full approval from the Commission on Accreditation of Allied Health Educational Programs (CAAHEP) for accreditation of our EMS-Paramedic programs; the college was also approved as only the second Michigan site for offering Critical Care Paramedic courses from the University of Maryland Baltimore County (UMBC).
- Also in 2017, North Central began partnering with local fire departments on a shared Regional Fire Training Center, capable of offering both initial and command-level training courses. We anticipate that the EMS accreditation, the UMBC selection, and the Regional Fire Training Center will enhance our abilities to attract students to all of our health programming.
- As the result of a generous donation of an Anatomage Table (a virtual cadaver lab), students in North Central's health sciences programs have the ability to digitally dissect human cadavers while simultaneously viewing tissues slides of dissected structures. In the past year, we have also upgraded our simulation technology to enhance pediatric skills practice; in our rural environment, pediatric patients are less common but the demands on provider skills remain high. This technology allows us to prepare students more effectively than having to wait for the infrequent ill or injured child.

Workforce Development and Adult Education Programming

North Central Michigan College's Corporate & Community Education (CCE) provides customized corporate training, workforce development, safety training, Lean learning,

professional development programs, and community & continuing education. CCE also serves as a gateway to the college for many nontraditional learners, particularly older workers and at-risk youth. In 2019-2020, approximately 61% of CCE students were at least 30 years old.

CCE has made particular strides in manufacturing, farming and health care, along with continued growth in professional development programs for adult learners. We host programs on campus, company sites, high schools, Michigan Works! Centers, and online.

Workforce Development training topics 2019-2020 academic year included:

Training Topics	Enrollment
Manufacturing	34
Online learning	41
Ergonomics-MISHA/LARA	401
Farming/Gardening	190
Lean Practices	59
Public Safety / Allied Health	606
Business/Marketing	31
Other	130
Total Enrollment	1492

CCE gathers feedback from training participants on the effectiveness of the program, the relevance to workplace skills, the quality of the instructor, instructional materials, and the facility. In addition, the questionnaires ask participants what other programs ought to be offered.

In addition to the individual questionnaires, CCE maintains a database of more than 3,500 contacts in various business sectors. CCE periodically surveys interest groups to determine their current educational needs. For example, area manufacturers, farmers, wineries, and chamber of commerce members have been surveyed. Responses from the surveys determine CCE's actions, whether it is workshop topics, locations, schedules, or funding requests. All of CCE's activities are driven by the needs of area companies and community members.

Articulation Agreements and Partnerships with Intermediate School District

North Central is a strong partner with the Charlevoix-Emmet Intermediate School District (Char-Em ISD) and its regional high schools. Responding to the plans set forth by the Michigan Governor and Legislature, North Central established an Early College program, initially with Public Schools of Petoskey in 2014. Early College enables students to earn a high school diploma concurrently with a North Central Associate's degree by remaining enrolled for one year beyond the traditional high school graduation date. Petoskey High School has sent a cohort of 25 students to the program in each of the last four years. Similar programs were started at Boyne City High School and Gaylord High School in 2015, with both schools continuing to participate with new students each year.

In addition to the Early College program, North Central continues to provide dual and/or concurrent enrollment courses, following National Alliance of Concurrent Enrollment

Partnerships (NACEP) standards, for more than 650 high school students each term. Dual credit comprises close to 39% of the college's total fall student head count in 2020. Chart 1 below shows the growth in head count and credit hours by these students.

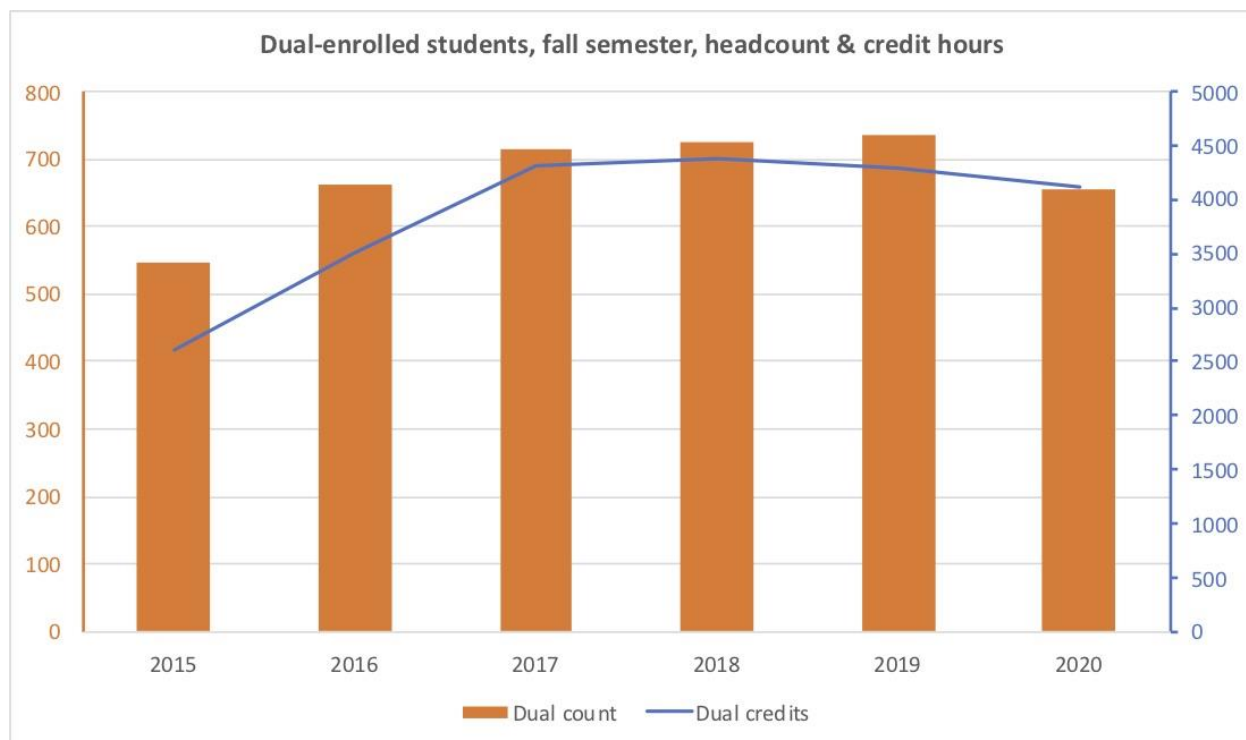


Chart 1: Dual-enrollment trends

Between the fall semesters of 2014 and 2017, dual enrollment headcount increased by more than 50% and credit hours taught by more than 120%, although both have leveled off since fall 2017.

North Central attracts a significant number of high school graduates from the region each year. In the fall 2019 semester, approximately 19% of all area 2020 high school graduates enrolled at North Central.

North Central is affiliated with the Michigan Department of Education. The college works in partnership with Char-Em ISD on various career and technical education (CTE) programs and tech-prep articulations for programs including accounting, business management, creative teaching, health occupations, information technology, mechanical drafting, and marketing.

Technical/Vocational Training on the Move

A unique learning resource at North Central is the mobile CNC Fabrication Laboratory (Fab Lab). Our Fab Lab was built in partnership with the Northern Lakes Economic Alliance (NLEA), the Michigan Economic Development Corporation (MEDC), Precision Edge Surgical Products Company, and many other area manufacturers. CCE assisted in bringing the Fab Lab concept to Northern Michigan and has used it to train area youth and workers at Moeller Aerospace, a local manufacturer.

In addition, North Central partnered with the Little Traverse Bay Bands of Odawa Indians to secure a \$1.5 million SEEDS grant which provided CNC equipment for a stationary

manufacturing and teaching lab in the college's Technology Building. The stationary lab opened in September 2015. Grant money was also used to hire an additional driver for the Fab Lab, an additional instructor, and a CNC career support specialist. In conjunction with the Fab Lab, the stationary lab is currently training more than 50 students and is providing support for the new Certificate of Development in Computer Numerically Controlled (CNC) Machinist Technology.

North Central also partners with the Little Traverse Bay Bands of Odawa Indians on a \$1.2 million Social and Economic Development Strategies (SEDS) grant. Our partnership with LTBB in this respect will enable North Central to expand into the areas of Mechatronics and Robotics, with the addition of a traveling van loaded with mobile Mechatronics training stations. In addition, SEDS funding will help bring on a Mechatronics instructor, and allow us to update curricula in Computer-Aided Design. In addition, this grant has also funded a "Career Development Specialist" position that will facilitate the opening of a career services center.

North Central also partners with Boyne USA regarding a Culinary Apprenticeship program based upon a similar collaboration between Boyne properties in the State of Maine with Central Maine Community College. These apprenticeships remain strong in spite of disruptions due to the COVID-19 pandemic.

Community Activities

A large part of North Central's mission is to provide educational, economic and cultural opportunities for community improvement. North Central operates a Student and Community Resource Center (SCRC) that includes two fitness rooms, indoor walking track and gymnasium with three full-size basketball/volleyball/tennis courts and ten full-size pickleball courts that are available to the public and used by more than 300 citizens daily. Overall, pickleball membership has grown to 450 members. The campus is also home to a 195-acre Natural Area that is groomed and maintained free to the public and students for recreation and leisure. In addition, the Harris Gardens provide 26 unique sculptures in the center of campus for students, faculty, staff, and community members to enjoy.

North Central recently hosted the MI CareerQuest event for the Charlevoix-Emmet Intermediate School District. Over 500 students attended this one-day set of hands-on activities designed to introduce 9th grade students to careers including: Construction Trades, Emergency Medical Services, Fire Services, Fisheries and Wildlife, Law Enforcement, Nursing, and many more.

The college sponsors several enrichment events each year—many of them free to community members—including the Lecture Series, Luncheon Lecture, the Global Awareness Series, and the Food and Farm Series.

Student Athletics

Two new club athletic opportunities are available for students starting fall 2019. The competitive running and ski teams provide students an opportunity to participate within an athletic team atmosphere. This approach is being used as an entry point to developing intercollegiate athletics at North Central. This approach allows involvement at various levels, and affords students the ability to enjoy, and benefit from, continued participation in a competitive athletic team. These extracurricular opportunities complement the

outstanding academic programs at North Central, creating a more holistic, vibrant environment for learning.

Articulation Agreements and Partnerships with Four-Year Institutions

Approximately 40% of North Central Michigan students transfer to other colleges or universities within four years, with 30% attending four-year institutions. The college is a signatory to the Michigan Transfer Agreement (MTA), which provides that 30 credit hours in general education at Michigan community colleges will transfer to other institutions in Michigan. North Central maintains articulation agreements with Central Michigan University, Davenport University, Eastern Michigan University, Ferris State University, Lake Superior State University, Madonna University, Northwood University, Spring Arbor University, and the University of Michigan-Flint.

In some cases, students may continue their post-North Central college career in Northern Michigan through courses offered in Petoskey by our university partners.

North Central has signed reverse transfer agreements with Lake Superior State University, Ferris State University, Grand Valley State University, Central Michigan University, Western Michigan University and Northern Michigan University. These agreements enable former North Central students to transfer courses from a four-year university back to North Central, to help satisfy the requirements to complete an associate's degree.

From 2010 through the 2018-19 academic year, North Central partnered with the Young Americans College of Performing Arts in Corona, California. This partnership was ended effective Fall 2019. Thus, we currently have no Young Americans enrolled, nor are we offering classes in California, as we had done previously.

c. Initiatives and Facility Use

Although North Central maximizes the use of its existing facilities, constraints limit its flexibility and ability to meet the full range of community and student needs. One project that emerged from the 2014 Campus Master Plan as a top priority is the renovation and upgrade of our Administration/Classroom Building.

Research shows that student engagement—time spent on campus and on educational tasks—is critical to college completion. The purpose of the renovation project is to improve the learning environment for students by renovating two existing classrooms into one state-of-the-art computer lab, as well as creating five state-of-the-art classrooms. The project will extend the life of the Administration/Classroom Building by providing necessary improvements to the instructional space, as well as creating a new Student Commons for students, staff, and faculty to collaborate.

The project will also address significant maintenance and repair items that have been identified as being critical in the Campus Master Plan. The project will also create a “first-stop shop,” providing key student services and cashier functions in one location. Students will be able to have access to support services that are centrally and conveniently located.

d. Economic Development Impact

The most recent Economic Impact Study, conducted by the W.E. Upjohn Institute and dated November 2015, quantifies the significant economic impact of North Central Michigan College in its four-county service region. With an annual budget of nearly \$16 million in 2015, North Central Michigan College's full- and part-time faculty and staff numbered 346 and its enrollment reached 2,633 in the year's winter semester. The college is among the top five, year-round largest employers in Emmet County. North Central's service area economy receives approximately \$253.6 million in total sales, \$66.1 million in personal income and \$120.2 million in total Gross Regional Product due solely to the presence of the College.

In the four-county region, the College and its training activity generated 1,470 jobs, and every North Central job supports 3.2 additional jobs. Clearly, North Central is a net positive investment for the community. Local businesses are more competitive because North Central contributes to a trained workforce. The College's presence in Cheboygan and Otsego counties contributes to the economy in those locales through the activities of its students in and near the Cheboygan and Gaylord communities.

Over the course of their working careers, associate-degree holders in northern Michigan earn \$459,000 more than persons who only have a high school diploma. Attaining an associate degree yields a return of \$6.87 to \$10.70 for every \$1.00 of tuition and historically offers lower levels of unemployment. Finally, for students seeking a four-year degree at one of the state's universities or four-year colleges, North Central offers an affordable pathway by allowing them to complete the first two years locally and at a much lower cost. Attending North Central Michigan College for the first two years while living at home and completing a bachelor's degree program at the University of Michigan, for example, saves the student \$42,931.

III. Staffing and Enrollment

a. Current Enrollment and Program Access

Enrollment for the Fall 2019 semester is 1,742 students enrolled for 16,463 credit hours, for an average load of 9.5 credit hours/student. North Central has seen a considerable change in enrollment over the past 10 years, with some early growth, but a decline since 2010. As represented in Chart 2 below, enrollment peaked at 56,340 credit hours in 2009-10 and has declined to the range of 30,000 - 35,000 credit hours in the past few years.

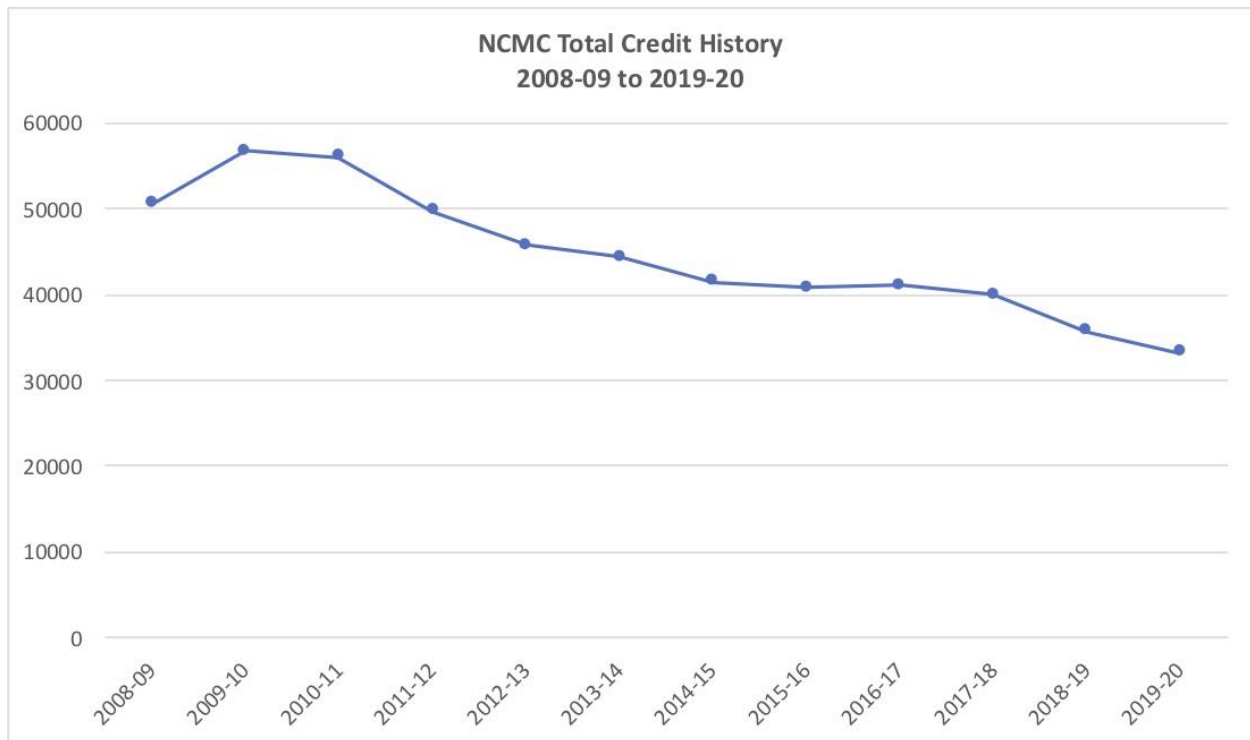


Chart 2: Credit enrollment history

The programs into which students enroll have also shifted over the past five years. Dual-enrolled students have become a substantial portion of our overall enrollment, as shown earlier in Chart 1. To demonstrate the impact of dual-enrolled students, two graphs are provided below showing the distribution of programs of enrollment for ALL students and then for NON-DUAL students.

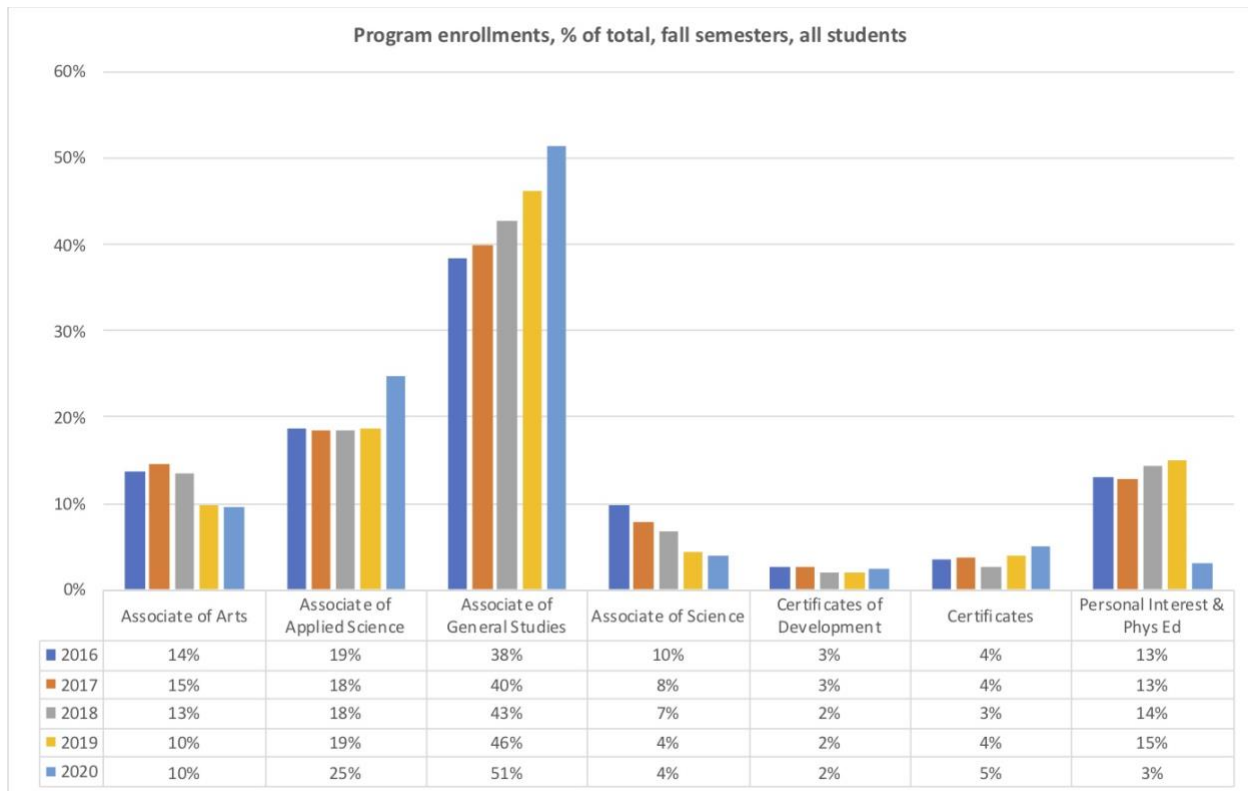


Chart 3: Fall program enrollments, ALL students

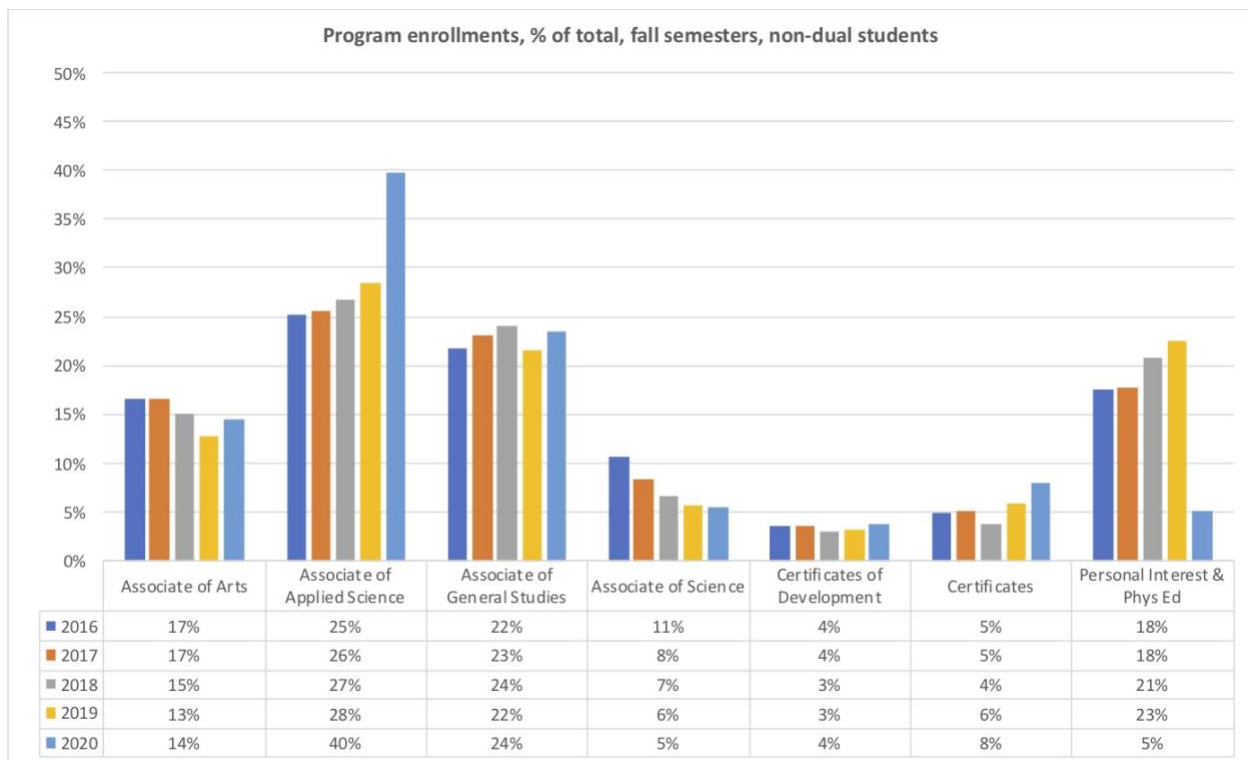


Chart 4: Fall program enrollments, NON-DUAL students

As can be seen by comparing the Associate of General Studies (AGS) values between the two graphs, although there's been quite an increase in student preference for this program (Chart 3), most of that is being driven by the dual-enrolled students, the majority of whom enroll in the AGS program. This is evidenced by the relatively flat enrollment in that program in Chart 4.

Beginning in the Fall 2020 semester, North Central reclassified the group of students who previously enrolled in only our Physical Education fitness classes. Those students are now counted in our community education division, thus they do not appear in the above graphs. This explains the sudden drop in the "Personal Interest & Phys Ed" students for this fall.

While overall percentages of program enrollments are shown in the graphs above, the following table details the enrollments in specific programs for the 2019-2020 academic year. Note that the final programs listed, the Liberal Arts associate degrees (AA, AS, AGS), indicate total and dual enrollments, highlighting that virtually all dual-enrolled students enroll in those programs.

The college offers the following academic programs. Totals are for non-dual-enrolled students, unless otherwise indicated.

Major	Description	CIP	Type	Count	% of total
046	Personal Interest	24.0102	N	557	17.4%
098	Physical Education Class	24.0102	N	30	0.9%
106	CNC Machinist Technology	48.0510	CDE	19	0.6%
107	Business of Art	50.1002	CDE	4	0.1%
111	New Media	50.0409	CDE	4	0.1%
113	Graphic Arts	50.0409	CDE	8	0.3%
116	Computer Aided Design	15.1301	CER	8	0.3%
117	Hotel and Hospitality	52.0901	CDE	3	0.1%
119	Business Development	52.0701	CDE	3	0.1%
121	Bookkeeping	52.0302	CDE	6	0.2%
125	Law Enforcement Aide	43.0103	CER	3	0.1%
127	State Corrections	43.0102	CDE	3	0.1%
132	Art-Fine Craft	50.0702	CER	5	0.2%
133	Art-Studio Art	50.0702	CER	7	0.2%
134	Animation	10.0304	CER	4	0.1%
136	Communications	09.0100	CER	4	0.1%
148	Computer Support Specialist	11.1006	CER	1	0.0%
149	Management	52.0201	CER	3	0.1%
150	Small Business Management	52.0201	CER	4	0.1%
152	Basic Emergency Medical Services	51.0904	CDE	10	0.3%

153	EMS/Paramedic	51.0904	CER	1	0.0%
154	EMS/Paramedic Accepted	51.0904	CER	12	0.4%
166	Manufacturing Technology	48.0510	CER	1	0.0%
178	Phlebotomy	51.1009	CDE	2	0.1%
179	Medical Billing and Coding	51.0713	CDE	5	0.2%
180	Medical Assistant	51.0710	CER	13	0.4%
181	Medical Assistant-Accepted	51.0710	CER	15	0.5%
182	Computer Networking Administrator	11.0901	CER	1	0.0%
183	Surgical Technologist	51.0909	CER	1	0.0%
187	Phlebotomy-Accepted	51.1009	CDE	7	0.2%
190	Medical Billing and Coding	51.0713	CER	13	0.4%
197	Certified Nurse Aide	51.3902	CDE	2	0.1%
205	Accounting	52.0302	AAS	36	1.1%
218	Hospitality and Casino Management	52.0901	AAS	3	0.1%
220	Business Management	52.0201	AAS	76	2.4%
225	Criminal Justice	43.0103	AAS	43	1.3%
226	Law Enforcement (w/NMC)	43.0107	AAS	4	0.1%
227	Law Enforcement (w/KCC)	43.0107	AAS	4	0.1%
236	Geographic Information Systems	15.1102	AAS	3	0.1%
238	Computer Support Specialist	11.1006	AAS	3	0.1%
243	Computer Information Systems	11.0301	AAS	28	0.9%
245	Marketing	52.1801	AAS	5	0.2%
249	Welding	48.0508	AAS	3	0.1%
253	EMS/Paramedic	51.0904	AAS	5	0.2%
254	EMS/Paramedic Accepted	51.0904	AAS	20	0.6%
256	Nursing	51.3801	AAS	110	3.4%
257	ADN Accepted Nursing	51.3801	AAS	100	3.1%
258	Surgical Technologist	51.0909	AAS	14	0.4%
270	Medical Office-OAS	52.0401	AAS	8	0.3%
276	Legal Assistant	22.0302	AAS	2	0.1%
277	Office Administrative Services	52.0401	AAS	7	0.2%
280	Early Childhood Education	13.1210	AAS	5	0.2%
282	Computer Networking	11.0901	AAS	9	0.3%
300	Arts	24.0101	AA	209 (31)	6.5% (2.6%)
301	Envs & Sustainability Studies	24.0101	AA	11	0.3%

380	AA-Early Childhood Education 2017	24.0101	AA	36	1.1%
400	Science	40.0101	AS	119 (17)	3.7% (1.4%)
600	General Studies	24.0102	AGS	1570 (1130)	49.2% (22% of non-dual) (96% of dual)
	TOTAL UNDUPLICATED (dual-enrolled)			3192 (1178)	

b. Five-Year Enrollment Projections

The college strives to be responsive to the needs of our community. During times when the need is high, our enrollment has exploded. We recognize that it is helpful to project enrollment for five years, but we also know we need to be cautious. None of us would have projected the enrollment surge in 2009-2010, because that was a direct reflection of the economy. North Central wants to “right size” our enrollment while being responsive to our community’s needs. Given the regional population trends, coupled with new college initiatives, we anticipate a slight increase in enrollment for the next five years.

c. Review of Previous Enrollment Patterns

CREDIT HOUR TOTALS

Fall 2014 - Fall 2018

YEAR	Summer	Fall	Winter
2016	2199.0	20368.5	18463.5
2017	2231.0	19777.0	17925.0
2018	1777	17647.0	16250
2019	1679	16250	16382
2020	1567	16397	

d. Instructional and Administrative Ratios for Academic Programs

2017-2018 unduplicated

Academic Division	Nursing, Allied Health & Public Safety	Business, Manufacturing & Technology	Liberal Arts	Corporate & Community Education / Personal Interest / Physical Education
Students	376	243	1986	1319
Administrative leadership	1	1	1	2
FT faculty	5	7	23	0
Adjunct faculty	21	45	81	18
Staff support	2	1	3	1

NOTES:

- Full-time staff (non-faculty) who teach are included in the Adjunct Faculty numbers.
- CCE (only) = 732, Personal Interest & Physical Education = 587. Students who took a CCE course and were enrolled in an academic division are included in the credit divisions.

e. Projected Staffing Needs, Enrollment Estimates, Program Changes

The college currently has 29 full-time faculty members and a dedicated adjunct instructional corps. Based on future enrollment projections, North Central anticipates maintaining current staffing numbers.

f. Current and Projected Average Class Size

The college offers approximately 400 course sections in each of the fall and winter academic terms and approximately 60 sections in the summer session. Of these, approximately 20% are either online or hybrid (both online and face-to-face instruction) offerings.

CURRENT AVERAGE CLASS SIZE 2018-2019

Fall, Winter = 13.0 (Online/hybrid = 16.0)

PROJECTED AVERAGE CLASS SIZE

2020 13.0
2021 13.0

IV. Facility Assessment

a. Summary description of each facility according to categories outlined in “net-to-gross ratio guidelines for various building types.”

See [Facilities Summary Worksheet](#).

b. Building and/or classroom utilization rates.

2018-19 Classroom Utilization (excluding summer)

Period	Days/Times	Fall % Utilization	Winter % Utilization	2018-19 Utilization
Off peak	M-F, 7:00 – 10:00 AM*	20%	14%	17%
Peak	M-F, 10:00 AM – 3:00 PM	41%	35%	38%
Off peak	M-F, 3:00 – 5:00 PM*	24%	23%	24%
Evening	M-F, 5:00 – 10:00 PM	25%	24%	24%
Weekends	Sat, 9:00 AM – 5:00 PM	< 1%	< 1%	< 1%
Total Off peak	*Combined	22%	18%	20%
Overall utilization		29%	25%	27%

NOTES:

- Assumes 36 instructional classrooms on Petoskey campus.
- Fall semester consisted of 15 weeks; winter consisted of 16 weeks.
- Weekends hosted one class in each semester, both were one-credit hour.

c. Mandated facility standards for specific programs

The Technology Building was renovated in Summer 2015 to accommodate the stationary CNC manufacturing lab.

d. Functionality of existing structures and space allocation to program areas served.

See [Master Plan](#).

e. Replacement value of existing facilities

See [R.A. Schettler, Inc. Appraisal Summary, Updated 2020](#).

R.A. Schettler, Inc. is a certified appraisal service that is engaged annually by the college's insurance carrier to determine replacement and insurable values of college buildings and property. The appraisal summary was updated November 1, 2020.

f. Utility system condition

The utility systems in several campus buildings are close to or at end of life. Buildings with HVAC components that are at end of life include: Administration Classroom Building (ADCL), Maintenance Building, a portion of the Student Services Building, Student Community Resource Center (SCRC), and the Technology Building. Electrical distribution systems in many buildings are also at end of life and include: ADCL, Heating Plant, Maintenance Building, Residence Hall and portions of the Student Services Building. The Health Education and Science Center (HESC), SCRC, Library, and portions of the Student Services buildings have relatively new electrical distribution systems. When completed in 2021, the renovation and expansion of the ADCL will upgrade the HVAC and electrical systems in portions of the renovated space and add new services to the built-out portion of the facility. The Physical Plant department conducts routine maintenance as necessary, as well as preventive maintenance to keep systems functional.

See [2020 Deferred Maintenance \(2021-2026\)](#).

g. Facility infrastructure condition

Most of the college facility infrastructure is in generally good condition. However, the older buildings on campus need to be updated and/or renovated. Facility infrastructure in need of renovation includes:

- Restrooms and plumbing in the ADCL, Technology Building, Student Services Building and Residence Hall.

- Windows and doors in the ADCL, Technology Building, Maintenance Building, Student Services Building and Residence Hall.
- Lighting in the Technology Building, Maintenance Building, Student Services Building, Residence Hall, and ADCL (the 2020-2021 ADCL project will upgrade lighting in the corridors and some classrooms).
- Curb, gutter and catch basin repairs throughout campus.
- Parking lot paving, sealing and striping throughout campus.

Roofing across campus in good condition. In the last four years, roofs have been repaired or replaced on the Library, Student Service Building, the lobby of the Residence Hall, and, in 2020, the former President's house now used for Early Childhood Education studies. Metal roofs on the ADCL and HESC are in good condition. HVAC and Electrical system were addressed in the Utility System Conditions section. The Information Technology (IT) network is a couple of years old and provides a stable platform for communication and research around campus. Additional work is being done in 2020-2021 as part of the multi-year project to convert outside lighting to LED and upgrade the poles and fixtures. SCRC interior lighting was converted to LED in 2018.

See [Facilities Conditions Assessment - Mechanical & Electrical](#).

h. Adequacy of existing utilities and infrastructure systems to current and 5-year projected programmatic needs.

Current utilities and infrastructure, with completion of the AD/CL Classroom Renovation & Expanded Learning Space Capital Outlay Project, will support existing programmatic needs. The Career and Technical Education Enhancement (CATEE) Project is needed to support growth in Nursing, Allied Health, and Skilled Trades programs. The CATEE proposal was the College's most recent State capital outlay request. This project will be re-submitted in the future when capital outlay project proposals are again requested by the State.

In 2020, Rooms 218 and 224 were upgraded to enhance technology programming. For example, Room 224 was reconfigured, with new furnishings and equipment, to support e-sports.

i. Does the institution have an enterprise-wide energy plan? What are its goals? Have energy audits been completed on all facilities; if not, what is the plan/timetable for completing such audits?

The College does not have a formal enterprise-wide energy plan, but it does have the following energy goals for the years 2022 to 2026:

Goal 1 | The next scheduled campus-wide energy audit will be conducted in 2021. The last campus-wide energy audit was conducted by Rebuild Michigan Energy Services in April of 2016. A campus-wide lighting audit was conducted in 2017. Since then the highest energy usage areas on campus have been converted to LED lighting. And, a solar panel and a charging station were added on campus.

Goal 2 | Formalize enterprise-wide energy plan by 2021.

Goal 3 | As part of the AD/CL Classroom Renovation & Expanded Learning Space Capital Outlay project, a vestibule will be added to the North entrance in 2021. This will result in reduced energy costs.

Goal 4 | Continue to convert the entire campus to LED lighting.

Goal 5 | Include plans for a heating and cooling loop as part of future capital outlay projects. Such a system will create efficiencies and flexibility for heating and cooling options, as well as being able to air condition the existing Residence Hall.

Goal 6 | Contract with natural gas provider to purchase and store natural gas during the offseason to take advantage of pricing differentials in the natural gas market.

- j. **Land owned by the institution and include a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose.**

See [Master Plan](#).

- k. **What portions of existing buildings, if any, are currently obligated to the State Building Authority and when these State Building Authority leases are set to expire.**

The Jack and Dorothy Harris Health Education and Science Center, which was 50% funded through the State's 2010 capital outlay bill, is obligated to the State Building Authority. The lease with the SBA has a term of 40 years and will expire in 2055.

IV. Implementation Plan

- a. Prioritize major capital projects requested from the State, including a brief project description and estimated cost in the format provided.**

The college submitted a \$12.25 million Capital Outlay project request for consideration, entitled the Career and Technical Education Enhancement (CATEE) Project, to support growth in Nursing, Allied Health, and Skilled Trades programs. While not selected for implementation in 2020, this planning request is the College's top priority moving forward and will be submitted again for consideration.

The “AD/CL Classroom Renovation & Expanded Learning Space,” which received final approval of its \$7.4 million project budget in 2020, is expected to be completed in April, 2021.

- b. If applicable, provide an estimate relative to the institution’s current deferred maintenance backlog.**

See [2020 Deferred Maintenance \(2021-2026\)](#).

See [Facilities Conditions Assessment - Mechanical & Electrical](#).

- c. Include the status on ongoing projects financed with State Building Authority resources and explain how completion coincides with the overall Five-Year Capital Outlay Plan.**

The “AD/CL Classroom Renovation & Expanded Learning Space” Capital Outlay Project is in the construction phase at this time with an expected completion date of April 2021. This project remains North Central Michigan College’s top priority.

- d. Identify to the extent possible, a rate of return on planned expenditures.**

At a cost of \$12.25 million, the Career and Technical Education Enhancement (CATEE) Project will inject an estimated \$45 million into the Northern Michigan economy over five years. This is a ROI of 360% for that period.

Completion of a heating and cooling (utility infrastructure) loop may yield significant energy savings between 5—10% per year, as a chilled water loop connecting all campus buildings will create heating and cooling efficiencies campus-wide. The scope of the energy savings has yet to be determined for the project.

- e. **Where applicable, consider alternatives to new infrastructure, such as distance learning.**

In addition to building new infrastructure, the college is exploring public-private partnerships. The College is also expanding its online and hybrid course offerings.

- f. **Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2022 through fiscal year 2026.**

The above-mentioned \$12.25 CATEE project, that is expected to include a heating and cooling loop that will yield significant energy savings over the existing system, is planned within the next five years.

- g. **Identify the amount of non-routine maintenance the institution has budgeted for in its current fiscal year and relevant sources of financing.**

The college funds routine small dollar (<\$2,000) maintenance through its annual operating funds in the general fund. Non-routine and larger dollar maintenance is funded via the college's plant fund reserves. As of June 30, 2020, the college's plant fund had a balance of approximately \$3.7 million for these types of maintenance. Annually, the college projects expenditures of approximately 5% of this fund balance for non-routine and larger dollar (>\$2,000) maintenance and also replenishes the plant fund from the general fund as part of the annual transfers when revenues exceed expenses in the general fund.