

FERRIS STATE UNIVERSITY

FERRIS FORWARD

Five-Year Capital Outlay Plan FY 2023 – FY 2027

October 2021

Ferris State University
Five-Year Capital Outlay Plan
FY 2023 – FY 2027

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I. Mission Statement

Ferris State University prepares students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society.

II. Instructional Programming

- a) Ferris' Academic Plan describes academic program planning, including distance education, at the University. Ferris intends to pursue growth in areas of demonstrated need and interest. The University's Strategic Plan includes a metric for the development of three market-driven programs annually. This fall the University implemented a new bachelor's degree in Artificial Intelligence, along with a minor in Social Media & Digital Communication and new certificate programs in Industrial Chemical Technology and Risk Management. Programs currently in development include associate degrees in Community Leadership and Computer Information Technologies; a bachelor's degree in Professional eSports Production; master's degrees in Digital Instruction and Design, and in Engineering; and certificates in Advanced Studies in Marketing, Advanced Vehicles Technology, Autonomous Vehicles, and Digital Instruction and Design.
- b) Unique characteristics of Ferris State University include the institution's focus on career-oriented, technical and professional programming. With the merger of Kendall College of Art and Design, Ferris houses the largest individual colleges of design and technology in the region. Ferris also serves a statewide function that shares expertise in the areas of career decision-making and workforce development. Ferris' statewide commitment is evidenced by partnerships developed with the Grand Rapids Public Schools and the Southwest Community High School, and with the Rockford Public Schools, in addition to the College of Pharmacy's presence in Grand Rapids and Kalamazoo. In terms of external support for these programs, several recent, significant grant awards provide funding for this work: \$1,831,851 MDHHS COVID Wastewater Grant; \$1M grant from the U.S. Dept. of Health and Human Services (Health Resources Administration) for Central Michigan Recovery and Education Network (CMREN); USDA FerrisNow Dual Enrollment STEM grant (\$669,216); and a \$345,000 cancer research grant from the National Institutes of Health (NIH).

Ferris also partners with 22 community colleges across Michigan and utilizes their college facilities to provide bachelor's degree-level instruction to place-bound students, enabling them to continue their education without relocating to Big Rapids. These programs offer an attractive educational option to working adults looking to increase career prospects or to transition into a new field.

Ferris offers programs ranging from certificate and associate degrees, through first professional and doctoral degrees. In addition to Ferris' extensive bachelor, graduate and professional programs, Ferris serves a community college function for its five-county

area through participation in federal Perkins programming, the state’s Tuition Incentive Program, as well as through numerous workforce-related curricular offerings.

c) Initiatives that may impact facilities usage:

- *Health Care and Health Professions*

Ferris has a strong tradition in the health professions, with accredited programs in Nursing, Dental Hygiene, Sonography and Radiography that have upwards of two-year admissions wait lists due to space limitations.

Scientific and Pharmaceutical Research

Ferris continues as a national leader in providing career training to students in a variety of fields. Students in the sciences and pharmacy have impactful, applied research experiences with faculty, focused on solving real-world problems (e.g. microbial resistance). Faculty and students have received NIH grants and National Science Foundation (NSF) grants to fund their research. The teacher-scholar model has been adopted in the College of Pharmacy with increased research efforts in several programs and colleges. The following needs are associated with continuation of this work:

1. Emergency power back-up for the Science building and the Hagerman Pharmacy building laboratories, as well as the animal care facilities.
2. Alarm systems for the Science Lab walk-in refrigeration unit and the sub-zero refrigeration unit, and renovation of laboratory spaces in the Science and Pharmacy buildings to accommodate cutting-edge interdisciplinary research with students.
3. Modernization of research laboratory facilities across campus with emphasis in colleges with substantial research efforts.

- *Virtual Learning*

Ferris offers charter schools, teacher education, and a doctorate in Community College Leadership. There remains a strong need to embed virtual learning within each of these fields in both preparation and delivery of program content. This will require a significant update to facilities and development of new classrooms and learning laboratories that enable and leverage technology.

Ferris has a strong and growing online presence. Ferris currently offers 38 degrees and certificates entirely online. These degrees provide flexibility for the non-traditional student market in search of higher education credentialing and career advancement. The online programming also expands the reach of the Ferris brand, while extending educational opportunities to a larger, more diverse audience throughout the state.

Ferris’ recent return to campus during Fall 2020 complies with local, state and federal guidelines to ensure the health and safety of students, faculty and staff. Alternative methods of delivering academic instruction have complemented Ferris’ ability to provide as many face-to-face opportunities as possible during the COVID 19 pandemic.

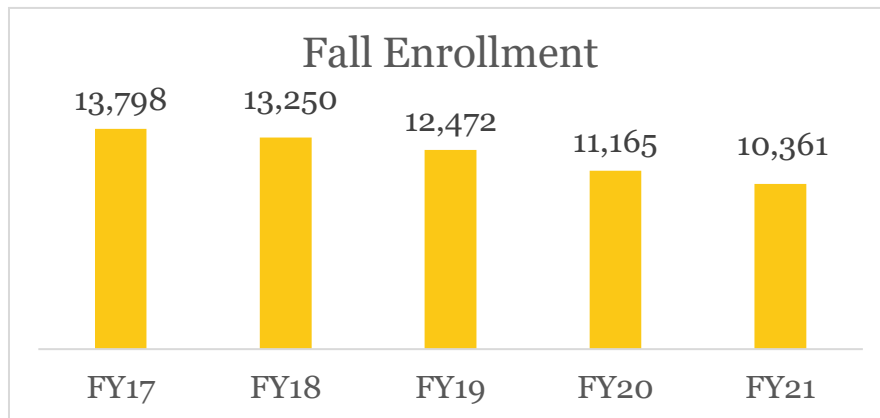
- *Career and Technical Education*
For many years Ferris State University has been a leader in the state for Career and Technical Education programs. Workforce demands drive a strong need to expand upon these programs, connecting them with technical education programs at the community college, tech center and secondary levels. Within Michigan there also exists a strong need for leadership to promote this kind of education to help fill existing and future job opportunities with skilled workers. This aligns with the current state initiatives that focus on promoting technical and apprenticeship education in Michigan. Ferris has also undertaken development of two new certificates that meet current and future workforce needs: Marketing and Sales Leadership, and Salesforce programming. This program will also be housed in the Center for Virtual Learning.
 - *Advanced Vehicles Technology and Autonomous Vehicles*
Ferris has a strong working relationship with major automotive manufacturers, service providers and the automotive aftermarket. As the world of vehicular transit continues to evolve, Ferris’ innovative programs will provide the education and support these industries need.
- d) Economic development impact of current/future programs:
- As a career-oriented University, Ferris serves as a major driver of the economy in West Michigan and throughout the state. Programs in health professions provide numerous opportunities for employment and support the growing field of healthcare. In the last five years, the University has started master’s level programs in Health Administration and in Public Health. In addition to professional doctoral programs in Pharmacy and Optometry, Ferris launched a Doctorate in Nursing Practice in August 2017.
 - Each of the technical programs previously mentioned represents areas of present and future economic growth. Ferris’ hands-on engineering programs – Architecture and Facilities Management; Automotive Technology; Computer Networks and Systems; Construction Management; Electrical\Electronics Technology; Heating, Ventilation, Air Conditioning and Refrigeration; Heavy Equipment Technology; Industrial Technology and Management; Manufacturing; Mechanical Technology; Plastics; Product Design Technology; Quality Technology; Rubber Engineering Technology; Surveying; and Welding Engineering Technology provide technical fields for new professionals, and opportunities for retraining and upskilling for current professionals.
 - Ferris’ educational leadership in charter schools, teacher preparation and a doctorate in Community College Leadership continues to provide the resources needed to develop the educated workforce for a knowledge-based, technological economy.
 - The Ferris State University process of Academic Program Review and new academic program development is a national leader in best practice. Ferris faculty are committed to developing new programs to support developing trends and needs. The nimbleness of these academic initiatives created more than 25 new academic programs in the past six years. At the same time, elimination of an equal or greater number of academic programs has occurred.

III. Staffing and Enrollment

- a) Ferris’ academic mission - to provide hands-on, career-oriented instruction that meets the business and industry needs of our state - continues to attract students to our institution. While recent enrollment at the University reflects the impact of declining high school graduates, the institution remains confident that Ferris’ programs will continue to attract new freshmen, transfer students and adult learners.

Ferris continues to attract students to the Big Rapids campus for hands-on, career-focused instruction that requires specialized equipment and face-to-face instruction. The University provides bachelor’s degree completion programming to place-bound students throughout the state by leveraging strong partnerships with community colleges, while offering upper level program opportunities to students in the communities where they live. Ferris utilizes the facilities of community college partners to offer bachelor’s degree programming to community college students who have earned associate degrees through partner community colleges. These relationships continue to expand and include a growing network of high school partnerships, notably with the Grand Rapids Public Schools and the Rockford Public Schools. At the same time, Ferris continues to increase online offerings to provide alternative instruction opportunities to students where this method of instructional delivery has become more attractive, especially during the pandemic. Specific enrollment information by program and site is available online in the University’s [Fact Book](#).

- b) Since 2016, Ferris has experienced a decline in enrollment due to the decrease of Michigan high school graduates and the recent COVID-19 pandemic.



- c) Ferris has experienced a Fall 2021 enrollment decline of slightly more than 7% due to the COVID-19 pandemic, the robust job market and declining Michigan high school graduates. The University continues to address this through its strategic plan (2019-2024) and a new branding and marketing campaign. Specifically, Ferris has engaged the following initiatives: expanding our online offerings, developing an e-sports program, increasing our enrollment and retention efforts, and expanding our relationships with community colleges. In addition, a Wintermester is now offered (began December 2018) where students can take accelerated online classes between fall and spring semester (over the December/January break). With these efforts, future enrollment is predicted to stabilize for FY23 with a 1-2% increase annually through FY 26.

- d) Depending upon the academic program area, student-to-faculty ratios will vary based upon whether the course is offered as a hands-on, equipment dependent laboratory, or a general lecture class. The current University student-to-faculty ratio of 16.1 to 1 indicates that classroom space continues to present major planning challenges for the University. This is due to our unique programming mix requiring small class sizes dictated by the equipment-intensive nature of many of Ferris' programs. Total University student-to-employee ratio has remained approximately seven to one over the last few years.
- e) Staffing levels have decreased because of enrollment declines and budget reductions. Ferris' operating strategy has focused on reducing budgets to balance revenues and expenses. For example, Ferris recently (2019-2020) reduced the base budget by \$20 million, with more than \$11 million of these cuts coming from Academic Affairs. Additional reductions of \$7 million will be made during this academic year.
- f) Current average class size for Fall 2020 is 16.1 students per class. Again, this small class size reflects the University's mission of providing hands-on education.

IV. Facility Assessments

- a) Ferris completed an update to the [Campus Master Plan](#) in May 2021. In addition, an updated [Facility Condition Assessment Report](#) was completed in May 2018.
- b) Ferris' classrooms are highly utilized. The unique programming requirements of our curricula make cross-utilization of some facilities challenging. Many hands-on laboratories (automotive, welding, HVAC, etc.) are specifically designed with the special equipment these disciplines require.
- c) The University believes all specialty laboratories and classrooms conform to federal/industry standards to ensure safe practices and compliance in classroom and research laboratories.
- d) The functionality of existing structures is addressed in the Master Plan and Facility Condition documents.
- e) The replacement value of existing facilities is detailed in the [Current Facilities Property Value report](#).
- f) The University completed a comprehensive assessment of its underground sanitation and wastewater systems in 2016 as part of the Michigan DEQ SAW Grant Program. A copy of this report is available upon request.
- g) In most cases, up-to-date information on facility infrastructure is detailed in the Utility Infrastructure Study that is available through hard copy in multiple three-ring binders. Some of this information is also available on the Physical Plant's GIS System.
- h) Existing utilities and infrastructure systems are sufficient and adequate to support the five-year Master Plan.

- i) Ferris approved an [Energy and Water Use Policy](#) in June 2012.
- j) The Master Plan document also provides detail as to land use and capacity.
- k) Detail on the bonded indebtedness of our facilities is included in the University’s financial statements.

V. Implementation Plan

The Campus Master Plan provides comments on specific needs of the various facilities.

- a) Ferris’ top priority for capital projects is noted below:

Priority One: ***The Center for Interprofessional Health Sciences Education (CIHSE)***

The Center for Interprofessional Health Sciences Education (CIHSE) will address mission-critical needs for Ferris State University. It will focus on renovating the existing Allied Health Sciences Building with an expansion to create new spaces for interprofessional health sciences education. In close proximity to the University’s College of Pharmacy and Michigan College of Optometry, this facility will also be available to their students. This approach will prepare students to graduate into a health-related workforce that demands an increasingly holistic education to address needs that have resulted from the COVID-19 pandemic.

- b) The backlog of current deferred maintenance projects is included in the 2018 campus Facility Condition Assessment report. The report is located on Ferris’ website on the Facilities Management page under [Planning Documents](#). The University maintains a comprehensive facilities assessment database that identifies the deferred maintenance costs for each building.
- c) Ferris continues to expect significant return on planned capital expenditures.
- d) Ferris continues to upgrade its technology infrastructure. This includes conventional network infrastructure, wireless capacity and capacity for additional online learning. This fall the University completed a \$1.5 million upgrade to the wireless network, with another \$2.2 million investment in the planning stages.
- e) Ferris currently offers 2 associate, 15 bachelor, 6 graduate, and 1 doctoral program—along with 26 certificates online. For Fall 2021, the count of students enrolled in programs presented entirely online totals 737. Courses at Ferris are also presented in a hybrid format, which requires some attendance on campus, with most of the work completed online. Ferris plans to accommodate growth in online offerings that will continue to evolve. However, in doing so, we also recognize that hands-on instruction in some career-oriented academic disciplines is not suited to distance learning technologies at this time.
- f) Ferris’ major maintenance items in excess of \$1 million include (but are not limited to):
 - The Allied Health building was constructed in 1979. It has significant facility challenges and is in great need of a substantial update to meet the demands of modern healthcare education.
 - Automotive Technology Center. This facility was constructed in 1956 and requires a

major renovation to keep pace with the electrical and digital nature of the profession. The University funded and completed Phase 1, a \$1.5 million investment, in 2017. This included South Wing improvements to faculty offices, classroom enhancements and a modern fuels lab.

- Center for Athletics Performance. The strength and conditioning space in the Sports Complex is undersized and underequipped, and in many cases is subpar to what our student-athletes used in high school. This \$15.3 million self-funded project has begun construction. The project also includes an expanded women’s volleyball arena and renovation to outdated locker room facilities.
 - Hagerman Pharmacy Building. This building was constructed in 1972. Phase 1 renovations were completed in Fall 2019. A second phase, supported by a capital fundraising campaign, is planned for 2023.
 - Information Technology. Information technology is primarily located in the West Building, a structure completed in 1952, which has a facility condition index of 72.1%, the second poorest on the Big Rapids campus. This need will be met through a \$12.5 million renovation of the Alumni Building scheduled to begin later this fall. Upon project completion the West Building will be razed.
 - The Business Building was constructed in 1970. This facility has significant infrastructure and renovation needs.
- g) Ferris is in its fifth year of a five-year (FY18-FY22) capital renewal and deferred maintenance plan. Annual funding includes \$1,800,000 annual general fund support and \$700,000 annual housing and dining funds, for a planned combined total investment over five years of \$12,500,000.