

FERRIS STATE UNIVERSITY

FERRIS FORWARD

FISCAL YEAR 2021 CAPITAL OUTLAY PROJECT REQUEST

Submitted: October 2019

Institution Name: **Ferris State University**

Capital Outlay Code:

Project Title: **Center for Virtual Learning**

Project Focus: Academic Research Administrative/Support

Type of Project: Renovation Addition New Construction

Approximate Square Footage: **64,000**

Total Estimated Cost: **\$29,500,000**

Estimated Duration of Project: **2020**

Is the Five-Year Plan posted on the institution's public internet site?

Yes No

Is the requested project the top priority in the Five-Year Capital Outlay Plan?

Yes No

Project purpose:

The Center for Virtual Learning will address mission-critical needs for Ferris State University. It will create a physical location to bring together the University's online education efforts, while providing program development support and preparation for faculty engaged in virtual education. It will house academic programs incorporating a significant virtual learning component that are in need of a modern facility— Digital Media; Information Security and Intelligence (ISI); Career and Technical Education; Teacher Education; and online programs. It will draw these programs together at the core of the Big Rapids campus, adjacent to the University library.

Scope of the project:

This project involves two buildings. The first is Bishop Hall, a six-floor dormitory built in 1967, which was renovated to accommodate classrooms and offices in the early 1980s, where the majority of the programs to be housed in the Center for Virtual Learning are currently

located. The condition and challenges of this building are described below and in the response provided to #5 (page 7). Given the poor condition, construction, and ongoing maintenance challenges, this building will be razed. The second is Vandercook Hall, an outdated low-rise residence hall. Because this is adjacent to the library and in the core academic area of the University, the location of this current building is ideal for the new facility and is outlined in the University's master plan.

The programs in Bishop Hall have far outgrown this facility, forcing pieces of these programs to be spread throughout the Ferris State University campus. The five classrooms and computer lab in this building are small and have structural support pillars which impede the students' view of instructional materials. Consequently, classes taught there have to be kept small, which is inefficient and expensive. The current facility is outdated, with multiple health and safety challenges that are cost prohibitive to address in a permanent fashion.

This proposal, as approved for planning by the State of Michigan in December 2018, outlined a major renovation of, and addition to, Vandercook Hall, resulting in an academic facility of 64,000 gross square feet. While a renovation is possible, through the program development and schematic design planning, our architects and construction managers believe the State of Michigan and the University would be better served, and it would result in a more cost effective project, by completely razing Vandercook Hall and constructing a new building vs renovation. This will reduce building cost by approximately \$1.5 million, helping to bring this project in for the costs outlined in this period of rapidly escalating construction costs. It has also become clear through the planning of this facility that utilizing portions of the existing Vandercook Hall would have created a significant ADA hazard because of the sloping topology of the site.

The Center for Virtual Learning will serve as one of the core academic buildings on the campus quad, promoting students' access to University facilities and services, reducing pedestrian-vehicular interaction, traffic congestion, and improving safety, while at the same time reducing operating costs.

The construction will include the following academic and support areas:

- Classrooms, laboratories, faculty offices and administrative spaces
- Computer laboratories, including network support facilities
- Research laboratories
- Online learning facilities
- Digital media and television production facilities

Program Focus of Occupants:

The Center for Virtual Learning will include a home for university-wide online instruction, and also undergraduate and graduate programs in Digital Media; Information Security and Intelligence; Career and Technical Education; Teacher Education; and online programs.

Additional Information:

1. How does the project support Michigan's talent enhancement, job creation and economic growth initiatives on a local, regional and/or statewide basis?

Digital Media (DM) includes Ferris' Digital Animation and Game Design program, which is ranked among the top 20 programs in the country by the Princeton Review. DM also encompasses programs in Digital Media Software Engineering, and Television and Digital Media Production. Alumni work in business, industry and virtual design studios, television stations, education institutions, and firms specializing in virtual, electronic and video representation. Digital media graduates have starting salaries in Michigan from mid-\$45,000 to mid-\$60,000 depending upon the field, and upward from mid-\$40,000 regionally.

The Information Security and Intelligence program (ISI), which is annually ranked among the top 25 programs in the nation, is considered the premier program in the State and is one of only six programs in the country to be designated as a Center of Excellence by the National Security Agency in all information assurance areas. Additionally, the program holds the National Center for Digital Forensic Academic Excellence designation from the Department of Defense Cyber Command Center (DC3) and from the Air Force Office of Special Investigations. ISI is the first university program in the country to receive DC3 and Air Force Office of Special Investigations Center designation as a National Center of Digital Forensics Academic Excellence. As such, Ferris' ISI program facilitates national-level security expertise in business, industry and government operations.

ISI is a node on the Michigan Cyber Range, a resource that prepares cybersecurity professionals in detection and prevention of cyberattacks in real-world settings. Breaches to computer systems threaten the security of data, which often includes personal information about Michigan citizens. Being designated a Michigan Cyber Range location benefits all levels of government, as well as educational systems, private business and industry. As a node on the Michigan Cyber Range, we support Michigan Cyber Intelligence efforts. Starting salaries for Ferris ISI graduates are approximately \$55,000 in Michigan and \$65,000 regionally with a 100 percent job placement rate.

Ferris State University has a unique statewide responsibility and leadership position in career and technical education. As such, it coordinates for the State a variety of career and technical programs. Additionally, it helps persons with experience in technical fields to enter the teaching profession. An example of this is the Pro-Mo-TEd program, which allows working students to earn a Bachelor of Education degree in Technical Education and/or possibly Secondary Certification. This integrates an intensive two-week, in-person summer program with online courses, followed by student teaching. This aligns with current State initiatives to promote technical and apprenticeship education in the State. Career and

Technical Education graduates enjoy 100 percent placement and starting salaries of over \$54,000 in Michigan and regionally.

Teacher Education programs at Ferris are the largest in West Michigan, and unlike other university programs in our area, grew by 50 percent from 2010-15. Ferris places a special emphasis on preparing teachers for success in areas with significant economic challenges, both urban in Grand Rapids and in the rural areas surrounding Big Rapids. Teacher Education graduates earn between \$37,000 - \$45,000 depending upon discipline and setting.

Internet-based learning at Ferris focuses on unique career-oriented programs for industry, manufacturing, technology, and health care fields. The future of business, industry and health care in Michigan depends upon the expansion of education-delivery options to everyone, independent of time and place. Online education efforts at Ferris are currently distributed across the University, which dilutes their impact and increases cost. The Center for Virtual Learning will bring the development of new programs and support for existing efforts in one place, helping to meet these critical and growing needs. Ferris' online programs help place-bound individuals prepare for a new career or career enhancement while they continue to work without relocation.

There is considerable demand for graduates in the Digital Media, Information Security and Intelligence, and Career and Technical Education fields. Ferris State University is an institution where traditionally over 95 percent of its students find employment upon graduation and 89 percent of graduates find employment in their field of study. Support for the growth of these programs will help fuel the continued economic success in Michigan.

2. How does the project enhance the core academic and/or research mission of the institution?

Our 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.

Digital Media - This is the age of electronic animation, video and virtual reality. This program brings together studies in digital video, digital animation and game design, and software engineering. The exponential growth of YouTube and other online video sites highlights the relevance of Ferris' Digital Media program. Housing the Digital Media program in the Center for Virtual Learning will help facilitate integration of these studies with online efforts, and provide much-needed space and facilities for this growing program.

Information Security & Intelligence - The Information Security and Intelligence program is annually ranked among the top 25 programs in the nation and is considered the premier program in the State. It is one of only six programs in the country to be designated

as a Center of Excellence by the National Security Agency in all information assurance areas. ISI is the first university program in the country to receive DC3 and Air Force Office of Special Investigations Center designation as a National Center of Digital Forensics Academic Excellence (Ferris State was the first university in the United States to achieve this designation). ISI graduates are employed as security analysts, data analysts, digital forensic investigators, FBI special agents, NCIS special agents, risk analysts, penetration testers, compliance officers, and many other areas. As a node on the Michigan Cyber Range we support Michigan Cyber Intelligence efforts. Cyber security and data analytics are frequently cited among the fastest-growing career fields.

Career and Technical Education - For many years Ferris State University has been the State leader for Career and Technical Education programs, hosting many of these resources in Michigan. There is a strong need to enhance this educational component, connecting it with technical education programs at the community college, tech center and secondary levels. Through a Center for Career and Technical Education, Ferris proposes to promote enhanced interest and enrollment in apprenticeship and vocational programs, an area where our business, industry and education partners need graduates. Within Michigan there is a strong need for leadership to promote this kind of education to help fill existing and future job opportunities with qualified workers.

Teacher Education - Ferris offers a broad range of programs in Teacher Education and a doctorate in Community College Leadership, for a combined enrollment of more than 700 students. It is unfortunate that future teachers, who should be learning in state-of-the-art classrooms that support forward-looking pedagogies and learning styles, are taught in outdated and poorly adapted facilities. The narrow footprint and column structure of the current facility make it impossible to have a normal classroom arrangement. Beyond this, within the State's K-12 curriculum, there is a requirement for each Michigan student to take an online course. Thus, there is a strong need to further enhance virtual learning within each of the Teacher Education curricula. The Community College Leadership doctoral program is a mixed delivery curriculum with a strong online component. This addresses the significant need for terminally degreed community college administrators.

Virtual Learning - Ferris State University offers a unique mix of career-oriented educational programs. Many of these are the only programs of their kind in the Midwest. Beyond preparing graduates for entry into these fields, they are also highly desirable for people looking to change careers or accelerate their existing career. Ferris currently offers twelve Bachelor's, six Master's, one Doctorate and eighteen certificate programs online. These include degrees in Allied Health Science, Automotive Management, Business Administration, Dental Hygiene, Healthcare Administration, Health Information Management, HVACR Engineering Technology, Integrative Studies, Nursing (RN-BSN, MSN, DNP), Public Health, Respiratory Therapy, Technical Education Pro-Mo-Ted; and Certificates in Cancer Information Management, Digital Marketing, Direct Marketing, Facility Management, Geographic Information Systems, Gerontology, Human Resource Management, International Business, Leadership and Supervision, Lean Healthcare, Long Term Care, Professional E-Commerce Marketing, Project Management, Small Business

Management, and Vascular Ultrasound. This listing of online offerings grows continuously. The most current listing is available on Ferris' website by typing in [Online Program Index](#) in the search toolbar.

With space to support the continued preparation of our faculty, enhancement of the support systems required for successful online education and program development, we will be able to increase capacity for existing degrees and create additional online offerings from our unique, career-oriented educational programs. Through this we will also encourage faculty members at our central campus and 24 locations across Michigan to embed mixed-delivery options throughout their course offerings.

These are areas of rapid growth with projections suggesting even more significant need for professionals. It is becoming increasingly cost-ineffective to provide pedagogical, technological and other support in a distributed fashion. The proposed Center for Virtual Learning will combine these scattered programs and support services in one location. Directly adjacent to FLITE (Ferris Library for Information Technology and Education building), it will create an incubator to support the growing needs of education, business and industry. It will also provide opportunities for innovative inter- and intra-disciplinary curricula as well as opportunities to creatively revitalize, develop and refine curricula and programs that are unique to Ferris or in which are the state-wide leaders (e.g., Information Security and Intelligence, Digital Media, Career and Technical Education, and Digital Animation and Game Design).

3. Is the requested project focused on a single, stand-alone facility? If no, please explain.

The Center for Virtual Learning results in a single stand-alone project. This will be a new facility that will be built on the current site of Vandercook. As a result of this project, Ferris will raze Bishop Hall.

4. How does the project support investment in or adaptive re-purposing of existing facilities and infrastructure?

This project will repurpose Vandercook Hall site by removing an obsolete residence hall and building the new Center for Virtual Learning at this location. By doing so, the University will remove an increasingly outdated building and replace it with a state-of-the-art academic facility located in the academic core of the institution. Several years ago Ferris State University moved from a two-year to a one-year on-campus residency requirement. This coupled with considerable construction of privately funded apartment complexes in Big Rapids has reduced the need for on-campus traditional residence halls.

5. Does the project address or mitigate any current health/safety deficiencies relative to existing facilities? If yes, please explain.

Bishop Hall was not originally designed with air conditioning. The building's retrofitted systems cause water to drip from pipes, wet ceiling tiles to fall in the classrooms and offices, and mold to form. The antiquated system breaks down repeatedly, and is difficult and expensive to maintain. The condition of the facility is a serious problem for those who learn, teach and work there. Not only is there equipment damage, but faculty members have lost vital teaching and research records due to water damage.

Additionally, the elevators, which were not designed for the heavy usage of a classroom/office building, are old and in constant need of repair. Consequently, their maintenance is expensive and continuous. Windows on the west stairwell leak severely during storms to the extent that personnel in the Dean's office post signs warning people not to use the stairs.

This facility is situated away from the academic core of Ferris State University. As a result, students have limited access to the library, other classroom buildings, and administrative, health, and extracurricular services. This more remote location also requires students and faculty to travel between classes, causing traffic congestion and dangerous walking conditions as pedestrians must cross a major thoroughfare. These challenges are most severe during the cold, snowy, icy winter months.

The replacement of Vandercook Hall will allow for the razing of two deficient facilities Bishop and Vandercook Halls, which are articulated in our Master Plan.

6. How does the institution measure utilization of its existing facilities, and how does it compare relative to established benchmarks for educational facilities? How does the project help to improve the utilization of existing space and infrastructure, or conversely how does current utilization support the need for additional space and infrastructure?

Using standard utilization measures both in terms of weekly hours used (industry standard is 20 to 35 hours per week, depending upon the specialty lab) and station occupancy percentage (85 percent standard), current facilities are fully utilized. The current facility restricts class sizes, while the new Center for Virtual Learning will allow for larger classes and more flexible configuration, both of which will make the facility more learning-friendly and greatly increase its utility and efficiency.

7. How does the institution intend to integrate sustainable design principles to enhance the efficiency and operations of the facility?

Ferris State University has actively practiced sustainable and energy-efficient design in its capital construction projects for nearly two decades. In 2000, the United States Green Building Council created the Leadership in Energy and Environmental Design (LEED) rating system that established various levels of sustainable performance. Since the inception of LEED, Ferris State University has modified its design processes to follow LEED protocols. All of the University's recent capital projects have achieved LEED certification. Five of our most recent projects—new construction of the West Campus Apartments, renovation of the University Center, new construction of the East Campus Suites, new construction of the Michigan College of Optometry building, and the restoration of the historic Federal Building in Grand Rapids—achieved Gold-level LEED certification. It is our goal that all University construction projects achieve minimally Silver-level LEED certification and that is the expectation for this project.

Additional sustainable design items will include high-efficiency lighting, high-efficiency HVAC units, interior-finish materials (such as carpets) that feature highly recycled content and low-emitting volatile organic compounds, and toilet rooms that will incorporate low-water consumption fixtures.

8. Are match resources currently available for the project? If yes, what is the source of the match resources? If no, identify the intended source and the estimated timeline for securing said resources?

Yes, the University is prepared to provide its twenty-five percent capital outlay funding match upon project approval, made possible in part by cost-savings through elimination of the costly upkeep of outdated and inefficient facilities, fundraising activities, and if needed, University reserves.

9. If authorized for construction, the state typically provides a maximum of 75% of the total cost for university projects and 50% of the total cost for community college projects. Does the institution intend to commit additional resources that would reduce the state share from the amounts indicated? If so, by what amount?

The University is prepared to provide its twenty-five percent match of the capital outlay funding upon project approval. Pieces of the academic programs in this proposal are located in three other buildings. Once vacated, these spaces will be repurposed for academic use from University funds outside of this project's cost. The University has completed the planning needed for State approval and final funding. We will continue to aggressively move forward with all planning before approval is received. Planning in this fashion assures that

our capital outlay request is as accurate as possible and reduces the time from approval to construction to instructional use. Given the rapid, continued increase in building cost, it is important to fund and construct this building as soon as possible.

10. Will the completed project increase operating costs to the institution? If yes, please provide an estimated cost (annually, and over a five-year period) and indicate whether the institution has identified available funds to support the additional cost.

No. Current operating support from Bishop Hall will be allocated to the Center for Virtual Learning. Given the costs to sustain these antiquated facilities and address their deficiencies on an ongoing basis, this project will reduce operating costs.

11. What impact, if any, will the project have on tuition costs?

None. The University is strongly committed to affordability and reducing student debt. Tuition is not used to cover construction costs.

12. If this project is not authorized, what are the impacts to the institution and its students?

If this request is not funded, the programs would continue to be taught in their present locations. The current limitations to online education will remain. The current facilities hinder learning, limit enrollment growth, inhibit student recruitment, create considerable maintenance challenges, are expensive to keep open, and have life/safety issues for the faculty and staff who work there and the students who are educated there.

13. What alternatives to this project were considered? Why is the requested project preferable to those alternatives?

The University considered renovating and expanding Bishop Hall; however, that building has many shortcomings that cannot be remedied through renovation. Very low floor-to-ceiling heights make the installation of necessary mechanical and life-safety equipment virtually impossible. The renovation of the existing residence hall for instruction was done within the narrow footprint of the existing residence hall facility. These size limitations, coupled with support columns in a building of six floors, create a very poor learning environment. Because of the nature of the site, the cost to add the necessary academic space would be prohibitive, while the overarching challenges of the building would continue to exist. The proposed replacement of Vandercook Hall, a low-rise building, will include creating a broader

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footprint, and is more cost effectively accomplished. These considerations, plus a more appropriate facility located in the heart of the academic core of campus, are required to meet the programmatic needs of the University. Initially we proposed a renovation of Vandercook Hall, but now understand that new construction brings greater value with fewer ADA issues.

Ferris' Center for Virtual Learning represents a bold and innovative vision for educating the knowledge-workers of the 21st century. By creating a home for online learning at Ferris, the continued growth of flexible, innovative and adaptive educational delivery methods will be supported, providing access to education to citizens across Michigan - when and where they need it. By bringing together programs that have shared interests and objectives, this state-of-the-art environment will encourage innovation and cross-disciplinary collaboration. It supports high-tech, high-demand business, industry, and community needs and will help expand the talent pool in these occupations. As a career-centered university, Ferris State sees these programs at the core of our mission. This facility will allow us to better serve our State, its citizens and economy, both now and in the future.