

Capital Outlay Project Request

Fiscal Year 2017

Grand Valley State University



**FISCAL YEAR 2017
CAPITAL OUTLAY PROJECT REQUEST**

Institution Name: Grand Valley State University

Project Title: Health & Medical Sciences Laboratory and Classroom Building

Project Focus: Academic Research Administrative/Support

Type of Project: Renovation Addition New Construction

Program Focus of Occupants: Health Professions - Nursing - Medical Engineering - Computer Based Analysis

Approximate Square Footage: 160,000

Total Estimated Cost: \$70,000,000

Estimated Start/Completion Dates: April 2017 & July 2019

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
Is the requested project focused on a single, stand-alone facility? Yes No

Describe the project purpose.

Grand Valley State University is Michigan's largest producer of graduates in the health professions: nursing, occupational therapy, physical therapy, physician assistant, biomedical engineering, speech-language pathology, therapeutic recreation, radiation therapy and public health. GVSU offers bachelors, masters and doctoral degrees in these programs. More than a third of Grand Valley's students are enrolled in health, STEM, or gateway programs for these and other related professions. GVSU's facility for the health sciences (Cook-DeVos Center for Health Sciences) opened in 2003 and is inadequate to meet current and future demand.

The continued growth in academic credit hours within the the health sciences has outstripped existing teaching and research lab spaces. The current utilization rate is estimated to be 80% higher than the accepted academic practice of 35 hours per week.

- Cook-DeVos Center for Health Sciences opened in Fall 2003 with 17,000 credit hours; by school year 2014-2015 credit hours grew to 50,000.
- Health Sciences graduates in 2003-2004 totaled 138; by 2014-2015 the Health Sciences graduated 2,011 students representing 37% of all GVSU graduates.
- In 2003, GVSU offered eight health-related degree, major, or certificate programs; as of 2014-2015 GVSU offers 41 health-related degree, major or certificate programs.



Describe the scope of the project.

We propose to construct a 160,000 square foot laboratory, classroom, and faculty office building on the GVSU Pew Grand Rapids campus, on university property adjacent to the GVSU Cook-DeVos Center for Health Sciences (CHS) on Michigan Street NE; this area is the city's "Medical Mile" and hosts numerous other hospital, medical, and research activities, among them Spectrum Health, a nationally ranked medical care facility, which has four hospitals located within one city block of the existing CHS. In close proximity are the Michigan State University College of Human Medicine, Ferris State University's pharmacy education program, and Van Andel Research Institute (a nationally recognized cancer research center). The Center for Molecular Medicine (a joint venture of Spectrum Health and Van Andel Institute), Mercy Health-Saint Mary's Campus, and Mary Free Bed Rehabilitation Hospital are located nearby.

- The programming from CHS has become an essential source of qualified clinical students, interns, research assistants and graduates supporting these and other medical providers.
- Additionally, our location has allowed connections between the local K-12 school districts aimed at bringing more students into the medical programs. Even for the students who choose to not attend college, the exposure has resulted in many finding their way into the support side of health care; local labs dedicated to sample processing are benefiting from existing academic structures and we expect this trend to continue.
- Health care providers are collectively the largest employers in Grand Rapids (a significant change from the city's former manufacturing employment base) and Grand Valley is their resource for trained professionals. The university must continue to meet their current and future needs for

additional employees. As nearly 90% of Grand Valley's graduates remain in Michigan to begin their careers or attend graduate school, GVSU is uniquely positioned to meet employer demand now and in the future.



Please provide detailed, yet appropriately concise responses to the following questions that will enhance our understanding of the requested project:

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

For three decades, Grand Valley has been the fastest growing of the state's 15 public universities, moving in rank from 11th to 4th in total enrollment. In the Fall of 2015, the university reached an all-time high enrollment of 25,325 students and a record freshman class of 4,568. More than one-third of Grand Valley students are enrolled in the health sciences or related gateway programs for careers in nursing, physical therapy, occupational therapy, biomedical sciences, physician assistant studies, public health, radiologic and imaging science, and speech/language pathology.

Employer demand in Michigan for graduates of these programs continues to grow and Grand Valley must expand capacity in order to meet current and future employer need. Toward that end, the university has purchased more than 14 acres of land adjacent to the Medical Mile to enable expansion of our health campus in coming decades. This significant investment confirms the university's intention to remain the state's largest provider of highly trained health care professionals. When constructed, the proposed project will enable the university to expand current degree programs and bring on line the following new academic programs:

- Clinical Dietetic Program serving 48 to 60 students per cohort
- Genetic Counseling serving 36 to 48 student per cohort
- Aquatic Therapy Program serving 24 to 36 students per cohort
- Gross Anatomy Lab serving 24 to 36 students per cohort (the intent is to simulate this training using state of the art simulation technology)

This will allow the university to expand a specific teaching format which has been developed to address a bottleneck which exists outside the university's control. Within the last decade, most medical institutions have, as a result of funding reductions, abandoned the traditional commitment to student education within their walls. These practicums had been the exposure point for students to the sick. With this activity being curtailed, the need still exists. A Simulated Environment approach has been developed to replace this education component. At GVSU, we use a standardized patient, specifically trained, to stand in for the traditional sick patient. We simulate the various environments which may exist within the health delivery system. This technique spans life stages from newborn to the aged. We work with accrediting bodies to have the training formats accepted; the accrediting bodies have altered their expectations and accept this as part of the training programs. Last year alone, we executed more than 4,000 such simulations and we expect to increase this number in the coming years. These simulations are a six-day-per-week event in the existing building and they start at 7 a.m. and end after 9 p.m.

<http://www.gvsu.edu/kcon/>
<http://www.gvsu.edu/engineering/biomed/>
<http://www.gvsu.edu/shp/>

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

There have been two major limitations to GVSU’s ability to respond to a regional and state need to educate more students and offer additional programs in the health field. The first limitation has been a shortage of lab space. Students were having a difficult time qualifying for our health programs because we did not have enough lab space to offer the courses that are prerequisites for our health programs. With the help of the State, that limitation has been addressed: a new laboratory science classroom building in Allendale came on line August of 2015 and we will be able to prepare more students and do so more effectively. However, the second limitation still remains: the current CHS building is at capacity, and we have had to lease space to house faculty. We cannot significantly increase the number of students in programs, nor can we add new programs

without expanded laboratory and skills teaching space. This is an especially difficult situation as we receive far more applications for our health programs than we can currently accommodate. GVSU is committed to the highest levels of academic rigor, as evidenced by our exceptionally high pass rates on the national health professions exams (99% passage rate for students taking the initial board certification tests). Increasing our student capacity will in turn add to the highly trained professionals that serve the Michigan community. More specifically, the new building will provide space for:

- 16 new labs and associated preparation spaces to support new academic offerings,
- 15 new classrooms and seminar rooms to support the new labs,
- 50 new faculty and staff offices to support the new faculty hired as a result of the new academic offerings,
- 20 new equipment storage and support spaces for the faculty and staff associated with the new programs,
- 10 conference and meeting rooms to support the programs and interaction with the local medical community,
- 10 student study and support spaces for the students enrolled in the new programs, and
- assorted spaces necessary to support the building, and its occupants.



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

Following the construction of the new building, the objective is to relocate some of the Kirkhof College of Nursing faculty from the existing building into the new building. Space vacated by this move will permit the university to expand the space in the Cook-DeVos Center now allocated to the simulation programs. Given the increasing demand for students skilled in care techniques, the university has implemented a program where extensive simulation is used to assist in the education and training of the students. This simulation activity is designed to meet the accreditation requirements and better manage the cost of student training. The cost of this renovation is not included in the proposed new construction.



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

The existing CHS building will need to be upgraded to bring it into conformance with changes that have occurred in medical education since its opening nearly 15 years ago and which will be deployed in the proposed new building. These technologies are expected to include state-of-the-art imaging to avoid traditional reliance on cadavers, interactive displays, big data manipulation for research activities, and labs outfitted to develop skills associated with the trend of miniaturization of medical devices.

5. 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?

GVSU measures classroom occupancy and seat utilization for all university-owned instructional space. On average, the university's classrooms are occupied well in excess of generally accepted standards. Given the space limitations, we expect the current utilization to increase as we continue to offer more classes without the benefit of additional space. We have leased more than 30,000 square feet of private office space nearby to support additional faculty and staff; however, teaching and lab space is not available for rent. New construction is therefore unavoidable.

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

In December 2005, the Governor of the State of Michigan issued an executive order requiring construction at State supported institutions to be consistent with applicable LEED® Standards. Grand Valley State University has embraced this directive and continues to construct all projects to LEED® standards. To date, the university has been granted LEED® certification on 21 projects totaling 1,276,717 square feet. At the present time, we have two projects under construction with a commitment to certify them to LEED® Silver or better. We have two projects in design stage with the same certification intent.

We meet or exceed standards for storm water management and standards for grounds operation. Grand Valley State University successfully employs numerous alternative and renewable energy practices to reduce energy consumption in all of its facilities. GVSU has become a partner in Consumers Energy's Solar Gardens project -- the largest utility-sponsored solar electricity generation installation in Michigan -- and a significant portion of solar energy will be used in this and in other GVSU facilities. The Solar Garden is being constructed in Allendale on land owned by the university and leased to Consumers Energy for this purpose. The university has added solar energy management as a subject taught in its Sustainable Energy certificate program.

7. 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. It is expected the required match resources will be a blend of private donations, GVSU capital, and GVSU bonding serviced with general fund revenue.

8. 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 intends to commit all funding in excess of the projected maximum of \$29 million from the State of Michigan. This commitment is identical to that made in our previous participation in State financed buildings. We recognize the limitations of State funding and are grateful that local donors continue to assist the university with its facility needs. This commitment puts the university's share of this proposed project at more than 50% of total cost.

9. 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.

The operating costs of the completed project will be paid from the university's general fund budget. Estimated annual operating cost is at approximately \$2.0 million with an estimated five-year total of \$10.0 million. Additional operating revenue to cover this expense will be derived from increases in student credit hours which result from the new and expanded academic programs.

With a continuing focus on the cost of building operations, the university, during the design phase, will concentrate on plans that will reduce the long term operating costs of the new building. Our current design processes include numerous features to reduce operating costs. Where we can mitigate or avoid cost through design and equipment selection, we approach it as a design solution rather than an after the fact search for funding to own and operate the building. This is consistent with our long standing objective to be the most

efficiently operating university in the State of Michigan -- a status confirmed in the three most recent higher education appropriations measures.

<http://www.gvsu.edu/accountability/>

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

None; Grand Valley has a long-standing reputation for completing its facility projects on time and on budget which enables us to make and to keep this important commitment to our students.

Our completed projects are always consistent with initial proposals and open at full capacity to meet pent-up demand. We are known for our respectful relationship with staff in Lansing that manage capital outlay projects; our history is of clear compliance with DTMB requirements and expectations.



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

The existing structures are fully subscribed and do not have the capacity to accommodate current and future growth. If not authorized, the negative impact will fall on job providers unable to fill open positions, as well as on students qualified for, but unable to enter Grand Valley health programs that do not have capacity for additional enrollment.

Grand Valley has altered its academic programming to expand to evening classes, weekend plus online programming, remote programming to our Traverse City location, hybrid offerings, and other methods to enroll the students and keep them on a timely graduation path. These methods accommodate the lecture portion of the curriculum but the critical lab components and training cannot be accomplished. The need for well-equipped labs and classrooms still remains.

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

Existing structures have been repurposed to relieve the burden on the existing building. This includes the relocation of faculty from the building so space could be used for student practicums. Storage functions, which are essential to some of the programs, have been relocated off campus. Program activities have been curtailed to fit within the available space. The possibility of scheduling classes at other GVSU buildings has been assessed and is not an effective solution because the distances would add too much time to the students' day.