Agendum
Oakland University
Board of Trustees Formal Session
October 11, 2021

FISCAL YEAR 2023 FIVE-YEAR CAPITAL OUTLAY PLAN AND FISCAL YEAR 2023 CAPITAL OUTLAY PROJECT REQUEST A Recommendation

- 1. <u>Division and Department:</u> Academic Affairs, Finance and Administration, and Facilities Management Department.
- 2. <u>Introduction:</u> Annually, Oakland University (University) is required to submit its Five-Year Capital Outlay Plan (Plan, Attachment A) and top priority Capital Outlay Project Request (Project Request, Attachment B) to the State of Michigan, State Budget Office. The submissions must include a five-year capital plan, long-term projections for enrollment, staffing and program development, and other information designed to help the State understand the University's capital needs.

Colleges and universities submit only their top priority Project Request. The University is submitting the Science Complex as its Project Request. The Plan and Project Request are required to be submitted to the State Budget Office by October 29, 2021.

- 3. <u>Previous Board Action:</u> The Board of Trustees (Board) approved the Fiscal Year 2022 Five-Year Capital Outlay Plan and Fiscal Year 2022 Capital Outlay Project Request on October 12, 2020.
- 4. <u>Budget Implications:</u> If the Project Request receives State funding approval, bonds would be issued to fund the required 25% match. The related debt service for the bonds would be incorporated into a future University general fund budget.
- 5. <u>Educational Implications:</u> Maintaining the University's capital assets and planning for future capital needs has a significant impact on the environment in which the University's mission is fulfilled. The University's 2023 Project Request is the transformation of existing classrooms and laboratories in the Science Complex (Dodge Hall and Hannah Hall) in support of programmatic changes in Chemistry, Physics, Biological Sciences, Engineering (Mechanical, Electrical, Computer and Industrial), the College of Arts and Sciences, School of Medicine, Eye Research Institute, and associated programs. These areas have known accessibility and deferred maintenance issues. Existing utility systems are not adequate to handle the increasing needs of the programs. This project would transform Science, Technology, Engineering and Mathematics (STEM) spaces into modern classrooms and laboratories that will enhance student learning and success by allowing instructors to engage in problem-based learning and develop critical thinking and problem-solving skills.
- 6. **Personnel Implications:** None.

Fiscal Year 2023 Five-Year Capital Outlay Plan And Fiscal Year 2023 Capital Outlay Project Request Oakland University Board of Trustees Formal Session October 11, 2021 Page 2

7. <u>University Reviews/Approvals:</u> The Plan was prepared by Facilities Management and reviewed by the Vice President for Finance and Administration, and President. The Project Request followed the same process, but was also reviewed and endorsed by the University Senate's Campus Development and Environment Committee (CDEC), Dean of the College of Arts and Sciences, and Executive Vice President for Academic Affairs and Provost.

8. Recommendation:

RESOLVED, that the Board of Trustees approves the submission of the attached Fiscal Year 2023 Five-Year Capital Outlay Plan and Fiscal Year 2023 Capital Outlay Project Request to the State of Michigan, State Budget Office, as representative of Oakland University's capital budget needs.

9. Attachments:

- A. Fiscal Year 2023 Five-Year Capital Outlay Plan
- B. Fiscal Year 2023 Capital Outlay Project Request

Submitted to the President on _____, 2021 by

Britt Rios-Ellis

Executive Vice President for Academic Affairs and Provost

John W. Beaghar

Vice President for Finance and Administration and Treasurer to the Board of Trustees

Recommended on ________, 2021 to the Board of Trustees for Approval by

Ora Hirsch Pescovitz, M.D.

President



ASPIRATION & INNOVATION

Fiscal Year 2023 Five-Year Capital Outlay Plan





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Mission Statement

Oakland University cultivates the full potential of a diverse and inclusive community. As a public doctoral institution, we impact Michigan and the world through education, research, scholarship, and creative activity.

Vision Statement

Oakland University will unlock the potential of individuals and leave a lasting impact on the world through the transformative power of education and research.

Strategic Goals

- 1. Foster student success through a robust teaching and learning environment and comprehensive student services.
- 2. Be recognized as a strong research and scholarly environment focused on creative endeavors and on the discovery, dissemination, and utilization of knowledge.
- 3. Become a leader in serving the needs and aspirations of our communities and region through expanded community relationships, institutional reputation and visibility, and engagement.
- 4. Advance diversity, equity, and inclusion in an environment of mutual trust and respect at all levels of the institution and facilitate opportunities and success for all community members.

Instructional Programming

Oakland University is a doctoral/research University located in Rochester, Michigan, within Oakland County. Through unique and distinctive academic experiences, Oakland is preparing students to make meaningful and substantial contributions to the workplace, academia and the community.

An Engaged University

Oakland University is the only comprehensive, doctoral-level university located in Oakland County, Michigan.

Recognized as one of the country's 135 doctoral research universities by the Carnegie

Foundation for the Advancement of Teaching, the University offers students

opportunities to work directly on research with expert faculty.

Through a multitude of partnerships with hospitals, Fortune 500 companies, individuals, cities, government agencies and educational institutions, Oakland helps communities solve problems and build thriving, sustainable businesses. These associations reward students with internship and coop opportunities and provide University researchers access to the latest technology tools. Oakland's leadership with these partnerships also significantly impacts economic development and commercialization opportunities.

Oakland, in partnership with Beaumont Health System, opened the first M.D.-granting medical school in Oakland County with an inaugural class of 50 students in August 2011. The fall 2020 cohort enrollment includes 125, and the school recognized 116 new doctors at the May 2021 commencement. The first new medical school started in Michigan in a generation, the Oakland University William Beaumont School of Medicine (OUWB) is expected to help boost the local and regional economies by generating new jobs and attracting medical, business



and academic leaders from around the nation. OUWB was designed to transform medical education by emphasizing holistic physician development – a patient-centered approach to the delivery of health care that is grounded in evidence-based medical science.

nasizing holistic patient-centered health care that sed medical nes, Oakland programs

In related academic disciplines, Oakland offers strong undergraduate programs founded in the liberal arts and basic

sciences. The University is widely recognized for excellence in biomedical sciences and other health-related programs. Oakland is home to the School of Nursing and School of Health Sciences, the world renowned Eye Research Institute, and highly-regarded programs in bioengineering, informatics and nanotechnology; health and environmental chemistry; medical physics and biological communication.

Oakland's other professional schools (Business Administration, Education and Human Services, Engineering and Computer Science), as well as the College of Arts and Sciences, have been recognized nationally for a wide array of accomplishments.

A Leading University

Oakland University is recognized as a student-centered, doctoral research institution with a global perspective. It engages students in distinctive educational experiences that connect to the unique and diverse opportunities within our region and beyond.

Through faculty-driven and student-engaged research, scholarship and creative activity, Oakland University advances knowledge and art in a diverse and inclusive environment. Oakland is also an active community partner, providing thriving civic, cultural, and recreational opportunities and valuable public service.

In addition to equipping graduates with a broad base of knowledge and top-notch intellectual and experiential

opportunities, Oakland is equally dedicated to the development of students in all aspects of their lives. Through a carefully thought-out collection of campus life experiences, the University gives students opportunities to conduct research and participate in internship and co-op experiences.

A Growing University

Oakland continues to thrive as a public institution with:

- Increased underrepresented minority student enrollment since 2014
- 890 international students enrolled in fall 2019
- Six residence halls and three apartment complexes

Oakland has continued to keep pace with growth by providing new and advanced academic, research and support facilities. Recent capital projects have included:

- construction of the Human Health Building
- construction of the Engineering Center
- renovation of Hannah Hall laboratories
- renovation of O'Dowd Hall to provide additional classrooms and space for the Oakland University William Beaumont School of Medicine
- creation of the First Year Advising Center
- construction of the 504-bed Oak View residence hall, which includes a new home for the Honors College
- upgrades to the Recreation and Athletics Outdoor Complex, creating a track and field complex, tennis courts, and synthetic turf soccer fields
- construction of a second parking structure with 1,245 spaces
- construction of an Athletic Dome through a publicprivate partnership to provide an indoor athletic practice facility



Oakland University Engineering Center

- completion of the 151-foot-tall, 49-bell Elliott Tower (100 percent funded by Hugh and Nancy Elliott)
- major renovation of the Oakland Center, a student union facility that includes 60,000 square feet of studentfocused spaces
- completion of Hillcrest Hall, a student housing facility that includes 750 beds and a dining facility with the capacity to accommodate 750 residents, students, and staff. The building also includes four general-purpose classrooms with 200 seats

A campus master plan accounts for expected growth and includes:

- renovation and restoration at Meadow Brook Hall
- a third parking structure
- housing facilities to expand the number of beds on campus
- the identification of potential building sites
- a research and development park
- a new humanities facility

Several upgrades, renovations and technological improvements to various classrooms, laboratories and common



areas were recently completed. Primary laboratories to receive extensive renovation were in chemistry, biology, physics, and art and art history – all programs that have experienced large increases in student enrollment or are key components of Oakland's biomedical and health care academic offerings.

Applied Research and Economic Development

Oakland offers knowledge, resources and programs that help companies grow. With its research labs, facilities, faculty and students, the University assists companies in transforming ideas into new business developments, turning dreams into reality and giving vitality to vision. At the OU INC and Macomb-OU business incubators, the University is committed to assisting startups and spin-offs to locate and secure technology development, business planning and capital acquisition, as well as providing opportunities for the licensing of Oakland University's intellectual property. To foster emerging discoveries, the University features several noted research centers, including the:

- Eye Research Institute (ERI)
- Fastening and Joining Research Institute (FAJRI)
- Galileo Institute for Teacher Leadership
- Center for Autism
- Center for Biomedical Research (CBR)
- Automotive Tribology Center (ATC)
- Center for Applied Research in Musical Understanding (CARMU)
- Center for Integrated Business Research and Education (CIBRE)
- Center for Robotics and Advanced Automation (CRAA)
- Center for Social and Behavioral Research (CSBR)
- Clean Energy Research Center (CERC)
- Ken Morris Center for the Study of Labor



and Work

Institute for Stem Cell and Regenerative Medicine (ISCRM)

OU SmartZone Business Accelerator: OU INC is a SmartZone Business Accelerator in collaboration with the City of Rochester Hills and Michigan Economic Development Corporation, and partners with Oakland County and Automation Alley. OU INC provides entrepreneurial resources and strategic business solutions for developing business ventures and accelerates ideas to market. It fosters a healthy environment for the growth of new startup companies and provides support for existing entities through its facility and resources. The OU INC facility provides business resources, including those offered by the Clean Energy Research Center and the Integrated Resource Center, as well as access to the expertise and skills of staff, faculty, students and corporate partners.



Fastening and Joining Research Institute (FAJRI): A collaboration between Oakland University, the U.S. Congress, the U.S. Army Tank Automotive Research and Engineering Center (TARDEC), the National Science Foundation and Fiat Chrysler Automobiles, FAJRI is an externally funded, academic, nonprofit research facility that is solely dedicated to exploring fundamental and applied research to develop and disseminate new technology for the fastening and joining of materials such as metals, composites, polymers and biomaterials.

Center for Robotics and Advanced Automation: Funded by the National Science Foundation, the Big Three automotive companies and the Department of Defense, the center works on smart control technology with industrial and defense applications, intelligent robotics, homeland security technology, suspension systems, digital shearography, and global satellite communication technology and systems.

Eye Research Institute (ERI): This unique center of ophthalmic research collaborates with the department of ophthalmology at Beaumont Health System on research and provides a joint ophthalmology residency and fellowship program. Since 1968, ERI scientists have received over \$50 million in support from private and federal health agencies.

Center for Biomedical Research: This center provides core facilities and pilot funding for the applied biomedical research efforts of Oakland University's life scientists. Key research includes eye diseases, chemical toxicology,

medical physics and biological communication.

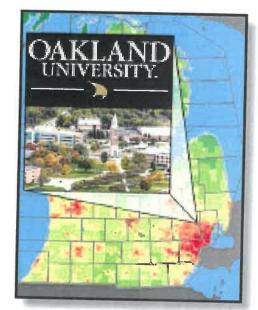
Partnerships

Oakland has leveraged its unique Auburn Hills/Rochester Hills/Rochester location in the heart of Michigan's technology and automotive corridor by forging strategic partnerships with hospitals, Fortune 500 and international companies, individuals, cities, government agencies and educational institutions located as near as Southeast Michigan and as far as other countries. The benefits of these associations are far-reaching: students are rewarded with internship and co-op opportunities, University researchers have access to the latest technology tools, and the region benefits through new business opportunities and a stronger economy.

Eugene Applebaum College of Pharmacy and Health Sciences: An alliance between Oakland University's School of Health Sciences and Wayne State University (WSU) provides Oakland's undergraduates a unique opportunity to earn a doctorate in pharmacy. Students can earn their bachelor's degree at OU taking pre-pharmacy courses. During their senior year at OU, students take pharmacy classes at WSU. Their senior year at OU is also their first year at WSU, giving students the opportunity to complete a doctoral program in seven years instead of eight, saving time and money.

Wayne State University Law School (Wayne Law): Oakland University's Department of Political Science in the College of Arts and Sciences, and the Bachelor of Integrative Studies Program, have both partnered with Wayne Law to offer undergraduate students the opportunity to obtain two degrees in a shorter time frame. This will allow students from premier and accredited institutions to obtain degrees at a lower cost. During the fourth (senior) year at Oakland University, students will attend Wayne Law and begin their first two semesters of credits at Wayne Law, transferring back to OU for completion of their bachelor's degree. Students must take the Law School Admission Test and meet all other Wayne Law admission requirements.

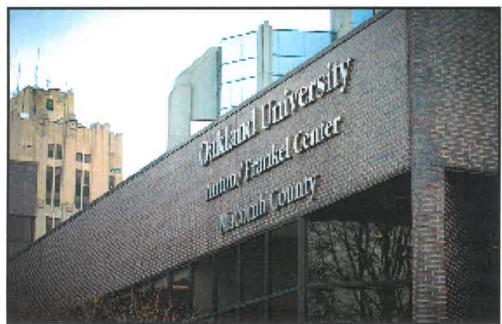
Ascension Providence Rochester: Ascension Providence Rochester has funded a \$2 million endowed professorship in Oakland University's School of Nursing that



is changing the clinical education and training of nursing students. The nursing professorship conducts patient-focused research on the science and best practices of nursing, an area that has not received much attention to date. Students in the program conduct all of their clinical rotations at Ascension Providence Rochester using the relationship-based care (RBC) model. RBC moves from an individual expert dynamic to one of engaging patients, identifying options, relaying experiences and empowering patients and their families to make the best treatment decisions.

OU Anton/Frankel Center: Oakland University expanded its reach in Macomb County with the opening of the Anton/Frankel Center (AFC) in fall 2011. With 25,422-square feet of space to house classrooms, offices for advising, student support services, faculty and staff, the AFC signals OU's continued commitment to bringing exceptional academic opportunities to the people of Macomb County. Programs offered at the AFC include bachelor's degrees in criminal justice, psychology, marketing and social work; and master's degrees in public administration and business administration.

The University of Botswana: Oakland University's Department of Counseling in the School of Education and Human Services, in partnership with the University of Botswana (UB), provides student and faculty exchanges, video conferences, and partnerships in research, scholarship, teaching and service.



Israel's Max Stern Academic College: Oakland University offers global experiences for students and faculty through a myriad of overseas programs, including a partnership with Max Stern Academic College in Emek Yezreel, Israel. Students and faculty on both campuses will experience different cultures through research opportunities, academic coursework and student life.

The Pawley Learning Institute: Established through a gift from Dennis Pawley, an OU alumnus and former chair of the OU Board of Trustees, the Pawley Learning Institute provides instruction and

research on concepts and training that improve organizational practices in business, education and public service sectors.

Instructional Technology

Access to user friendly instructional technology resources in the classroom are a standard expectation of Oakland's faculty and students. All general purpose classrooms and a growing number of conference rooms and labs are equipped with enhanced instructional technology resources.



Dennis Pawley (center) of the Pawley Learning Institute

University classrooms are equipped with the following:

- Multimedia workstation containing: a PC computer hardwired to campus network; a digital document camera; an electronic whiteboard; a DVD player; an interface to plug in a user provided laptop computer or mobile device, an interface to plug in an accessory analog audio/video device; sound system; and an electronic control system for managing the room's systems and components.
- · Ceiling mounted video/data projection system connected to the multimedia workstation.
- · Wireless network access.
- A lecture capture system (Panopto) is also available to record classroom instruction and post recordings online for student review.
- · Room microphones and video cameras are also either currently installed or available on an as-needed basis.

Oakland provides course offerings via distance education. The three modes of delivery include live two-way interactive video between two or more sites, synchronous web-based instruction to individual students, and asynchronous web-based online learning. The Internet is the current transmission vehicle for the University's distance education course offerings.

Software based video collaboration tools such as Zoom, YuJa, and Google Meet are also available for the University community to conduct business at a distance. These types of technologies save time and money by providing a communications tool that allows for the sharing of voice, video and content between two or more computers or mobile devices. The growth in web-based learning and communications models will continue to

expand in the foreseeable future.

Oakland University uses Moodle for their web-based Learning Management System (LMS). Moodle can be used as a full web-based solution where no face-to-face meetings are required, or as a web-supplemented course resource that enhances the standard face-to-face classroom contact between faculty and students. Moodle offers online activities such as discussion boards, chat rooms, quizzes, assignments, grade book, file storage, journals, workshops, and lessons. Moodle is also the portal to access lecture capture and video

conference recordings.

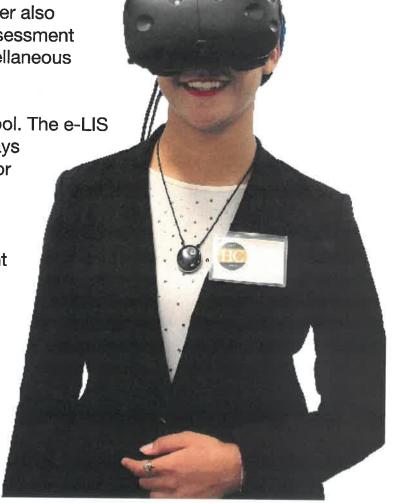
Another separate server is set up with Moodle, called ePortfolio, which offers digital space for student, faculty, and staff portfolios. That same server also has a copy of Moodle called eSpace, which contains department assessment activities, research, academic committees, advising, and other miscellaneous academic activities.

Oakland is also utilizing 3D spaces and virtual reality as a teaching tool. The e-LIS Virtual Reality Lab allows faculty to use virtual reality in innovative ways for an immersive learning experience. The multi-headset lab allows for research and programming opportunities for faculty and students.

During the Winter 2021 term, Oakland offered 707 course sections that were fully online to 8,644 distinct students (~53% of total student body). There were 2,357 courses (~77% of all course sections) that provided some level of web-supplemented activity. Oakland also offers 27 online degree and certificate programs. Akindi, i>clicker, and other software are supported centrally for grading exams and processing course evaluations.

Technology Enhancements

Oakland University is dedicated to enhancing education through the use of contemporary and emerging technologies, and 14





continues to commit significant resources to technological enhancements, including:

- Complete administrative software suite.
- Online registration.
- Extensive wired and wireless network to all classroom buildings and surroundings.
- Elliott Hall of Business and Information Technology, a 74,000-square foot, technology-rich facility.
- The Pawley Hall of Education & Human Services Building with 24 enhanced technology classrooms.
- Interactive television and

video conferencing capability to supplement instruction and administrative program activity.

- · Online web-based learning management system utilizing Moodle.
- Other teaching and learning software, such as Zoom, YuJa, Panopto, Akindi, Camtasia, i>clicker, and H5P.
- · A Virtual Reality lab and lightboard in the e-LIS office in Kresge Library.
- An Information Commons in Kresge Library with a significant number of computer workstations for the patrons.
- A remodeled O'Dowd Hall has become the home of the Oakland University/William Beaumont School of Medicine, and includes the addition of significant technology enhancements within classrooms and meeting spaces.
- Oakland's Macomb County site is housed within the Anton/Frankel Center located in Mount Clemens and provides 25,422 square feet of classroom, office and meeting space.
- Major classroom renovation projects that included significant technology enhancements in older campus buildings continue to be a priority objective.



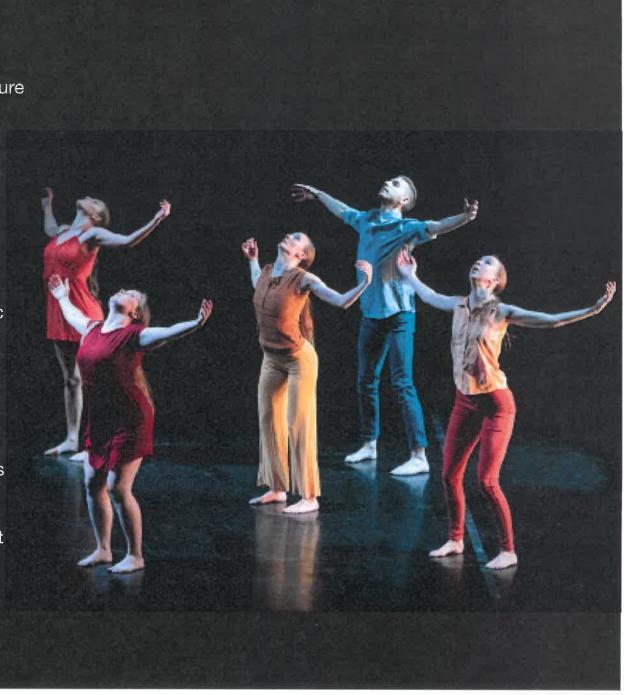
- · A Human Health Building (HHB) provides the University community with all-digital classroom technology systems within all instructional spaces, a state-of-the-art Nursing SIM lab, and many technology enhancements within specialty laboratories. The HHB has been recognized as a LEED Platinum building, the first Platinum building on a University campus in the State of Michigan.
- · An Engineering Center building opened in the fall of 2014 with state of the art instructional facilities, labs and resources.
- Nine instructional classrooms opened during the fall of 2015 which were created within existing University space that was repurposed and remodeled to include the most current instructional technology resources.
- Oakland is a partner with the City of Auburn Hills in the collaboration of a University Center which opened in January of 2014.
- The University is also partnering with the Pontiac Public Schools system and during the summer of 2015 created a collaboration center and classroom in downtown Pontiac.
- During the summer of 2017 five general purpose classrooms were converted to active learning classrooms with new furniture that supports group work and collaboration activities. In addition, new technology was added to support Modern Languages courses and lab activity with a focus on audio listening and recording.
- Progress with Accessibility has been made during the 2019/2020 academic year with a focus on faculty development and the creation of instructional content, and the adoption of Ally, a tool that shows faculty how to make their Moodle courses accessible. In addition, web sites are being updated across the campus, and video captioning processes are being defined along with vendor support identified. A committee was formed on Universal Design in Learning (UDL) to further the University's efforts to improve Accessibility in multiple ways.

Cultural and Performing Arts

Oakland's contribution to the arts has moved beyond local boundaries to secure a place of prominence in the region. Historically, OU has had a strong performing arts program with recordhigh enrollment numbers.

The School of Music, Theatre and Dance, formerly the Department of Music, Theatre and Dance, offers more than 140 student and faculty performances throughout the academic year. Guests enjoy everything from musicals and intimate recitals to experimental plays and innovative dance performances. OU has earned a reputation for taking artistic risks, developing gifted artists, nurturing arts partnerships and achieving new heights of quality and professionalism.

Meadow Brook Hall is the sixth largest historic house museum in the United States and is renowned for its superb craftsmanship, architectural detailing and grand scale.





Built between 1926 and 1929 as the residence of Matilda Dodge Wilson (widow of auto pioneer John Dodge) and her second husband, lumber broker Alfred G. Wilson, the 110-room, 88,000-square-foot, Tudor-revival style mansion is complete with vast collections of original art and furnishings. In 2012, the U.S. Department of the Interior designated the hall a National Historic Landmark, the highest recognition for historic properties in the United States.

For more than 40 years, the **Oakland University Art Gallery** (OUAG), housed in the Department of Art and Art

History, has delivered diverse, museum-quality art to Metro Detroit audiences. From September to May, the OUAG presents up to six different exhibitions – from cutting-edge contemporary art to projects exploring historical and global themes. The gallery also offers lectures, performances, tours, special events and more. Nearly 15,000 people visit OUAG each year.

OU's **Meadow Brook Amphitheatre** hosts today's top concerts including rock, alternative, adult contemporary, pop, country, and rhythm and blues; a wine and food festival; stand-up comedians; and family entertainment.



Community Outreach

In the more than 10 years since Oakland University initiated a formal partnership with the **City of Rochester** through the Rochester Downtown Development Authority (DDA), much has been accomplished with new initiatives added over time. The partnership presents many opportunities for the OU community to benefit from joint educational and cultural programming. Areas of emphasis for students, faculty and alumni have included employment, internships, research and development projects, business development assistance, community service projects, promotions and business discounts, and opportunities to showcase the arts, theatre and music to complement classroom work. The University annually hosts the Rochester Area Chamber of Commerce's Regional Outlook Luncheon and also maintains a support partnership with the Rochester Older Person's Commission. Students, alumni, faculty and staff enjoy discounts at dozens of participating stores and restaurants through the

OU GO card. The University also partners with the Rochester Regional Chamber

of Commerce for joint programming and assistance.

Oakland proudly partners with its other neighboring communities including **Auburn Hills**, **Pontiac** and **Rochester Hills**. OU and the Pontiac community have a long history together through programs such as GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs), which helps students in the Pontiac as well as Oak Park school districts; Project Upward Bound, which helps 120 students each year finish high school and develop the social and cultural skills needed to realize their dreams and succeed in college and society; and through the Wade H. McCree Jr. Incentive Scholarship program, which assures that students who meet specific criteria will be awarded a full-tuition scholarship to Oakland when they graduate from high school.

Since 2014, OU faculty and staff, Pontiac business owners, representatives from non-profit agencies, Pontiac schools, hospitals and the Mayor's office as well as Pontiac residents and enthusiasts have collaborated in a comprehensive community advancement project called the Pontiac Initiative. All told, 74 partner organizations and roughly 500 individuals have embarked on more than two-dozen projects focusing on education; civic engagement; business, workforce development and entrepreneurship, health care and wellness; arts and culture;



and neighborhoods and non-profits.

Recently, Oakland initiated a laboratory school initiative that places University faculty and education students in Pontiac schools to help institute and maintain instruction best practices in the classroom. The initiative is developed after a highly successful model implemented in a neighboring Auburn Hills school. In addition, Oakland University and Pontiac Schools are also working together to make Parent University a valuable community resource with a program that encourages families to connect to schools and the community, providing resources that help parents become full partners in their child's education.



Oakland University is involved in various community service efforts in **Macomb County**, including the Let's Move Festival of Races in downtown **Mount Clemens** and emergency preparedness education programs. In addition, Oakland University students and staff, including the OU Dance team, Cheer team and the Grizz, participated in the annual Macomb County Santa Parade last year.

In 2020, members of the Oakland University community opened their hearts and their wallets, making generous gifts to the All-University Fund Drive. A total of 1,106 faculty, staff and retirees contributed \$\$667,684.

Academic and Student Life Enhancements

All students should have the benefit of academic support services, especially mentoring and small learning communities, aimed at helping them make the necessary academic and social adjustments to achieve collegiate success.

OU's **First Year Advising Center** connects new students with University advisers, peer mentors, graduate assistants, faculty and various support services on campus to provide a more effective student experience, especially during the critical first year.

The award-winning **Oakland University Trustee Academic Success (OUTAS)** scholarship program is a national model for retaining and graduating a diverse group of high-achieving university students. OUTAS was established **20**

to counter the declining rates of minority retention, graduation and student performance. In recent years, OUTAS students have graduated at record rates that are as high as 35 percentage points above University averages.

The **Writing Center in Kresge Library**, established through a leadership gift from OU Professor Emeritus of English Joan Rosen, assists hundreds of students each year. The Writing Center provides assistance to students to develop and incorporate effective writing and communication skills in all subject areas.

Oakland's **Honors College** offers highly motivated students an intimate, intellectually friendly and challenging atmosphere featuring small classes of 10 to 20 students. They pursue a specially designed core of general

education courses in art, literature, western civilization, social science, global perspectives, mathematics, logic, computer science, natural science and technology. The recent opening of the Frances M. Moceri Scholars House will allow high-achieving scholars to also develop leadership qualities including empathy, collaboration and vision through specialized programming. Overall, the Honors College has seen a 350% increase in enrollment over the last eight years and current freshmen achieved an average high school grade point average of 3.97.

OU has more than **300 student organizations** that encourage student involvement and social opportunities.



The Recreation and Athletics Center hosts a number of activities throughout the year in which students may get involved, including intramural and club sports, group exercise classes and wellness-related programs. This multi-purpose facility draws more than 25,000 visits per month for recreational and sports programs. New outdoor recreation and athletics facilities accommodate NCAA Division I athletic events including tennis and track and field meets, club and intramural sports competitions, and a variety of fitness and recreational activities welcoming university students, faculty, staff and community visitors.

Oakland is dedicated to the development of students in all aspects of their lives. Through a carefully thoughtout collection of campus-life experiences, the University gives students opportunities to conduct research and participate in internships and co-op experiences. In 2016, the **Office of Student Success** and **Experiential Learning Center** was developed to embrace the University's mission to "engage students in distinctive educational experiences that connect to the unique and diverse opportunities within and beyond our region." The office supports student retention by helping students make the most of their second academic year, aiding those short on credits, guiding displaced workers through the workforce development system, providing assistance to those falling behind in a course and assisting in an overall effort to help student complete their degree.

Oakland University has become the first Division I university in Michigan to formally announce the addition of a varsity esports team to its athletics program. The University also announced a unique partnership with Team Renegades, a professional esports team based at GameTime in Auburn Hills. Esports is short for "electronic sports" and is defined as competitive multiplayer video gaming. While new, and developing at the collegiate level, esports has grown exponentially among amateur and professional gamers around the world.

Undergraduate Degree Programs

College of Arts and Sciences (110)

Bachelor of Arts - CASBA (64)

40110101	
2810	Anthropology
2815	Anthropology - Modified w/Concentration in Linguistics
1055	Art History
1105	Biology
1230	Chemistry
1609	Chinese Studies
2705	Communication
1420	Creative Writing
1421	Creative Writing, Specialization in Fiction
1422	Creative Writing, Specialization in Poetry
1423	Creative Writing, Specialization in Screenwriting



1425 2875 2880	Creative Writing, Specialization in Memoir and Essay Criminal Justice Criminal Justice w/Special in Information Security and Assurance
2881 2290 3700	Criminal Justice w/Special in Homeland Security Dance Economics
1405 1410	English Modified w/Concentration in Linguistics
1451	English – Modified w/Concentration in Linguistics Film
1454	Film Production
1980	French Language and Literature
1985	French – Modified
2015	German w/Concentration in German Studies
2010	German Language and Literature
2020	German – Modified
1096	Graphic Design
1505	History
1045	Independent Major
2510	International Relations
2511	International Relations, Specialization in Foreign Affairs and Diplomacy
2512	International Relations, Specialization in Global Justice and Sustainability
2040	Japanese Language and Literature
2045	Japanese - Modified
1614	Japanese Studies
2735	Journalism
2060	Latin American Language and Civilization

1625 1700 1705 1710 1805 2205 2375 2405 2515 2516	Latin American Studies Liberal Studies Linguistics Linguistics – Modified Mathematics Music Philosophy Physics Political Science Political Science, Specialization in Campaigns
2517 2605 2615 2744 2820 2805 2825 2100 2110 1075 1084	and Elections Political Science, Specialization in Courts, Justice and Politics Psychology Psychology – Modified w/Concentration in Linguistics Public Relations and Strategic Communication Sociology Sociology/Anthropology Sociology – Modified w/Concentration in Linguistics Spanish Language and Literature Spanish – Modified Studio Art – Specialization in Drawing Studio Art – Specialization in ArtsTech/Sculpture
1080 1085 2294 2130 2871 2865	Studio Art – Specialization in Painting Studio Art – Specialization in Photography Theatre Two Modern Languages Professional and Digital Writing Women and Gender Studies

Bachelor of Fine Arts – BFA (4)

2283 Acting

2290 Dance

2285 Musical Theatre

2296 Theatre Design & Technology

Bachelor of Music - BM (10)

2360	Choral/General Music Education
2363	Choral/General Music Education/Performance
2362	Instrumental/General Music Education
2364	Instrumental/General Musical Education Performance
2265	Music – Instrumental Performance
2254	Music – Music Technology
2245	Music - Piano Performance
2247	Music - Piano Pedagogy
2248	Music - Piano Performance w/Special. in Pedagogy
2240	Music - Voice Performance

Bachelor of Science - CASBS (14)

	. ,
1905	Actuarial Science
1835	Applied Statistics
1225	Biochemistry
1105	Biology
1125	Biology - Modified w/Specialization in Anatomy
1120	Biology - Modified w/Specialization in Cell-Molecular Biology
1130	Biology - Modified w/Specialization in Microbiology
1109	Biomedical Sciences
1111	Biomedical Sciences - w/Specialization in Anatomy





1230	Chemistry
1805	Mathematics
2420	Medical Physics
2405	Physics
2530	Public Administration and Public Policy

Bachelor of Science - ENVSCI (2)

1252 Environmental Science/Specialization in Sustainability and Res. Management 1257 Environmental Science/Specialization in Environmental Health

Bachelor of Social Work – BSW (1)

2860 Social Work

K-12 Educational Programs (9)

1992	French w/K-12 Certification
2027	German w/K-12 Certification
2047	Japanese w/K-12 Certification
2122	Spanish w/K-12 Certification
1076	Studio Art - w/K-12 Specialization in Drawing
1088	Studio Art - w/K-12 Specialization in ArtsTech/Sculpture
1081	Studio Art – w/K-12 Specialization in Painting
1086	Studio Art - w/K-12 Specialization in Photography
1093	Studio Art - w/K-12 Specialization in Graphic Design



Secondary Education Programs (6)

1140	Biology w/Secondary Ed
1240	Chemistry w/Secondary Ed
1430	English w/Secondary Ed

1515	History w/Secondary Ed
1825	Mathematics w/Secondary Ed
2431	Physics w/Secondary Ed

School of Business Administration (16)

Bachelor of Science - SBABS

3100	Accounting
3715	Business Actuarial Science
3705	Business Economics
3710	Economics
3200	Finance
3210	Finance w/Special. in Wealth Management
3300	General Management
3400	Human Resource Management
3500	Management Information Systems
3510	Management Information Systems w/Special. in Bus. Analytics
3520	Management Information Systems w/Special. in Information Security Management
3600	Marketing
3806	Operations Management
3816	Operations Management w/Special. in Supply Chain Management
3826	Operations Management w/Special. in Lean/Quality Management
3836	Operations Management w/Special. in Project Management

School of Education and Human Services (2)

Bachelor of Science (2)

4120 Elementary Education

School of Engineering and Computer Science (9)

Bachelor of Science (2)

5120

5163

5020	Computer Science
5070	Information Technology

Bachelor of Science in Engineering (7)

Computer Engineering

3120	Computer Engineering
5140	Electrical Engineering
5185	Industrial & Systems Engineering
5160	Mechanical Engineering
5162	Mechanical Engineering w./Special. in Manufactu
5164	Mechanical Engineering w./Special. in Automotiv
	Engineering

School of Health Sciences (14)

Bachelor of Science

6070	Applied Health Sciences
6171	Clinical and Diagnostic Sciences
6241	Exercise Science
6242	Exercise Science: Orthotist and
	Prosthetist Assistant Studies
6042	Environmental Health and Safety
6020	Health Sciences



6177	CDS: Medical Laboratory Science
6173	CDS: Histotechnology
6175	CDS: Nuclear Medical Technology
6178	CDS: Radiologic Technology
6180	CDS: Pre-Clinical Professions (Formerly 6179 CDS: Preprofessional)
6184	CDS: Pre-Physician Assistant
6082	CDS: Pre-Pharmacy
6053	Nutrition
6054	Nutrition: Dietetics
6052	Wellness and Health Promotion

School of Nursing (3)

Bachelor of Science in Nursing (3)

7020 Nursing

7040 Nursing (Completion Sequence)

7050 Accelerated Second Degree

University Programs (1)

Bachelor of Integrative Studies (1)

7605 Integrative Studies

Bachelor of Science Offered Jointly between CAS and SECS (3)

5051 Bioengineering

5040 Engineering Chemistry

5060 Engineering Physics



Undergraduate Concentrations and Minors

CONCEN	ITRATIONS (17)	3801	Business Analytics
2885	Addiction Studies	1230	Chemistry
1435	American Studies	1240	Chemistry - Secondary Teaching
2850	Archaeology	2889	Child Welfare
1160	Endorsement Concentration in Integrated Science	1610	Chinese Studies
	(STEP)	1956	Chinese Language
1518	Endorsement Concentration in Social Studies (STEP)	1955	Chinese Language and Civilization
1270	Environmental Studies	1960	Chinese - Secondary Teaching
1995	French Studies	2841	Christianity Studies
2016	German Studies	2705	Communication
2887	Gerontology	2718	Communication and Deaf Studies
6024	Holistic Health	6056	Community Health Engagement
1705	Linguistics	5020	Computer Science
6021	Pre-Health Professional	5021	Computing
6022	Pre-Pharmacy	2875	Criminal Justice
6015	Pre-Physical Therapy	1420	Creative Writing
1152	Pre-Medical Studies - Med/Den/Opt/Vet	2290	Dance
2856	Religious Studies	2750	Digital Media Production
2855	Urban Studies	3700	Economics
		3702	Economics - Secondary Teaching
MINORS	(118)	4351	Employment Systems and Standards
3100	Accounting	1405	English
2740	Advertising	1430	English - Secondary Teaching
1605	African and African-American Studies	3850	Entrepreneurship
2810	Anthropology	6042	Environmental Health and Safety
2812	Applied Geographic Information Science (GIScience)	1266	Environmental Science
	Applied Mathematics	6240	Exercise Science
4355	Applied Leadership Skills	1451	Film
	Applied Statistics	3200	Finance
1055	Art History	1981	French Language
	Astronomy Minor	1980	French Language and Literature
1105	Biology	1990	French - Secondary Teaching
1140	Biology - Secondary Teaching	2408	Geology
3840	Business	2011	German Language

2010	German Language and Literature
2025	
2016	-
1095	
2710	. 5
	History
1515	•
6025	Holistic Health
4320	Human Resource Development
3400	Human Resources Management
3521	Information Security Management
2708	Interactive and Social Media
3302	International Management
5300	International Orientation
2510	International Relations
5070	Information Technology
2842	Islamic Studies
2030	Italian Language
2037	Japanese Language
2035	1 0 0
2040	1 3 3
2047	Japanese – Secondary Teaching
1615	•
2350	
	Journalism
	Judaic Studies
	Latin American Studies
	Lean Leadership
2864	LGBTQ Studies
1705	Linguistics
3500	Management Information Systems
3600	O
	Mathematics
1825	Mathematics - Secondary Teaching

1635 Middle Eastern Studies

2206 Music, Liberal Arts

2205 Music

2351	Music Theory
6055	Nutrition and Health
3806	Operations Management
2709	Organizational Communication
6247	Orthotist and Prosthetist Assistant Studies
2375	Philosophy
2378	Philosophy of Cognitive Science
2405	Physics
2430	Physics - Secondary Teaching
2515	Political Science
2520	Political Science - Secondary Teaching
2605	Psychology
	Public Relations
2530	Public Administration and Public Policy
2707	Relational Communication
1631	
	Sociology
	South Asian Studies
	Spanish Language
2100	,
2120	, ,
	Speech Language Pathology
1070	
	Teaching English as a Second Language
	Teaching English as a Second Language – K12
	Theatre
	Three Science
	Training and Development
	Two Science
	Urban Agriculture and Agroecology
	Wellness and Health Promotion
	Women and Gender Studies
	Writing
2355	World Music

Graduate Degree Programs (152)

Doctoral

PhD in Applied and Computational Physics

PhD in Applied Mathematical Sciences

PhD in Biological and Biomedical Sciences

PhD in Biomedical Sciences: Medical Physics

PhD in Biomedical Sciences: Health & Environmental

Chemistry

PhD in Music Education

PhD in Psychology

Doctor of Education in Organizational Leadership

Education Specialist in Leadership - campus

Education Specialist in Leadership -100% Online

PhD in Education: Counseling

PhD in Education: Early Childhood Education

PhD in Education: Educational Leadership

PhD in Literacy, Culture and Language

PhD in Computer Science and Informatics

PhD in Electrical and Computer Engineering

PhD in Mechanical Engineering

PhD in Systems Engineering

Doctor of Physical Therapy

PhD in Human Movement Science

Doctor of Nursing Practice - Post Master

Doctor of Nursing Practice - Nurse Anethesia

PhD In Nursing

Masters

Master of Arts in Biology

Master of Arts in Communication

Master of Arts in Communication 4+1

Master of Arts in English

Master of Arts in English 4+1

Master of Arts in History

Master of Arts in Liberal Studies

Master of Arts in Linguistics

Master of Arts in Mathematics

Master of Music in Conducting

Master of Music in Instrumental Performance

Master of Music in Music Education - campus

Master of Music in Music Education - 100% Online

Master of Music in Piano Pedagogy

Master of Music in Piano Performance

Master of Music in Vocal Pedagogy

Master of Music in Vocal Performance

Master of Music in World Percussion Performance

Master of Public Administration - campus

Master of Public Administration - 100% Online

Master of Public Administration 4+1

Master of Science in Applied Statistics

Master of Science in Applied Statistics 4+1

Master of Science in Biology

Master of Science in Chemistry

Master of Science in Physics

Master of Science in Psychology

Master of Science in Psychology 4+1

Master of Accounting

Master of Business Administration

Master of Business Administration - (Gen Prog) 100% Online

Master of Business Administration - 50-99% Online

Master of Business Administration - Executive MBA

Master of Science in Business Analytics

Master of Science in Information Technology Management

Master of Science in Information Technology Management 4+1

Master of Arts in Clinical Mental Health Counseling

Master of Arts in Counseling

Master of Education in Early Childhood 100% Online

Master of Education in Educational Leadership

Master of Education in Higher Education Leadership - campus

Master of Education in Higher Education Leadership - 100% Online

Master of Education in Special Education-concentration Applied Behavior Analysis

Master of Education in Special Education-concentration Autism Spectrum Disorder - 100% Online

Master of Education in Special Education-concentration Emotional Impairment - 100% Online

Master of Education in Special Education-concentration Specific Learning Disability 100% Online

Master of Education in Teacher Leadership

Master of Organizational Leadership

Master of Arts in Teaching - Elementary Education

Master of Arts in Teaching - Reading and Language Arts - campus

Master of Arts in Teaching - Reading and Language Arts - 100% online

Master of Arts in Teaching - Secondary Education

Master of Science in Computer Science

Master of Science in Cyber Security

Master of Science in Electrical and Computer Engineering

Master of Science in Embedded Systems

Master of Science in Engineering Management

Master of Science in Engineering Management -100% Online

Master of Science in Industrial & Systems Engineering

Master of Science in Industrial Applied Mathematics

Master of Science in Mechanical Engineering

Master of Science in Mechatronic System Engineering Master of Science in Software Engineering and Info

Technology

Master of Science in Systems Engineering

Master of Public Health

Master of Public Health 4+1

Master of Science in Exercise Science

Master of Science in Exercise Science 4+1

Master of Science in Safety Management -100% Online

Master of Science in Nursing - Adult/Gerontological Care Nurse Practitioner

Master of Science in Nursing - Clinical Nurse Leader - AR

Master of Science in Nursing - Family Nurse Practitioner Primary Care

Master of Science in Nursing - Forensic Nursing - 100% online

Graduate Certificate

Graduate Certificate in Applied Behavior Analysis Basic

Graduate Certificate in Applied Behavior Analysiscomprehensive

Graduate Certificate in ASD for Multiple Disciplines - 100% Online

Graduate Certificate in Autism Spectrum Disorder - Advanced 100% Online

Graduate Certificate in Autism Spectrum Disorder - Basic 100% Online

Graduate Certificate in Biomedical Sciences

Graduate Certificate in Business Analytics

Graduate Certificate in Business Essentials - 100% online

Graduate Certificate in Business Essentials - campus

Graduate Certificate in Clinical Exercise Science

Graduate Certificate in Conducting

Graduate Certificate in Corporate and Worksite Wellness

Graduate Certificate in Court Administration

Graduate Certificate in Criminal Justice Leadership

Graduate Certificate in Emotional Impairment - Basic

100% Online

Graduate Certificate in Emotional Impairment-Advanced

100% Online

Graduate Certificate in Exercise Science

Graduate Certificate in Fin Tech

Graduate Certificate in Finance

Graduate Certificate in Forensic Nursing

Graduate Certificate in Health Care Administration

Graduate Certificate in Human Diversity, Inclusion and

Social Justice

Graduate Certificate in Information Security Management

Graduate Certificate in Instrumental Performance

Graduate Certificate in K12 Teaching English Second Language

Graduate Certificate in Lean Leadership

Graduate Certificate in Local Government Management

Graduate Certificate in Nonprofit Organization & Management

Graduate Certificate in Oncology Rehabilitation - 100% Online

Graduate Certificate in Orthopedic Manual Physical Therapy

Graduate Certificate in Orthopedics

Graduate Certificate in Piano Pedagogy

Graduate Certificate in Piano Performance

Graduate Certificate in Productivity Improvement

Graduate Certificate in Specific Learning Disabilities - Advanced 100% Online

Graduate Certificate in Specific Learning Disabilities - Basic 100% Online

Graduate Certificate in Statistical Methods

Graduate Certificate in Teaching & Learning for Rehab Professionals

Graduate Certificate in Teaching ESL

Graduate Certificate in Vocal Pedagogy

Post Masters Graduate Certificate

Post-Masters APRN Certificate in Family Nurse Practitioner in Primary Care Post-Masters Certificate in Adult/Gerontological Primary Care Nurse Practitioner

Post-Masters Graduate Certificate in Accounting

Post-Masters Graduate Certificate in Business Economics

Post-Masters Graduate Certificate in Central Office Administration

Post-Masters Graduate Certificate in Entrepreneurship

Post-Masters Graduate Certificate in Family Nurse Practitioner

Post-Masters Graduate Certificate in General Management

Post-Masters Graduate Certificate in Higher Education

Post-Masters Graduate Certificate in Human Resources Management

Post-Masters Graduate Certificate in International Business

Post-Masters Graduate Certificate in Management Information Systems

Post-Masters Graduate Certificate in Marketing

Post-Masters Graduate Certificate in Nurse Anesthesia

Post-Masters Graduate Certificate in Production Operations Management

Post-Masters Graduate Certificate in Reading, Language Arts and Literature



Staffing and Enrollment

FIGURE 1

Faculty and Staff Full Time Equivalent (FTE) by Program, FY 2019-20

Instructional Programs	FACULTY	STAFF
Area, Ethnic, Cultural, Gender and Group Studies	9.7	0.84
Communications, Journalism, and Related Programs	37.4	0.67
Computer & Information Sciences & Support Services	31.55	5.32
Education	87.22	28.71
Engineering	55.69	18.81
Foreign Languages, Literatures, & Linguistics	52.24	2.79
Eng Language & Lit/Letters	78.88	7.11
Lib Arts & Sci, Gen Studies & Human	9.48	4.72
Library Science	1	0
Biological & Biomedical Sciences	51.85	15.6
Mathematics & Statistics	41.31	8.73
Multi/Interdisciplinary Studies	0	0
Parks, Rec, Leisure, & Fitness Stud	6.76	0
Philosophy & Religious Studies	24.93	1.87
Physical Sciences	37.84	17.93
Psychology	0	33.37
Homeland Security, Law Enforcement, Firefighters	8.06	0
Public Administration & Social Service Professions	12.25	0.3
Social Sciences	49.36	9.01
Visual & Performing Arts	88.78	36.63
Health Professions and Related Sciences	7.34	0
Medicine (MD)	42.81	18.69
Public Health	5.67	0
Reg Nursing, Nursing Admin, Nursing Res & Clinical	48.66	1.48
Health Prof & Related Clinical Sciences, Other	34.82	8.03
Business, Mgt, Market & Related Support Svcs	95.55	10.34
History	16.98	1.8

Total Instruction	936.13	232.75
iotal instruction	930.13	232.73

Non-Instructional Programs	STAFF
Research	20.68
Public Support	4.58
Academic Support	414.22
Student Services	270.38
Institutional Support	227.65
Plant Operation& Maintenance	129.93
Aux Enterprise	55.63

Total FTE 1355.82

Staffing and Enrollment

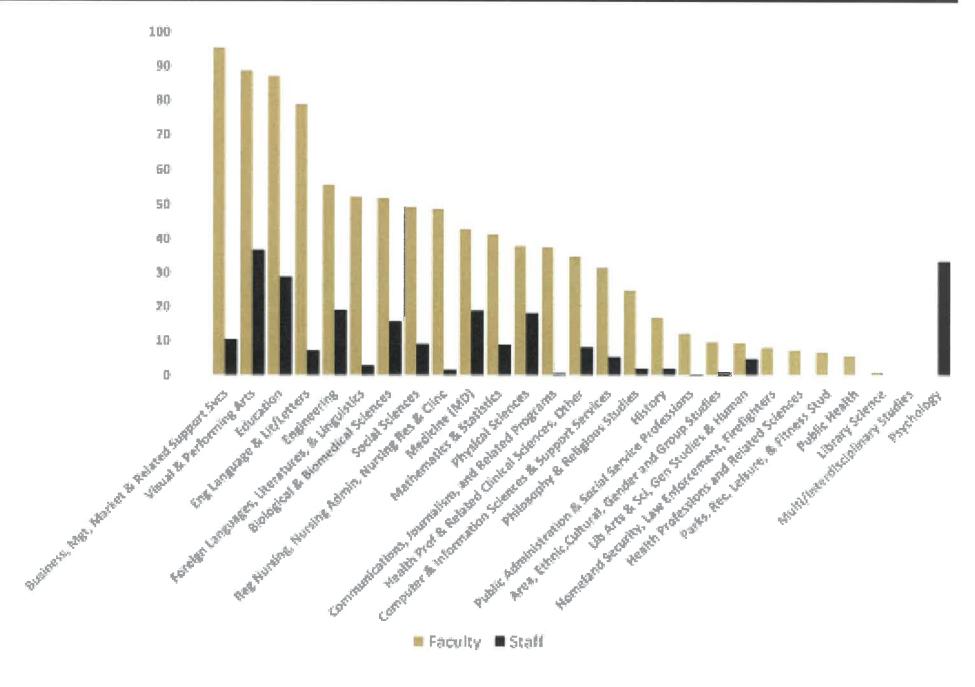


FIGURE 2

Student Credit Hours by Level and by Program, FY 2020-21

	Lower	Upper	Masters	Doctoral	Total
Area Studies	3782	724			4506
Communication	8940	7080	352		16372
Computer Science	6618	7816	2104	199	16737
Education	1468	12394	10983	3214	28059
Engineering	9635	15708	6036	891	32270
Modern Languages	14780	3090	168		18038
English	23882	7244	276		31402
Liberal Arts	5624	270	88		5982
Library Science					0
Biology	17499	14311	1464	98	33372
Math	26175	983	1216	52	28426
Multi/Interdisciplin. Sciences					0
Parks, Recreation & Fitness					0
Philosophy	11172	940			12112
Physical Sciences	26039	2402	573	165	29179
Psychology	11900	6894	531	104	19429
Criminal Justice	1596	3446			5042
Public Administration	400	3806	808		5014
Social Science	16354	9718	364		26436
Fine Arts	18916	9388	294	61	28659
Medical Laboratory Sciences	869	5825	32		6726
Public Health	644	2,080	860		3584
Rehabilitative & Therapeutic Professions		118	1178	3718	5014
Nursing	7031	20760	3381	1750	32922
Other Health Professions	4183	6014			10197
Business	10719	37848	7812		56379
History	3548	2554	114		6216
Total	231,774	181,413	38,634	10,252	462,073

Student Credit Hours by Level and Program

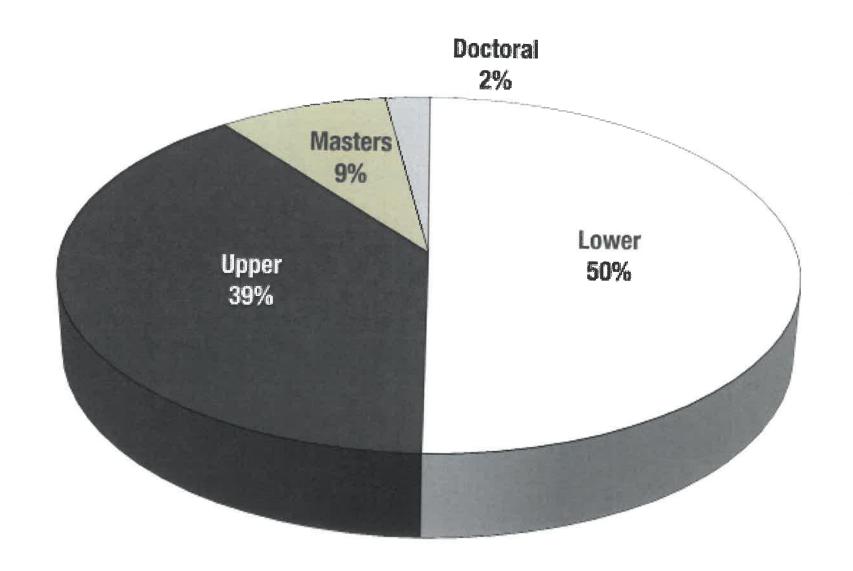


FIGURE 3

Degrees Awarded by Program, FY 2019-20

	Bachelor's	Post Bachelor's	Master's	Post Master's	Doctoral	Total
Environmental Sciences	23	0	0	0	0	23
Area Studies	3	0	0	0	0	3
Communication	175	0	14	0	0	189
Computer Science	170	0	64	0	11	245
Education	132	6	212	39	39	428
Engineering	340	0	169	0	8	517
Engineering Management	0	0	48	0	0	48
Modern Languages	32	0	6	0	0	38
Legal Studies (CRJ-Courts)	1	0	0	0	0	1
English	74	0	5	0	0	79
Liberal Arts	121	0	2	0	0	123
Biology	183	4	19	0	6	212
Math	11	0	2	0	2	15
Parks, Recreation & Fitness	29	0	0	0	0	29
Philosophy	14	0	0	0	0	14
Physical Sciences	19	0	10	0	0	29
Psychology	161	0	13	0	3	177
Criminal Justice (Non-Court)	105	0	0	0	0	105
Public Administration	72	0	19	0	0	91
Social Science	116	2	0	0	0	118
Fine Arts	146	0	4	0	0	150
Nursing	458	1	42	2	6	509
Public Health	18	0	15	0	0	33
Other Health Professions	382	10	33	0	154	579
Business	669	20	138	1	0	828
History	46	0	4	0	0	50
Tota	3,500	43	819	42	229	4,633

Degrees Awarded by Program

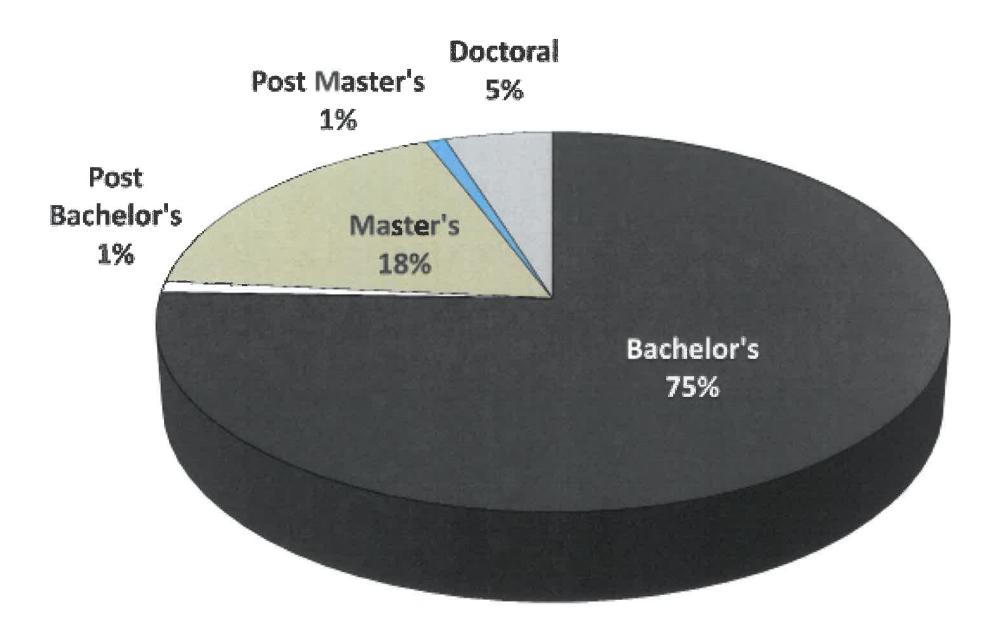


FIGURE 4

Enrollment Trends from Fall 2001 to Fall 2021

Student enrollment over the last 20 years at Oakland University peaked at just over 20,000 students.

	į	Jndergraduat	е	Graduate			Total		
Fall Term	In-State	Out-State	Total	In-State	Out-State	Total	In-State	Out-State	Total
2001	12,034	215	12,249	3,145	104	3,249	15,179	319	15,498
2002	12,185	208	12,393	3,232	115	3,347	15,417	323	15,740
2003	12,504	223	12,727	3,428	101	3,529	15,932	324	16,256
2004	12,614	211	12,825	3,568	113	3,681	16,182	324	16,506
2005	12,923	212	13,135	3,672	100	3,772	16,595	312	16,907
2006	13,163	210	13,373	3,839	97	3,936	17,002	307	17,309
2007	13,549	182	13,731	3,753	107	3,860	17,302	289	17,591
2008	13,948	158	14,106	3,528	124	3,652	17,476	282	17,758
2009	14,680	181	14,861	3,401	117	3,518	18,081	298	18,379
2010	14,961	189	15,150	3,293	121	3,414	18,254	310	18,564
2011	15,275	198	15,473	3,301	126	3,427	18,576	324	18,900
2012	15,587	229	15,816	3,293	157	3,450	18,880	386	19,266
2013	15,967	305	16,272	3,236	252	3,488	19,203	557	19,760
2014	16,166	343	16,509	3,149	346	3,495	19,315	689	20,004
2015	16,379	414	16,793	3,036	432	3,468	19,415	846	20,261
2016	16,139	429	16,568	2,933	511	3,444	19,072	940	20,012
2017	15,470	431	15,901	2,895	537	3,432	18,365	968	19,333
2018	15,335	464	15,799	2,930	580	3,510	18,265	1,044	19,309
2019	15,089	454	15,543	2,937	533	3,470	18,026	987	19,013
2020	14,666	434	15,100	2,965	487	3,452	17,631	921	18,552
2021	13,338	433	13,771	2,700	699	3,399	16,038	1,132	17,170

Enrollment Trends from Fall 2001 to Fall 2021

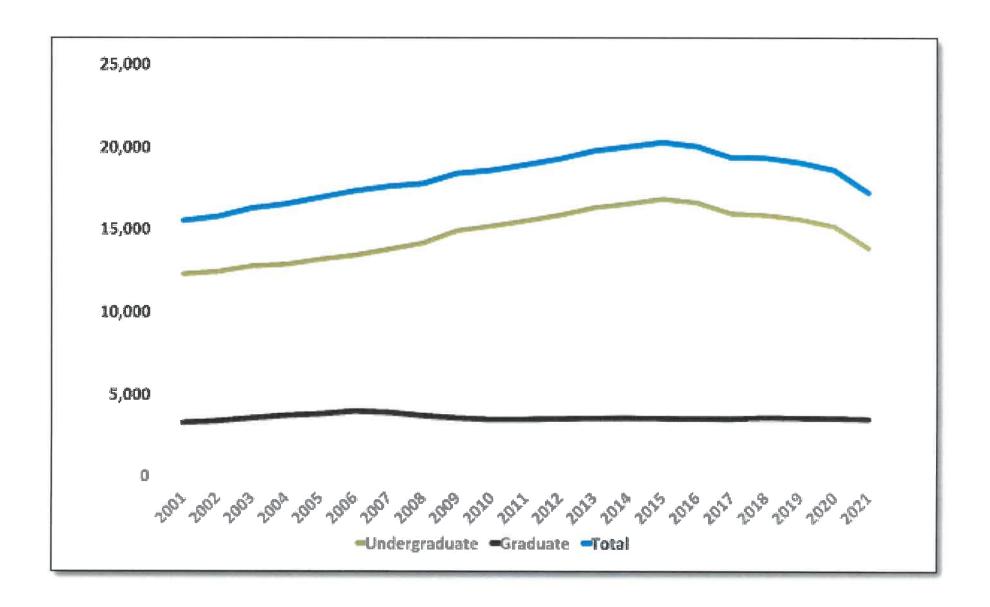


FIGURE 5

Enrollment Projections by School/College and Level, Fall 2020 – Fall 2024

	Actual		Projecti	grij.		Change
Undergraduate	2020	2021	2022	2023	2024	B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CAS	5,167	5,124	5,070	5,046	5,027	-2.7%
SBA	2,280	2,261	2,238	2,227	2,219	-2.7%
SEHS	949	941	931	927	923	2.7%
SECS	2,933	2,908	2,878	2,864	2,853	-2.7%
SHS	1,767	1,752	1,734	1,726	1,719	-2.7%
SON	1,316	1,305	1,291	1,285	1,280	2.7%
University Programs/None	1,082	1,073	1,062	1,057	1,053	-2.7%
Graduate	2020	2021	2022	2023	2024	
CAS	384	381	377	375	373	-2.7%
SBA	414	411	406	405	403	-2_7%
SEHS	898	891	881	877	874	-2.7%
SECS	884	276	867	863	860	-2.7%
SHS	268	266	263	262	261	-2.7%
SON	246	244	241	240	239	-2.7%
SOM	494	494	494	494	494	0.0%
Totals	2020	2021	2022	2023	2024	
CAS	5,551	5,505	5,447	5,421	5,401	-2.7%
SBA	2,695	2,672	2,644	2,632	2,622	-2.7%
SEHS	1,847	1,832	1,813	1,804	1,797	-2.7%
SECS	3,817	3,785	3,745	3,727	3,713	-2.7%
SHS	2,035	2,019	1,997	1,988	1,980	-2.7%
SON	1,562	1,549	1,532	1,525	1,519	-2.7%
Subtotals w/o SOM	18,588	18,434	18,240	18,153	18,086	-2.7%
Grand Total	19082	18928	18734	18647	18580	
Change		-0.81%	-1.02%	-0.47%	-0.36%	

University Enrollment Projections by School/College, Fall 2020 – Fall 2024

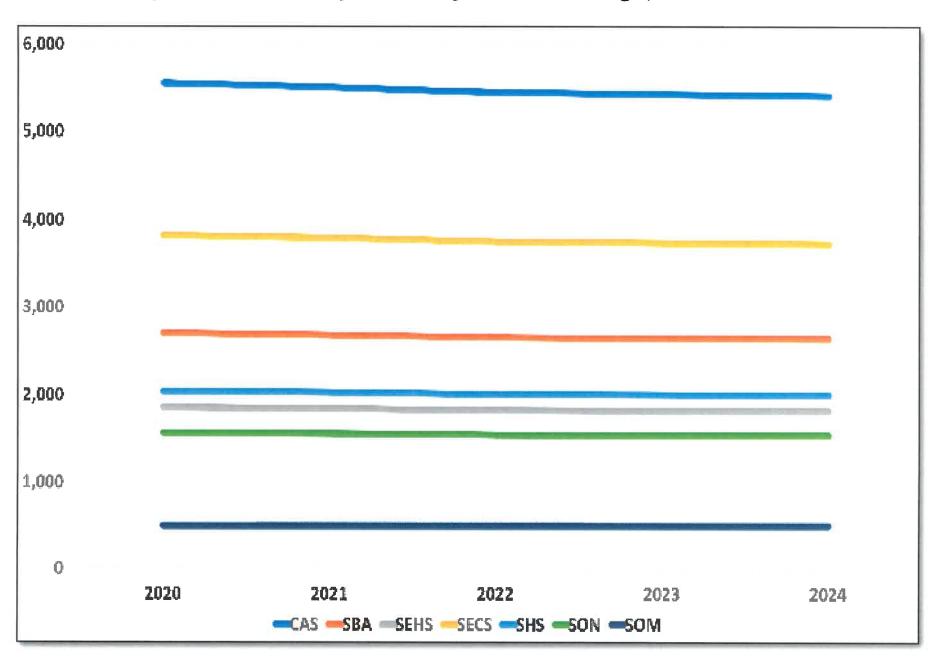
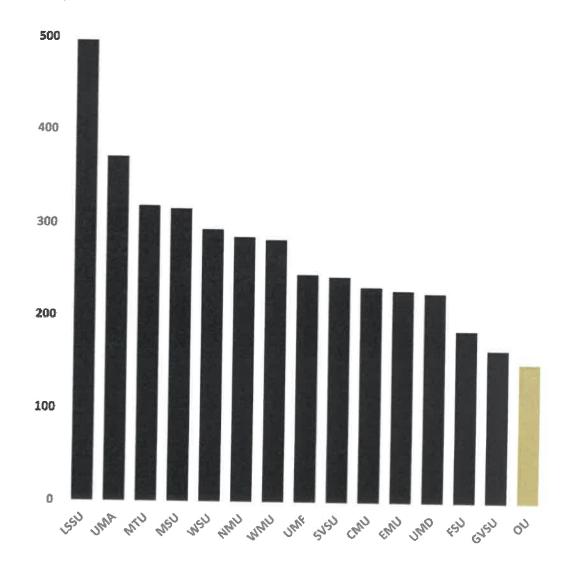


FIGURE 6

General Fund Square Feet Per Student in Michigan, FY 2019-20

University	Total Square Footage	Square Footage/ FYES
СМП	3,968,543	232.02
EMU	3,227,394	228.37
FSU	1,881,934	184.58
GVSU	3,597,436	163.58
LSSU	805,422	496.55
MSU	15,131,935	315.76
MTU	2,093,750	318.62
NMU	1,946,390	285.56
OU	2,599,935	149.86
SVSU	1,757,700	243.01
UMA	18,257,883	370.61
UMD	1,613,362	225.56
UMF	1,493,135	245.38
WSU	6,812,820	293.65
WMU	5,236,960	282.85



Future Staffing Needs

Currently, Oakland University employs 2,422 full- and part-time faculty and staff, as well as 1,443 students and graduate assistants. In addition, there are more than 100 employees of contract service providers for food service, bookstore and custodial services.

Average Class Size

Average class size for undergraduate instruction in fall 2020 was 29.71 students. Graduate class size in fall 2019 was 17.15 and Ph.D. classes averaged 21.76 students. It is important to the institutional character that the size of classes remains small. However, larger classes have been a cost-effective way to absorb growth.



Facility Assessment

Utilization Rates



Oakland University has the lowest building square footage per student (Figure 6) among the 15 public universities. A comparison of its enrollment, programmatic mix, doctoral programs and relatively large number of engineering and science programs suggests that the University's space should be closer to the state average. Program by program comparisons to national norms for disciplines indicates that all programs fall short in space. Classroom utilization is high, especially in the evenings due to Oakland's enrollment, which includes a large number of non-traditional students. Demand for evening classes exceeds available facilities.

Mandated Standards

Mandated standards for animal research are met.

Functionality

The limited amount of specialized program space affects overall space functionality. This is particularly evident in the most impacted areas of Nursing, Health Sciences, and the Performing Arts. Recent facility additions for the sciences, nursing, business and education provide good space for programmatic needs. Most academic programs on the Oakland University campus are offered in the following buildings:

North Foundation Hall – Completed in 1959, this is primarily a student services building, but also includes one classroom. The building is receiving a general face lift and significant improvements to the air distribution system.

South Foundation Hall - Completed in 1959, this is primarily a classroom building. As one of the oldest buildings on campus, it hosts the core classrooms for incoming students. Since the building was constructed, emphasis has been placed upon the institution's function rather than form, making academics and growth the main focus of the building, which has remained predominantly classroom-based. To help Oakland University continue to enhance the its student success initiative, the state has approved capital outlay funding to support renovation of South Foundation Hall. Work will result in new state-of-the-art classrooms and a collaborative environment that integrates innovative learning space. This will gradually build a sense of timelessness that links generations of the campus community and is associated with the campus' quality and highly valued physical environment.



Science Complex - The Science Complex includes the original Hannah Hall of Science facility, which was built in 1961 and is now the west wing of the complex, along with two additions. Dodge Hall of Engineering was built in 1968 and is now the east wing. The Mathematics and Science Center was built in 1997 and is now the south wing. In sum, the complex is home to biology, science, health science, and engineering laboratories; classrooms; faculty offices, an administrative and academic computing center and OU's Eye Research Institute.

Kresge Library - Completed in 1961 with additions in 1989. This is the central library for the institution.

Wilson Hall - Completed in 1967, houses the departments of Art and Art History, and Communications and
Journalism, It also houses Meadow Brook Theatre and administrative offices.



Varner Hall - Completed in 1970, houses the departments of Music, Theatre and Dance (MTD), History, Political Science, and Sociology/Anthropology. The facilities for MTD are inadequate to meet the needs of their growing programs.

O'Dowd Hall - Completed in 1982, this building houses the Graduate Office, the Registrar, the Departments of English, Writing and Rhetoric, Modern Languages and Literatures, Linguistics, Philosophy, and a number of general purpose

classrooms. It is also home to the Oakland University William Beaumont School of Medicine.

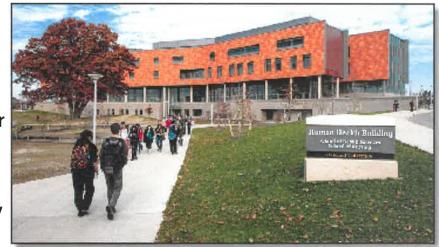
Elliott Hall - Completed in 2000, houses the School of Business Administration and Information Technology.

Pawley Hall - Completed in 2002, houses the School of Education and Human Services, as well as the Lowry Child Development Center.

Human Health Building - Completed in Fall, 2012, this 172,825 square foot building houses the School of

Health Sciences and the School of Nursing. Collectively, this new enterprise is part of Oakland University's vision of better preparing today's health care students by creating an innovative partnership in one structure. With this building, growth in undergraduate and graduate enrollment is responsive to vital shortages in nursing and heavy demand for health science professionals.

Engineering Center (EC) - Completed in Fall, 2014, this building is designed to provide high quality twenty first century instructional and research facilities for all engineering and computer science programs that are vital to the revival of the economy of Southeast Michigan as well as the State of



Michigan in general. This includes supporting the global competitiveness of the US alternative energy, health care and biomedical, automotive, defense, and other high-tech industries. The EC added 128,000 square feet for the School of Engineering and Computer Science (SECS), as well as 13,500 square feet of assignable general purpose classroom space to support the growth of the overall student population.

Although academic programs are offered in other facilities and there are a number of other service buildings and auxiliary buildings, the above are the major academic facilities. The average age of buildings on the main campus is 30 years old. In general, buildings are in fair condition. Oakland University maintains a comprehensive list of plant renewal and deferred plant renewal projects, which is updated annually.

Replacement Value of Facilities

The replacement value of Oakland University's 4.2 million square feet, including Meadow Brook Hall is estimated at \$1.5 billion.

Utility Systems Condition

The utility systems in facilities (i.e., heating, ventilation, air conditioning (HVAC), water, sewage, gas and electrical) are in varying degrees of condition, depending on facility age. All are fully functional, with those in the 30- to 40-year age and beyond group needing upgrades to increase efficiency and effectiveness of operation. The storm water system for some of the facilities surpassed capacity due to unusual 100-year storms and need attention in coming years. The existing water/sewage infrastructure is adequate to serve the projected programming needs for the next 10 years. An upgrade to the electrical substation was completed in 2003, which included cabling, switchgear, and a new substation. This upgrade will meet projected electrical needs for at least 15 years however capacity of the cabling needs to be evaluated as the campus grows in the future. Additional upgrades to infrastructure throughout campus will be required as campus facilities age and enrollment grows.

Many of the older facilities lack fire suppression systems and would be in consideration to update the facilities per current Codes during major renovation projects.

Due to the age of OU's infrastructure, replacement/ upgrade is needed for the underground HTHW lines and HTHW in tunnel. A new HTHW line needs to be installed to complete the south loop from the new Engineering Center to Varner Hall, IT cabling with Voice over IP capabilities, and the infrastructure (HVAC, plumbing and electrical) in the academic buildings (Dodge Hall of Engineering, South Foundation Hall, Hannah Hall of Science, Varner Hall).



Facility Infrastructure Condition

The pavement/sidewalks/structural infrastructure is generally in fair condition. Funds are allocated annually to pavement/sidewalk repair to restore the most deteriorated portions.

Major campus projects included in the next 5-year plan the replacement of old air-handling units, HTHW system upgrade, storm water management, and an upgraded VOIP communication network. A service contract has been in place to maintain new micro-turbines in the new Engineering Center and to maintain the new cogeneration plant in CHP. Oakland budgets \$2.25 million for non-routine maintenance in its current fiscal year from the general fund, endowment distribution, and auxiliary operation reserves.

Land

Oakland University's campus includes 1,443 acres. The main campus is approximately 350 acres. The remaining campus includes several major developments (a faculty/ staff subdivision, the National Register Meadow Brook Estate, two golf courses), a large amount of wetland. and significant undeveloped acreage. The Campus Master Plan, approved by the Board of Trustees in June 2016, has identified future uses for much of the undeveloped property.



Buildings Obligated to the State Building Authority

The following buildings/portions of buildings are bonded through State bonds:

Mathematics and Science Center

Elliott Hall

Pawley Hall

Human Health Building

Engineering Center

lease expiration in 2032 lease expiration in 2036 lease expiration in 2037

lease expiration in 2048

lease expiration in 2050

The following facilities are bonded through the University:

Golf course final payment in 202

Recreation and Athletic Center final payment in 202

Ann V. Nicholson Apartments final payment in 203

Electrical Power Upgrade final payment in 203

Parking Structure

Oakland Center Expansion - 2003

Human Health Building

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Engineering Center

Oak View Hall

Extension of Library Drive

Facilities Management Building

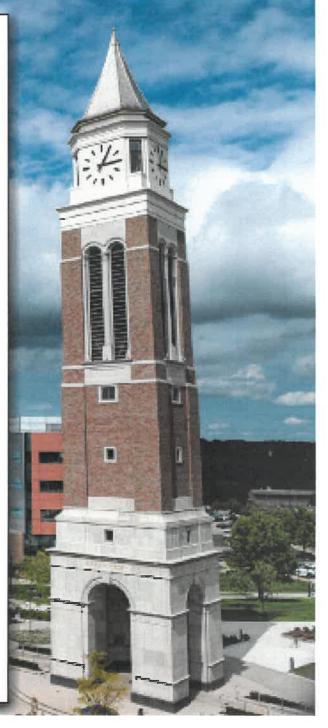
Parking Structure #2

Upper Playing Fields

Oakland Center Expansion - 2018

Hillcrest Hall

final payment in 2023 final payment in 2026 final payment in 2031 final payment in 2031 final payment in 2031 final payment in 2031 final payment in 2039 final payment in 2042 final payment in 2043 final payment in 2047 final payment in 2047 final payment in 2047



Classroom Utilization Reports

Classroom Utilization Definitions

Square Feet Assignable Square Feet

Seats Number of Seats or Stations in Room

WRH Number of Hours per Week Room was Scheduled

WRH% WRH / Available Hour per Week

Station Occupancy % of Seats Used When Room was in Use.

Classroom Summary

Number of Classrooms 123

Total Square Feet 125,759
Total Number of Seats 7,194

Average Classroom Size 1,022 square feet

Average Seats per Room 58

Classroom Utilization Summary by Time Frame

			Fall 2017			Winter 2018			
Time Frame	Available Room Hours	Average WRH	% of Available Hours	Station Occupancy %	Average WRH	% of Available Hours	Station Occupancy %		
All Day – 8 a.m. to 10 p.m.	75	44.1	59%	56%	40.4	54%	56%		
Daytime – 8 a.m. to 5 p.m.	45	32.9	73%	58%	29.6	66%	58%		
Prime Time - 10 a.m 3 p.m.	25	20.8	83%	58%	19.2	77%	58%		
Off Peak - 8-10 a.m.; 3-5 p.m.	20	12.0	60%	57%	10.4	52%	58%		
Evening – 5-10 p.m.	25	11.19	45%	50%	10.8	43%	51%		
Saturday (1)	9	4.6	52%	31%	5.3	59%	33%		

^{(1) 12} rooms scheduled at least one week during fall term and 11 rooms scheduled for at least one week winter term. Average WRH is based on rooms scheduled only.

Report 1: All Day Utilization - Fall 2017

- All Day Utilization 8 a.m. to 10 p.m.; Monday-Friday
- 75 Available Hours per Week

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

North Foundation Hall (NFH) O'Dowd Hall (ODH) Pawley Hall (PH) South Foundation Hall (SFH) Varner Hall (VH) Wilson Hall (WH)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	39.2	52.3%	74.1%
DH	135	947	48	44.0	58.6%	74.3%
DH	136B	470	21	36.0	48.0%	60.8%
DH	200	1,126	95	45.4	60.6%	69.5%
DH	201	3,004	314	47.1	62.7%	50.8%
DH	202	702	52	42.9	57.2%	63.0%
DH	203	990	70	35.8	47.7%	73.6%
DH	204	374	30	47.7	63.6%	61.0%
DH	236	394	30	41.5	55.4%	52.3%
DH	237	389	24	44.0	58.7%	75.4%
EC	116	3,373	200	43.4	57.9%	59.6%
EC	254	2,035	100	41.3	55.1%	63.7%
EC	275	1,333	50	50.7	67.5%	67.0%
EC	279	1,329	50	34.9	46.5%	75.7%
EC	281	1,350	50	50.5	67.3%	65.7%
EH	204	541	30	49.1	65.5%	57.5%
EH	206	523	30	51.1	68.1%	60.6%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	43.5	58.0%	64.2%
EH	210	683	40	46.6	62.2%	61.4%
EH	212	696	40	44.9	59.8%	73.4%
EH	214	902	48	45.1	60.2%	71.0%
EH	235	1,021	40	48.3	64.4%	66.0%
EH	237	1,026	40	56.8	75.7%	56.9%
EH	239	1,018	40	47.1	62.7%	60.9%
EH	242	1,561	60	33.2	44.2%	72.6%
НН	113	921	24	46.0	61.3%	68.2%
НН	123	777	36	53.2	71.0%	62.5%
НН	190	2,131	187	54.4	72.6%	61.3%
НН	195	2,068	187	37.0	49.4%	60.0%
НН	220	548	40	48.2	64.3%	46.7%
нн	225	422	30	39.5	52.7%	55.2%
НН	233	1,348	60	51.4	68.6%	64.6%
ННВ	1005	1,828	80	40.6	54.2%	54.2%
ННВ	1006	1,563	50	49.3	65.7%	61.2%
ННВ	1031	729	25	39.5	52.7%	58.2%
ННВ	1050	4,384	200	27.3	36.4%	53.4%
ннв	2023	1,442	50	46.7	62.3%	42.2%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ННВ	2085	1,213	55	40.3	53.7%	36.8%
ННВ	2086	1,307	60	45.7	60.9%	57.3%
ННВ	4043	1,938	80	36.8	49.0%	69.6%
ННВ	4050	2,695	112	41.0	54.7%	50.1%
ННВ	5036	1,208	50	46.6	62.1%	64.5%
ннв	5037	1,967	80	34.7	46.3%	47.0%
ННВ	5045	2,730	112	42.1	56.1%	62.0%
MSC	102	1,170	48	44.6	59.5%	35.5%
MSC	104	1,117	48	46.4	61.8%	55.4%
MSC	120	1,560	72	45.5	60.7%	68.1%
MSC	124	1,839	84	45.2	60.2%	62.7%
MSC	130	624	42	45.2	60.3%	53.9%
MSC	164	1,129	70	48.1	64.1%	70.2%
MSC	168	1,129	70	49.3	65.7%	53.8%
MSC	172	1,129	70	48.3	64.4%	70.7%
MSC	185	828	50	52.0	69.4%	66.9%
MSC	187	542	36	52.0	69.3%	59.2%
MSC	364	422	26	41.0	54.7%	76.6%
MSC	372	961	50	43.5	57.9%	55.7%
MSC	376	613	28	40.0	53.3%	64.3%
MSC	378	613	30	42.2	56.2%	57.6%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	46.6	62.2%	50.2%
MSC	386	606	40	56.0	74.7%	68.9%
MSC	388	605	30	44.0	58.7%	48.2%
MSC	93	574	35	38.0	50.7%	42.0%
NFH	156	1,757	157	37.7	50.3%	57.2%
ODH	202A	1,344	83	42.2	56.3%	51.5%
ODH	202B	1,848	111	33.2	44.3%	81.2%
ODH	202C	1,394	83	39.1	52.1%	55.3%
PH	302	1,660	72	46.6	62.2%	37.9%
РН	306	910	48	50.2	66.9%	43.4%
PH	307	938	49	44.3	59.1%	50.2%
PH	308	910	48	42.7	56.9%	45.5%
PH	309	930	49	42.3	56.4%	55.7%
PH	310	732	36	50.6	67.5%	50.4%
PH	312	738	36	47.1	62.8%	54.8%
PH	314	916	48	50.2	66.9%	51.2%
PH	316	918	48	53.8	71.7%	44.1%
PH	318	910	48	39.4	52.5%	35.9%
PH	320	735	36	43.1	57.5%	62.5%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	51.1	68.1%	57.2%
SFH	164	667	30	39.0	52.1%	48.3%
SFH	165	992	63	56.0	74.7%	77.8%
SFH	166	667	30	56.0	74.7%	48.1%
SFH	167	667	48	53.1	70.8%	49.9%
SFH	168	667	30	45.8	61.0%	49.9%
SFH	169	667	40	45.5	60.7%	60.8%
SFH	170	667	48	54.2	72.3%	51.3%
SFH	171	667	30	46.8	62.3%	32.4%
SFH	172	667	48	42.6	56.9%	51.3%
SFH	173	667	48	47.1	62.8%	34.8%
SFH	174	667	48	53.7	71.6%	40.2%
SFH	176	732	48	45.4	60.5%	42.4%
SFH	263	991	65	43.5	58.1%	66.4%
SFH	265	446	25	34.2	45.6%	46.0%
SFH	266	688	48	49.7	66.3%	42.6%
SFH	268	668	48	46.2	61.6%	45.1%
SFH	269	688	48	48.9	65.2%	47.2%
SFH	270	688	48	33.6	44.9%	41.6%
SFH	271	668	48	49.7	66.3%	42.7%
SFH	272	668	48	41.6	55.4%	38.2%
SFH	273	668	48	40.6	54.1%	45.7%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	33.0	44.0%	49.5%
SFH	276	733	48	17.5	23.4%	47.7%
SFH	363	896	70	40.0	53.3%	78.1%
SFH	364	668	48	50.8	67.7%	23.2%
SFH	365	992	75	43.1	57.5%	45.0%
SFH	366	668	36	49.8	66.5%	28.4%
SFH	367	668	48	35.5	47.3%	37.8%
SFH	368	668	48	39.6	52.8%	57.4%
SFH	369	668	48	42.3	56.3%	44.1%
SFH	370	688	48	37.3	49.7%	56.0%
SFH	371	668	38	49.4	65.9%	33.3%
SFH	372	668	48	36.8	49.1%	54.2%
SFH	373	668	48	40.2	53.6%	58.0%
SFH	374	668	48	33.8	45.1%	43.4%
SFH	376	732	50	53.7	71.6%	41.9%
VAR	205	1,151	85	50.6	67.5%	46.9%
VAR	206	1,184	85	44.2	58.9%	37.0%
VAR	479	998	30	50.2	66.9%	67.5%
WH	102	870	60	45.2	60.3%	58.5%
WH	105	856	60	38.6	51.5%	59.8%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	39.5	52.7%	58.1%
WH	301	306	16	39.5	52.7%	65.3%
WH	313	500	30	46.6	62.1%	54.6%
WH	416	372	15	16.0	21.3%	51.7%
Totals	123	125,759	7,194	5,419		
Averages		1,022	58	44.1	58.7%	55.9%



Report 2: Daytime Utilization - Fall 2017

- Daytime Utilization 8 a.m. to 5 p.m.; Monday-Friday
- 45 Available Hours per Week

Dodge Hall (DH)
Engineering Center (EC)
Elliott Hall (EH)
Hannah Hall (HH)
Human Health Building (HHB)
Math & Science Center (MSC)

North Foundation Hall (NFH)
O'Dowd Hall (ODH)
Pawley Hall (PH)
South Foundation Hall (SFH)
Varner Hall (VH)
Wilson Hall (WH)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	25.1	55.8%	83.1%
DH	135	947	48	35.2	78.1%	81.7%
DH	136B	470	21	32.0	71.1%	64.3%
DH	200	1,126	95	36.9	81.9%	74.7%
DH	201	3,004	314	40.8	90.7%	54.5%
DH	202	702	52	34.7	77.0%	65.3%
DH	203	990	70	27.7	61.6%	74.6%
DH	204	374	30	33.0	73.3%	74.1%
DH	236	394	30	33.5	74.6%	54.8%
DH	237	389	24	36.0	80.0%	83.8%
EC	116	3,373	200	37.4	83.2%	61.2%
EC	254	2,035	100	32.3	71.7%	65.8%
EC	275	1,333	50	32.7	72.6%	69.5%
EC	279	1,329	50	22.9	50.9%	78.0%
EC	281	1,350	50	36.2	80.5%	59.6%
EH	204	541	30	41.0	91.1%	62.4%
EH	206	523	30	38.0	84.4%	68.6%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	32.9	73.0%	61.7%
EH	210	683	40	33.9	75.4%	62.7%
EH	212	696	40	30.2	67.2%	78.9%
EH	214	902	48	30.9	68.7%	70.3%
EH	235	1,021	40	34.1	75.8%	71.7%
EH	237	1,026	40	39.3	87.4%	59.2%
EH	239	1,018	40	32.9	73.0%	56.1%
EH	242	1,561	60	25.2	56.0%	79.8%
НН	113	921	24	38.4	85.4%	74.6%
НН	123	777	36	40.7	90.4%	69.0%
нн	190	2,131	187	45.6	101.3%	64.6%
нн	195	2,068	187	34.9	77.6%	59.1%
нн	220	548	40	33.0	73.3%	50.0%
нн	225	422	30	31.0	68.9%	63.0%
нн	233	1,348	60	35.4	78.7%	70.1%
				*		
ННВ	1005	1,828	80	27.0	60.0%	62.3%
ннв	1006	1,563	50	34.9	77.6%	58.7%
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ННВ	1050	4,384	200	27.3	60.7%	53.4%
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Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ннв	2085	1,213	55	31.1	69.2%	40.2%
ннв	2086	1,307	60	32.0	71.1%	51.7%
ннв	4043	1,938	80	28.5	63.3%	71.6%
ннв	4050	2,695	112	32.0	71.2%	44.0%
ннв	5036	1,208	50	36.9	82.1%	70.2%
ннв	5037	1,967	80	28.1	62.6%	49.8%
ннв	5045	2,730	112	33.0	73.3%	71.0%
MSC	102	1,170	48	33.0	73.3%	42.9%
MSC	104	1,117	48	32.0	71.1%	61.7%
MSC	120	1,560	72	28.9	64.3%	69.3%
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MSC	376	613	28	36.0	80.0%	68.3%
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Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
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MSC	386	606	40	40.0	88.9%	78.5%
MSC	388	605	30	31.0	68.9%	60.9%
MSC	93	574	35	24.0	53.3%	47.9%
NFH	156	1,757	157	32.3	71.8%	55.1%
ODH	202A	1,344	83	31.5	70.1%	50.1%
ODH	202B	1,848	111	28.6	63.6%	86.5%
ODH	202C	1,394	83	31.0	68.9%	51.0%
PH	302	1,660	72	36.0	80.0%	37.5%
PH	306	910	48	35.0	77.8%	47.8%
PH	307	938	49	30.1	67.0%	59.0%
PH	308	910	48	32.0	71.1%	43.8%
PH	309	930	49	28.1	62.4%	63.9%
PH	310	732	36	39.0	86.7%	54.7%
РН	312	738	36	36.0	80.0%	59.0%
PH	314	916	48	35.0	77.8%	50.7%
PH	316	918	48	38.5	85.7%	36.4%
PH	318	910	48	28.5	63.4%	38.6%
PH	320	735	36	32.0	71.1%	64.9%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	35.0	77.8%	53.5%
SFH	164	667	30	35.0	77.8%	48.4%
SFH	165	992	63	38.0	84.4%	69.6%
SFH	166	667	30	39.0	86.7%	44.1%
SFH	167	667	48	38.9	86.5%	53.0%
SFH	168	667	30	30.7	68.2%	51.3%
SFH	169	667	40	35.0	77.8%	67.2%
SFH	170	667	48	39.0	86.7%	56.0%
SFH	171	667	30	38.8	86.1%	25.3%
SFH	172	667	48	31.0	68.9%	54.8%
SFH	173	667	48	31.0	68.9%	41.2%
SFH	174	667	48	38.0	84.4%	41.7%
SFH	176	732	48	31.0	68.9%	37.6%
SFH	263	991	65	35.0	77.8%	62.1%
SFH	265	446	25	23.3	51.7%	52.0%
SFH	266	688	48	35.0	77.8%	39.9%
SFH	268	668	48	32.0	71.1%	40.1%
SFH	269	688	48	32.7	72.7%	47.7%
SFH	270	688	48	26.5	59.0%	40.2%
SFH	271	668	48	36.0	80.0%	43.3%
SFH	272	668	48	30.9	68.7%	43.0%
SFH	273	668	48	29.9	66.5%	49.9%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	29.9	66.5%	50.8%
SFH	276	733	48	10.9	24.3%	45.5%
SFH	363	896	70	24.0	53.3%	68.1%
SFH	364	668	48	38.8	86.1%	17.9%
SFH	365	992	75	36.0	80.0%	48.0%
SFH	366	668	36	38.8	86.1%	23.3%
SFH	367	668	48	25.8	57.4%	43.6%
SFH	368	668	48	26.9	59.8%	60.2%
SFH	369	668	48	27.5	61.2%	49.0%
SFH	370	688	48	24.6	54.7%	54.0%
SFH	371	668	38	38.8	86.1%	34.2%
SFH	372	668	48	27.1	60.3%	53.5%
SFH	373	668	48	27.0	60.0%	51.1%
SFH	374	668	48	24.2	53.7%	42.4%
SFH	376	732	50	40.0	88.9%	40.4%
VAR	205	1,151	85	39.0	86.7%	49.2%
VAR	206	1,184	85	30.0	66.7%	46.0%
VAR	479	998	30	35.0	77.8%	76.7%
WH	102	870	60	32.0	71.1%	60.6%
WH	105	856	60	27.0	60.0%	52.3%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	35.0	77.8%	59.6%
WH	301	306	16	31.0	68.9%	70.6%
WH	313	500	30	35.0	77.8%	56.0%
WH	416	372	15	16.0	35.6%	51.7%
Totals	123	125,759	7,194	4,042		
Averages		1,022	58	32.9	73.0%	57.7%



Report 3: Prime Time Utilization - Fall 2017

- Prime Time Utilization 10 a.m. to 3 p.m.; Monday-Friday
- 25 Available Hours per Week

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

North Foundation Hall (NFH)
O'Dowd Hall (ODH)
Pawley Hall (PH)
South Foundation Hall (SFH)
Varner Hall (VH)
Wilson Hall (WH)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	20.1	80.5%	82.2%
DH	135	947	48	22.1	88.6%	80.9%
DH	136B	470	21	19.0	76.0%	54.4%
DH	200	1,126	95	23.9	95.5%	82.3%
DH	201	3,004	314	22.3	89.1%	53.3%
DH	202	702	52	22.0	88.0%	67.3%
DH	203	990	70	18.9	75.7%	75.2%
DH	204	374	30	23.0	92.0%	73.6%
DH	236	394	30	22.0	88.0%	60.9%
DH	237	389	24	19.0	76.0%	87.5%
EC	116	3,373	200	21.4	85.7%	52.0%
EC	254	2,035	100	21.6	86.4%	63.5%
EC	275	1,333	50	20.6	82.6%	71.9%
EC	279	1,329	50	14.9	59.6%	68.6%
EC	281	1,350	50	22.3	89.0%	56.6%
EH	204	541	30	23.0	92.0%	53.2%
EH	206	523	30	23.0	92.0%	72.0%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	20.9	83.7%	56.0%
EH	210	683	40	22.0	88.0%	70.7%
EH	212	696	40	18.6	74.4%	80.5%
EH	214	902	48	16.9	67.7%	76.8%
EH	235	1,021	40	21.1	84.5%	76.6%
EH	237	1,026	40	24.3	97.3%	57.4%
EH	239	1,018	40	20.9	83.7%	51.8%
EH	242	1,561	60	19.2	76.8%	90.2%
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НН	113	921	24	23.0	92.0%	70.1%
нн	123	777	36	22.0	88.0%	74.0%
нн	190	2,131	187	24.9	99.7%	65.8%
НН	195	2,068	187	21.9	87.6%	62.6%
НН	220	548	40	23.0	92.0%	51.9%
НН	225	422	30	23.0	92.0%	59.7%
НН	233	1,348	60	22.4	89.7%	77.6%
ннв	1005	1,828	80	14.0	56.0%	57.0%
ННВ	1006	1,563	50	20.9	83.7%	57.6%
ННВ	1031	729	25	22.0	88.0%	61.1%
ННВ	1050	4,384	200	15.1	60.4%	56.5%
ННВ	2023	1,442	50	21.7	86.7%	37.5%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ннв	2085	1,213	55	21.8	87.3%	43.9%
ннв	2086	1,307	60	23.0	92.0%	55.4%
ннв	4043	1,938	80	22.0	88.0%	81.9%
ннв	4050	2,695	112	19.0	76.2%	35.5%
ннв	5036	1,208	50	20.4	81.5%	72.0%
ннв	5037	1,967	80	19.1	76.6%	54.8%
ННВ	5045	2,730	112	20.2	81.0%	68.9%
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MSC	102	1,170	48	20.0	80.0%	41.3%
MSC	104	1,117	48	22.3	89.3%	63.7%
MSC	120	1,560	72	20.9	83.7%	68.1%
MSC	124	1,839	84	24.1	96.4%	72.4%
MSC	130	624	42	22.0	88.0%	58.4%
MSC	164	1,129	70	22.0	88.0%	69.1%
MSC	168	1,129	70	22.0	88.0%	62.3%
MSC	172	1,129	70	24.1	96.4%	83.2%
MSC	185	828	50	23.0	92.0%	78.2%
MSC	187	542	36	22.0	88.0%	55.3%
MSC	364	422	26	24.0	96.2%	68.1%
MSC	372	961	50	17.4	69.6%	51.7%
MSC	376	613	28	23.0	92.0%	67.5%
MSC	378	613	30	19.0	76.0%	71.8%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	19.0	76.0%	56.1%
MSC	386	606	40	23.0	92.0%	78.8%
MSC	388	605	30	23.0	92.0%	60.7%
MSC	93	574	35	19.3	77.3%	52.1%
NFH	156	1,757	157	16.2	64.9%	47.8%
ODH	202A	1,344	83	20.3	81.3%	52.5%
ODH	202B	1,848	111	17.2	68.8%	85.3%
ODH	202C	1,394	83	22.0	88.0%	47.1%
PH	302	1,660	72	23.0	92.0%	33.9%
PH	306	910	48	22.0	88.0%	48.1%
PH	307	938	49	16.1	64.6%	56.3%
PH	308	910	48	23.0	92.0%	42.5%
PH	309	930	49	15.8	63.3%	63.8%
PH	310	732	36	22.0	88.0%	55.6%
PH	312	738	36	23.0	92.0%	56.9%
PH	314	916	48	22.0	88.0%	43.8%
PH	316	918	48	19.7	78.7%	34.0%
PH	318	910	48	15.6	62.2%	54.1%
PH	320	735	36	19.0	76.0%	76.6%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	23.0	92.0%	46.4%
SFH	164	667	30	23.0	92.0%	51.4%
SFH	165	992	63	22.0	88.0%	70.4%
SFH	166	667	30	22.0	88.0%	29.4%
SFH	167	667	48	23.0	92.0%	47.9%
SFH	168	667	30	20.7	82.7%	42.6%
SFH	169	667	40	22.0	88.0%	72.7%
SFH	170	667	48	22.0	88.0%	60.0%
SFH	171	667	30	24.5	98.0%	27.5%
SFH	172	667	48	22.0	88.0%	58.5%
SFH	173	667	48	22.0	88.0%	44.7%
SFH	174	667	48	22.0	88.0%	42.8%
SFH	176	732	48	22.0	88.0%	31.1%
SFH	263	991	65	22.0	88.0%	60.8%
SFH	265	446	25	16.8	67.0%	55.3%
SFH	266	688	48	22.0	88.0%	33.3%
SFH	268	668	48	23.0	92.0%	38.9%
SFH	269	688	48	20.7	82.9%	48.5%
SFH	270	688	48	20.7	82.7%	42.9%
SFH	271	668	48	23.0	92.0%	44.2%
SFH	272	668	48	23.0	92.0%	41.9%
SFH	273	668	48	22.0	88.0%	43.2%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	22.0	88.0%	49.4%
SFH	276	733	48	10.9	43.7%	45.5%
SFH	363	896	70	18.0	72.0%	71.9%
SFH	364	668	48	24.5	98.0%	21.6%
SFH	365	992	75	23.0	92.0%	52.9%
SFH	366	668	36	24.5	98.0%	20.4%
SFH	367	668	48	21.3	85.0%	43.8%
SFH	368	668	48	20.4	81.6%	56.9%
SFH	369	668	48	21.0	84.0%	54.4%
SFH	370	688	48	15.7	62.7%	51.2%
SFH	371	668	38	24.5	98.0%	31.2%
SFH	372	668	48	15.6	62.4%	43.0%
SFH	373	668	48	20.0	80.0%	45.2%
SFH	374	668	48	11.9	47.5%	47.2%
SFH	376	732	50	23.0	92.0%	43.4%
VAR	205	1,151	85	22.0	88.0%	51.9%
VAR	206	1,184	85	19.0	76.0%	53.2%
VAR	479	998	30	22.0	88.0%	74.5%
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WH	102	870	60	19.0	76.0%	66.9%
WH 74	105	856	60	18.0	72.0%	50.4%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	18.0	72.0%	67.6%
WH	301	306	16	18.0	72.0%	78.5%
WH	313	500	30	22.0	88.0%	54.2%
WH	416	372	15	16.0	64.0%	51.7%
Averages		1,022	58	20.8	83.4%	57.9%



Report 4: Off Peak Utilization - Fall 2017

- Off Peak Utilization 8-10 a.m.; 3-5 p.m.; Monday-Friday
- 20 Available Hours per Week.

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	5.0	25.0%	86.7%
DH	135	947	48	13.0	65.0%	83.2%
DH	136B	470	21	13.0	65.0%	78.8%
DH	200	1,126	95	13.0	65.0%	60.7%
DH	201	3,004	314	18.5	92.6%	55.8%
DH	202	702	52	12.7	63.3%	61.9%
DH	203	990	70	8.8	44.0%	73.2%
DH	204	374	30	10.0	50.0%	75.3%
DH	236	394	30	11.5	57.7%	43.2%
DH	237	389	24	17.0	85.0%	79.7%
EC	116	3,373	200	16.0	80.0%	73.6%
EC	254	2,035	100	10.7	53.4%	70.4%
EC	275	1,333	50	12.0	60.0%	65.3%
EC	279	1,329	50	8.0	40.0%	95.5%
EC	281	1,350	50	14.0	69.9%	64.4%
EH	204	541	30	18.0	90.0%	74.1%
EH	206	523	30	15.0	75.0%	63.3%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	11.9	59.7%	71.5%
EH	210	683	40	11.9	59.7%	48.0%
EH	212	696	40	11.6	58.2%	76.4%
EH	214	902	48	14.0	70.0%	62.5%
EH	235	1,021	40	13.0	65.0%	63.8%
EH	237	1,026	40	15.0	75.0%	62.0%
EH	239	1,018	40	11.9	59.7%	63.6%
EH	242	1,561	60	6.0	30.0%	46.7%
НН	113	921	24	15.4	77.2%	81.4%
НН	123	777	36	18.7	93.3%	63.0%
НН	190	2,131	187	20.7	103.3%	63.2%
НН	195	2,068	187	13.0	65.0%	53.1%
нн	220	548	40	10.0	50.0%	45.6%
нн	225	422	30	8.0	40.0%	72.5%
нн	233	1,348	60	13.0	65.0%	57.2%
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ннв	1005	1,828	80	13.0	65.0%	68.1%
ННВ	1006	1,563	50	14.0	70.0%	60.2%
ННВ	1031	729	25	9.0	45.0%	58.2%
ннв	1050	4,384	200	12.2	61.1%	49.7%
ннв	2023	1,442	50	13.2	66.1%	50.2%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ннв	2085	1,213	55	9.3	46.6%	31.6%
ННВ	2086	1,307	60	9.0	45.0%	42.0%
ННВ	4043	1,938	80	6.5	32.5%	36.5%
ннв	4050	2,695	112	13.0	65.0%	56.5%
ннв	5036	1,208	50	16.6	82.8%	68.1%
ннв	5037	1,967	80	9.0	45.0%	39.0%
ннв	5045	2,730	112	12.8	63.8%	74.4%
MSC	102	1,170	48	13.0	65.0%	45.4%
MSC	104	1,117	48	9.7	48.4%	57.0%
MSC	120	1,560	72	8.0	40.0%	72.6%
MSC	124	1,839	84	9.0	45.0%	62.2%
MSC	130	624	42	9.0	45.0%	43.9%
MSC	164	1,129	70	13.0	65.0%	79.8%
MSC	168	1,129	70	16.2	80.8%	43.3%
MSC	172	1,129	70	12.1	60.7%	74.4%
MSC	185	828	50	17.0	85.0%	61.8%
MSC	187	542	36	13.0	65.0%	67.3%
MSC	364	422	26	17.0	85.0%	88.5%
MSC	372	961	50	17.0	85.0%	57.8%
MSC	376	613	28	13.0	65.0%	69.5%
MSC	378	613	30	11.9	59.7%	54.0%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	17.0	85.0%	42.6%
MSC	386	606	40	17.0	85.0%	78.1%
MSC	388	605	30	8.0	40.0%	61.3%
MSC	93	574	35	4.7	23.4%	30.2%
NFH	156	1,757	157	16.1	80.5%	62.4%
ODH	202A	1,344	83	11.2	56.1%	45.6%
ODH	202B	1,848	111	11.4	57.2%	88.2%
ODH	202C	1,394	83	9.0	45.0%	60.4%
PH	302	1,660	72	13.0	65.0%	43.8%
PH	306	910	48	13.0	65.0%	47.3%
PH	307	938	49	14.0	70.0%	62.1%
РН	308	910	48	9.0	45.0%	47.0%
PH	309	930	49	12.3	61.3%	64.2%
PH	310	732	36	17.0	85.0%	53.6%
PH	312	738	36	13.0	65.0%	62.6%
PH	314	916	48	13.0	65.0%	62.3%
PH	316	918	48	18.9	94.4%	38.9%
PH	318	910	48	13.0	65.0%	20.0%
PH	320	735	36	13.0	65.0%	47.9%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	12.0	60.0%	67.2%
SFH	164	667	30	12.0	60.0%	42.5%
SFH	165	992	63	16.0	80.0%	68.5%
SFH	166	667	30	17.0	85.0%	63.1%
SFH	167	667	48	15.9	79.7%	60.2%
SFH	168	667	30	10.0	50.0%	69.3%
SFH	169	667	40	13.0	65.0%	57.9%
SFH	170	667	48	17.0	85.0%	50.9%
SFH	171	667	30	14.3	71.3%	21.7%
SFH	172	667	48	9.0	45.0%	45.8%
SFH	173	667	48	9.0	45.0%	32.6%
SFH	174	667	48	16.0	80.0%	40.2%
SFH	176	732	48	9.0	45.0%	53.5%
SFH	263	991	65	13.0	65.0%	64.1%
SFH	265	446	25	6.5	32.5%	43.5%
SFH	266	688	48	13.0	65.0%	51.1%
SFH	268	668	48	9.0	45.0%	43.3%
SFH	269	688	48	12.0	60.0%	46.4%
SFH	270	688	48	5.9	29.4%	30.7%
SFH	271	668	48	13.0	65.0%	41.7%
SFH	272	668	48	7.9	39.7%	46.0%
SFH	273	668	48	7.9	39.7%	68.4%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	7.9	39.7%	54.4%
SFH	276	733	48	0.0	0.0%	#DIV/0!
SFH	363	896	70	6.0	30.0%	56.7%
SFH	364	668	48	14.3	71.3%	11.5%
SFH	365	992	75	13.0	65.0%	39.3%
SFH	366	668	36	14.3	71.3%	28.4%
SFH	367	668	48	4.5	22.7%	42.8%
SFH	368	668	48	6.5	32.4%	70.5%
SFH	369	668	48	6.5	32.7%	31.6%
SFH	370	688	48	8.9	44.7%	59.0%
SFH	371	668	38	14.3	71.3%	39.3%
SFH	372	668	48	11.5	57.7%	67.8%
SFH	373	668	48	7.0	35.0%	67.9%
SFH	374	668	48	12.3	61.4%	37.7%
SFH	376	732	50	17.0	85.0%	36.4%
VAR	205	1,151	85	17.0	85.0%	45.7%
VAR	206	1,184	85	11.0	55.0%	33.5%
VAR	479	998	30	13.0	65.0%	80.3%
WH	102	870	60	13.0	65.0%	51.4%
WH	105	856	60	9.0	45.0%	56.3%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	17.0	85.0%	51.1%
WH	301	306	16	13.0	65.0%	59.6%
WH	313	500	30	13.0	65.0%	59.0%
WH	416	372	15	0.0	0.0%	0.0%
Totals	123	125,759	7,194	1,479		
Averages		1,022	58	12.0	60.1%	57.4%



Report 5: Evening Utilization - Fall 2017

- Evening Utilization 5-10 p.m.; Monday-Friday
- 25 Available Hours per Week

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)

Math & Science Center (MSC)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1741	92	14.10	56.4%	58.1%
DH	135	947	48	8.82	35.3%	45.0%
DH	136B	470	21	4.00	16.0%	33.3%
DH	200	1126	95	8.55	34.2%	47.4%
DH	201	3004	314	6.26	25.0%	27.1%
DH	202	702	52	8.22	32.9%	52.9%
DH	203	990	70	8.05	32.2%	70.1%
DH	204	374	30	14.72	58.9%	31.5%
DH	236	394	30	8.00	32.0%	41.7%
DH	237	389	24	8.00	32.0%	37.5%
EC	116	3373	200	6.00	24.0%	49.1%
EC	254	2035	100	9.05	36.2%	56.1%
EC	275	1333	50	18.00	72.0%	62.4%
EC	279	1329	50	12.00	48.0%	71.3%
EC	281	1350	50	14.25	57.0%	81.2%
EH	204	541	30	8.10	32.4%	32.7%
EH	206	523	30	13.10	52.4%	37.5%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	10.65	42.6%	72.2%
EH	210	683	40	12.70	50.8%	58.0%
EH	212	696	40	14.63	58.5%	62.0%
EH	214	902	48	14.20	56.8%	72.4%
EH	235	1021	40	14.20	56.8%	52.2%
EH	237	1026	40	17.42	69.7%	51.7%
EH	239	1018	40	14.20	56.8%	72.0%
EH	242	1561	60	7.98	31.9%	49.7%
нн	113	921	24	7.55	30.2%	35.5%
НН	123	777	36	12.55	50.2%	41.4%
нн	190	2131	187	8.86	35.4%	44.5%
НН	195	2068	187	2.13	8.5%	75.4%
HH	220	548	40	15.20	60.8%	39.7%
нн	225	422	30	8.55	34.2%	26.7%
НН	233	1348	60	16.00	64.0%	52.5%
ннв	1005	1828	80	13.65	54.6%	38.1%
ннв	1006	1563	50	14.37	57.5%	67.5%
ННВ	1031	729	25	8.55	34.2%	50.5%
ННВ	1050	4384	200	0.00	0.0%	
ННВ	2023	1442	50	11.82	47.3%	41.9%

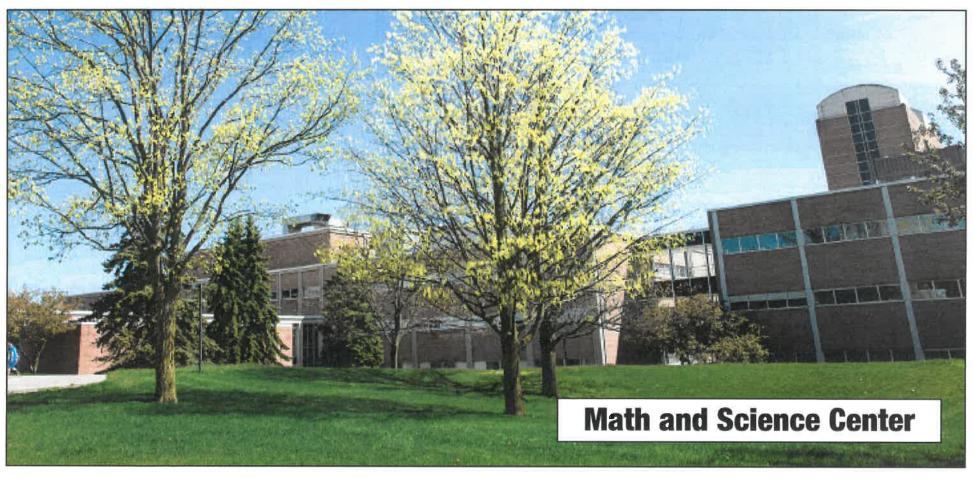
Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ннв	2085	1213	55	9.10	36.4%	24.9%
ННВ	2086	1307	60	13.70	54.8%	70.5%
ннв	4043	1938	80	8.27	33.1%	62.7%
ннв	4050	2695	112	9.00	36.0%	72.0%
ННВ	5036	1208	50	9.65	38.6%	42.6%
ННВ	5037	1967	80	6.55	26.2%	34.9%
ННВ	5045	2730	112	9.10	36.4%	29.1%
MSC	102	1170	48	11.65	46.6%	14.6%
MSC	104	1117	48	14.37	57.5%	41.4%
MSC	120	1560	72	16.60	66.4%	66.0%
MSC	124	1839	84	12.05	48.2%	43.5%
MSC	130	624	42	14.20	56.8%	53.3%
MSC	164	1129	70	13.10	52.4%	62.5%
MSC	168	1129	70	11.15	44.6%	52.3%
MSC	172	1129	70	12.05	48.2%	42.0%
MSC	185	828	50	12.03	48.1%	52.4%
MSC	187	542	36	17.00	68.0%	58.0%
MSC	364	422	26	0.00	0.0%	
MSC	372	961	50	9.05	36.2%	59.5%
MSC	376	613	28	4.00	16.0%	28.6%
MSC	378	613	30	11.22	44.9%	37.4%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	10.65	42.6%	51.5%
MSC	386	606	40	16.00	64.0%	45.0%
MSC	388	605	30	13.00	52.0%	17.9%
MSC	93	574	35	14.00	56.0%	31.8%
NFH	156	1757	157	5.37	21.5%	70.2%
ODH	202A	1344	83	10.65	42.6%	55.8%
ODH	202B	1848	111	4.55	18.2%	47.8%
ODH	202C	1394	83	8.10	32.4%	72.1%
PH	302	1660	72	10.65	42.6%	39.4%
PH	306	910	48	15.20	60.8%	33.4%
РН	307	938	49	14.20	56.8%	31.6%
PH	308	910	48	10.65	42.6%	50.7%
PH	309	930	49	14.20	56.8%	39.3%
PH	310	732	36	11.65	46.6%	36.1%
PH	312	738	36	11.10	44.4%	41.3%
PH	314	916	48	15.20	60.8%	52.4%
PH	316	918	48	15.20	60.8%	63.5%
PH	318	910	48	10.82	43.3%	28.9%
PH	320	735	36	11.10	44.4%	55.3%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	16.10	64.4%	65.4%
SFH	164	667	30	4.05	16.2%	47.4%
SFH	165	992	63	18.00	72.0%	95.1%
SFH	166	667	30	17.00	68.0%	57.3%
SFH	167	667	48	14.20	56.8%	41.7%
SFH	168	667	30	15.10	60.4%	47.1%
SFH	169	667	40	10.55	42.2%	39.5%
SFH	170	667	48	15.20	60.8%	39.0%
SFH	171	667	30	8.00	32.0%	66.7%
SFH	172	667	48	11.65	46.6%	41.7%
SFH	173	667	48	16.10	64.4%	22.6%
SFH	174	667	48	15.70	62.8%	36.6%
SFH	176	732	48	14.37	57.5%	52.8%
SFH	263	991	65	8.55	34.2%	84.1%
SFH	265	446	25	10.98	43.9%	33.3%
SFH	266	688	48	14.70	58.8%	49.1%
SFH	268	668	48	14.20	56.8%	56.3%
SFH	269	688	48	16.20	64.8%	46.0%
SFH	270	688	48	7.10	28.4%	46.9%
SFH	271	668	48	13.70	54.8%	41.2%
SFH	272	668	48	10.65	42.6%	24.3%
SFH	273	668	48	10.65	42.6%	34.0%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	3.05	12.2%	37.5%
SFH	276	733	48	6.60	26.4%	51.5%
SFH	363	896	70	16.00	64.0%	93.2%
SFH	364	668	48	12.00	48.0%	40.3%
SFH	365	992	75	7.10	28.4%	30.0%
SFH	366	668	36	11.10	44.4%	46.2%
SFH	367	668	48	9.65	38.6%	22.2%
SFH	368	668	48	12.70	50.8%	51.5%
SFH	369	668	48	14.70	58.8%	34.9%
SFH	370	688	48	12.70	50.8%	59.8%
SFH	371	668	38	10.65	42.6%	29.8%
SFH	372	668	48	9.65	38.6%	55.9%
SFH	373	668	48	13.20	52.8%	72.3%
SFH	374	668	48	9.65	38.6%	45.9%
SFH	376	732	50	13.70	54.8%	46.5%
VAR	205	1151	85	11.65	46.6%	39.2%
VAR	206	1184	85	14.20	56.8%	17.9%
VAR	479	998	30	15.20	60.8%	46.4%
WH	102	870	60	13.20	52.8%	53.3%
WH	105	856	60	11.60	46.4%	77.1%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1062	85	4.55	18.2%	47.2%
WH	301	306	16	8.55	34.2%	46.2%
WH	313	500	30	11.60	46.4%	50.3%
WH	416	372	15	0.00	0.0%	0.0%
Totals	123	125,759	7,194	1,376		
Averages		1,022	58	11.19	44.8%	49.9%



Report 6: Saturday Utilization - Fall 2017

- Saturday Utilization 8 a.m. to 5 p.m.
- 9 Available Hours per Week
- 12 rooms had a class meeting at least one week during the term. The following table lists these rooms, number of Saturdays scheduled, and the average hours used when the room was scheduled.

Building	Room	Square Feet	Seats	# of Saturdays Scheduled During Term	Avg WRH	WRH% of Available Hours	Station Occupancy %
DH	204	374	30	13	3.7	41%	20%
EH	204	541	30	7	3.5	39%	20%
EH	206	523	30	6	3.5	39%	17%
EH	235	1,021	40	3	5.2	58%	13%
EH	237	1,026	40	8	8.5	94%	37%
НН	113	921	24	13	4.0	45%	42%
MSC	364	422	26	13	3.7	41%	15%
PH	310	732	36	13	3.7	41%	39%
PH	312	738	36	8	6.5	72%	28%
PH	320	735	36	2	6.2	69%	33%
SFH	166	667	30	13	3.5	39%	20%
SFH	168	667	30	13	3.5	39%	80%
Totals/ Averages	12	8,367	388	112	4.6	52%	31%

Report 7: All Day Utilization - Winter 2018

- All Day Utilization 8 a.m. to 10 p.m.; Monday-Friday
- 75 Available Hours per Week

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	39.3	52.30%	60.70%
DH	135	947	48	46.3	61.70%	71.90%
DH	136B	470	21	40	53.30%	57.60%
DH	200	1,126	95	31.5	42.10%	60.30%
DH	201	3,004	314	27.1	36.20%	45.00%
DH	202	702	52	32.1	42.70%	69.00%
DH	203	990	70	28.2	37.60%	61.70%
DH	204	374	30	40	53.30%	58.00%
DH	236	394	30	28	37.30%	62.90%
DH /	237	389	24	53.5	71.40%	73.40%
EC	116	3,373	200	35.6	47.40%	51.20%
EC	254	2,035	100	45.3	60.40%	55.80%
EC	275	1,333	50	48	64.00%	75.80%
EC	279	1,329	50	41.5	55.40%	67.20%
EC	281	1,350	50	42.1	56.10%	68.10%
EH	204	541	30	51.1	68.10%	49.90%
EH	206	523	30	54.7	73.00%	69.60%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	32.6	43.40%	63.70%
EH	210	683	40	47.8	63.80%	65.60%
EH	212	696	40	43.3	57.80%	74.60%
EH	214	902	48	46.6	62.10%	64.20%
EH	235	1,021	40	34.6	46.10%	85.50%
EH	237	1,026	40	43.1	57.40%	62.10%
EH	239	1,018	40	42.1	56.10%	75.60%
EH	242	1,561	60	48.2	64.30%	57.60%
						1
нн	113	921	24	50.2	66.90%	63.40%
нн	123	777	36	51.1	68.10%	73.00%
нн	190	2,131	187	48.4	64.50%	63.40%
нн	195	2,068	187	41.6	55.40%	61.60%
нн	220	548	40	41.3	55.10%	52.70%
нн	225	422	30	27.5	36.70%	66.40%
нн	233	1,348	60	40	53.30%	62.50%
					1	
ННВ	1005	1,828	80	39.2	52.20%	64.10%
ННВ	1006	1,563	50	42.9	57.20%	59.30%
ННВ	1031	729	25	34.2	45.60%	54.70%
ННВ	1050	4,384	200	30.5	40.70%	57.00%
ННВ	2023	1,442	50	38.8	51.70%	52.30%

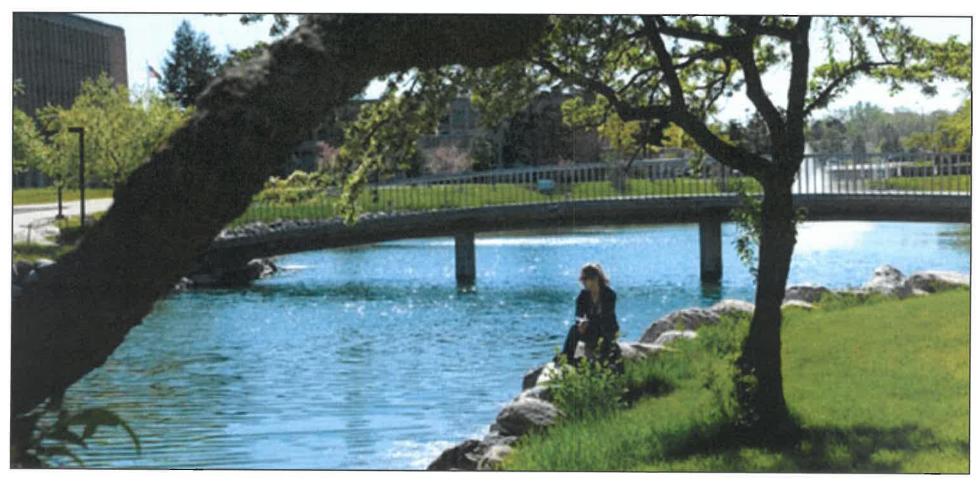
Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ННВ	2085	1,213	55	36.9	49.20%	49.20%
ннв	2086	1,307	60	44.8	59.70%	60.40%
ннв	4043	1,938	80	24.7	32.90%	45.00%
ннв	4050	2,695	112	29.5	39.40%	72.60%
ннв	5036	1,208	50	49.4	65.90%	63.10%
ннв	5037	1,967	80	33	43.90%	42.90%
ННВ	5045	2,730	112	36.5	48.70%	71.80%
					•	
MSC	102	1,170	48	48.3	64.50%	48.40%
MSC	104	1,117	48	47.1	62.80%	52.00%
MSC	120	1,560	72	43.5	58.10%	57.70%
MSC	124	1,839	84	36.7	48.90%	63.40%
MSC	130	624	42	44.1	58.80%	56.30%
MSC	164	1,129	70	51.1	68.20%	75.90%
MSC	168	1,129	70	47.1	62.80%	71.30%
MSC	172	1,129	70	53.2	70.90%	75.50%
MSC	185	828	50	47.1	62.80%	76.40%
MSC	187	542	36	45.2	60.30%	49.20%
MSC	364	422	26	41.2	54.90%	52.60%
MSC	372	961	50	44.2	58.90%	57.20%
MSC	376	613	28	47.5	63.40%	56.00%
MSC	378	613	30	32	42.70%	62.90%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	47	62.70%	61.60%
MSC	386	606	40	46.6	62.10%	58.50%
MSC	388	605	30	50.7	67.50%	64.60%
MSC	93	574	35	40.4	53.90%	50.30%
NFH	156	1,757	157	43.8	58.40%	41.80%
ODH	202A	1,344	83	17.5	23.40%	49.30%
ODH	202B	1,848	111	29.4	39.20%	67.80%
ODH	202C	1,394	83	24.2	32.20%	55.20%
PH	302	1,660	72	29.8	39.80%	53.60%
PH	306	910	48	42.7	56.90%	60.20%
РН	307	938	49	34.2	45.60%	39.20%
PH	308	910	48	41.7	55.60%	42.90%
PH	309	930	49	28.2	37.60%	55.50%
PH	310	732	36	46.2	61.60%	53.20%
PH	312	738	36	41.4	55.20%	61.30%
PH	314	916	48	37.8	50.30%	44.30%
PH	316	918	48	29.1	38.80%	51.40%
PH	318	910	48	41.8	55.70%	42.20%
PH	320	735	36	44.3	59.10%	62.90%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	36	48.00%	74.20%
SFH	164	667	30	48	64.00%	51.40%
SFH	165	992	63	43.1	57.50%	74.50%
SFH	166	667	30	51.1	68.10%	52.60%
SFH	167	667	48	46.6	62.20%	48.20%
SFH	168	667	30	50.7	67.50%	34.70%
SFH	169	667	40	53.7	71.60%	51.70%
SFH	170	667	48	45.1	60.10%	46.60%
SFH	171	667	30	42.1	56.10%	33.30%
SFH	172	667	48	42.2	56.30%	49.70%
SFH	173	667	48	48	64.00%	46.70%
SFH	174	667	48	42.1	56.20%	45.70%
SFH	176	732	48	46.1	61.50%	40.80%
SFH	263	991	65	48	64.00%	74.90%
SFH	265	446	25	38	50.70%	27.60%
SFH	266	688	48	43.1	57.50%	37.30%
SFH	268	668	48	38.6	51.50%	46.90%
SFH	269	688	48	31.1	41.50%	41.80%
SFH	270	688	48	43.1	57.50%	42.30%
SFH	271	668	48	42.6	56.90%	42.30%
SFH	272	668	48	43.5	58.10%	41.50%
SFH	273	668	48	39.1	52.10%	41.90%
SFH	274	668	48	36	48.00%	44.60%
SFH	276	733	48	37.4	49.90%	47.70%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	363	896	70	31.8	42.40%	66.90%
SFH	364	668	48	49.7	66.30%	20.30%
SFH	365	992	75	33.7	44.90%	59.40%
SFH	366	668	36	38.1	50.80%	27.30%
SFH	367	668	48	39.1	52.10%	37.00%
SFH	368	668	48	38.1	50.90%	51.20%
SFH	369	668	48	31.5	42.10%	49.10%
SFH	370	688	48	43.1	57.50%	41.50%
SFH	371	668	38	44.2	58.90%	32.30%
SFH	372	668	48	41.1	54.80%	53.50%
SFH	373	668	48	35.5	47.40%	45.50%
SFH	374	668	48	49.5	66.00%	51.90%
SFH	376	732	50	41.7	55.60%	39.80%
VAR	205	1,151	85	37.2	49.60%	39.00%
VAR	206	1,184	85	25.7	34.30%	34.90%
VAR	479	998	30	46.2	61.60%	60.20%
WH	102	870	60	35.1	46.80%	62.40%
WH	105	856	60	31.5	42.10%	57.40%
WH	124	1,062	85	23.5	31.40%	59.10%
WH	301	306	16	38.2	50.90%	67.80%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	313	500	30	39.5	52.70%	51.20%
WH	416	372	15	28	37.30%	50.50%
Totals	123	125,759	7,194	4,966		
Averages		1,022	58	40.4	53.80%	56.00%



Report 8: Daytime Utilization - Winter 2018

Daytime Utilization – 8 a.m. to 5 p.m.; Monday-Friday

• 45 Available Hours per Week

Dodge Hall (DH)
Engineering Center (EC)
Elliott Hall (EH)
Hannah Hall (HH)
Human Health Building (HHB)
Math & Science Center (MSC)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	36.3	80.60%	62.90%
DH	135	947	48	34.3	76.20%	82.70%
DH	136B	470	21	24	53.30%	72.20%
DH	200	1,126	95	25.5	56.80%	63.00%
DH	201	3,004	314	27.1	60.30%	45.00%
DH	202	702	52	24	53.40%	69.20%
DH	203	990	70	21.8	48.40%	63.20%
DH	204	374	30	24	53.30%	68.30%
DH	236	394	30	28	62.20%	62.90%
DH	237	389	24	40.7	90.40%	79.50%
EC	116	3,373	200	33.6	74.60%	51.50%
EC	254	2,035	100	33.1	73.60%	62.90%
EC	275	1,333	50	31	68.90%	92.70%
EC	279	1,329	50	30	66.70%	68.70%
EC	281	1,350	50	30	66.80%	66.60%
		1		1		
EH	204	541	30	40	88.90%	46.00%
EH	206	523	30	41	91.10%	71.80%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	18.5	41.10%	78.60%
EH	210	683	40	32.2	71.60%	58.50%
EH	212	696	40	31.1	69.20%	79.80%
EH	214	902	48	32.4	72.00%	57.70%
EH	235	1,021	40	21.9	48.60%	85.60%
EH	237	1,026	40	28.9	64.10%	53.90%
EH	239	1,018	40	26.9	59.80%	80.60%
EH	242	1,561	60	36	80.00%	63.50%
					•	•
нн	113	921	24	36	80.00%	69.90%
нн	123	777	36	35	77.80%	71.30%
НН	190	2,131	187	40.9	90.90%	64.50%
НН	195	2,068	187	35.6	79.00%	63.30%
НН	220	548	40	32	71.10%	52.80%
нн	225	422	30	20	44.40%	69.30%
НН	233	1,348	60	28	62.20%	62.90%
ннв	1005	1,828	80	23	51.10%	85.90%
ННВ	1006	1,563	50	28.2	62.70%	48.50%
ННВ	1031	729	25	24	53.30%	70.70%
ННВ	1050	4,384	200	23.4	52.00%	61.40%
ННВ	2023	1,442	50	23.6	52.40%	52.00%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ННВ	2085	1,213	55	28.3	63.00%	47.50%
ННВ	2086	1,307	60	34.9	77.60%	61.80%
ННВ	4043	1,938	80	18.9	42.10%	51.10%
ннв	4050	2,695	112	19	42.20%	79.60%
ннв	5036	1,208	50	36.9	82.00%	66.20%
ннв	5037	1,967	80	21.9	48.60%	46.70%
ннв	5045	2,730	112	32.5	72.30%	78.90%
MSC	102	1,170	48	29.9	66.40%	51.50%
MSC	104	1,117	48	30	66.70%	57.00%
MSC	120	1,560	72	31	68.90%	68.70%
MSC	124	1,839	84	31.1	69.20%	64.30%
MSC	130	624	42	33	73.30%	55.80%
MSC	164	1,129	70	35.1	78.10%	78.60%
MSC	168	1,129	70	31	68.90%	70.90%
MSC	172	1,129	70	38.1	84.70%	75.00%
MSC	185	828	50	32	71.10%	80.00%
MSC	187	542	36	31	68.90%	57.60%
MSC	364	422	26	28.2	62.70%	66.90%
MSC	372	961	50	33.1	73.60%	60.60%
MSC	376	613	28	36	80.00%	57.10%
MSC	378	613	30	23	51.10%	74.20%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	33.9	75.40%	59.70%
MSC	386	606	40	36	80.00%	56.70%
MSC	388	605	30	40	88.90%	70.00%
MSC	93	574	35	32.4	72.10%	47.90%
NFH	156	1,757	157	34.1	75.80%	40.10%
ODH	202A	1,344	83	10.9	24.30%	52.80%
ODH	202B	1,848	111	22.3	49.50%	80.40%
ODH	202C	1,394	83	18.7	41.60%	53.30%
PH	302	1,660	72	21.8	48.30%	61.70%
РН	306	910	48	31	68.90%	69.10%
РН	307	938	49	19	42.20%	52.60%
PH	308	910	48	30.5	67.90%	39.70%
PH	309	930	49	18	40.10%	54.60%
PH	310	732	36	35.5	79.00%	60.20%
PH	312	738	36	28	62.20%	69.80%
PH	314	916	48	27.1	60.20%	49.40%
PH	316	918	48	18.9	42.10%	55.60%
PH	318	910	48	30.1	66.90%	38.10%
PH	320	735	36	30.1	66.90%	54.30%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	28	62.20%	77.40%
SFH	164	667	30	36	80.00%	53.00%
SFH	165	992	63	31	68.90%	75.90%
SFH	166	667	30	42	93.30%	52.70%
SFH	167	667	48	36	80.00%	55.30%
SFH	168	667	30	38	84.40%	33.20%
SFH	169	667	40	40	88.90%	56.30%
SFH	170	667	48	36	80.00%	46.50%
SFH	171	667	30	31	68.90%	17.50%
SFH	172	667	48	27	60.00%	53.90%
SFH	173	667	48	36	80.00%	50.20%
SFH	174	667	48	32	71.10%	44.80%
SFH	176	732	48	35	77.80%	41.40%
SFH	263	991	65	40	88.90%	79.20%
SFH	265	446	25	31	68.90%	26.00%
SFH	266	688	48	35	77.80%	37.10%
SFH	268	668	48	27	60.00%	42.80%
SFH	269	688	48	23	51.10%	41.40%
SFH	270	688	48	31	68.90%	48.50%
SFH	271	668	48	31	68.90%	43.20%
SFH	272	668	48	34	75.60%	40.70%
SFH	273	668	48	27	60.00%	42.40%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	23.4	52.10%	46.20%
SFH	276	733	48	26	57.80%	43.90%
SFH	363	896	70	23.8	52.90%	71.00%
SFH	364	668	48	38.8	86.10%	12.10%
SFH	365	992	75	18	40.00%	64.10%
SFH	366	668	36	31	68.90%	17.40%
SFH	367	668	48	27	60.00%	36.40%
SFH	368	668	48	28	62.20%	48.20%
SFH	369	668	48	23	51.10%	46.30%
SFH	370	688	48	35	77.80%	43.40%
SFH	371	668	38	31	68.90%	17.10%
SFH	372	668	48	29.9	66.50%	46.20%
SFH	373	668	48	32	71.10%	47.10%
SFH	374	668	48	37.9	84.30%	50.50%
SFH	376	732	50	28	62.20%	37.10%
VAR	205	1,151	85	24	53.30%	40.20%
VAR	206	1,184	85	15.6	34.60%	35.80%
VAR	479	998	30	32	71.10%	59.20%
WH	102	870	60	28	62.20%	58.80%
WH	105	856	60	24	53.30%	64.70%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	19	42.20%	65.30%
WH	301	306	16	24	53.30%	71.90%
WH	313	500	30	31	68.90%	48.30%
WH	416	372	15	27	60.00%	49.10%
Totals	123	125,759	7,194	3,640		
Averages		1,022	58	29.6	65.80%	57.80%



Report 9: Prime Time Utilization - Winter 2018

- Prime Time Utilization 10 a.m. to 3 p.m.; Monday-Friday
- 25 Available Hours per Week

Dodge Hall (DH)
Engineering Center (EC)
Elliott Hall (EH)
Hannah Hall (HH)
Human Health Building (HHB)
Math & Science Center (MSC)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741.00	92	25	100.00%	59.00%
DH	135	947	48	21.3	85.20%	83.30%
DH	136B	470	21	16	64.00%	82.10%
DH	200	1,126.00	95	17.5	70.20%	68.00%
DH	201	3,004.00	314	17.1	68.60%	40.70%
DH	202	702	52	18.7	74.70%	71.00%
DH	203	990	70	18.5	73.90%	68.00%
DH	204	374	30	21	84.00%	69.00%
DH	236	394	30	17	68.00%	68.20%
DH	237	389	24	22	88.00%	82.20%
EC	116	3,373.00	200	22.9	91.80%	50.40%
EC	254	2,035.00	100	18.1	72.40%	66.10%
EC	275	1,333.00	50	22	88.00%	94.20%
EC	279	1,329.00	50	22	88.00%	74.00%
EC	281	1,350.00	50	19.7	78.70%	62.40%
EH	204	541	30	23	92.00%	46.10%
EH	206	523	30	23	92.00%	75.10%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	10.6	42.40%	80.50%
EH	210	683	40	17.2	68.80%	74.00%
EH	212	696	40	15.3	61.10%	70.50%
EH	214	902	48	17.5	70.10%	64.80%
EH	235	1,021.00	40	14	56.00%	84.60%
EH	237	1,026.00	40	21.9	87.40%	54.90%
EH	239	1,018.00	40	16.6	66.60%	89.80%
EH	242	1,561.00	60	22	88.00%	62.00%
НН	113	921	24	19	76.00%	64.00%
нн	123	777	36	22	88.00%	71.50%
НН	190	2,131.00	187	23.9	95.60%	65.50%
НН	195	2,068.00	187	19.6	78.20%	63.70%
НН	220	548	40	22	88.00%	54.30%
НН	225	422	30	14	56.00%	80.50%
НН	233	1,348.00	60	21	84.00%	59.20%
				r	1	
ННВ	1005	1,828.00	80	16	64.00%	85.00%
ННВ	1006	1,563.00	50	20	80.00%	45.60%
ННВ	1031	729	25	18	72.00%	73.80%
ННВ	1050	4,384.00	200	16.3	65.00%	64.10%
ННВ	2023	1,442.00	50	15.7	62.60%	46.80%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ннв	2085	1,213.00	55	17.3	69.40%	48.00%
ннв	2086	1,307.00	60	23	92.00%	54.30%
ННВ	4043	1,938.00	80	14	56.00%	51.40%
ннв	4050	2,695.00	112	12	48.00%	85.70%
ннв	5036	1,208.00	50	20.1	80.30%	66.90%
ннв	5037	1,967.00	80	12.9	51.70%	49.10%
ННВ	5045	2,730.00	112	18.1	72.50%	75.40%
MSC	102	1,170.00	48	15.9	63.40%	64.60%
MSC	104	1,117.00	48	18	72.00%	63.20%
MSC	120	1,560.00	72	20	80.00%	67.80%
MSC	124	1,839.00	84	23.1	92.50%	62.50%
MSC	130	624	42	22	88.00%	62.80%
MSC	164	1,129.00	70	24.1	96.50%	72.20%
MSC	168	1,129.00	70	22	88.00%	65.70%
MSC	172	1,129.00	70	25	100.00%	78.20%
MSC	185	828	50	23	92.00%	86.30%
MSC	187	542	36	22	88.00%	60.10%
MSC	364	422	26	22.2	88.80%	65.70%
MSC	372	961	50	21.2	84.70%	60.40%
MSC	376	613	28	23	92.00%	45.20%
MSC	378	613	30	14	56.00%	81.90%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	22	88.00%	51.90%
MSC	386	606	40	23	92.00%	53.00%
MSC	388	605	30	23	92.00%	69.60%
MSC	93	574	35	21.8	87.20%	55.10%
NFH	156	1,757.00	157	23	92.00%	30.80%
ODH	202A	1,344.00	83	7.9	31.70%	52.70%
ODH	202B	1,848.00	111	17.5	70.10%	84.40%
ODH	202C	1,394.00	83	13	52.00%	54.70%
PH	302	1,660.00	72	15.3	61.30%	78.50%
PH	306	910	48	22	88.00%	63.60%
PH	307	938	49	12	48.00%	64.60%
PH	308	910	48	20	80.00%	36.70%
PH	309	930	49	12.1	48.20%	48.70%
PH	310	732	36	21	84.00%	70.00%
PH	312	738	36	17	68.00%	68.30%
PH	314	916	48	18	72.00%	47.00%
PH	316	918	48	14.9	59.70%	57.10%
PH	318	910	48	20.1	80.40%	42.20%
PH	320	735	36	17.1	68.40%	53.00%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	15	60.00%	76.70%
SFH	164	667	30	23	92.00%	39.40%
SFH	165	992	63	19	76.00%	86.20%
SFH	166	667	30	23	92.00%	50.90%
SFH	167	667	48	23	92.00%	57.50%
SFH	168	667	30	23	92.00%	37.70%
SFH	169	667	40	23	92.00%	47.80%
SFH	170	667	48	23	92.00%	54.70%
SFH	171	667	30	16.8	67.00%	19.30%
SFH	172	667	48	18	72.00%	50.20%
SFH	173	667	48	23	92.00%	49.90%
SFH	174	667	48	22	88.00%	43.60%
SFH	176	732	48	22	88.00%	40.50%
SFH	263	991	65	23	92.00%	76.80%
SFH	265	446	25	16.8	67.00%	14.40%
SFH	266	688	48	22	88.00%	28.60%
SFH	268	668	48	18	72.00%	42.40%
SFH	269	688	48	14	56.00%	42.90%
SFH	270	688	48	18	72.00%	43.10%
SFH	271	668	48	20	80.00%	42.10%
SFH	272	668	48	22	88.00%	39.80%
SFH	273	668	48	22	88.00%	41.30%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	14	56.00%	42.30%
SFH	276	733	48	16	64.00%	35.40%
SFH	363	896	70	17.4	69.70%	66.90%
SFH	364	668	48	24.5	98.00%	13.00%
SFH	365	992	75	12	48.00%	52.90%
SFH	366	668	36	21.2	84.70%	19.30%
SFH	367	668	48	20	80.00%	41.30%
SFH	368	668	48	20	80.00%	51.70%
SFH	369	668	48	18	72.00%	48.10%
SFH	370	688	48	22	88.00%	41.70%
SFH	371	668	38	24.5	98.00%	18.70%
SFH	372	668	48	16	64.00%	45.30%
SFH	373	668	48	19	76.00%	57.70%
SFH	374	668	48	22	88.00%	41.30%
SFH	376	732	50	22	88.00%	34.20%
VAR	205	1,151.00	85	16	64.00%	42.40%
VAR	206	1,184.00	85	13.7	54.70%	36.80%
VAR	479	998	30	22	88.00%	57.90%
WH	102	870	60	23	92.00%	67.30%
WH	105	856	60	20	80.00%	74.70%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062.00	85	16	64.00%	58.80%
WH	301	306	16	18	72.00%	71.50%
WH	313	500	30	17	68.00%	53.30%
WH	416	372	15	18	72.00%	45.90%
Totals	123	125,759	7,194	2,363		
Averages		1,022	58	19.2	76.80%	57.60%



Report 10: Off Peak Utilization - Winter 2018

- Off Peak Utilization 8-10 a.m.; 3-5 p.m.; Monday-Friday
- 20 Available Hours per Week.

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

North Foundation Hall (NFH)
O'Dowd Hall (ODH)
Pawley Hall (PH)
South Foundation Hall (SFH)
Varner Hall (VH)
Wilson Hall (WH)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
DH	127	1,741	92	11.3	56.30%	71.50%
DH	135	947	48	13	65.00%	81.70%
DH	136B	470	21	8	40.00%	52.40%
DH	200	1,126	95	8	40.00%	52.00%
DH	201	3,004	314	10	50.00%	52.50%
DH	202	702	52	5.3	26.70%	63.00%
DH	203	990	70	3.3	16.60%	36.60%
DH	204	374	30	3	15.00%	63.30%
DH	236	394	30	11	55.00%	54.50%
DH	237	389	24	18.7	93.30%	76.30%
EC	116	3,373	200	10.6	53.20%	53.90%
EC	254	2,035	100	15	75.00%	58.90%
EC	275	1,333	50	9	45.00%	89.10%
EC	279	1,329	50	8	40.00%	54.00%
EC	281	1,350	50	10.4	51.90%	74.70%
EH	204	541	30	17	85.00%	45.90%
EH	206	523	30	18	90.00%	67.60%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
EH	208	686	40	7.9	39.40%	76.10%
EH	210	683	40	15	75.00%	40.70%
EH	212	696	40	15.9	79.30%	88.80%
EH	214	902	48	14.9	74.40%	49.30%
EH	235	1,021	40	7.9	39.30%	87.20%
EH	237	1,026	40	7	35.00%	50.70%
EH	239	1,018	40	10.3	51.30%	65.60%
EH	242	1,561	60	14	70.00%	66.00%
НН	113	921	24	17	85.00%	76.50%
НН	123	777	36	13	65.00%	70.90%
НН	190	2,131	187	17	85.00%	63.00%
нн	195	2,068	187	16	80.00%	62.70%
НН	220	548	40	10	50.00%	49.50%
НН	225	422	30	6	30.00%	43.30%
НН	233	1,348	60	7	35.00%	73.80%
	t					
ннв	1005	1,828	80	7	35.00%	87.90%
ннв	1006	1,563	50	8.2	41.00%	55.40%
ННВ	1031	729	25	6	30.00%	61.30%
ннв	1050	4,384	200	7.1	35.60%	55.20%
ннв	2023	1,442	50	7.9	39.60%	62.30%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
ННВ	2085	1,213	55	11	55.00%	46.80%
ННВ	2086	1,307	60	11.9	59.70%	76.40%
ННВ	4043	1,938	80	4.9	24.70%	50.00%
ННВ	4050	2,695	112	7	35.00%	69.00%
ННВ	5036	1,208	50	16.8	84.10%	65.30%
ННВ	5037	1,967	80	8.9	44.70%	43.20%
ннв	5045	2,730	112	14.4	72.00%	83.40%
MSC	102	1,170	48	14	70.00%	36.60%
MSC	104	1,117	48	12	60.00%	47.70%
MSC	120	1,560	72	11	55.00%	70.50%
MSC	124	1,839	84	8	40.00%	69.60%
MSC	130	624	42	11	55.00%	41.80%
MSC	164	1,129	70	11	55.00%	92.60%
MSC	168	1,129	70	9	45.00%	83.70%
MSC	172	1,129	70	13.1	65.50%	68.90%
MSC	185	828	50	9	45.00%	63.80%
MSC	187	542	36	9	45.00%	51.50%
MSC	364	422	26	6	30.00%	71.20%
MSC	372	961	50	11.9	59.70%	60.90%
MSC	376	613	28	13	65.00%	78.30%
MSC	378	613	30	9	45.00%	62.20%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
MSC	384	653	44	11.9	59.70%	74.20%
MSC	386	606	40	13	65.00%	63.10%
MSC	388	605	30	17	85.00%	70.60%
MSC	93	574	35	10.6	53.20%	33.20%
NFH	156	1,757	157	11.1	55.50%	59.20%
ODH	202A	1,344	83	3	15.00%	53.00%
ODH	202B	1,848	111	4.8	23.80%	65.80%
ODH	202C	1,394	83	5.7	28.60%	50.20%
PH	302	1,660	72	6.4	32.20%	21.60%
РН	306	910	48	9	45.00%	82.40%
PH	307	938	49	7	35.00%	32.10%
PH	308	910	48	10.5	52.70%	45.50%
PH	309	930	49	6	29.90%	66.40%
PH	310	732	36	14.5	72.70%	46.10%
PH	312	738	36	11	55.00%	72.20%
PH	314	916	48	9.1	45.50%	54.20%
PH	316	918	48	4	20.00%	50.00%
PH	318	910	48	10	50.00%	30.00%
PH	320	735	36	13	65.00%	56.00%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	163	985	65	13	65.00%	78.10%
SFH	164	667	30	13	65.00%	76.90%
SFH	165	992	63	12	60.00%	59.50%
SFH	166	667	30	19	95.00%	54.90%
SFH	167	667	48	13	65.00%	51.40%
SFH	168	667	30	15	75.00%	26.20%
SFH	169	667	40	17	85.00%	67.60%
SFH	170	667	48	13	65.00%	32.10%
SFH	171	667	30	14.3	71.30%	15.40%
SFH	172	667	48	9	45.00%	61.30%
SFH	173	667	48	13	65.00%	50.80%
SFH	174	667	48	10	50.00%	47.50%
SFH	176	732	48	13	65.00%	42.90%
SFH	263	991	65	17	85.00%	82.50%
SFH	265	446	25	14.3	71.30%	39.60%
SFH	266	688	48	13	65.00%	51.60%
SFH	268	668	48	9	45.00%	43.80%
SFH	269	688	48	9	45.00%	39.10%
SFH	270	688	48	13	65.00%	56.10%
SFH	271	668	48	11	55.00%	45.30%
SFH	272	668	48	12	60.00%	42.40%
SFH	273	668	48	5	25.00%	47.50%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
SFH	274	668	48	9.4	47.20%	52.10%
SFH	276	733	48	10	50.00%	57.50%
SFH	363	896	70	6.4	31.90%	82.10%
SFH	364	668	48	14.3	71.30%	10.50%
SFH	365	992	75	6	30.00%	86.70%
SFH	366	668	36	9.8	49.10%	13.20%
SFH	367	668	48	7	35.00%	22.60%
SFH	368	668	48	8	40.00%	39.60%
SFH	369	668	48	5	25.00%	39.60%
SFH	370	688	48	13	65.00%	46.30%
SFH	371	668	38	6.5	32.50%	11.30%
SFH	372	668	48	13.9	69.70%	47.20%
SFH	373	668	48	13	65.00%	31.70%
SFH	374	668	48	15.9	79.70%	63.20%
SFH	376	732	50	6	30.00%	48.00%
VAR	205	1,151	85	8	40.00%	35.90%
VAR	206	1,184	85	1.9	9.40%	28.20%
VAR	479	998	30	10	50.00%	62.00%
WH	102	870	60	5	25.00%	19.70%
WH	105	856	60	4	20.00%	15.00%

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %
WH	124	1,062	85	3	15.00%	100.00%
WH	301	306	16	6	30.00%	72.90%
WH	313	500	30	14	70.00%	42.10%
WH	416	372	15	9	45.00%	55.60%
Totals	123	125,759	7,194	1,277		
Averages		1,022	58	10.4	51.90%	58.00%



Report 11: Evening Utilization - Winter 2018

- Evening Utilization 5-10 p.m.; Monday-Friday
- 25 Available Hours per Week

Dodge Hall (**DH**)
Engineering Center (**EC**)
Elliott Hall (**EH**)
Hannah Hall (**HH**)
Human Health Building (**HHB**)
Math & Science Center (**MSC**)

North Foundation Hall (NFH)
O'Dowd Hall (ODH)
Pawley Hall (PH)
South Foundation Hall (SFH)
Varner Hall (VH)
Wilson Hall (WH)

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
DH	127	1,741	92	3	12.00%		
DH	135	947	48	12	48.00%	41.00%	
DH	136B	470	21	16	64.00%	35.70%	
DH	200	1,126	95	6	24.00%	48.90%	
DH	201	3,004	314	0	0.00%		
DH	202	702	52	8.1	32.20%	68.40%	
DH	203	990	70	6.4	25.60%	56.40%	
DH	204	374	30	16	64.00%	42.50%	
DH	236	394	30	0	0.00%		
DH	237	389	24	12.9	51.50%	54.40%	
EC	116	3,373	200	2	8.00%	47.00%	
EC	254	2,035	100	12.2	48.90%	36.80%	
EC	275	1,333	50	17	68.00%	45.10%	
EC	279	1,329	50	11.6	46.20%	63.20%	
EC	281	1,350	50	12.1	48.20%	71.70%	
EH	204	541	30	11.1	44.40%	63.80%	
EH	206	523	30	13.8	55.00%	63.00%	

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
EH	208	686	40	14.1	56.40%	44.20%	
EH	210	683	40	15.6	62.50%	80.20%	
EH	212	696	40	12.2	48.80%	61.30%	
EH	214	902	48	14.2	56.80%	79.00%	
EH	235	1,021	40	12.7	50.80%	85.40%	
EH	237	1,026	1,026 40 14.2 56.80%		78.60%		
EH			40	15.2	60.80%	66.60%	
EH	242	1,561	60	12.2	48.80%	40.00%	
нн	113 921		24	14.2	56.80%	46.90%	
НН	123	777	36	16.1	64.40%	76.80%	
нн	190	2,131	187	7.5	29.80%	57.30%	
нн	195	2,068	187	6	24.00%	52.00%	
НН	220	548	40	9.3	37.30%	52.30%	
нн	225	422	30	7.6	30.20%	58.60%	
нн	233	1,348	60	12	48.00%	61.70%	
ннв	1005	1,828	80	16.2	64.70%	33.00%	
ннв	1006	1,563	50	14.7	58.80%	80.10%	
ннв	1031	729	25	10.2	40.90%	17.20%	
ннв	1050	4,384	200	7.1	28.40%	42.50%	
ннв	2023	1,442	50	15.2	60.80%	52.80%	

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
ннв	2085	1,213	55	8.6	34.20%	55.00%	
ннв	2086	1,307	60	9.8	39.30%	55.60%	
ннв	4043	1,938	80	5.8	23.10%	24.90%	
ннв	4050	2,695	112	10.6	42.20%	60.20%	
ннв	5036	1,208	50	12.5	50.20%	54.10%	
ннв	5037	1,967	80	11.1 44.40%		35.40%	
ннв	5045	2,730	112	4	16.00%	13.80%	
MSC	102	1,170	48	18.5	74.00%	43.60%	
MSC	104	1,117	48	17.1	68.40%	43.10%	
MSC	120	1,560	72	12.6	50.20%	30.40%	
MSC	124	1,839	84	5.6	22.20%	58.20%	
MSC	130	624	42	11.1	44.40%	57.70%	
MSC	164	1,129	70	16	64.00%	70.00%	
MSC	168	1,129	70	16.1	64.40%	71.90%	
MSC	172	1,129	70	15.1	60.40%	76.80%	
MSC	185	828	50	15.1	60.40%	68.80%	
MSC	187	542	36	14.2	56.80%	31.00%	
MSC	364	422	26	13	52.00%	21.60%	
MSC	372	961	50	11.1	44.40%	47.10%	
MSC	376	613	28	11.6	46.20%	52.50%	
MSC	378	613	30	9	36.00%	34.10%	

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
MSC	384	653	44	13.1	52.30%	66.40%	
MSC	386	606	40	10.6	42.40%	64.80%	
MSC	388	605	30	10.6	42.60%	44.40%	
MSC	93 574		35	8	32.00%	60.00%	
NFH	156	1,757	157	9.7	38.80%	47.90%	
DDH 202A 1,344		1,344	83	6.6	26.40%	43.50%	
ODH	202B	1,848	111	7.1	28.40%	28.40%	
ODH	202C	1,394	83	5.4	21.80%	61.40%	
PH	302	1,660	72	8.1	32.40%	31.90%	
PH	306	910	48	11.7	46.60%	36.50%	
PH	307	938	49	15.2	60.80%	22.50%	
PH	308	910	48	11.2	44.60%	51.60%	
PH	309	930	49	10.1	40.60%	57.30%	
PH	310	732	36	10.6	42.60%	29.60%	
PH	312	738	36	13.4	53.50%	43.30%	
PH	314	916	48	10.6	42.60%	31.30%	
PH	316	918	48	10.1	40.60%	43.40%	
PH	318	910	48	11.7	46.60%	52.60%	
PH	320	735	36	14.2	56.80%	81.10%	

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
SFH	163	985	65	8	32.00%	63.10%	
SFH	164	667	30	12	48.00%	46.70%	
SFH	165	992	63	12.1	48.40%	70.90%	
SFH	166	667	30	9.1	36.40%	52.00%	
SFH	167	667	48	10.6	42.60%	24.30%	
SFH	H 168 667		30	12.7	50.60%	39.20%	
SFH	169	667	40	13.7	54.80%	38.50%	
SFH	170	667	48	9.1	36.40%	46.70%	
SFH	171	667	30	11.1	44.40%	77.50%	
SFH	172	667	48	15.2	60.80%	42.30%	
SFH	173	667	48	12	48.10%	36.10%	
SFH	174	667	48	10.1	40.60%	48.50%	
SFH	176	732	48	11.2	44.60%	38.60%	
SFH	263	991	65	8	32.00%	53.10%	
SFH	265	446	25	7.1	28.20%	34.40%	
SFH	266	688	48	8.1	32.40%	38.10%	
SFH	268	668	48	11.7	46.60%	56.20%	
SFH	269	688	48	8.1	32.40%	42.80%	
SFH	270	270 688 48		12.1	48.40%	26.40%	
SFH	271	668	48	11.7	46.60%	39.90%	
SFH	272	668	48	9.6	38.20%	44.60%	
SFH	273	668	48	12.1	48.40%	40.80%	

Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
SFH	274	668	48	12.6	50.40%	41.60%	
SFH	276	733	48	11.4	45.70%	56.30%	
SFH	363	896	70	8	32.00%	55.00%	
SFH	364	668	668 48 11 43.90%		49.10%		
SFH	365	992	75	15.7	62.80%	53.90%	
SFH	366	668	36	7.1	28.40%	70.80%	
SFH	367	668	48	12.1	48.40%	38.40%	
SFH	368	668	48	10.1	40.60%	59.40%	
SFH	369	668	48	8.6	34.20%	56.70%	
SFH	370	688	48	8.1	32.40%	33.10%	
SFH	371	668	38	13.2	52.80%	67.90%	
SFH	372	668	48	11.1	44.60%	73.00%	
SFH	373	668	48	3.5	14.20%	31.30%	
SFH	374	668	48	11.6	46.20%	56.30%	
SFH	376	732	50	13.7	54.80%	45.10%	
VAR	205	1,151	85	13.2	52.80%	36.80%	
VAR	206	1,184	85	10.1	40.60%	33.50%	
VAR	479	998	30	14.2	56.80%	62.50%	
WH	102	870	60	7.1	28.40%	76.70%	
WH	105	856	60	7.6	30.20%	33.90%	

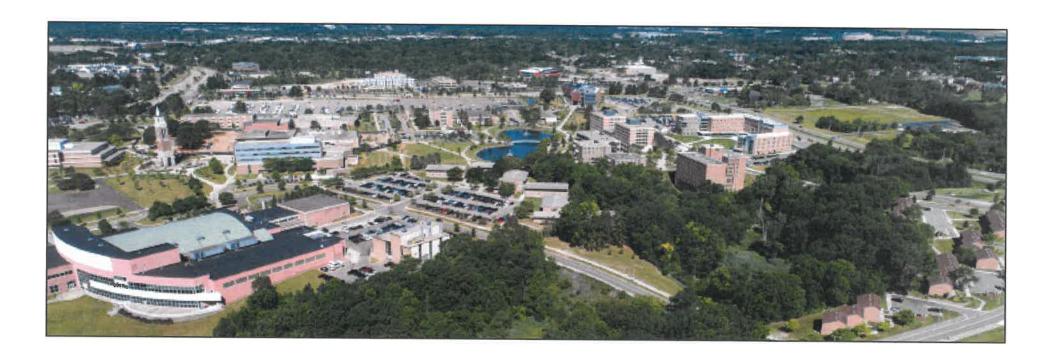
Building	Room Number	Square Feet	Number of Seats	WRH	WRH% of Available Hours	Station Occupancy %	
WH 124		1,062	85	4.6	18.20%	33.00%	
WH 301 306		306	16	14.2	56.80%	60.90%	
WH	313	500	30	8.6	34.20%	62.00%	
WH	416	372	15	1	4.00%	86.70%	
Totals	123	125,759	7,194	1,326			
Averages		1,022	58	10.8	43.10%	50.50%	



Report 12: Saturday Utilization - Winter 2018

- Saturday Utilization 8 a.m. to 5 p.m.
- 9 Available Hours per Week
- 12 rooms had a class meeting at least one week during the term. The following table lists these rooms, number of Saturdays scheduled, and the average hours used when the room was scheduled.

Building	Room	Square Feet	Seats	# of Saturdays Scheduled During Term	Avg WRH	WRH% of Available Hours	Station Occupancy %
EH	206	523	30	4	6.2	69%	37%
EH	208	686	40	4	6.2	69%	0%
EH	210	683	40	17	3.5	39%	28%
EH	214	902	48	17	3.5	39%	77%
EH	235	1,021	40	8	8.5	94%	40%
EH	239	1,018	40	1	3	34%	93%
•							•
НН	113	921	24	17	3.7	41%	21%
PH	310	732	36	17	3.5	39%	44%
PH	312	738	36	4	6.6	73%	28%
PH	320	735	36	3	6.2	69%	28%
SFH	166	667	30	17	7.2	80%	55%
Totals/ Averages	11	8,626	400	109	5.3	59%	33%



Facility Condition Assessment

Plant Renewal, Deferred Plant Renewal & Plant Adaptation Backlog

The Facilities Management computerized Capital Asset Management (CAM) program is a relational database management system containing more than 1,500 projects with a total cost of more than \$228 million. In addition to this summary report, the database is capable of producing ad-hoc reports by priority rank, building system, completed and In-process projects in the current fiscal year, and backlog category.

The objective with this document, in addition to identifying our needs, is to raise awareness of the deferred plant renewal liability, and to serve broader facilities planning as well as to set priorities. These facility condition assessments identified needs, preliminary work scope, determined preliminary costs, and prioritized facility projects for the University.

Oakland University completed facility condition assessments in 2006 for 34 campus buildings and updates the assessments of four buildings each year.

System Code	Projects Category	2019 Projects Total	Completed Projects	In-Process Projects	New Projects added	2020 Projects Backlog
AC	Accessibility	\$4.68	\$-	\$-	\$1.08	\$5.76
CN	Controls	\$5.16	\$0.07	\$0.34	\$1.05	\$5.80
EL	Electrical	\$18.85	\$0.62	\$0.24	\$2.84	\$20.82
EN	Energy	\$4.12	\$-	\$2.07	\$2.30	\$4.34
ES	Exterior System	\$13.52	\$0.11	\$-	\$1.82	\$15.24
FS	Fire/Life Safety	\$16.91	\$0.24	\$0. 45	\$1.67	\$17.89
HE	Health	\$0.80	\$0.12	\$0.86	\$1.02	\$0.84
HT	High Temp / Hot Water	\$16.56	\$7.00	\$0.73	\$7.00	\$15.83
HV	HVAC	\$36.95	\$1.55	\$3.39	\$4.94	\$36.96
IS	Interior System	\$35.14	\$4.95	\$7.66	\$15.07	\$37.59
ΙΤ	Information Technology	\$20.15	\$-	\$0.89	\$1.11	\$20.37
PL	Plumbing	\$7.85	\$0.22	\$0.30	\$0.90	\$8.24
RF	Roofing	\$4.08	\$-	\$0.33	\$1.86	\$5.61
RW	Roads / Walks / Parking Lots	\$0.93	\$0.94	\$0.03	\$1.25	\$1.21
SI	Site	\$2.52	\$1.09	\$1.98	\$4.48	\$3.93
SS	Security Systems	\$1.46	\$-	\$0.15	\$0.33	\$1.64
SW	Storm Water	\$17.51	\$0.06	\$0.43	\$3.00	\$20.03
VT	Elevator	\$6.31	\$-	\$0.26	\$0.05	\$6.09
	Total	\$ 215.97	\$ 33,53	\$ 4.81	\$ 45.62	\$ 223.25

Remarks: Facilities Management continually checks the validity of projects in the database and eliminates those assessed as not viable.

^{*} Elimination of non-viable projects under that category

DEFINITIONS

Capital Asset Management is a systematic approach to renewing the University's capital assets through planned:

Plant Renewal
Deferred Plant Renewal
Plant Adaptation

These terms have been formally defined by the National Association of College and University Business Officers (NACUBO) as follows:

Plant Renewal

"...a systematic approach to planning and budgeting for known future cyclical renewal and replacement requirements that extend the (present) life and retain the usable condition of campus facilities and (building) systems ... not normally contained in the annual operating budget. ..." (NACUBO).

Cyclical renewals typically exceed five year cycles and include such items as roof replacement, electrical switchgear, and HVAC system replacement. These expenditures keep the physical plant and related infrastructure in reliable operating condition for its present use.

Deferred Plant Renewal

"... encompasses measures that are not carried out because of underfunding in the budgeting process or perceived low priority..." (NACUBO).

This includes actual projects, from the prior or current years, not included in the routine maintenance work. These projects represent "Postponed Work" that was deferred because total costs exceed current budget, or projects that are of a "low priority" that present a minimal return on investment. Also included in the Deferred Plant Renewal project list are those projects that were shifted because funds were re-allocated to address emergencies that have no other funding source.

Plant Adaptation

"...improvements are driven by institutional program changes ..." (NACUBO).

This involves a programmatic process to plan and fund for projects that will be required due to an evolving use of the institution (e.g., changes in academic disciplines, shifting expectations, supporting institutional mission, etc.), or changing standards (e.g., campus master plans, architectural standards, etc.). These expenditures are over and above normal maintenance, and are not typically contained in the annual operating budget.

FACILITY CONDITION ASSESSMENT RANKING

PRIORITY 1 Current Critical (immediate or current year)

Projects in this category require immediate action to:

- Return a facility to normal operation
- Stop accelerated deterioration
- · Correct a cited safety hazard
- Any other funded projects requiring immediate action or construction

PRIORITY 2 Potentially Critical (within one year)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:

- Intermittent interruptions
- Rapid deterioration
- Potential safety hazard

PRIORITY 3 Necessary – Not Yet Critical (within years two – five)

Projects in this category include conditions requiring prompt attention to preclude predictable deterioration or potential down time and associated higher costs if deferred further.

PRIORITY 4 Recommended (within years six – ten)

Projects in this category include items that represent a sensible improvement to existing

conditions. These are not required for the most basic function of a facility; however, Priority 4 projects will either improve overall usability and/or reduce long-term maintenance.

PRIORITY 5 Recommended (beyond year ten)

Projects in this category may not improve overall usability and/or reduce long-term maintenance; however, they provide an economic payback that would not otherwise be present. Projects in this category may represent to upgrade buildings with current codes during major renovation projects. They may also represent non-time based improvement, upgrade, or recommendation.

SOURCE: Association of Higher Education Facilities Officers (APPA)

ABBREVIATIONS

CAMPUS SYSTEM Accessibility (AC)

Controls (CN)

Electrical (EL)

Energy Management (EN)

Exterior Structure (ES)

Fire/Life Safety (FS)

Health (HE)

High Temperature / Heat Water (HT)

HVAC (HV)

Information Technology (IT)

Interior / Finish System (IS)

Plumbing (PL)

Roofing (RF)

Roads, Walks, Parking Lots (RW)

Site (SI)

Vertical Transportation (VT)

Security Systems (SS)

Storm Water (SW)

CATEGORY

Plant Renewal (PR)

Deferred Plant Renewal (DPR)

Plant Adaptation (PA)

FACILITIES CONDITION NEEDS INDEX (FCNI)

Facilities Condition Needs Index provides a relative measure for comparing one building (or group of buildings) to another. The index is a simple calculation, derived by dividing the total project costs (for the ten-year window) by the total facilities replacement cost (FRC). When applying the index as an evaluation tool, the lower the number, the better the facility condition. It should also be noted that this is an index, not a percentage. It can (and often does in the case of historic facilities) exceed 1.00.

Individual Building FCNI Range	Condition Description
0.01 - 0.05 0.06 - 0.15 0.16 - 0.30 0.31 - 0.40 0.41 - 0.59 0.60 and above	Excellent condition, typically new construction Good condition, renovations occur on schedule Fair condition, in need of normal renovation Below average condition, major renovation required Poor condition, gut / renovation indicated Complete facility replacement indicated

FACILITIES REPLACEMENT COST (FRC)

Facilities Replacement Cost is reported as the total replacement cost for the building or structure and its contents or fixed assets. As an example, the FRC for student housing includes the replacement cost for the building and all the fixtures within each room. Likewise, the FRC for a central heating plant would include the cost of the structure and the boilers, generators and other equipment contained within.

Executive Summary

All Campus Buildings - Facility Condition Assessment

No.	Bldg. Code	Building Name	Use	Year Built	Square Feet	Facility Replacement Cost	Project Costs	FCNI Total	Benchmark Per APPA
1	AD	Athletic Dome	AUX	2014	110,800	\$5,913,816	\$12	0.00	Excellent
2	ANI	Anibal House	HS	1962	20,487	\$4,712,897	\$1,294,202	0.27	Fair Condition
3	AVN	Ann V. Nicholson Apartments	HS	1998	181,291	\$26,392,102	\$615,254	0.02	Excellent
4	BB	Belgian Barn	AUX	1935	9,324	\$856,272	\$263,441	0.31	Fair Condition
5	BGM	Building Grounds and Maintenance Bldg.	UNIV	1994	14,400	\$1,649,601	\$476,420	0.29	Fair Condition
6	BRS	Biomedical Research Support Facility	UNIV	1999	14,300	\$6,098,664	\$928,696	0.15	Good Condition
7	CAS	College of Arts & Science Annex	AD	1987	4,084	\$351,535	\$221,121	0.63	Complete Replacement
8	CCC	Chicken Coop Center *	AUX	1930	8,404	\$869,994	\$132,076	0.15	Good Condition
9	CHP	Central Heating Plant	UNIV	1974	16,833	\$50,039,751	\$2,784,116	0.06	Good Condition
10	DH	Dodge Hall	AD	1968	151,204	\$61,132,295	\$17,199,978	0.28	Fair Condition
11	EC	Engineering Center	AD	2014	134,286	\$74,093,419	\$12	0.00	Excellent
12	ЕСМВ	East Campus & Misc. Buildings	AUX	N/A	94,569	\$25,388,431	\$2,795,730	0.11	Good Condition
13	EH	Elliott Hall	AD	2000	74,582	\$18,948,902	\$3,302,467	0.17	Fair Condition
14	ET	Elliott Tower	UNIV	2014	950	\$7,687,961	\$12	0.00	Excellent
15	FM	Facilities Management	UNIV	2014	7,800	\$2,069,836	\$165,735	0.08	Good Condition
16	FTZ	Fitzgerald House	HS	1961	20,610	\$4,741,192	\$1,026,833	0.22	Fair Condition
17	GAT	Gatehouse at MBH	UNIV	1929	2,032	\$1,155,476	\$835,971	0.72	Complete Replacement
18	GHC	Graham Health Center	UNIV	1970	13,161	\$2,609,385	\$998,768	0.38	Below Average
19	GLC	Golf & Learning Center	AUX	1914	6,038	\$2,709,182	\$2,218,167	0.82	Complete Replacement

20	GLF	Golf Courses	AUX	N/A	1	\$28,432,000	\$10,188,237	0.36	Below Average
21	GP	Golf Pavilion	AUX	2014	5,450	\$1,537,592	\$11	0.00	Excellent
22	GRN	Greenhouse *	UNIV	1917	3,630	\$2,195,692	\$979,460	0.45	Poor Condition
23	GTM	George T. Matthews Apartments	HS	1982	47,464	\$8,992,277	\$2,698,095	0.30	Fair Condition
24	HAM	Hamlin Hall	HS	1968	143,872	\$41,280,596	\$6,822,094	0.17	Fair Condition
25	HCH	Hillcrest Hall	HS	2018	291,488	\$83,435,922	\$121	0.00	Excellent
26	НН	Hannah Hall	AD	1961	89,418	\$41,787,461	\$15,304,632	0.37	Below Average
27	ННВ	Human Health Building	AD	2012	172,825	\$70,809,169	\$32,624	0.00	Excellent
28	HIL	Hill House	HS	1964	42,522	\$14,987,975	\$7,839,604	0.52	Poor Condition
29	JDH	John Dodge House	AD	1880	10,696	\$2,293,453	\$679,077	0.30	Fair Condition
30	KL	Kresge Library	AD	1961	164,522	\$32,638,726	\$5,916,602	0.18	Fair Condition
31	MBH	Meadow Brook Hall	AUX	1929	78,002	\$56,864,000	\$8,252,971	0.15	Good Condition
32	MC	Main Campus	UNIV	N/A	0	\$142,162,024	\$28,047,576	0.20	Fair Condition
33	МСМВ	Main Campus Misc.	AUX	1960	17,015	\$5,239,808	\$238,536	0.05	Excellent
34	MSC	Mathematics & Science Center	AD	1997	165,494	\$77,690,440	\$6,058,491	0.08	Good Condition
35	NFH	North Foundation Hall	AD	1959	67,691	\$32,020,118	\$7,127,139	0.22	Fair Condition
36	OC	Oakland Center	AUX	1959	208,787	\$110,793,675	\$7,617,792	0.07	Good Condition
37	ODH	O'Dowd Hall	AD	1982	105,000	\$58,923,898	\$9,142,976	0.16	Good Condition
38	OIT	O'Dowd Hall IT Network Building	UNIV	2011	822	\$2,574,546	\$11	0.00	Excellent
39	OUI	O.U. INCubator Office	UNIV	1983	11,385	\$2,290,705	\$511,529	0.22	Fair Condition
40	OVH	Oak View Hall	HS	2014	164,724	\$35,423,758	\$12	0.00	Excellent
41	P32	Parking Structure	UNIV	2014	381,782	\$23,960,607	\$12	0.00	Excellent
42	PH	Pawley Hall	AD	2002	132,406	\$36,862,927	\$4,188,239	0.11	Good Condition
43	PRY	Pryale Hall	AD	1963	20,829	\$4,894,451	\$1,341,826	0.27	Fair Condition
44	PS1	Parking Structure	UNIV	2002	179,820	\$13,002,139	\$86,224	0.01	Excellent
45	PSS	Police and Support Services	UNIV	1976	26,444	\$5,364,561	\$1,048,114	0.20	Fair Condition
46	RAC	Student Recreation and Athletic Center	UNIV	1998	253,494	\$53,609,992	\$3,765,607	0.07	Good Condition

47	SFH	South Foundation Hall	AD	1959	55,041	\$30,581,886	\$5,021,586	0.16	Fair Condition
48	SGP	O.U. INC. Shotwell Gustafson Pavilion *	AUX	1929	25,850	\$5,512,254	\$1,151,109	0.21	Fair Condition
49	SS	Spenser Substation	UNIV	2003	14,769	\$3,149,386	\$99,600	0.03	Excellent
50	SSC	Steve Sharf Clubhouse	AUX	2011	9,900	\$4,357,308	\$125,404	0.03	Excellent
51	SST	Sunset Terrace *	UNIV	1952	12,587	\$3,235,011	\$543,749	0.17	Fair Condition
52	UF	Upper Fields Support Building	AUX	2014	2,467	\$538,173	\$12	0.00	Excellent
53	VAR	Varner Hall	AD	1970	119,939	\$52,491,668	\$21,093,417	0.40	Below Average
54	VBH	Vandenberg Hall	HS	1967	178,321	\$51,164,905	\$8,487,484	0.17	Fair Condition
55	VWH	Van Wagner House	HS	1965	43,305	\$14,987,975	\$8,921,878	0.60	Complete Replacement
56	WH	Wilson Hall and Meadow Brook Theatre	AD	1967	98,153	\$55,298,818	\$19,605,791	0.35	Below Average
E AR			Grand	Totals:	4,231,070	\$1,508,806,608	\$228,196,646	0.15	Good Condition

NOTE: The FRC is not included site development work, equipment and furnishing, furniture, soft cost, and escalation cost.

* Historical Buildings



Total Cost Per Square Foot for all Campus Physical Assets

\$356.60

Total Cost Per Square Foot for all Campus Projects

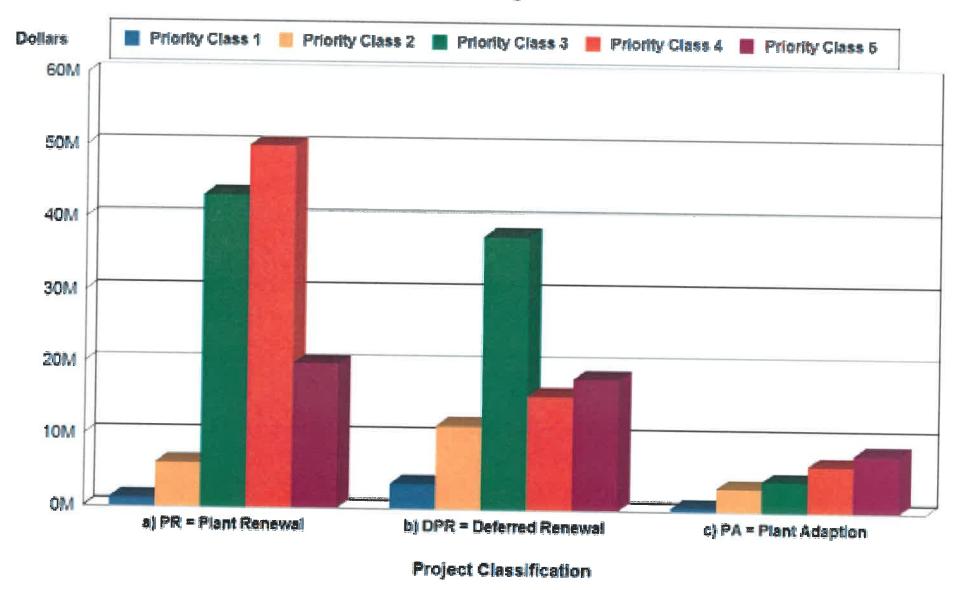
\$53.93

Individual Building FCNI Range	Condition Description				
0.01 – 0.05	Excellent condition, typically new construction				
0.06 – 0.15	Good condition, renovations occur on schedule				
0.16 - 0.30	Fair condition, in need of normal renovation				
0.31 – 0.40	Below average condition, major renovation required				
0.41 – 0.59	Poor condition, gut/renovation indicated				
0.60 and above	Complete facility replacement indicate				

Detailed Project Summary Facility Condition Analysis Project Class By Priority Class									
Subtotal	Priority Class 1	Priority Class 2	Priority Class 3	Priority Class 4	Priority Class 5	Subtotal			
a) PR = Plant Renewal	\$ 1,251,091	\$ 6,065,397	\$ 43,118,153	\$ 50,032,179	\$ 19,844,875	\$ 120,311,695			
b) DPR = Deferred Renewal	\$ 3,381,628	\$ 11,411,580	\$ 37,210,773	\$ 15,796,082	\$ 18,235,049	\$ 86,035,111			
c) PA = Plant Adaption	\$ 471,243	\$ 3,200,595	\$ 4,121,107	\$ 6,261,355	\$ 7,795,540	\$ 21,849,840			
TOTALS	\$ 5,103,963	\$ 20,677,572	\$ 84,450,033	\$ 72,089,616	\$ 45,875,464	\$ 228,196,647			

FACILITY CONDITION ASSESSMENT Project Class by Priority Class

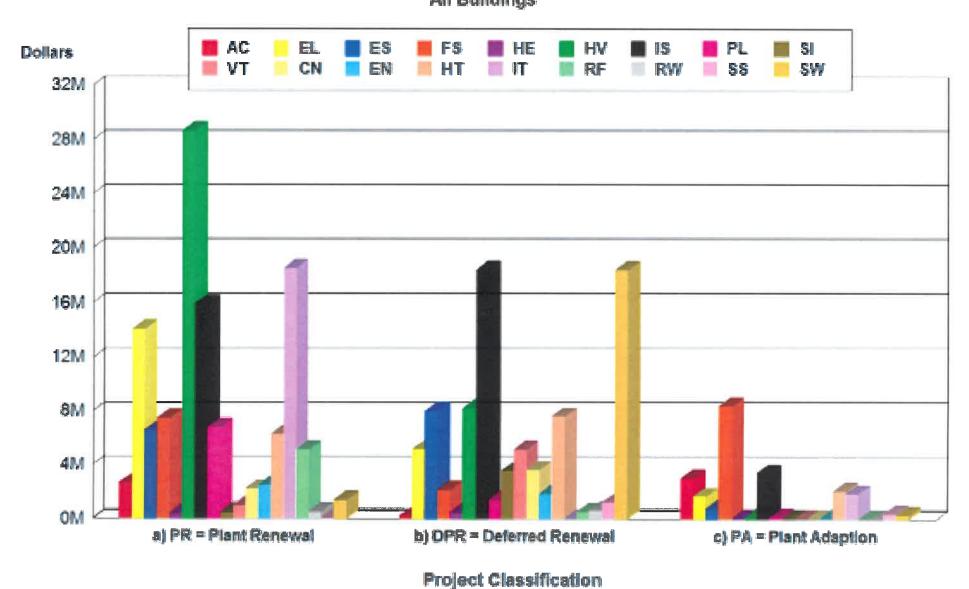
All Buildings



Detailed Project Totals Facility Condition Assessment System Code by Project Class – All Buildings

System Code	System Description	Project Class PR= Plant Renewal	Project Class DPR = Deferred Renewal	Project Class PA = Plant Adaption	Subtotal	%
AC	ACCESSIBILITY	2,639,733	194,407	2,930,608	\$5,764,748	2.53%
CN	CONTROLS	2,209,221	3,556,659	33,915	\$5,799,796	2.54%
EL	ELECTRICAL	14,061,005	5,141,058	1,620,271	\$20,822,335	9.12%
EN	ENERGY	2,438,487	1,801,705	104,600	\$4,344,791	1.90%
ES	EXTERIOR	6,537,104	7,963,182	736,191	\$15,236,477	6.68%
FS	FIRE/LIFE SAFETY	7,476,111	2,084,104	8,328,903	\$17,889,119	7.84%
HE	HEALTH	394,064	433,681	11,147	\$838,892	0.37%
HT	HIGH TEMP/HEAT WATER	6,239,785	7,568,757	2,018,751	\$15,827,293	6.94%
HV	HVAC	28,655,670	8,208,169	93,206	\$36,957,046	16.20%
IS	INTERIOR/FINISH SYS.	15,890,724	18,339,428	3,360,043	\$37,590,195	16.47%
IT	INFORMATION TECHNOLOGY	18,510,684	24,792	1,838,290	\$20,373,765	8.93%
PL	PLUMBING	6,752,281	1,359,605	124,490	\$8,236,376	3.61%
RF	ROOFING	5,112,200	498,750	0	\$5,610,950	2.46%
RW	ROAD/WALKS/PARKING LOT	520,479	686,189	0	\$1,206,668	0.53%
SI	SITE	432,309	3,494,780	0	\$3,927,089	1.72%
SS	SECURITY SYSTEMS	88,703	1,201,807	353,757	\$1,644,266	0.72%
SW	STORM WATER	1,382,775	18,360,988	288,275	\$20,032,037	8.78%
VT	VERT. TRANSPORTATION	970,359	5,117,050	7,392	\$6,094,802	2.67%
	TOTALS	\$120,311,695	\$86,035,111	\$21,849,840	\$228,196,646	100.00%

FACILITY CONDITION ASSESSMENT System Code by Project Class All Buildings

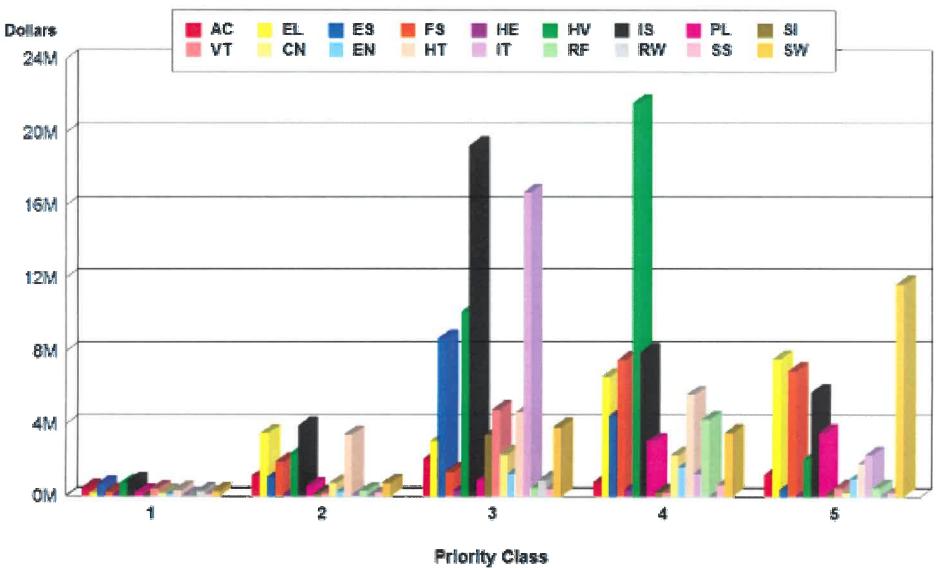


Detailed Project Totals Facility Condition Assessment System Code by Priority Class All Buildings

System Code	System Description	Priority Class 1 FY 2021	Priority Class 2 FY 2022	Priority Class 3 FY 2023-26	Priority Class 4 FY 2027-30	Priority Class 5 FY 2031+	Subtotal
AC	ACCESSIBILITY	447,588	1,161,473	2,095,010	830,437	1,230,240	5,764,748
CN	CONTROLS	187,597	733,851	2,359,621	2,322,549	196,177	5,799,796
EL	ELECTRICAL	141,373	3,502,155	3,104,734	6,553,588	7,520,486	20,822,335
EN	ENERGY	138,341	253,567	1,308,497	1,640,909	1,003,476	4,344,791
ES	EXTERIOR	652,751	1,072,861	8,681,011	4,432,591	397,262	15,236,477
FS	FIRE/LIFE SAFETY	211,073	1,915,582	1,412,146	7,471,516	6,878,801	17,889,119
HE	HEALTH	85,796	52,820	314,049	375,081	11,147	838,892
HT	HIGH TEMP/HEAT WATER	338,122	3,450,427	4,617,771	5,579,072	1,841,902	15,827,293
HV	HVAC	713,060	2,425,676	10,139,056	21,570,172	2,109,081	36,957,046
IS	INTERIOR/FINISH SYS.	855,014	3,887,517	19,257,588	7,891,691	5,698,384	37,590,195
IT	INFORMATION TECHNOLOGY	5,766	82,286	16,702,168	1,294,430	2,289,116	20,373,765
PL	PLUMBING	203,608	540,456	888,589	3,080,172	3,523,551	8,236,376
RF	ROOFING	27,528	314,253	513,060	4,256,544	499,565	5,610,950
RW	ROAD/WALKS/ PARKING LOT	296,909	12,820	507,659	196,570	192,711	1,206,668
SI	SITE	15,859	130,741	3,443,518	212,628	124,342	3,927,089
SS	SECURITY SYSTEMS	88,703	209,911	453,846	655,653	236,155	1,644,266
SW	STORM WATER	288,275	770,100	3,840,934	3,518,013	11,614,716	20,032,037
VT	VERT. TRANSPORTATION	406,600	161,075	4,810,776	208,000	508,350	6,094,802
	TOTALS	5,103,962	20,677,572	84,450,033	72,089,616	45,875,464	228,196,646

FACILITY CONDITION ASSESSMENT System Code by Priority Class

All Buildings



Implementation Plan

State Funding Request

In the future, as additional state projects are considered, Oakland University has need for the following based on program growth, opportunity and State needs:

Science Complex

The FY2023 Project Request is for the transformation of the Science Complex into a modern facility featuring the latest technology and equipped teaching and learning classrooms and laboratory spaces, targeted for our growing Science, Technology, Engineering, and Math (STEM) curriculum and sponsored research. The Science Complex is currently equipped with aging infrastructure such as fume hoods, backup electrical systems and other critical laboratory systems for academic programs.

The Science Complex dates back to the 1960's and is one of the oldest structures on campus. It has greatly surpassed the service life of the building systems, which were not originally intended to be used for research purposes. This proposal will enhance the University's ability to support modern styles of teaching and learning for the sciences and provide capacity and technology for state-of-the-art laboratories for teaching and sponsored research.

University Funded Priorities

Wilson Hall Expansion (funded)

Project S.U.C.C.E.S.S. is a 40,000-square-foot addition to Wilson that will house new and renovated space for University Admissions, the Welcome Center, the Tutoring Center, Disability Services, a testing center, as well as administrative offices.

Elliott School of Business Administration Expansion and Renovation

The expansion and renovation of the School of Business Administration building will double the square footage of the current facility (Elliott Hall). Funded through design only.

Galloway Creek Ecosystem Restoration Project (externally funded)

This project includes improvements to the regional drainage system, which traverses the campus.

Varner Hall (funded)

This \$45 million project consists of critical updates to the building's infrastructure including HVAC, plumbing, electrical, technology, elevator and exterior envelope. The renovation will also take care of accessibility issues and improve public and student gathering spaces.

Student Athlete Development Center (donor funding being sought)

This multi-phased renovation will expand the existing athletic facility and provide much needed improvements to the facility. Building systems will be updated or replaced and interior spaces will be renovated to accommodate Oakland's athletic programs.

High Temperature Hot Water System (funded)

This is a 5 phase replacement of piping from the Central Heating Plant to campus buildings.

Off-Campus Research Facility (funded)

This project involves the purchase and renovation of an industrial building to house offices and research laboratories for the School of Engineering and Computer Sciences projects requiring high bay spaces.

Future Projects Under Consideration

Our Comprehensive Campus Master Plan has identified short, midterm and long range opportunities for internal initiatives as well as external development opportunities. These include additional student housing, classroom and

administrative facilities, athletics and recreation facilities, and performing arts center, among others. An update to the plan is underway and will consider development opportunities to campus edge districts. It will also address in greater detail the Meadow Brook Estate, its historic assets, and their important relationship to the main campus.

Plant Renewal / Deferred Plant Renewal

As previously noted, Plant Renewal and Deferred Plant Renewal projects total more than \$206 million of the \$228 million Facility Condition Analysis. The current average annual investment is approximately \$1.6 million from General Fund budgets and maintenance endowments; approximately \$3.5 million from Auxiliaries Maintenance Reserves; and \$0.9 million from University Technology Services budgets.



Oakland University

FY2023 Capital Outlay Submittal October 29, 2021

Science Complex Renovation Project

FISCAL YEAR 2023

CAPITAL OUTLAY PROJECT REQUEST

Institution Name: O	akland University									
Project Title: Science Complex Renovation Project										
Project Focus:	⊠Academic	⊠Research	□Administrative/Support							
Type of Project:	⊠Renovation	□Addition	□New Construction							
Program Focus of Occupants: Classroom and Laboratory Renovation in Science Complex										
Approximate Square Footage: 175,000 sf of renovation										
Total Estimated Cost	\$40,000,000									
Estimated Start/Com	pletion Dates: <u>May 202</u>	2/August 2025								
Is the Five-Year Plan	ı	⊠Yes	□No							
Is the requested project the top priority in the Five-Year Capital Outlay Plan?					□No					
Is the requested proje	⊠Yes	□No								

Describe the project purpose.

Oakland University's Capital Outlay Project proposal for 2023 is the transformation of the Science Complex into a modern facility featuring the latest technology and equipped teaching and learning classrooms and laboratory spaces, targeted for our growing Science, Technology, Engineering, and Math (STEM) curriculum and sponsored research. The Science Complex is currently equipped with aging infrastructure such as fume hoods, backup electrical systems and other critical laboratory systems for academic programs.

The Science Complex dates back to the 1960's and is one of the oldest structures on campus. It has greatly surpassed the service life of the building systems, which were not originally intended to be used for research purposes. This proposal will enhance the University's ability to support modern styles of teaching and learning for the sciences and provide capacity and technology for state-of-the-art laboratories for teaching and sponsored research.

A goal of our strategic plan is to be recognized as a strong research and scholarly environment for students focused on creative endeavors and on the discovery, dissemination, and utilization of knowledge. Science is neither conducted nor taught in the ways it was in the 1960s when this Complex was built. In both instances, the need for small, independent labs has been replaced by the need for more open, collaborative spaces. Additionally, the need for power and spaces to accommodate large and complex shared scientific equipment and facilities has dramatically changed the requirements for spaces within which science is conducted and taught in today's environment.

Renovation of the Science Complex is our top Capital Outlay priority to allow programmatic changes to our science curriculum. With the global interest in climate change, recycling and other environmental issues, the development of professionals to combat these issues is critical. Student demand for Environmental Science and related Biological Science at OU is on the increase consistent with this societal need. Furthermore, the expansion of the biomedical engineering program to meet the needs of the industry is critical. With the advancement of technology, biomedical engineers are involved in a wide array of projects to address societal needs. Examples include tissue engineering to meet the demand for organ transplant, prosthetics and replacement joints needed for trauma, and an aging population. To develop this knowledge and experience, students need hands-on laboratory experiences to maximize their learning and to develop critical skills. Students that participate in research are also much more marketable in industry jobs, and have higher success rates at enrolling in graduate programs. Direct contact with faculty members supports student success by fostering mentoring relationships which are especially critical for our underrepresented minority students, not to mention the entire student population on campus.

The Science Complex is at maximum capacity for course scheduling but not seat scheduling. We need to right size the classrooms for the current use as well as make them flexible enough to accommodate changing learning methodologies. Traditional lectures are a passive learning environment and have been shown to not be as effective for learners to retain and apply material. Active learning methods have been shown by many studies to be better for students' success, long-term retention and mastery of the material. Examples of active learning include flipped classrooms, the use of breakouts and case studies, and collaborative class projects, among others. What these methods share is that students are actively engaged with the material and are applying it to solve problems in real time with guidance from their instructors. They are not only learning the course content but also critical thinking skills, oral and written communication skills, and teamwork.

New approaches which have been developed during the pandemic for class delivery include Hyflex. Classrooms designed to accommodate Hyflex delivery (live streaming to remote students and in-person students simultaneously) requires additional technology installed to make this a seamless experience for both student populations. Active learning classrooms with small group breakouts to focus on problems during lectures require movable seating options, additional whiteboards and microphones as well as other technologies to address ADA compliance concerns. Furthermore, renovations will support both teaching labs and research labs.

Students that participate in research are much more likely to stay engaged in coursework and stay on track to graduate. Access to high quality laboratory experiences have always been a key part of our recruitment strategies as they offer opportunities that other universities do not. Students participate in faculty research in a variety of ways to enhance their education. They use it to complete required senior thesis projects, Honors College thesis projects, research laboratory courses in independent research, and as an employment opportunity as laboratory assistants. These students also graduate with marketable job skills and have better acceptance rates in graduate programs.

Describe the scope of the project.

This project consists of a renovation to the Science Complex which will include furniture, finishes, technology and network communications to improve capacity utilization and flexibility. Classrooms will be "right sized" for smaller and more interactive class sizes and allow us to utilize this important Science Complex laboratory classrooms for Engineering, Chemistry, Physics and Biology. This renovation will replace and upgrade the laboratory mechanical and utility systems and will address the current severe space shortages due to growth in enrollment in the Environmental Science and related Biological and Biomedical Sciences fields.

In support of the programmatic changes that are being planned, it is anticipated that the renovations will include three floors of the Dodge Hall wing and two floors of the interconnected Hannah Hall wing, approximately 175,000 square feet. The renovation will include complete interior and infrastructure transformation. Academic space will be improved to be used more efficiently and effectively. Teaching laboratory spaces will be upgraded to allow students to be trained with cutting edge technology and research techniques which will improve their job market prospects. This will also allow us to make the spaces more accessible for those with physical disabilities.

The Science Complex's mechanical and electrical systems are at maximum capacity. Modern laboratory spaces need robust and flexible systems. Renovation will allow for modern teaching labs and a wide range of scientific research spaces that are in compliance with ADA regulations and are equipped with adequate utilities.

Laboratory spaces will receive infrastructure improvements including replacing original and obsolete building systems such as inefficient HVAC systems, building controls, electrical, lighting, network communications wiring and electronics, and plumbing to improve systems reliability, health and safety, the learning environment, air quality, energy efficiency, as well as water use reduction. A centralized fume hood ventilation system will be installed to ensure safe handling and storage of laboratory chemicals and biological samples. Hazardous building materials, such as asbestoscontaining insulation and floor tile will be properly removed and disposed of. Building and floor accessibility will be addressed to ensure the Science Complex meets current building standards and ADA standards and will function efficiently well into the 21st century.

The adaptive re-use of the spaces demonstrates Oakland University's commitment to the success of our students and the continued wise stewardship of campus assets and funds. No new square footage is being added.

Program focus of occupants

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

Approximately 70% of Oakland University undergraduates immediately enter the workforce upon graduation while 30% are admitted to graduate school or commit to military service. Oakland University is proud that nearly 100% of our students who enter the workforce choose to stay in Michigan to live and work. Approximately 90% of our students that attend medical and dental schools also stay in Michigan for this additional education and then to practice.

Oakland University maintains close communication with employers to target student skills that meet employer needs and expectations. We are also keeping abreast of the latest areas of growth, particularly in the STEM disciplines. Over the last five years, the number of students graduating in critical disciplines at OU has increased by 36% overall. Students graduating with degrees in engineering have increased by 116% since

2011. In a recent study conducted by our Career Services department, we learned that the average annual salary of an Oakland graduate is \$55,000, above the national average. The median annual salary for recent OU mechanical engineering masters graduates, \$90,900, according to recent rankings by GradReports.com, is third highest in the nation, behind only Stanford University and Massachusetts Institute of Technology graduates. Many of our students must complete internships with local companies to graduate. Many of those interns end up with offers of employment before they graduate so they are immediately entering the workforce. Oakland University is graduating students with a skill set needed to fill state, regional and local high paying jobs.

In Michigan there are many jobs related to STEM, and in particular, Biology, Environmental Chemistry, Bioengineering, Biostatistics, Physics and Chemistry graduates that these renovations will serve. In industry and academia there are jobs for graduates trained and experienced in laboratory research techniques, experimental design, data analysis, and scientific writing. These are job opportunities that pay well and are in high demand fields. For example, according to the US Bureau of Labor Statistics the median annual wage for bioengineers and biomedical engineers was \$92,620 in May 2020. Biostatisticians have an annual median wage of \$93,290. Environmental scientists can expect an 8% increase in opportunities between 2020-2030 and an average salary of \$73,230. Biomedical scientists can expect a 17% increase in opportunities and an average salary of \$91,510. Within the local region, in the State of Michigan and nationally these areas are all demonstrating job growth. The Bureau of Labor Statistics, in an analysis published in February 2021, projects strong growth for many STEM occupations in the United States, particularly epidemiologists, medical scientists, biochemists and biophysicists, and biological technicians, among others.

The hands-on experiences that these renovations will support will make OU students much more marketable. The faculty research labs also provide employment opportunities for graduate and undergraduate students as do all of our teaching labs which are staffed with teaching assistants who are Oakland University students. The technical, communication, and analytical skills that these students gain make them highly marketable on the job market. It also helps them transition into graduate education programs such as medical and dental schools as well as graduate programs in the sciences. These are incredibly competitive programs and research experiences are highly valued by the admissions committees. For many medical schools, the Medical Schools Admissions Report (MSAR) shows 85-95% of matriculating students have research experience.

A study published in Science reported that 75% of graduate students accepted into PhD programs had research experience. The number was higher in the more demanding programs in STEM areas with some reporting 100% of the accepted students having some research experience. This is unsurprising as successful completion of research projects are used as an indicator of future success in the programs. All of our science (physics, chemistry, biology, biomedical science, environmental sciences) majors, science education majors, nursing majors, pre-health professional majors and sciencerelated general education students will be impacted by this renovation. We currently have over 1,000 students majoring in Biology, Biomedical Sciences, and Bioengineering. Of those students only 50 per year currently have the opportunity to participate in faculty-led research projects due to the lack of facilities to safely accommodate more. All of those students will take at least two lab courses in the biology discipline alone each semester. These students also take chemistry and physics teaching labs which are impacted by this proposed renovation. Of our 17,500 students almost all of them will benefit by this renovation either directly through a major required class or a science general education course.

In addition, the Science Complex Renovation Project will provide economic benefit to Oakland County as well as surrounding counties through the creation of new construction and skilled labor jobs over the three years of project design and construction. It is estimated that this project will support over 250 jobs in the next three years for estimated wages of over \$10,000,000 in the region.

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

The project will enhance the university's research mission. At present, the labs in the Science Complex are entirely full, which is inhibiting the growth of the university's research enterprise. Recruiting new diverse and talented researchers requires adequate space to support their research programs. Additionally, the current configuration of the labs as predominantly single investigator spaces is out of step with modern approaches to multi- and cross-disciplinary, team-based research. The lack of appropriate facilities prevents faculty from being competitive for federal funding that expects these kinds of approaches to be employed and for these kinds of facilities to be available. The renovation of the Science Complex will allow our investigators to be competitive for these federal dollars that will support our students and the further growth of the University's research mission.

The core academic and research efforts at Oakland University are supported by funding through the Department of Defense (DOD), Department of Education (DOE), National Institutes of Health (NIH), and National Science Foundation (NSF), as well as by many corporations and philanthropic organizations. This project will create learning spaces that will provide students with an upgraded environment conducive for learning. By having a modernized facility, we will prepare our students to actively participate in research programs and enterprises that expect students to have the capacity to work jointly, and in cross-disciplinary teams. This type of training is currently difficult to provide in the smaller, single-investigator labs that were designed for science in the 1960s. These collaborative spaces will allow for larger multi-Principal Investigator (PI) training grants for students (ex. NIH T-series grants), Program Project grants with multiple collaborative investigators and the construction of Core grants which allow multiple investigators to share specialized equipment. These renovations will also allow us to be more competitive for external funding. One aspect the grants are evaluated on is the facilities available to the investigator and students. By redesigning the space to be more open and removing unnecessary walls we will gain significant work space. This will allow for more efficiency in workflow and opportunities for more people to be involved in research activities.

These renovations will allow for new technologies to be brought to OU. The recent purchase of a two photon confocal microscope required renovations to the space because air handling was not sufficient to safely use the machine. This machine will be standard in biomedical research facilities in a few years and will allow our students to train on it, making them more marketable. Six faculty researchers will use this equipment in their research programs; utilizing cutting edge technology helps the faculty obtain extramural funding. Research with our growing Environmental Science program on COVID-19 requires BSL-2 level biosafety which is extremely limited in this current space. The Bioengineering program has doubled in enrollment but we are limited in the types of projects they can do and the number of lab sections we can run to support the program due to lack of laboratories. This delays student progress through the Bioengineering program and limits their employment options after graduation unless they find an internship to fill in those educational gaps. We are finishing the process for ABET accreditation for this program this fall and expect to see the number of students double again within the next 2 years from 90 students with major standing to 180. This accreditation enhances the market value of the degree. According to the Bureau of Labor Statistics the employment of biomedical engineers is projected to grow six percent from 2020 to 2030. This renovation of facilities will most importantly allow us to involve more undergraduate and graduate students in research opportunities which will ensure hands-on experiences and timely graduation.

These renovations will also support our new Masters in Environmental Chemistry degree program. We currently have a strong undergraduate population and the addition of the Masters (MA/MS) program will enhance opportunities for our students. We anticipate growth in the undergraduate program by 25% and expect an estimated 20-30 MA/MS students within three years. With the growing interest locally with water quality and environmental impacts with lead, PFAS, toxic algae and COVID-19, many students are migrating to environmental programs. All the students, both graduate and undergraduate, will have internship opportunities, lab experiences and significant research opportunities due to this renovated space. We will be able to help students make substantial career advancement with opportunities to present and publish their research. Also supported by these proposed renovations is the growth of our Biomedical sciences research with students in our Biochemistry, Biology, Biomedical Sciences, and School of Medicine programs. Applications to all of our healthcare related programs are up and with the expected launch of our Physician's Assistant program we anticipate these numbers to continue to grow. We are hiring faculty in these highly fundable areas, with a focus on cardiovascular and neurological diseases. We have a special concentration in Alzheimer's, Parkinson's, and neuronal regeneration. These initiatives can share equipment and are areas of growth in the research industry. The access to training in animal studies will give our students a competitive advantage in the job market. Lack of personnel to perform these types of studies is a substantial bottleneck in the biotech and pharmaceutical fields. A renovation of Oakland's Science Complex will allow us to accommodate expansion of successful research areas and academic programs.

The renovation of existing classroom and laboratory spaces will create flexible, movable, interactive and engaged spaces. In engaged classrooms, students learn to collaborate in teams, to think critically, and to solve problems at the same time they are learning course content. This type of learning also increases student engagement, course success, enhanced retention and ultimately increased graduation rates. The data suggests that this is especially true for students from underrepresented minority groups. To recruit, retain and improve the graduation rates of these students we need to offer these interactive and engaged classrooms.

The 2025 Oakland University Strategic Plan's first strategic goal is to "Foster student success through a robust teaching and learning environment and comprehensive student services." Student success indicators include retention and persistence, graduation, and successful career placement. As an institution we have embraced this goal and have provided opportunities for faculty to enhance their teaching skills,

created an Office of Student Success, and examined our processes to remove barriers to student success. The renovation of the Science Complex will help the university achieve its goals of increasing our retention and graduation rates. This facility will become a space where students and faculty can join together to provide a culture of belonging in the STEM fields. Research shows that a sense of belonging is integral for student success, especially for first generation students and students from disadvantaged backgrounds (educationally and socioeconomically).

We will be able to offer more courses and lab sections with this renovation, allowing more students to enroll and will also allow students that are working while attending school more options to attend classes. Most of our student population works at least part-time while attending school. Flexibility in course offerings is critical for students to be successful in completing their degree requirements.

3. Is the requested project focused on a single, stand-alone facility?

Yes. The Science Complex includes the original facility built in 1961, Hannah Hall of Science (west wing), with two additions; 1968 Dodge Hall of Engineering (east wing) and 1997 Mathematics and Science Center (south wing).

The Science Complex is reliant upon shared systems; the main campus utility loop of the High Temperature Hot Water system, potable water main, natural gas, and electrical loop. The Science Complex is serviced by the chilled water system tie-in with a dedicated chiller. The air handling system serves the interior spaces and the interconnected pedestrian corridors between wings. This project is focused on resolving deferred maintenance needs and upgrades only to Hannah and Dodge, not the most recent addition, the Mathematics and Science Center.

The original building and subsequent additions feature coordinated building envelope shapes, with a long east-west block with north and south arms crossing their centers. The main facades are comprised of a narrow band of horizontal windows per floor infilled with masonry, with a concrete base. The proportions of glazing to masonry and makeup of the masonry wall construction is purposeful for the Science Complex; the entire complex being designed by the same architects for appropriate continuity.

The scope of the renovation project would be to embed the Science Complex with state-of-the-art technologies and infrastructure, more efficient fixtures and systems, a modern learning environment, finishes that enhance the learning spaces, and increased accessibility to the entire complex.

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

The Science Complex was constructed in the 1960's and was the original location for science classrooms and laboratories to serve the then small campus of Oakland University. As the campus grew and diversified, classrooms were updated to accommodate the growth. This complex has served the campus well over the years but is in need of more extensive work beyond a typical classroom and laboratory upgrade. Furthermore, to meet the needs of today's higher education standards, we must upgrade the building envelope and shared infrastructure systems, as well as optimize existing spaces for instructional and support use.

Initially, the projected cost for the construction of a new building was carefully considered. Based on current state and institutional fiscal constraints, it was determined that a new construction standalone project was not a viable alternative. Renovation of an existing academic science facility is a more cost-effective solution and more environmentally friendly. The renovation work will include installation of an adequately-zoned, energy-efficient heating and cooling system in a space that currently has a 50-year old system with limited zones. Energy savings, laboratory safety, and occupant comfort will be gained with the installation of high-performance systems throughout. This is critical as many newer scientific equipment pieces like -80 degree Celsius freezers, and confocal microscopes require specific temperature regulation to function properly and safely.

Utilizing existing square footage by upgrading and repurposing a building is critical to the growth of the campus and demonstrates Oakland University's commitment to efficient operations and sustainability. We believe, when possible, existing buildings that are structurally sound should be renovated and modernized to accommodate current academic programs. We have followed this same upgrading and repurposing strategy with other recent self-funded projects including Varner Hall, Fitzgerald House and Anibal House renovations.

Oakland University is committed to having a sustainable campus environment. Resource management goals include the efficient use of existing spaces. The proposed project will enhance student learning and provide properly configured areas for academic and research pursuits without expanding the facility's footprint. The proposed renovations will make these buildings more accessible and energy efficient.

5. Does the project address or mitigate any current health/safety deficiencies relative to existing facilities?

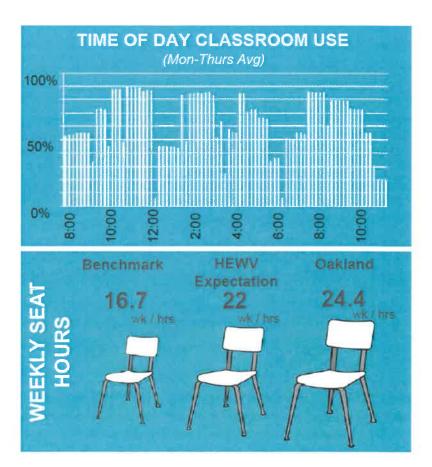
Yes, a primary focus of this capital outlay project is to address all life/safety issues identified in the latest facility assessment including removal of asbestos-containing materials, improved ventilation for health, updated fire suppression, ADA compliance, updated exit and emergency lighting, etc. For example, we cannot add any chemical fume hoods or ventilated storage cabinets for volatile chemicals because the current Science Complex infrastructure will not support it. The current electrical system will not allow any additional connections to the backup generator to protect samples in -20 and -80 degree Celsius freezers. These are now standard in all labs and power outages are catastrophic to research. Although Oakland University funds over \$2 million annually to address infrastructure replacement and upgrading, this is not adequate with aging building systems and state-of-the-art laboratory requirements. In 2019-2020 we renovated 6,359 square feet of space in this building on the first and third floors. This created four additional research labs that we have already filled to capacity with research faculty. To date they have received six grants and one research contract for an additional \$1 million in research support. We anticipate this growth will continue as they have already recruited four graduate students and six undergraduate students within a month of opening their new laboratory spaces. The proposed project will address over \$32 million of deferred maintenance including updates of grandfathered deficiencies that are still in use. This project will reduce the risk of failures for the existing components related to these systems.

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?

The Campus Master Plan (https://wwwp.oakland.edu/facilities/campus-master-plan), updated in 2016 with the assistance of Hanbury Evans Wright Vlattas (HEWV), included a thorough study of classroom and learning laboratory usage. The factors illustrated in the utilization study included the average hours per week of scheduled instructional use for each room, the average hours of scheduled use for each student seat, the percentage of student stations or seats filled when the rooms are scheduled, and the average square feet allocated to the student stations in the rooms.

The study findings included:

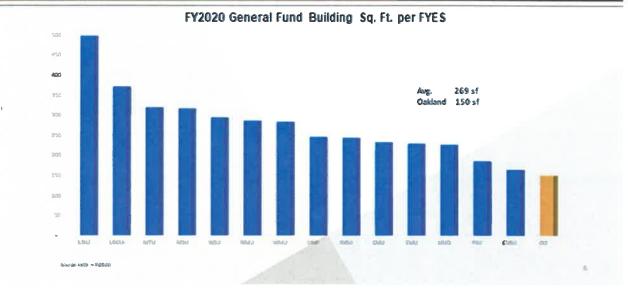
- An average of 47 hours per week of usage per classroom (compared to a national benchmark of 33)
- An average assignable square feet per student of 18 (compared to a national benchmark of 20)
- An average weekly seat hours of 24.4 (compared to a national benchmark of 22)
- Often approaching 90% capacity during high demand times (compared to a national benchmark of 63%)
- Concluding that there is a current shortage of properly sized and configured classrooms and learning laboratories, especially during the high demand class times.



The following chart compares the area per student for General Fund buildings at all state universities (source FY2020 HEIDI data). At 150 square feet per First Year Equated Student (FYES), Oakland University ranks lowest in the State of Michigan.







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

The integration of sustainable design principles to enhance the efficiency and operation of this building include saving energy and conserving resources, potable water use reduction, indoor environment, usage of recycled material, reduction of carbon footprint, and green environment, waste reduction and recycling are the primary objectives for all the construction projects of the University. LEED® Green Building principles (Leadership in Energy and Environmental Design) will be adhered to throughout the design and construction process as well as in post occupancy operation of the facility. Construction specifications will include reduction, reuse, and recycling of construction and packaging materials. As evidence of Oakland University's commitment to sustainable design principles, consider the following history of sustainable initiatives:

Human Health Building (HHB): Our first LEED certified Platinum building as
well as the first LEED certified Platinum building located on a university campus
in the State of Michigan. The HHB includes a highly efficient geothermal system,
funded via a federal grant that provides heating and cooling for the building.
The project was partially funded by the state through a Capital Outlay.

- The Engineering Center: Our first LEED certified Gold building, and another state Capital Outlay funded project, implemented sustainable design principles and an innovative Trigeneration system to save and produce energy via two micro-turbines housed inside the building.
- Oak View Residence Hall: Our second LEED certified Gold building and the first LEED residence hall, implemented sustainable design principles and energy reduction strategies, and resulted in a sustainable campus living environment for our students.
- Hillcrest Hall: Oakland's most recently completed residence hall is also LEED certified Gold.
- Energy Performance Contracts: Oakland University completed various projects under the agreement of "Guaranteed Minimum Savings" in the last several years, including optimization of three chilled water plants and replacement of lighting for energy savings in various buildings.
- Sustainable Best Practices: Oakland University implemented sustainable best practices in the daily operation and maintenance including green cleaning as well as landscaping.
- Replacement of older building equipment and systems, some dating from the 1950s. Upgrades include high-efficiency HVAC, lighting and plumbing systems and reducing the load on the older campus-wide heating and cooling infrastructure.
- Update to University standard occupancy-based controls to reduce heating, cooling, ventilation and lighting needs on a room-by-room level.
- Design building envelopes to minimize energy use and take advantage of passive energy reduction strategies.
- Exploit energy savings from the newly installed co-generation system at the central heating plant. The co-generation system is currently saving the University more than \$1.2 million annually and is self-generating 68.5% of the University's electrical needs.

The above actions and commitments demonstrate Oakland University's philosophy to adhere to sustainable design principles. Oakland will continue its sustainable design commitment for the proposed Science Complex project. We will transform an energy inefficient complex into an energy efficient building meeting at least LEED Silver standards. These include an efficient HVAC system, LED light fixtures, improved indoor air quality, low Volatile Organic Chemicals (VOC) paint and finishes, recycled

content in flooring materials and other interior finishes, integration of natural day lighting, high efficiency equipment, digital automatic building controls, waste reduction and recycling, low flow plumbing fixtures, etc.

The following is a listing of infrastructure components of the proposed project:

Building Structure/Envelope:

- 1. Replacement of roof
- 2. Structural repair
- 3. Replace sealant
- 4. Replace compromised building envelope

Interior/Accessibility:

- 5. Replace ceilings
- 6. Replace floor panels and tiles
- 7. Upgrade toilet room accessories

HVAC/Controls/Energy:

- 8. Replace pneumatic controls with Direct Digital Controls (DDC)
- 9. Replace enthalpy control for air-side economizer
- 10. Add interlock Building Management System (BMS) with space thermostats
- 11. Add CO2 sensors and demand-controlled ventilation
- 12. Replace supply air diffusers
- 13. Add control system router
- 14. Replace outdoor air monitoring station
- 15. Replace airflow measurement devices
- 16. Add airflow-measuring stations
- 17. Provide return air system to classrooms
- 18. Replace Thermafuser system with Variable Air Volume (VAV) boxes
- 19. Install new mixing box at each Air Handling Unit (AHU)
- 20. Replace split system for elevator machine room

Piping/Plumbing:

- 21. Replace heating hot water heat exchangers
- 22. Replace High Temperature Hot Water (HTHW) valves
- 23. Convert secondary heating hot water system to variable volume
- 24. Radiant ceiling heating system
- 25. Replace hot water recirculating pumps
- 26. Upgrade to low flow fixtures
- 27. Convert to automatic devices
- 28. Replace backflow preventer

Fire/Life Safety/Health:

- 29. New fire sprinkler system
- 30. Update fire alarm system
- 31. Upgrade toilet room ventilation

Electrical/Lighting:

- 32. Replace bus
- 33. Replace distribution power panel
- 34. Replace wiring
- 35. Replace receptacle panels
- 36. Replace lighting panels
- 37. Replace lighting with LED light fixtures
- 38. Replace transformers

Information Technology:

39. Upgrade information technology systems

Elevator:

40. Modernize elevator cab

8. Are matching resources currently available for the project? If yes, what is the source of the match resources? If not, identify the intended source and the estimated timeline for securing said resources.

Yes. Oakland University would issue bonds to provide the required match and build the associated debt service into its general fund budget.

9. If authorized for construction, the state typically provides a maximum of 75% of the total cost for university projects. Does the institution intend to commit additional resources?

Oakland University is committed to providing the 25% required match, \$10 million, to the total estimated project cost of \$40 million. A complete renovation and rehabilitation of the Science Complex can be achieved within this total project cost.

10. Will the completed project increase operating costs to the institution? If yes, 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. The Science Complex Renovation Project is **expected to reduce operating costs of the existing spaces** due to significant infrastructure improvements and energy efficient upgrades. Based on collected and projected data, the utility costs for the current square feet will lower from \$2.59 per square foot to \$1.81 per square foot (see chart below) for the Science Complex. Meanwhile, upgrades to the existing mechanical systems will resolve deferred maintenance concerns for equipment dating nearly 50-years old.

	Science Complex - 175,000 SF									
Annual Operating Cost Savings										
Utility Current \$ per C SF C		Current Total Cost	Future \$ per SF	Future Total Cost	Estimated Savings					
Electric	\$1.26	\$220,500	\$0.89	\$155,750	\$64,750					
HTHW	\$0.96	\$168,000	\$0.64	\$112,000	\$56,000					
Water	\$0.37	\$64,750	\$0.28	\$49,000	\$15,750					
Total	\$2.59	\$453,250	\$1.81	\$316,750	\$136,500					

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

None. This project would not cause a tuition increase. The intention would be to build the debt service on the matching bonds into the general fund budget to be offset by cost containment measures.

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

The consequences related to not providing state support for the Science Complex Renovation Project will result in a diminished offering of high demand degrees which prepare educated professionals for the workforce in the State of Michigan. Our ability to train and educate students will be greatly challenged if we are unable to complete this project. The current laboratory conditions are providing an environment that is less than what prospective students have experienced at their local high schools resulting in Oakland University being much less competitive in recruiting and retaining students.

Goal 1 of the Oakland University strategic plan is to foster student success through a robust teaching and learning environment and comprehensive student services. To achieve this goal, we have established aggressive targets for student retention and graduation. By providing the proper learning environments, we will enhance learning and, ultimately, student success. We have been doing this on a classroom by classroom basis throughout campus, but the Science Complex is in need of comprehensive system upgrades and modernizations.

The lack of state funding will require Oakland University to continue to use the limited deferred maintenance funding to address the current maintenance issues. Currently, there is a deferred maintenance backlog campus wide of over \$200 million. It is anticipated that the work will need to be conducted in smaller increments over a tenyear period. This project will assist in avoiding an increased possibility of costly emergency repairs and increased operating costs.

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

Oakland University has a 10-year campus master plan to address changing academic programs, increasing on-campus residents, identifying teaching, learning and research needs and determining how the only public four-year university in Oakland County

would respond to those needs. The master plan evaluated ideal building locations and prioritized projects to meet critical needs.

The top priorities listed were to increase and improve academic space on campus and to provide relevant 21st century active learning environments.

A new classroom, laboratory and research facility was considered and was rejected due to high construction costs and incremental utility costs. It was estimated that a new science building would cost at least \$600 per square foot at a total cost of at least \$85 million, which is cost prohibitive.

This proposed renovation project is preferable for multiple reasons – building condition and classroom and laboratory space being the two most important. The Science Complex is the original science facility and the primary instructional and research area that was designed for a different era and different academic needs. While improving academic program and research spaces, this project resolves much needed building system upgrades and over \$32 million of deferred maintenance. Regardless of any approach the University selects to meet academic space needs, the mission-critical Science Complex will need renovation to remain functional for science curriculum and research needs.

In addition, the Science Complex is centrally located near the library, student union and admission office buildings, with vehicle parking and easy access for students, faculty and visitors. The campus master plan proposes to recast this part of campus as a more pedestrian-friendly, community-focused space, increasing the importance of the Science Complex for both academics and community engagement.