Agendum
Oakland University
Board of Trustees Formal Session
October 31, 2011

FISCAL YEAR 2013 FIVE-YEAR CAPITAL OUTLAY PLAN AND FISCAL YEAR 2013 CAPITAL OUTLAY PROJECT REQUEST

A Recommendation

- 1. <u>Division and Department:</u> Finance and Administration, Facilities Management, and Capital Planning and Design
- 2. <u>Introduction:</u> Annually, Oakland University (University) is required to submit its Five-Year Capital Outlay Plan (Plan) and top priority Capital Outlay Project Request (Project Request) to the Michigan Department of Management and Budget. 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 capital outlay request. The University is submitting as its top priority a project to construct an Engineering Center and renovate vacated space in Hannah Hall. The Engineering Center has planning authorization approval from the State of Michigan. Draft planning documents are due to the State Budget Office November 4, 2011 for consideration of construction authorization. Until the University receives construction authorization, the Engineering Center must remain as the University's top priority capital outlay request. Attachment A is the proposed Plan. Attachment B is the proposed Project Request.

- 3. <u>Previous Board Action:</u> On December 9, 2010 the Board of Trustees (Board) approved the Fiscal Year 2012 Five-Year Capital Outlay Plan and Fiscal Year 2012 Capital Outlay Project Request.
- **4. Budget Implications:** Funding to address a portion of the plant renewal items identified in the Plan is budgeted annually. Funding for the University's Project Request would be provided through capital appropriations (maximum of 75% of project costs), fund raising, reserves, and/or debt.
- **5.** Educational Implications: 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.
- 6. Personnel Implications: None.
- 7. <u>University Reviews/Approvals:</u> The Plan is prepared and updated by Capital Planning and Design and reviewed by Facilities Management, the Vice President for Finance and Administration, and President. The Project Request followed the same process and was also reviewed and endorsed by Academic Affairs leadership.

Fiscal Year 2013 Five-Year Capital Outlay Plan and Fiscal Year 2013 Capital Outlay Project Request Oakland University Board of Trustees Formal Session October 31, 2011 Page 2

Recommendation:

RESOLVED, that the Board of Trustees approves the submission of the attached Fiscal Year 2013 Five-Year Capital Outlay Plan and Fiscal Year 2013 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 2013 Five-Year Capital Outlay Plan
- B. Fiscal Year 2013 Capital Outlay Project Request

Submit	ted to the	President	
on	10/21	, 2011	by

John W. Beaghan

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

Recommended on ______, 2011 to the Board of Trustees for Approval

Gary D. Russi President

ATTACHMENT A

OAKLAND UNIVERSITY

Fiscal Year 2013
Five-Year Capital Outlay Plan

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I. Mission Statement

"Oakland University has a three-fold mission. It offers instructional programs of high quality that lead to degrees at the baccalaureate, master's, and doctoral levels as well as programs in continuing education; it advances knowledge and promotes the arts, through research, scholarship, and creative activity; and it renders significant public service. In all its activities, the University strives to exemplify educational leadership."

II. Instructional Programming

Oakland University (Oakland, University or OU) 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 83 doctoral/research universities by the Carnegie Foundation for the Advancement of Teaching, the University offers students opportunities to work directly on research projects 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 co-op opportunities and provide University researchers access to the latest technology tools. Oakland's leadership with these partnerships also significantly impacts economic development efforts and commercialization opportunities in the region.

In August 2011, Oakland, in partnership with Beaumont Hospitals, brought the first M.D.-granting medical school to Oakland County and the first new medical school started in Michigan in a generation. It will boost our local and regional economies by generating new jobs and attracting medical, business and academic leaders from around the world and aid in our transition from a manufacturing to a knowledge-based economy.

The medical school will train physicians to practice 21st century medicine with an emphasis on research, technology, preventive and pre-symptom medicine, treatment and management of chronic disease, and teamwork. It will promote applied research "from the bench to the bedside," assuring that scientific discoveries and new technologies are able to directly benefit patients in the most rapid timeframe possible.

Oakland has a strong undergraduate program in the basic sciences and is widely recognized for excellence in the biomedical sciences and other health care related programs. It has a School of Nursing, a School of Health Sciences, a renowned Eye Research Institute, and

highly regarded programs in bioengineering, informatics and nanotechnology as well as chemical toxicology, health and environmental chemistry, medical physics and biological communication.

Oakland University's other professional schools, including the Schools of Business Administration, Education and Human Services, Engineering and Computer Science, and the College of Arts and Sciences have been recognized nationally for various accomplishments.

A Leading University

Oakland is committed to providing undergraduate and graduate education marked by academic excellence, unique opportunities, and beyond-the-classroom experiences in preparing future leaders, advancing research frontiers and engaging with business, educational and community partners for the benefit of the region and beyond.

Through the dedication of inspired faculty, Oakland prepares students to make meaningful and substantial contributions to society and the workplace by producing graduates who can think critically and creatively, communicate effectively, navigate and use information technology, and interact well with others.

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 is among the fastest growing public universities in the state with student enrollment projections through 2020 including:

- continued enrollment growth
- increased enrollment of minority students
- greater outreach activities and advanced technology-assisted education delivery

Over the last 12 years, the University has realized a 32 percent increase in enrollment and has added more than 65 new degree programs since 1995 to strengthen educational offerings.

Oakland's first-ever comprehensive campaign, officially launched in the spring of 2005, exceeded its goal of \$110 million by raising \$111.8 million one year ahead of schedule. Funds will be used to support student scholarships, faculty chairs and professorships, research endowments, academic programming and capital enhancements.

Oakland has continued to keep pace with growth by providing new and advanced academic, research and support facilities, such as the:

- Science and Engineering Building
- renovated Hannah Hall
- Elliott Hall of Business and Information Technology
- Pawley Hall of Education and Human Services
- renovation and expansion of the Oakland Center
- renovation of O'Dowd Hall to provide additional classrooms and space for the Oakland University William Beaumont School of Medicine
- Recreation Center
- renovation and restoration of Meadow Brook Hall
- renovation and technology upgrades of South Foundation Hall
- Student Apartments
- The Honors College
- Parking structure
- Student Technology Center
- OU Writing Center
- OU Anton/Frankel Center
- Human Health Building, which broke ground in April 2010, will be located on the northwest corner of campus and is targeted for completion in 2012.

A Campus Master Plan accounts for expected growth and includes:

- recommendations for additional parking
- infrastructure improvements
- the identification of potential building sites
- a research and development park
- a new humanities facility
- · future phases of student housing

Several upgrades, renovations and technological improvements to various classrooms, laboratories and common areas were recently accomplished. Primary laboratories to receive complete renovation were in Chemistry, Biology and Physics, including labs in Nursing, Art and Art History and Physical Therapy – all programs which have experienced large increases in student enrollment or are key components of Oakland 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. The University is committed to assisting start-ups and spin-outs to locate and secure technology development, business planning and capital acquisition as well as providing opportunities for the licensing of Oakland University's intellectual assets. To foster emerging discoveries, the University features several noted research centers, including the:

- OU SmartZone Business Incubator
- Fastening and Joining Research Institute (FAJRI)
- Center for Robotics and Advanced Automation
- Eye Research Institute (ERI)
- Center for Integrated Business Research and Education (CIBRE)
- · Center for Biomedical Research
- Prevention Research Center
- Center for Autism Research, Education and Support (OUCARES)

OU SmartZone Business Incubator: A collaboration with Automation Alley, the Great Lakes Interchange, the Michigan Economic Development Corporation, Oakland County and the City of Rochester Hills, OU INC provides the expertise and skills of faculty, students and corporate partners to area businesses in a variety of capacities, including entrepreneurial resources and business solutions to develop intellectual property.

OU's Macomb incubator now has a Sterling Heights facility, which is a joint venture between Oakland University, Macomb County and the City of Sterling Heights.

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 Chrysler Corporation, 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: metals, composites, polymers, and bio materials.

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 William Beaumont Hospital Ophthalmology Department on research and provides a joint Ophthalmology residency and fellowship program. Since 1968, ERI scientists have received more than \$50 million 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 from Southeastern Michigan to 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.

M2O: Oakland University and Macomb Community College implemented the state's first joint admission, concurrent enrollment program called M20. One application, coordinated advising and financial aid, and expanded course selection make it easy for those who live or work in Macomb County to seamlessly complete their associate and bachelor's degrees.

O2O and SC2O: In 2010, Oakland University announced two new joint admission, concurrent enrollment programs with Oakland Community College (OCC) and St. Clair County Community College (SC4). The partnerships are the second and third of their kind in Michigan, the first being M2O.

Eugene Applebaum College of Pharmacy and Health Sciences: An alliance between Oakland University's School of Health Sciences and Wayne State University 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. 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 doctorate program in seven years instead of eight, saving time and money.

Crittenton Hospital Medical Center:

Crittenton Hospital Medical Center has funded a \$2 million endowed professorship in Oakland University's School of Nursing that will change the clinical education and training of nursing students. The nursing professorship will conduct patient-focused research on the science and best practices of nursing, an area that has not received much attention to date. Students in the new program will conduct all of their clinical rotations at Crittenton Hospital Medical Center using the RBC Model. Relationship Based Care moves from an individual expert dynamic to one of engaging the patient, identifying options, relaying experiences and empowering the patient and his/her family to make the best treatment decisions.

OU Anton/Frankel Center:

Oakland University expanded its reach in Macomb County by opening the two-story Towne Square Building in downtown Mt. Clemens. Newly named the Oakland University Anton/Frankel Center, the facility offers OU 25,422 square feet of space to house classrooms, offices for advising, student support services, faculty and staff as well as an Education and Community Outreach Center. Macomb County investors and developers Gebran (Gabe) S. Anton and his Towne Square Associates partner, Stuart Frankel, donated the building, which is valued at approximately \$2 million. The new facility will help Oakland University advance its commitment to bringing exceptional academic opportunities to the people of Macomb County.

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 myriad overseas programs including a new 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.

Cooley Law School: Oakland University and Cooley Law School have enjoyed a successful partnership since 2002, when Cooley first offered its Juris Doctor (JD) law program on Oakland's campus. The recently opened Thomas M. Cooley Law School-Auburn Hills campus is the exclusive educational partner law school of Oakland University.

The Pawley Learning Institute: Established through a gift from Dennis Pawley, 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.

Applied Technology in Business: This program combines a rigorous education with handson training in the application of information technology in business. Students earn a scholarship along with a minor degree in Applied Technology in Business while tackling projects on-site at sponsoring organizations over the course of two years.

St. John Health Providence System at Riverview: Oakland continues to find new ways to fill Michigan's allied health professional and nursing pipeline. Through this partnership, students in the Patient Care Technician, Certified Nursing Assistant, Licensed Practical Nurse and Accelerated Second Degree Nursing programs take lecture and clinical laboratory courses at the Riverview Institute of Oakland University, the former St. John Riverview Hospital in Detroit.

Undergraduate research opportunities:

More than 100 undergraduate students have earned Undergraduate Student Research Awards this year, working closely with faculty mentors to gain valuable hands-on research experience. The awards provide up to \$1,500 and travel opportunities to present student research results at regional, national or international conferences.

Instructional Technology

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

All general purpose classrooms are equipped with the following features:

- Multimedia workstation containing: a PC computer hardwired to campus network; a digital document camera; an electronic whiteboard; a rack mounted DVD player; an interface to plug in a user provided laptop computer, an interface to plug in an accessory analog audio/video device; speaker system; and an electronic media control system
- Ceiling mounted video/data projection system connected to the multimedia workstation
- Wireless network access
- A lecture capture system (Panopto) is available to faculty who would like to provide recordings of their classroom instruction for student review

Oakland continues to offer courses via distance education. The three modes of delivery include live interactive video, synchronous and asynchronous web-based learning opportunities.

The Internet is the current transmission vehicle for the University's live two-way compressed video course offerings. The ongoing development and interest in online learning courses and programs has reduced the need to utilize the more expensive live interactive video distance learning model and thus there is less of a need to maintain high cost video conferencing systems and resources. However, the growth in web based learning models will continue to expand in the foreseeable future.

Oakland University supports a web-based Course Management System (CMS) solution utilizing Moodle. Moodle can be used as a full "web based" solution where no face-to-face teaching is required or as a "web supplemented" course resource that enhances the standard face-to-face classroom contact between faculty and student. Moodle offers online activities such as discussion boards, chat, quizzes, grade book, file storage and display, RSS feeds, wikis, journals, workshops, automated lessons. Moodle will also be the portal to access lecture capture recordings. We also support another separate instance of Moodle that is our e-Portfolio. It includes digital space for student career Portfolios. A third instance of Moodle

is called e-Space that contains department assessment activities, research, academic committees, advising, and other miscellaneous academic activities.

Elluminate is a web-based synchronous learning, video-conferencing solution Oakland is offering where students are able to participate in live class meetings from any computer connected to the Internet. Another teaching tool is Second Life, an experimental island where several faculty meet their classes.

During the Winter 2011, Oakland offered 136 course sections that are fully online and approximately one third of all course sections are providing some level of web supplemented activity. Oakland also offers twenty-nine online degree and certificate programs.

Scantron machines, i-Clicker, and other software are also supported centrally for grading exams and processing course evaluations.

Technological Enhancements

Oakland University is dedicated to enhancing education through the use of contemporary and emerging technologies and continues to commit significant resources to technological enhancements, including:

- Complete administrative software suite.
- On-line registration.
- Extensive wired and wireless network to all classroom buildings and surroundings.
- Elliott Hall of Business and Information Technology, a \$17.5-million, 74,000-square foot, technology-rich facility.
- The Pawley Hall of Education & Human Services Building with 24 enhanced technology classrooms and an all digital video recording, playback and archive system in the School's Counseling Center.
- Interactive television and video conferencing capability to supplement instruction and administrative program activity.
- On-line web-based course offerings to students utilizing Moodle, a course management software (CMS).
- Other teaching and learning software, such as Panopto, CourseWeb, Scantron, Turnitin, Second Life, Camtasia, I-clicker, and Visual Communicator.
- A new Information Commons was developed in Kresge Library adding a significant number of computer work stations for the patrons.
- A remodel of O'Dowd Hall was completed to become the initial home of the new Oakland University William Beaumont School of Medicine, including adding many new technology enhancements.
- An off-site School of Nursing instructional center was developed at the St. Johns Riverview Hospital location in Detroit including the creation of 5 technology enhanced classrooms.
- Renovation of the two-story Anton/Frankel Center in Mount Clemens provides

- Oakland with a third Macomb County location with an additional 25,422 square feet of space. The new center will provide classrooms as well as offices for advising, student support services, faculty and staff.
- Major classroom renovation projects that included significant technology enhancement in older campus buildings continue to be a priority objective.

Helpdesk Operations

Oakland University provides a central helpdesk operation which supports all instructional and information technology service needs throughout the Institution.

In addition, the office of Classroom Support and Instructional Technical Services provides an immediate response helpdesk service that is open day and night, six days a week.

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 record-high enrollment numbers.

The Department of Music, Theatre and Dance offers more than 100 student and faculty performances throughout the school 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 fourth 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.

The Oakland University Art Gallery (OUAG), housed in the Department of Art and Art History, continues to garner critical acclaim for the quality and scope of its exhibitions. From September to May, the OUAG presents six different exhibitions – anything from Russian icons to Native American art to cutting-edge art produced by breakthrough Michigan artists. The gallery also offers lectures, performances, tours, special events and more. More than 20,000 visit OUAG each year to experience art and cultural programs.

Outdoor summer amphitheatre, Meadow Brook Music Festival, hosts today's top concerts including rock, alternative, adult contemporary, pop, country, the Detroit Symphony Orchestra, rhythm and blues, and family entertainment.

Community Outreach

In the nearly six 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. Oakland considers Rochester its "hometown community" based on its long history with the city dating to the University's founding.

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.

Students are involved in downtown Rochester events including an annual holiday parade, attracting more than 100,000 spectators. 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 City of Pontiac have a long history together through programs such as GEAR UP, which helps students in the Pontiac as well as Oak Park school districts; Project Upward Bound, which helps thousands of Pontiac students 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.

Oakland University-Macomb is involved in various community service efforts including sponsorship of Turning Point's annual fundraising event and Tara Grant Memorial Run Walk. This past holiday season, OU-Macomb staff and students made donations to Turning Point and its resale shop, Second Hand Rose. In addition, students in the Future Educators club donated over 100 books to Mt. Clemens King Academy.

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.

The Advising Resource Center connects new students with OU 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.

Oakland's Trustee Academic Success scholarship program (OUTAS) is a national model for retaining and graduating a diverse group of high-achieving University students. OUTAS was established to counter the declining rates of minority retention, graduation and student performance.

Oakland's OU 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 communications skills in all subject areas.

Oakland's Honors College offers highly motivated students seeking a rich, valuable and challenging undergraduate education an intimate, intellectually friendly and challenging atmosphere. Small classes average 10 to 20 students and allow for more interaction between the professor and other students. The program offers a specially designed core of general education courses in art, literature, western civilization, international studies, social science, mathematics, logic, computer science, natural science and technology.

Oakland's Student Technology Center serves as a digital hub for the promotion, instruction and support of technology literacy. Through the center, professional system specialists, combined with undergraduate student technology mentors, provide training and support in one-on-one or group sessions to students. This support helps students become proficient in technology, complete coursework in various disciplines, conduct University-related business transactions and work-related tasks, and improve personal growth skills.

OU has more than 170 student organizations that encourage student involvement and social opportunities.

The Recreation Center hosts a number of activities throughout the academic year in which students may get involved, including self-defense and other safety classes, scuba diving courses and many others. This state-of-the-art facility draws more than 5,000 participants a week for recreation and swimming, and record crowds at men's basketball games.

UNDERGRADUATE DEGREE PROGRAMS

College of Arts and Sciences (96) Bachelor of Arts – CASBA (55)

2810	Anthropology
2815	Anthropology – Modified w/Concentration in Linguistics
1055	Art History
1105	Biology
1230	Chemistry
1450	Cinema Studies
2705	Communication
2715	Communication – Modified w/Concentration in Linguistics
1420	Creative Writing
2290	Dance
1610	East Asian Studies – China
1615	East Asian Studies – Japan
3700	Economics
1405	English
1410	English – Modified w/Concentration in Linguistics
1980	French Language and Literature
1985	French – Modified
2015	German w/Concentration in German Studies
2010	German Language and Literature
2020	German – Modified
1505	History
1045	Independent Major
2510	International Relations
2040	Japanese Language and Literature
2045	Japanese – Modified
2735	Journalism
2060	Latin American Language and Civilization
1625	Latin American Studies
1700	Liberal Studies
1705	Linguistics
1710	Linguistics – Modified
1805	Mathematics
2205	Music
2375	Philosophy
2380	Philosophy - Modified
2385	Philosophy – Modified w/Concentration in Linguistics
2405	Physics
2515	Political Science
2605	Psychology
2615	Psychology – Modified w/Concentration in Linguistics
2820	Sociology
2805	Sociology/Anthropology
2825	Sociology – Modified w/Concentration in Linguistics
2830	Sociology – w/Specialization in Criminal Justice (2 + 2)
2100	Spanish Language and Literature
2110	Spanish – Modified
1070	Studio Art
1075	Studio Art – Specialization in Drawing
1070	Studio / It - Specialization in Diawing

2130 2870 2865	Writing and Rhetoric
Bachelor	of Fine Arts – BFA (4)
2283	
2290	
2285	
2296	Theatre Design & Technology
Bachelor	of Music – BM (7)
2270	
2279	
2272	? Instrumental/General Music Education
2278	
2265	
2245	
2240	Music – Vocal Performance
	of Science – CASBS (13)
1835	
1225 1105	
1110	
1125	
1120	
1130	
1130	Biomedical Sciences
1905	
1230	
1805	•
2420	
2420	· · · · · · · · · · · · · · · · · · ·
2530	
	•
Bachelor o	f Science – ENVSCI (2)
1252	2 Environmental Science/Specialization Sustainability and Res. Mgt
1257	
1266	
Bachaloro	of Social Work – BSW (1)
2860	
K-12 Educ	ational Programs (8)
1992	
2027	
2122	
1071	
107	
1076	,
109	Totalio file with 12 openialization in from Modia

Studio Art - Specialization in New Media Studio Art – Specialization in Painting Studio Art – Specialization in Photography

Theatre

1081 1086	,	
1140		
1240 1430	,	
1515		
1825		
2430	Physics w/Secondary	
	siness Administration (9) of Science – SBABS (9)	
3100	Accounting	
3705 3700	Business Economics	
3700	Economics Finance	
3300		
3400	Human Resource Management	
3500		
3600 3806	Marketing Operations Management	
	ucation and Human Services (2)	
	of Science (2) Elementary Education	
	Human Resource Development	
	gineering and Computer Science (6)	
Bachelor of 5020	of Science (2) Computer Science	
	Information Technology	
Bachelor o	of Science in Engineering (4)	
5120		
5140 5185	Electrical Engineering	
5160	Industrial & Systems Engineering Mechanical Engineering	
2,720		
	alth Sciences (11)	
Bachelor of 6070	of Science (11) Applied Health Sciences	
6161		
6020		
6167	· · · · · · · · · · · · · · · · · · ·	
6162		
6163 6165	• • • • • • • • • • • • • • • • • • • •	
6166		
6168	BDTS: Radiologic Technology	
6041		
6050	Wellness, Health Promotion, and Injury Prevention	
School of Nursing (2)		
Bachelor of	of Science in Nursing (2)	
7000		
7020	Nursing Nursing (Completion Sequence)	

University Programs (1)

Bachelor of Integrative Studies (1)

7605 Integrative Studies

Bachelor of Science Offered Jointly between the College of Arts and Sciences and School of Engineering and Computer Science (3)

Engineering Biology **Engineering Chemistry** 5040 **Engineering Physics** 5060

Bachelor of Science Offered Jointly between the College of Arts and Sciences and School of Business Administration (1)

3750 Actuarial Science

UNDERGRADUATE CONCENTRATIONS AND MINORS

UNDERGRADUATE CONCENTRATIONS (24)

1435 American Studies1835 Applied Statistics

2850 Archaeology

2858 Criminal Justice

1270 Environmental Studies

6240 Exercise Science

1995 French Studies

2016 German Studies

6030 Health Behavioral Sciences

6073 Health Information Technology

6023 Integrative Holistic Medicine

1705 Linguistics

6071 Medical Assistant

6075 Occupational Therapy Assistant

6076 Physical Therapist Assistant

6021 Pre-Health Professional

1152 Pre-Medical Studies in Med/Den/Opt/Vet

6022 Pre-Pharmacy 6015 Pre-Physical Therapy

1150 Pre-Professional Studies in Med/Den/Opt/Vet and Physician Assistant

2856 Religious Studies

6072 Respiratory Therapy

6074 Surgical Technology

2855 Urban Studies

UNDERGRADUATE MINORS (83)

3100 Accounting

2740 Advertising

1605 African-American Studies

2810 Anthropology

1810 Applied Mathematics

4355 Applied Leadership Skills

1835 Applied Statistics

3810 Applied Technology in Business

1055 Art History

1105 Biology

- 3840 Business
- 1230 Chemistry
- 1610 East Asian Studies China
- 1615 East Asian Studies Japan
- 1956 Chinese Language
- 1955 Chinese Language and Civilization
- 2841 Christianity Studies
- 1450 Cinema Studies
- 2705 Communication
- 5020 Computer Science
- 5021 Computing
 - Creative Writing
- 2290 Dance
- 3700 Economics
- 4351 Employment Systems and Standards
- 1405 English
- 1721 English as a Second Language
- 3850 Entrepreneurship
- 1266 Environmental Science
- 6240 Exercise Science
- 3200 Finance
- 1981 French Language
- 1980 French Language and Literature
- 3315 General Business
- 2011 German Language
- 2010 German Language and Literature
- 2016 German Studies
- 1095 Graphic Design
- 1505 History
- 4320 Human Resource Development
- 3400 Human Resources Management
- 3302 International Management
- 2510 International Relations5070 Information Technology
- 2842 Islamic Studies
- 2037 Japanese Language
- 2035 Japanese Language and Civilization
- 2040 Japanese Language and Literature
- 2350 Jazz Studies
- 2735 Journalism
- 2843 Judaic Studies
- 1625 Latin American Studies
- 1705 Linguistics
- 3500 Management Information Systems
- 3600 Marketing
- 1805 Mathematics
- 1635 Middle Eastern Studies
- 2205 Music
- 6055 Nutrition and Health
- 6041 Occupational Safety and Health
- 3806 Operations Management
- 2375 Philosophy
- 2405 Physics
- 2515 Political Science
- 2605 Psychology
- 2742 Public Relations

2530	Public Administration and Public Policy
3800	Quantitative Methods
1630	Slavic Studies
2820	Sociology
1620	South Asian Studies
2101	Spanish Language
2100	Spanish Language and Literature
1070	Studio Art
1720	Teaching English as a Second Language in Linguistics
2294	Theatre
1147	Three Science
4900	Training and Development
1146	Two Science
6050	Wellness, Health Promotion, and Injury Prevention
2865	Women and Gender Studies
2870	Writing and Rhetoric
2355	World Music

GRADUATE DEGREE PROGRAMS

Doctor of Philosophy (13)		
Applied Mathematical Sciences		
Biomedical Sciences: Biological Communication		
Biomedical Sciences: Health and Environmental Chemistry		
Biomedical Sciences: Medical Physics		
Computer Science and Informatics		
Education: Educational Leadership		
Education: Counseling		
Education: Early Childhood Education		
Mechanical Engineering		
Music Education		
Reading Education		
Systems Engineering		
Electrical and Computer Engineering		

Doctor of Physical Therapy (2)

DP6220 DP6221

Doctor of Science in Physical Therapy (1)

DS6220

Doctor of Nursing Practice (1)

DN7400

Doctor of Medicine (1)

MD9100

Education Specialist (1)

ED4705 Early Education and Intervention

ES4650 Leadership

Master of Arts (7)

MA1105 Biology

MA2710 Communications
MA4400 Counseling
MA1405 English
MA1505 History
MA1705 Linguistics
MA1805 Mathematics

Master of Arts in Liberal Studies (1)

MA1700

Master of Accounting (1)

MA3100

Master of Arts in Teaching (3)

MT4120 Elementary Education
MT4500 Reading and Language Arts
MT4220 Secondary Education

Master of Business Administration (2)

MB3900 MB3901

Master of Education (5)

ME4700 Early Childhood Education
ME4610 Educational Leadership
ME4620 Educational Studies
ME4800 Special Education
ME4615 Teacher Leadership

Master of Music (7)

MM2335 Conducting

MM2345 Instrumental Performance

MM2305 Music Education
MM2320 Piano Pedagogy
MM2325 Piano Performance
MM2310 Vocal Pedagogy
MM2315 Vocal Performance

Master of Public Administration (1)

MP2560

Master of Science (18)

MS1835 Applied Statistics

MS1105 Biology MS1230 Chemistry

MS5020	Computer Science
MS5540	Electrical and Computer Engineering
MS5620	Embedded Systems
MS5560	Engineering Management
MS6240	Exercise Science
MS5185	Industrial and Systems Engineering
MS1860	Industrial Applied Mathematics
MS3550	Information Technology Management
MS5160	Mechanical Engineering
MS5545	Mechatronics
MS6220	Physical Therapy
MS2405	Physics
MS6045	Safety Management
MS5600	Software Engineering and Information Technology
MS5180	Systems Engineering

Master of Science in Nursing (7) MS7270 Adult Gerontological Nurse Practitioner

WS7270	Adult Gerontological Nurse Practitioner
MS7266	Clinical Nurse Leadership
MS7265	Clinical Nurse Specialist - Adult Health
MS7280	Family Nurse Practitioner
MS7220	Nurse Anesthesia
MS7285	Nursing Education
MS7290	RN to MSN

Master of Training and Development (1)

MD4900

Graduate Certificate (25)

GC4551	Advanced Microcomputer Applications
GC4820	Autism Spectrum Disorder
GC1107	Biomedical Sciences
GC6245	Clinical Exercise Science
GC7266	Clinical Nurse Leadership
GC6248	Complementary Medicine and Wellness
GC2335	Conducting
GC6246	Corporate and Worksite Wellness
GC6240	Exercise Science
GC2345	Instrumental Performance
GC4625	International Education
GC4550	Microcomputer Applications
GC2305	Music Education
GC6233	Neurological Rehabilitation
GC7285	Nursing Education
GC6230	Orthopedic Manual Physical Therapy
GC6232	Orthopedics
GC6231	Pediatric Rehabilitation
GC2320	Piano Pedagogy
GC2325	Piano Performance
GC1880	Statistical Methods

GC6234	Teaching and Learning for Rehabilitation Professionals
GC1720	Teaching English as Second language
GC2310	Vocal Pedagogy
GC2315	Vocal Performance

Post Masters Graduate Certificate (30)		
PM3100	Accounting	
PM7270	Adult Gerontological Nurse Practitioner	
PM4561	Advanced Reading, Language Arts and Literature	
PM3705	Business Economics	
PM7267	Clinical Nurse Leadership	
	Clinical Nurse Specialist: Adult Health	
PM7264		
PM2335	Conducting	
PM2569	Criminal Justice Leadership	
PM3850	Entrepreneurship	
PM7280	Family Nurse Practitioner	
PM3200	Finance	
PM3300	General Management	
PM2566	Health Care Administration	
PM4670	Higher Education	
PM3400	Human Resources Management	
PM2345	Instrumental Performance	
PM3305	International Business	
PM2568	Local Government Management	
PM3500	Management Information Systems	
PM3600	Marketing	
PM2305	Music Education	
PM2567	Nonprofit Organization & Management	
PM7220	Nurse Anesthesia	
PM7285	Nursing Education	
PM2320	Piano Pedagogy	
PM2325	Piano Performance	
PM3805	Production/Operations Management	
PM4560	Reading, Language Arts and Literature	
PM2310	Vocal Pedagogy	
PM2315	Vocal Performance	

III. Staffing and Enrollment

The following tables and graphs are provided:

Figure 1 - Faculty and Staff Full Time Equivalent (FTE) by Program, FY 2010-11

This chart shows the FTE for faculty, administration and clerical/service for both instructional disciplines and non-instructional program classes.

				CLERICAL AND
		FACULTY	ADMINISTRATION	SERVICE
5	AREA STUDIES	16.56	0.00	0.66
9	COMMUNICATION	39.92	0.16	0.00
11	COMPUTERS	15.91	5.61	1.96
13	EDUCATION	111.91	9.47	13.29
14	ENGINEERING	37.77	9.34	6.91
16	FOREIGN LANGUAGES	46.90	0.51	3.52
23	ENGLISH & LETTERS	81.40	1.00	4.73
24	LIBERAL ARTS	4.88	1.17	0.33
25	LIBRARY	0.08	0.00	0.00
26	BIOLOGY	32.20	6.44	5.07
27	MATH	32.79	4.76	3.67
30	MULTI/INTERDISCIPLINARY	0.70	0.00	0.00
31	PARKS RECREATION & FITNESS	8.05	0.00	0.00
38	PHILOSOPHY	17.45	0.08	0.75
40	PHYSICAL SCIENCES	28.59	9.90	9.75
42	PSYCHOLOGY	16.28	1.09	1.82
44	PUBLIC ADMINISTRATION	7.39	0.00	0.00
45	SOCIAL SCIENCES	44.54	1.99	3.26
50	VISUAL & PERFORMING ARTS	65.72	9.10	9.63
51	HEALTH PROFESSIONS	4.14	0.00	0.00
51.22	PUBLIC HEALTH	6.40	0.00	0.00
51.22	REG NURSING	43.93	1.87	1.45
51,99	OTHER HEALTH PROFESSIONALS	22.16	4.35	3.25
52	BUSINESS	84.37	5.30	5.29
54	HISTORY	19.95	0.43	1.81
	TOTAL INSTRUCTION	789.99	72.57	77.15
	RESEARCH		8.91	4.55
	PUBLIC SUPPORT		1.55	0.13
	ACADEMIC SUPPORT		171.31	150.78
	STUDENT SERVICES		70.21	87.02
	INSTITUTIONAL SUPPORT		119.50	82.58
	PLANT OPERATION & MAINT		14.00	101.72
	AUXILIARY ENTERPRISES		34.04	4.46
	TOTAL FTEs	789.99	492.09	508.39

Figure 2 - <u>Student Credit Hours by Level and by Program, FY 2010-11</u>
This chart shows credit hours awarded by instructional discipline.

CIP		Lower	Upper	Masters	Doctoral	Total
05	Area Studies	8,436	1,506			9,942
09	Communication	8,199	10,699			18,898
11	Computer Science	4,796	2,189	738	102	7,825
13	Education	1,409	15,206	21,876	4,420	42,911
14	Engineering	3,547	4,062	3,157	693	11,459
16	Modern Languages	20,234	4,230	552		25,016
23	English	30,949	11,388	517		42,854
24	Liberal Arts	1,848	79	142		2,069
25	Library Science	24				24
26	Biology	22,073	11,555	810	75	34,513
27	Math	24,068	1,098	994	62	26,222
30	Multi/Interdisciplin. Sciences		740			740
	Parks, Recreation &					
31	Fitness	2,668	2,287	1,172		6,127
38	Philosophy	9,492	1,878			11,370
40	Physical Sciences	26,149	1,524	633	204	28,510
42	Psychology	15,628	5,234			20,862
44	Public Administration	236	2,056	1,424		3,716
45	Social Science	21,002	12,128	324		33,454
50	Fine Arts	21,258	7,742	652	98	29,750
51.38	Nursing	7,042	17,654	3,331	790	28,817
51.22	Public Health	411	1,632	110		2,153
51.99	Other Health Professions	5,369	9,047	3,200	1,496	19,112
52	Business	10,136	29,416	7,814		47,366
54	History	7,920	3,920	162		12,002
Total		252,894	157,270	47,608	7,940	465,712

Figure 3 - <u>Degrees Awarded by Program, FY 2009-10</u>
This chart shows the degrees awarded by program.

CIP		Bachelor's	Post	Master's	Post	Doctoral	Total
			Bachelor's		Master's		
05	Area Studies	16	0	0	0	0	16
09	Communication	207	0	0	0	0	207
11	Computer Science	49	0	24	0	1	73
13	Education	223	28	387	84	22	744
14	Engineering	104	0	83	0	8	195
15	Engineering Management	0	0	17	0	0	17
16	Modern Languages	52	0	7	0	0	59
23	English	93	0	14	0	0	107
24	Liberal Arts	95	0	1	0	0	96
26	Biology	120	0	4	0	2	126
27	Math	13	2	7	0	2	24
31	Parks, Recreation & Fitness	0	0	18	0	0	18
38	Philosophy	8	0	0	0	0	8
40	Physical Sciences	16	0	12	0	3	31
42	Psychology	118	0	0	0	0	118
44	Public Administration	47	0	22	0	0	69
45	Social Science	138	0	0	0	0	138
50	Fine Arts	70	0	5	0	0	75
51.16	Nursing	330	0	35	0	25	390
51.22	Public Health	26	0	3	0	0	29
51.99	Other Health Professions	140	0	6	0	41	187
52	Business	458	0	214	0	0	672
54	History	55	0	5	0	0	60
Total	Total	2,378	30	864	84	103	3,459

Figure 4 - Enrollment Trends from Fall 1998 to Fall 2011

This graphic shows the growth over the last twelve years in undergraduate and graduate resident students and undergraduate and graduate non-resident students. During this period Oakland University's enrollment increased from 14,289 to 19,329, an increase of over 35%.

Fall Term	Undergraduate			Graduate			Total		
	In-State	Out of State	Total	In-State	Out of State	Total	In-State	Out of State	Total
1998	10,963	148	11,111	3,061	117	3,178	14,024	265	14,289
1999	11,473	181	11,654	2,989	83	3,072	14,462	264	14,726
2000	11,797	205	12,002	3,132	101	3,233	14,929	306	15,235
2001	12,311	218	12,529	3,236	110	3,346	15,547	328	15,875
2002	12,418	216	12,634	3,310	115	3,425	15,728	331	16,059
2003	12,731	228	12,959	3,515	102	3,617	16,246	330	16,576
2004	12,894	221	13,115	3,580	207	3,787	16,474	428	16,902
2005	13,233	215	13,448	3,787	104	3,891	17,020	319	17,339
2006	13,484	217	13,701	3,936	100	4,036	17,420	317	17,737
2007	13,907	183	14,090	3,879	113	3,992	17,786	296	18,082
2008	14,233	164	14,397	3,646	126	3,772	17,879	290	18,169
2009	15,091	184	15,275	3,526	319	3,645	18,617	303	18,920
2010	15,331	199	15,530	3,400	123	3,523	18,731	322	19,053
2011	15,637	201	15,838	3,411	130	3,541	19,048	331	19,379

Figure 5 – Enrollment Projections by School/College and Level, Fall 2012 – Fall 2016 Oakland University continues to experience increases in enrollments.

	E	•	ctions by Scho Fall 2012 - Fall	ol/College and L	.evel		_
	Actual		raii 2012 - Faii	2016 Projections			% Change
Undergraduate	2011	2012	2013	2014	2015	2016	2011 2016
CAS	6,036	6,105	6,170	6,218	6,282	6,354	5.3%
SBA	2,113	2,146	2,169	2,186	2,208	2,234	5.7%
SEHS	1,317	1,333	1,347	1,358	1,371	1,387	5.3%
SECS	1,030	1,089	1,100	1,109	1,120	1,133	10.0%
SHS	1,846	1,923	1,943	1,959	1,979	2,001	8.4%
SON	1,845	1,870	1,889	1,904	1,924	1,946	5.5%
UP/None	1,651	1,631	1,648	1,661	1,678	1,698	2.8%
Total	15,838	16,098	16,267	16,396	16,563	16,754	5.8%
Graduate	2011	2012	2013	2014	2015	2016	
CAS	437	423	424	428	433	459	5.0%
SBA	437	430	431	434	442	465	6.4%
SEHS	1,599	1,581	1,584	1,603	1,637	1,693	5.9%
SECS	431	426	428	441	447	466	8.1%
SHS	258	250	251	254	258	271	5.1%
SON	329	321	322	326	331	346	5.3%
Medical School	50	125	225	349	448	547	994.0%
Total	3,541	3,556	3,664	3,834	3,995	4,433	25.2%
Total	2011	2012	2013	2014	2015	2016	
CAS	6,473	6,529	6,594	6,646	6,714	6,813	5%
SBA	2,550	2,576	2,600	2,621	2,650	2,699	6%
SEHS	2,916	2,914	2,931	2,960	3,008	3,081	6%
SECS	1,461	1,515	1,528	1,550	1,567	1,599	9%
SHS	2,104	2,173	2,194	2,212	2,237	2,273	8%
SON	2,174	2,191	2,212	2,231	2,255	2,292	5%
Medical School	50	125	225	349	448	547	994%
University Programs	1,651	1,631	1,648	1,661	1,678	1,698	3%
Total	19,379	19,654	19,931	20,230	20,558	21,002	8%

Figure 6 – General Fund Square Feet per Student in Michigan, FY 2009-2010

This chart shows that Oakland University is last in general fund square footage per student of the 15 Michigan institutions. Source: Heidi Data Base

Rank	by	SQ	FT
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ixain	by out i
UNIV	SQFT/FYES
LSSU	355.67
UM_AA	347.04
MSU	316.33
MTU	307.55
WMU	275.99
WSU	260.87
NMU	239.30
UM-D	213.46
UM-F	213.26
EMU	178.16
CMU	163.92
SVSU	154.19
FSU	147.80
GVSU	122.66
OU	99.08

Future Staffing Needs

Oakland University currently employs 3,070 full and part-time faculty and staff and 2,252 student employees. In addition, there are over 100 employees of contract service providers for food service, bookstore, and custodial services. Faculty and staff will grow with increased enrollment.

Average Class Size

Average class size for undergraduate instruction in fall 2010 was 32.89 students. Graduate class size in fall 2010 was 18.12 and PhD classes averaged 8.31 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.

IV. Facility Assessment

Utilization Rates

Oakland University has the lowest building square footage per student (figure 6) of any of the 15 public universities. However, a comparison of its programmatic mix with its doctoral programs and the relatively large number of engineering and science programs would lead to the conclusion that it should at least be near the overall average in total space. Program by program comparisons to national norms for disciplines indicates that all programs, even the School of Business with its new facility, fall short in space.

Classroom utilization is also very high, especially in the evenings. Oakland's enrollment includes a large number of non-traditional students. Demand for evening classes exceeds available facilities. A large number of evening classes are offered at area high schools.

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, Engineering and the Performing Arts. Recent facilities additions for the sciences, 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, and is primarily a student services building, but also includes two classrooms. The building is receiving a general facelift and significant improvements to the air distribution system.
- South Foundation Hall Completed in 1959, this building is primarily a classroom building. The University has been adding technology to the classrooms over the past several years. This building is used by nearly all academic disciplines.

- Hannah Hall of Science Completed in 1961, houses science, health science, and
 engineering laboratories as well as classrooms and offices. Air conditioning was
 added as part of a major energy project undertaken several years ago. Portions of
 the building were renovated to accommodate health sciences as part of the State
 funded Science and Engineering Building.
- 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.
- Dodge Hall of Engineering Completed in 1969, houses engineering and biology laboratories, offices, and classrooms. It also provides space for the Eye Research Institute and the administrative/academic-computing center. The School of Engineering and Computer Science has a significant space deficit compared to national standards. This deficit would be significantly reduced by the construction of the proposed Engineering Center.
- 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 School of Nursing, 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. O'Dowd Hall is the home of the School of Medicine. The building continues to suffer from leaks along the curtain wall that have been a problem for a number of years.
- Science and Engineering Building Completed in 1997, houses the School of Engineering and Computer Science, as well as Chemistry, Physics, Biology and Mathematics departments, and includes a roof-top area for solar and atmospheric research projects, the S&R Sharf Computer Integrated Manufacturing Lab and a state of the art animal care facility.
- 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 Scheduled for completion for Fall, 2012, this 165,126 square foot building will house the School of Health Sciences and the School of Nursing and general purpose classrooms. 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 new building, growth in

undergraduate and graduate enrollment can be doubled in response to vital shortages in nursing and heavy demand for health science professionals.

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 nearly 3 million square feet, including Meadow Brook Hall is estimated at \$814 million.

Utility Systems Condition

The utility systems in facilities (i.e., heating, ventilation, air conditioning (HVAC), water, sewage, 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 group needing upgrades to increase efficiency and effectiveness of operation.

The existing water/sewage infrastructure is adequate to serve the projected programming needs for at least 10 years, due to a recently installed water source. An upgrade to the electrical substation was completed, which included cabling, switchgear, and a new substation. This upgrade will meet projected electrical needs for at least 15 years. Additional upgrades to infrastructure throughout campus will be required as campus facilities age and enrollment grows.

Due to the age of OU's infrastructure replacement/upgrade is needed of the HTHW lines (South Loop), IT closets, IT cabling with Voice over IP capabilities, Boiler #4 in the Central Heat Plant, and the infrastructure (HVAC, plumbing and electrical) in Hamlin Hall and Vandenberg Hall.

Facility Infrastructure Condition

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

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 April 2001, has identified future uses for all of the undeveloped property.

Buildings Obligated to the State Building Authority

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

Science and Engineering Building - lease expiration in 2034

Elliott Hall – lease expiration in 2040

Pawley Hall – lease expiration in 2042

Human Health Building - lease expiration in 2047

The following facilities are bonded through the University:

Golf course - final payment in 2026

Recreation and Athletic Center - final payment in 2026

Student Apartments - final payment in 2031

Electrical Power Upgrade – final payment in 2031

Parking Structure - final payment in 2031

Oakland Center Expansion - final payment in 2031

Oakland University Classroom Utilization Reports

Peak - 10 AM to 3

PM

Fall 2009 Data

25 Available Weekly Room Hours - WRH

Room Type 110 - Classrooms

Bldg Num	Room Num	ASF	Capacity	WRH	WRH%	Station Occupancy
DHE	200	1,126	108	22.00	88.0%	56.1%
DHE	201	3,004	314	23.01	92.0%	22.4%
DHE	202	702	52	21.10	84.4%	72.1%
DHE	203	990	77	22.00	88.0%	54.4%
DHE	204	374	25	14.00	56.0%	58.3%
DHE	236	394	25	22.00	88.0%	63.3%
DHE	237	389	25	18.43	73.7%	56.6%
EH	204	541	35	17.33	69.3%	48.9%
EH	206	523	35	19.00	76.0%	74.9%
EH	208	686	45	22.67	90.7%	62.5%
EH	210	683	45	21.00	84.0%	60.7%
EH	212	696	45	19.60	78.4%	60.4%
EH	214	902	44	16.26	65.0%	56.4%
EH	235	1,021	40	16.36	65.4%	84.6%
EH	237	1,026	40	21.17	84.7%	77.1%
EH	239	1,018	40	17.00	68.0%	68.4%
HHS	190	2,131	187	25.27	101.1%	55.0%
HHS	195	2,068	187	23.13	92.5%	74.6%
HHS	220	548	40	20.06	80.2%	80.8%
HHS	225	422	30	12.93	51.7%	74.7%
HHS	350	498	40	14.82	59.3%	49.1%
NFH	156	1,757	157	21.23	84.9%	74.6%

NFH	159	1,757	90	14.00	56.0%	72.2%
ODH	108	424	60	22.00	88.0%	82.9%
ODH	110	1,548	60	22.00	88.0%	88.5%
ODH	202A	1,591	0	18.00	72.0%	49.4%
ODH	202B	2,391	0	17.67	70.7%	57.6%
ODH	202C	1,561	0	16.10	64.4%	93.3%
ODH	203	2,460	229	23.92	95.7%	60.8%
ODH	204	2,426	178	19.13	76.5%	73.3%
PH	302	1,660	72	16.93	67.7%	57.1%
PH	306	910	48	19.01	76.0%	72.3%
PH	307	938	48	16.00	64.0%	74.7%
PH	308	910	48	15.60	62.4%	62.8%
PH	309	930	48	18.00	72.0%	65.3%
PH	310	732	36	15.67	62.7%	71.6%
PH	312	738	36	23.00	92.0%	72.3%
PH	314	916	48	23.00	92.0%	46.6%
PH	316	918	48	9.55	38.2%	47.2%
PH	318	910	48	20.22	80.9%	70.5%
PH	320	735	36	18.22	72.9%	58.5%
SEB	093	574	0	16.93	67.7%	50.7%
SEB	130	673	42	18.00	72.0%	72.5%
SEB	164	1,131	64	18.00	72.0%	73.4%
SEB	168	1,112	64	18.00	72.0%	66.7%
SEB	172	1,130	64	22.46	89.8%	61.2%
SEB	185	883	50	19.00	76.0%	56.7%
SEB	187	543	36	23.00	92.0%	72.8%
SEB	364	428	30	15.62	62.5%	82.3%
SEB	372	1,043	50	2.35	9.4%	11.1%
SEB	376	669	30	15.07	60.3%	84.7%
SEB	378	618	30	16.00	64.0%	78.3%
SEB	384	654	44	18.00	72.0%	65.4%
SEB	386	607	40	18.00	72.0%	60.0%
SEB	388	607	30	23.00	92.0%	69.0%
SFH	163	985	70	22.00	88.0%	71.0%
SFH	164	667	48	23.00	92.0%	70.7%
SFH	165	992	75	19.65	78.6%	70.8%
SFH	166	667	48	22.00	88.0%	42.5%
SFH	167	667	30	23.00	92.0%	81.6%
SFH	168	667	48	23.00	92.0%	48.6%
SFH	169	667	40	23.00	92.0%	53.7%
SFH	170	667	48	22.00	88.0%	53.6%
SFH	171	667	40	23.00	92.0%	44.2%
SFH	172	667	48	22.00	88.0%	39.4%
	173	667	48	23.00	92.0%	52.7%
SFH			48		88.9%	70.8%
SFH	174	667		22.22		
SFH	176	732	48	20.67	82.7%	49.3%
SFH	263	991	75 25	23.00	92.0%	70.0%
SFH	265	446	25	19.00	76.0%	68.8%
SFH	266	688	48	23.00	92.0%	64.0%
SFH	268	668	48	22.00	88.0%	52.5%
SFH	269	688	48	20.00	80.0%	54.2%
SFH	270	688	48	18.00	72.0%	44.9%

SFH 271 668 48 19.00 76.0% 38.6% SFH 272 668 48 23.00 92.0% 55.0% SFH 273 668 48 21.93 87.7% 48.0% SFH 276 733 48 23.00 92.0% 39.9% SFH 363 896 70 18.00 72.0% 61.9% SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 22.00 88.0% 51.3% SFH 369 668 48 22.00 88.0% 53.2% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8%							
SFH 273 668 48 21.93 87.7% 48.0% SFH 274 668 48 22.00 88.0% 45.3% SFH 276 733 48 23.00 92.0% 39.9% SFH 363 896 70 18.00 72.0% 61.9% SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 22.00 88.0% 51.3% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8%							
SFH 274 668 48 22.00 88.0% 45.3% SFH 276 733 48 23.00 92.0% 39.9% SFH 363 896 70 18.00 72.0% 61.9% SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 21.67 86.7% 56.9% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 23.00 92.0% 57.8% SFH 373 668 48 22.33 89.3% 46.5%	SFH	272	668	48	23.00	92.0%	55.0%
SFH 276 733 48 23.00 92.0% 39.9% SFH 363 896 70 18.00 72.0% 61.9% SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 22.00 88.0% 51.3% SFH 368 668 48 22.00 88.0% 51.3% SFH 369 668 48 22.00 88.0% 44.1% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 23.00 92.0% 32.2% SFH 373 668 48 23.00 92.0% 32.2%	SFH	273	668	48	21.93	87.7%	48.0%
SFH 363 896 70 18.00 72.0% 61.9% SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 22.00 88.0% 56.9% SFH 368 668 48 22.00 88.0% 56.9% SFH 369 668 48 22.00 88.0% 44.1% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 23.00 92.0% 57.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5%	SFH	274	668	48	22.00	88.0%	45.3%
SFH 364 668 48 23.00 92.0% 43.9% SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 21.67 86.7% 56.9% SFH 368 668 48 22.00 88.0% 44.1% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 23.00 92.0% 32.2% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1%	SFH	276	733	48	23.00	92.0%	39.9%
SFH 365 992 75 18.00 72.0% 52.9% SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 21.67 86.7% 56.9% SFH 368 668 48 21.67 86.7% 50.0% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 23.00 92.0% 32.2% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2%	SFH	363	896	70	18.00	72.0%	61.9%
SFH 366 668 48 22.00 88.0% 51.3% SFH 367 668 48 21.67 86.7% 56.9% SFH 368 668 48 21.67 86.7% 50.0% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% <td>SFH</td> <td>364</td> <td>668</td> <td>48</td> <td>23.00</td> <td>92.0%</td> <td>43.9%</td>	SFH	364	668	48	23.00	92.0%	43.9%
SFH 367 668 48 21.67 86.7% 56.9% SFH 368 668 48 22.00 88.0% 44.1% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 479 998 60 23.00 92.0% 60.0% <td>SFH</td> <td>365</td> <td>992</td> <td>75</td> <td>18.00</td> <td>72.0%</td> <td>52.9%</td>	SFH	365	992	75	18.00	72.0%	52.9%
SFH 368 668 48 22.00 88.0% 44.1% SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0%	SFH	366	668	48	22.00	88.0%	51.3%
SFH 369 668 48 21.67 86.7% 50.0% SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% <	SFH	367	668	48	21.67	86.7%	56.9%
SFH 370 688 48 22.00 88.0% 53.2% SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 301 306 20 22.00 88.0% 69.1% </td <td>SFH</td> <td>368</td> <td>668</td> <td>48</td> <td>22.00</td> <td>88.0%</td> <td>44.1%</td>	SFH	368	668	48	22.00	88.0%	44.1%
SFH 371 668 48 23.00 92.0% 57.8% SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% <td>SFH</td> <td>369</td> <td>668</td> <td>48</td> <td>21.67</td> <td>86.7%</td> <td>50.0%</td>	SFH	369	668	48	21.67	86.7%	50.0%
SFH 372 668 48 22.00 88.0% 43.8% SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% </td <td>SFH</td> <td>370</td> <td>688</td> <td>48</td> <td>22.00</td> <td>88.0%</td> <td>53.2%</td>	SFH	370	688	48	22.00	88.0%	53.2%
SFH 373 668 48 23.00 92.0% 32.2% SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0% <td>SFH</td> <td>371</td> <td>668</td> <td>48</td> <td>23.00</td> <td>92.0%</td> <td>57.8%</td>	SFH	371	668	48	23.00	92.0%	57.8%
SFH 374 668 48 22.33 89.3% 46.5% SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	SFH	372	668	48	22.00	88.0%	43.8%
SFH 376 732 48 20.00 80.0% 47.1% VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	SFH	373	668	48	23.00	92.0%	32.2%
VAR 205 1,151 90 22.00 88.0% 79.2% VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	SFH	374	668	48	22.33	89.3%	46.5%
VAR 206 1,184 90 14.00 56.0% 87.1% VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	SFH	376	732	48	20.00	80.0%	47.1%
VAR 229 371 25 0.00 0.0% n/a VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	VAR	205	1,151	90	22.00	88.0%	79.2%
VAR 479 998 60 23.00 92.0% 60.0% WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	VAR	206	1,184	90	14.00	56.0%	87.1%
WH 102 870 60 22.00 88.0% 83.9% WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	VAR	229	371	25	0.00	0.0%	n/a
WH 105 856 60 18.00 72.0% 78.3% WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	VAR	479	998	60	23.00	92.0%	60.0%
WH 124 1,062 90 19.00 76.0% 83.9% WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	WH	102	870	60	22.00	88.0%	83.9%
WH 301 306 20 22.00 88.0% 69.1% WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	WH	105	856	60	18.00	72.0%	78.3%
WH 313 500 25 15.00 60.0% 85.3% WH 416 372 15 8.00 32.0% 60.0%	WH	124	1,062	90	19.00	76.0%	83.9%
WH 416 372 15 8.00 32.0% 60.0%	WH	301	306	20	22.00	88.0%	69.1%
	WH	313	500	25	15.00	60.0%	85.3%
Averages 888 56 19.47 77.9% 65.9%	WH	416	372	15	8.00	32.0%	60.0%
	Average	es	888	56	19.47	77.9%	65.9%

Classroom Utilization Report

Off Peak - 8 AM to 10 am and 3pm to 5 pm

20 Available Weekly
Room Hours - WRH

Fall 2009 Data

Room Type 110 - Classrooms

Bldg Num	Room Num	ASF	Capacity	WRH	WRH%	Station Occupancy	
DHE	200	1,126	108	8.00	40.0%	30.8%	
DHE	201	3,004	314	16.91	84.5%	22.0%	
DHE	202	702	52	16.00	80.0%	74.9%	
DHE	203	990	77	17.00	85.0%	56.3%	
DHE	204	374	25	9.00	45.0%	72.9%	
DHE	236	394	25	11.00	55.0%	73.1%	
DHE	237	389	25	5.00	25.0%	21.6%	
EH	204	541	35	16.33	81.6%	53.8%	
EH	206	523	35	17.00	85.0%	63.5%	
EH	208	686	45	14.38	71.9%	61.7%	
EH	210	683	45	9.93	49.7%	80.8%	

EH	212	696	45	12.00	60.0%	60.7%
EH	214	902	44	5.33	26.7%	79.6%
EH	235	1,021	40	9.67	48.4%	50.9%
EH	237	1,026	40	17.67	88.4%	60.0%
EH	239	1,018	40	6.93	34.7%	62.8%
HHS	190	2,131	187	17.00	85.0%	59.4%
HHS	195	2,068	187	17.00	85.0%	73.7%
HHS	220	548	40	18.44	92.2%	81.7%
HHS	225	422	30	5.60	28.0%	61.3%
HHS	350	498	40	8.93	44.7%	77.9%
NFH	156	1,757	157	5.00	25.0%	68.3%
NFH	159	1,757	90	12.00	60.0%	69.2%
ODH	108	424	60	15.93	79.7%	73.0%
ODH	110	1,548	60	16.00	80.0%	74.2%
ODH	202A	1,591	0	8.00	40.0%	63.3%
ODH	202B	2,391	0	7.01	35.0%	60.1%
ODH	202C	1,561	0	9.00	45.0%	60.8%
ODH	203	2,460	229	18.15	90.8%	57.9%
ODH	204	2,426	178	17.00	85.0%	55.0%
PH	302	1,660	72	9.00	45.0%	74.7%
PH	306	910	48	14.57	72.8%	76.1%
PH	307	938	48	6.55	32.8%	52.9%
PH	308	910	48	15.76	78.8%	62.0%
PH	309	930	48	14.00	70.0%	55.4%
PH	310	732	36	10.88	54.4%	63.0%
PH	312	738	36	9.00	45.0%	52.2%
PH	314	916	48	9.00	45.0%	67.8%
PH	316	918	48	9.00	45.0%	31.7%
PH	318	910	48	14.00	70.0%	63.4%
PH	320	735	36	7.98	39.9%	62.2%
SEB	093	574	0	12.44	62.2%	35.8%
SEB	130	673	42	10.00	50.0%	56.2%
SEB	164	1,131	64	16.00	80.0%	65.6%
SEB	168	1,112	64	13.00	65.0%	36.2%
SEB	172	1,130	64	13.67	68.4%	66.3%
SEB	185	883	50	10.50	52.5%	29.1%
SEB	187	543	36	13.00	65.0%	54.1%
SEB	364	428	30	5.00	25.0%	26.0%
SEB	372	1,043	50	0.00	0.0%	n/a
SEB	376	669	30	9.13	45.7%	130.7%
SEB	378	618	30	7.00	35.0%	26.7%
SEB	384	654	44	9.00	45.0%	33.3%
SEB	386	607	40	16.00	80.0%	58.6%
SEB	388	607	30	14.00	70.0%	47.6%
SFH	163	985	70	12.93	64.7%	52.9%
SFH	164	667	48	19.00	95.0%	49.9%
SFH	165	992	75	13.00	65.0%	46.9%
SFH	166	667	48	11.33	56.6%	57.7%
SFH	167	667	30	15.93	79.7%	54.4%
SFH	168	667	48	17.00	85.0%	46.0%
SFH	169	667	40	14.67	73.4%	46.5%
SFH	170	667	48	12.00	60.0%	45.5%

SFH	171	667	40	17.00	85.0%	33.7%
SFH	172	667	48	17.00	85.0%	44.2%
SFH	173	667	48	13.00	65.0%	56.1%
SFH	174	667	48	14.55	72.8%	42.6%
SFH	176	732	48	15.67	78.4%	43.4%
SFH	263	991	75	7.10	35.5%	87.4%
SFH	265	446	25	17.00	85.0%	45.4%
SFH	266	688	48	12.00	60.0%	45.1%
SFH	268	668	48	13.10	65.5%	51.3%
SFH	269	688	48	11.00	55.0%	76.3%
SFH	270	688	48	13.00	65.0%	53.0%
SFH	271	668	48	13.00	65.0%	46.2%
SFH	272	668	48	12.00	60.0%	40.5%
SFH	273	668	48	13.00	65.0%	66.0%
SFH	274	668	48	13.00	65.0%	58.8%
SFH	276	733	48	9.00	45.0%	35.2%
SFH	363	896	70	16.00	80.0%	72.9%
SFH	364	668	48	13.00	65.0%	37.0%
SFH	365	992	75	6.00	30.0%	29.8%
SFH	366	668	48	13.00	65.0%	53.2%
SFH	367	668	48	13.00	65.0%	50.6%
SFH	368	668	48	12.00	60.0%	39.8%
SFH	369	668	48	12.00	60.0%	53.0%
SFH	370	688	48	6.00	30.0%	22.9%
SFH	371	668	48	13.00	65.0%	53.5%
SFH	372	668	48	10.00	50.0%	45.4%
SFH	373	668	48	12.00	60.0%	45.5%
SFH	374	668	48	11.26	56.3%	55.3%
SFH	376	732	48	11.00	55.0%	55.7%
VAR	205	1,151	90	16.00	80.0%	73.9%
VAR	206	1,184	90	12.00	60.0%	65.6%
VAR	229	371	25	0.00	0.0%	n/a
VAR	479	998	60	13.00	65.0%	24.1%
WH	102	870	60	10.00	50.0%	62.7%
WH	105	856	60	9.00	45.0%	58.1%
WH	124	1,062	90	13.00	65.0%	69.6%
WH	301	306	20	6.00	30.0%	43.3%
WH	313	500	25	17.00	85.0%	74.4%
WH	416	372	15	4.00	20.0%	33.3%
Averages		888	56	11.87	59.3%	61.5%

Classroom Utilization Report

Evening 5 PM - 10 PM Fall 2009 Data

25 Available Weekly Room Hours - WRH Room Type 110 - Classrooms

Bldg Num	Room Num	ASF	Capacity	WRH	WRH%	Station Occupancy	
DHE	200	1,126	108	16.43	65.7%	56.3%	
DHE	201	3,004	314	12.00	48.0%	27.8%	
DHE	202	702	52	17.00	68.0%	13.8%	

DHE	203	990	77	13.00	52.0%	25.7%
DHE	204	374	25	9.00	36.0%	56.9%
DHE	236	394	25	9.00	36.0%	74.2%
DHE	237	389	25	13.00	52.0%	62.5%
EH	204	541	35	13.70	54.8%	40.8%
EH	206	523	35	8.60	34.4%	74.8%
EH	208	686	45	14.20	56.8%	58.2%
EH	210	683	45	13.20	52.8%	43.6%
EH	212	696	45	16.20	64.8%	65.5%
EH	214	902	44	12.70	50.8%	68.8%
EH	235	1,021	40	13.42	53.7%	68.9%
EH	237	1,026	40	14.92	59.7%	59.5%
EH	239	1,018	40	13.70	54.8%	52.4%
HHS	190	2,131	187	8.00	32.0%	44.4%
HHS	195	2,068	187	14.13	56.5%	43.2%
HHS	220	548	40	24.11	96.4%	66.3%
HHS	225	422	30	12.10	48.4%	58.6%
HHS	350	498	40	15.52	62.1%	74.6%
NFH	156	1,757	157	12.70	50.8%	37.2%
NFH	159	1,757	90	8.27	33.1%	56.6%
ODH	108	424	60	11.15	44.6%	36.2%
ODH	110	1,548	60	15.75	63.0%	41.9%
ODH	202A	1,591	0	8.60	34.4%	46.4%
ODH	202B	2,391	0	3.55	14.2%	43.1%
ODH	202C	1,561	0	13.00	52.0%	40.2%
ODH	203	2,460	229	4.55	18.2%	60.9%
ODH	204	2,426	178	5.00	20.0%	34.4%
PH	302	1,660	72	14.70	58.8%	55.8%
PH	306	910	48	13.70	54.8%	55.6%
PH	307	938	48	14.20	56.8%	71.5%
PH	308	910	48	10.65	42.6%	57.8%
PH	309	930	48	13.70	54.8%	50.5%
PH	310	732	36	15.20	60.8%	50.7%
PH	312	738	36	13.70	54.8%	51.8%
PH	314	916	48	10.65	42.6%	81.4%
PH	316	918	48	10.65	42.6%	57.5%
PH	318	910	48	13.20	52.8%	44.0%
PH	320	735	36	14.20	56.8%	59.8%
SEB	093	574	0	8.55	34.2%	37.8%
SEB	130	673	42	14.43	57.7%	48.8%
SEB	164	1,131	64	16.00	64.0%	30.1%
SEB	168	1,112	64	17.00	68.0%	60.9%
SEB	172	1,130	64	17.00	68.0%	68.4%
SEB	185	883	50	16.50	66.0%	31.8%
SEB	187	543	36	14.60	58.4%	33.7%
SEB	364	428	30	11.21	44.8%	37.4%
SEB	372	1,043	50	12.00	48.0%	30.0%
SEB	376	669	30	10.78	43.1%	18.6%
SEB	378	618	30	17.00	68.0%	47.8%
SEB	384	654	44	9.00	36.0%	39.9%
SEB	386	607	40	13.05	52.2%	47.3%
SEB	388	607	30	16.22	64.9%	56.1%

CELL	4.63	005	7.0	4475	50.00/	F2 40/
SFH	163	985	70	14.75	59.0%	52.4%
SFH	164	667	48	16.30	65.2%	43.5%
SFH	165	992	75	12.10	48.4%	41.6%
SFH	166	667	48	10.15	40.6%	42.2%
SFH	167	667	30	11.87	47.5%	124.0%
SFH	168	667	48	14.20	56.8%	43.8%
SFH	169	667	40	10.65	42.6%	71.1%
SFH	170	667	48	16.20	64.8%	39.0%
SFH	171	667	40	11.55	46.2%	39.8%
SFH	172	667	48	13.70	54.8%	36.4%
SFH	173	667	48	12.00	48.0%	40.3%
SFH	174	667	48	13.20	52.8%	77.1%
SFH	176	732	48	14.70	58.8%	53.7%
SFH	263	991	75	11.10	44.4%	59.1%
SFH	265	446	25	11.10	44.4%	51.8%
SFH	266	688	48	15.20	60.8%	72.0%
SFH	268	668	48	12.65	50.6%	45.9%
SFH	269	688	48	14.70	58.8%	63.2%
SFH	270	688	48	15.20	60.8%	47.4%
SFH	271	668	48	12.65	50.6%	50.3%
SFH	272	668	48	16.10	64.4%	42.9%
SFH	273	668	48	14.20	56.8%	38.1%
SFH	274	668	48	12.10	48.4%	40.9%
SFH	276	733	48	13.37	53.5%	54.0%
SFH	363	896	70	16.20	64.8%	53.9%
SFH	364	668	48	9.55	38.2%	49.8%
SFH	365	992	75	8.00	32.0%	36.0%
SFH	366	668	48	11.60	46.4%	30.4%
SFH	367	668	48	13.70	54.8%	42.4%
SFH	368	668	48	9.10	36.4%	40.8%
SFH	369	668	48	11.15	44.6%	45.1%
SFH	370	688	48	11.20	44.8%	38.2%
SFH	371	668	48	13.70	54.8%	53.4%
SFH	372	668	48	14.20	56.8%	52.8%
SFH	373	668	48	6.55	26.2%	25.2%
SFH	374	668	48	11.10	44.4%	27.1%
SFH	376	732	48	13.00	52.0%	40.1%
VAR	205	1,151	90	9.10	36.4%	82.1%
VAR	206	1,184	90	11.65	46.6%	40.9%
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WH	102	870	60	14.20	56.8%	60.1%
WH	105	856	60	15.20	60.8%	64.6%
WH	124	1,062	90	6.60	26.4%	37.0%
WH	301	306	20	14.20	56.8%	65.1%
WH	313	500	25	12.32	49.3%	76.1%
WH	416	372	15	7.10	28.4%	69.8%
Averages		888	56	12.53	50.1%	48.9%
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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 approximately 1275 projects; totaling over \$189 million. In addition to this summary report, the database is capable of producing ad-hoc reports by priority rank, building system, 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 as a point of departure for broader facilities planning.

The original Facilities Condition Assessment was completed in 2006 and was updated in 2007 for IT related projects for the entire campus. In addition, a Facilities Condition Assessment was completed for the following four academic buildings (O'Dowd Hall, North Foundation Hall, Hannah Hall of Science, and Wilson Hall) and two housing buildings (Hamlin Hall and Vandenberg Hall) in the current year. These assessments identified needs, established scope, determined preliminary costs, and prioritized facility projects for the University.

			Million	Dollar	
System Code	System Description	2010 Reported	Closed Projects	New Projects	2011 Totals
AC ELN ES FS HE HT HV IS IT PL SI SS VT	Accessibility Electrical Energy Exterior System Fire/Life Safety Health High Temp / Hot Water HVAC Interior System Information Technology Plumbing Roads / Walks / Parking Lots Site Security Systems Elevator	\$ 3.02 \$ 7.31 \$ 3.19 \$ 21.67 \$ 7.34 \$ 1.07 \$ 22.37 \$ 26.08 \$ 27.97 \$ 23.53 \$ 3.91 \$ 7.22 \$ 15.57 \$ 1.32 \$ 3.23	\$ 0.35 \$ 0.43 \$ 2.22 \$ 8.91 \$ 0.56 \$ 0.78 \$ 5.42 \$ 1.81 \$ 5.23 \$ 3.33 \$ 0.01 \$ 2.73 \$ 0.71 \$ 1.31 \$ 0.02	\$ 1.46 \$ 4.22 \$ 1.24 \$ 2.38 \$ 6.94 — \$ 3.95 \$ 8.12 \$ 3.70 \$ 1.48 \$ 18.16 \$ 2.48 \$ 0.76 — \$ 0.11	\$ 4.13 \$ 11.10 \$ 2.21 \$ 15.15 \$ 13.72 \$ 0.29 \$ 20.90 \$ 32.99 \$ 26.44 \$ 21.68 \$ 22.06 \$ 2.01 \$ 14.10 \$ 0.01 \$ 3.11
- •	NET CHANGE FROM PREVIOUS	\$174.81	\$ 33.82	\$ 55.59	\$189.88 \$15.07

Note: \$6.7M of projects were eliminated as a result of duplicate projects, not viable projects, and canceled future projects.

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 ASSESMENT 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

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. Projects in this category may also represent non-time based improvement, upgrade, or recommendation.

SOURCE: Association of Higher Education Facilities Officers (APPA)

ABBREVATIONS

<u>CAMPUS SYSTEM</u> - Accessibility (AC)

Electrical (EL)

Energy Management (EN) Exterior Structure (ES) Fire/Life Safety (FS)

Locith (UE)

Health (HE)

High Temperature / Heat Water (HT)

HVAC (HV)

Information Technology (IT) Interior / Finish System (IS)

Plumbing (PL)

Roads, Walks, Parking Lots (RW)

Site (SI)

Vertical Transportation (VT) Security Systems (SS)

CATEGORY -

Plant Renewal (PR)

Deferred Plant Renewal (DPR)

Plant Adaptation (PA)

FACILITIES CONDITION NEEDS INDEX (FCNI) Facility 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 facility 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.

Facility Condition Needs Index

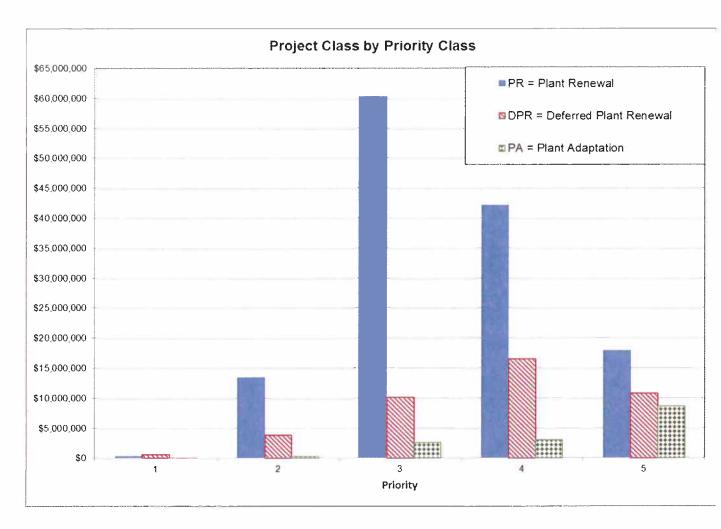
Individual Building FCNI Range	Condition Description
0.01-0.05	Excellent condition, typically new construction
0.06 - 0.15	Good condition, renovations occur on schedule
0.16 - 0.30	Fair condition, in need of normal renovation
0.31 - 0.40	Below average condition, major renovation required
0.41 - 0.59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

FACILITIES REPLACEMENT COST FRC 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 Facility Condition Analysis Totals by Building

Building			Square		Project	FCNI	Benchmark Per
Code	Building Name	Use	Feet	FRC	Costs	Total	APPA
ANI	Anibal House	HS	20,487	\$3,661,148	\$963,643	0.26	Fair Condition
ASD	Athletic Sports Dome	UNIV	30,557	\$5,061,915	\$2,251,137	0.44	Poor Condition
AVN	Ann V. Nicholson Apartments	HS	181,291	\$20,502,624	\$1,009,577	0.05	Excellent Condition
BB	Belgian Barn	AUX	9,324	\$665,193	\$205,702	0.31	Below Average
BGM	Building Grounds & Maintenance Bldg	UNIV	14,400	\$1,281,469	\$661,271	0.52	Poor Condition
BRS	Biomedical Research Support Facility	UNIV	14,300	\$4,737,729	\$510,940	0.11	Good Condition
ccc	Chicken Coop Center	AUX	7,322	\$675,852	\$202,737	0.30	Fair Condition
CHP	Central Heating Plant	UNIV	16,833	\$22,307,744	\$4,851,960	0.22	Fair Condition
DHE	Dodge Hall of Engineering	AD	151,204	\$41,402,405	\$9,145,333	0.22	Fair Condition
EC	East Campus	AUX	248,049	\$33,130,969	\$1,381,025	0.04	Excellent Condition
EH	Elliott Hall	AD	74,582	\$14,720,397	\$1,434,646	0.10	Good Condition
FM	Facilities Management Building	AD	3,300	\$273,085	\$383,002	1.40	Complete Facility
							Replacement
FTZ	Fitzgerald House	HS	20,610	\$3,683,128	\$1,200,316	0.33	Below Average
GAT	Gatehouse at MBH	UNIV	2,032	\$860,622	\$132,587	0.15	Historical
GHC	Graham Health Center	UNIV	13,161	\$2,027,093	\$536,809	0.26	Fair Condition
GLF	Golf Courses	AUX	12,331	\$22,087,313	\$5,075,733	0.23	Fair Condition
GRN	Greenhouse	UNIV	3,630	\$601,327	\$741,814	1.23	Historical
GTM	George T. Matthews Apartments	HS	47,464	\$6,985,623	\$1,310,468	0.19	Fair Condition
HAM	Hamlin Hall	HS	143,872	\$32,068,705	\$14,628,188	0.46	Poor Condition
HHS	Hannah Hall of Science	AD	89,418	\$42,462,000	\$14,895,488	0.35	Below Average
HIL	Hill House	HS	42,522	\$9,478,047	\$2,813,341	0.30	Fair Condition
JDH	John Dodge House	AD	10,696	\$1,781,662	\$765,463	0.43	Poor Condition
KCC	Katke-Cousins Club House	AUX	6,038	\$1,000,224	\$223,132	0.22	Fair Condition
KL	Kresge Library	AD	164,522	\$26,841,765	\$2,733,401	0.10	Good Condition
мвн	Meadow Brook Hall	AUX	78,002	\$44,174,626	\$9,214,788	0.21	Fair Condition
MC	Main Campus	UNIV		\$110,436,565	\$33,407,378	0.30	Fair Condition
NFH	North Foundation Hall	AD	67,691	\$22,524,000	\$7,390,411	0.33	Below Average
oc	Oakland Center	AD	146,693	\$23,523,983	\$4,317,664	0.18	Fair Condition
ODH	O'Dowd Hall	AD	105,000	\$41,449,001	\$8,572,553	0.21	Fair Condition
OUInc.1	O.U. INCubator (Health Enhancement Bldg)	UNIV	11,385	\$1,779,527	\$400,176	0.22	Fair Condition
OUInc.2	O.U. INCubator (Shotwell Gustafson)	AUX	25,850	\$4,282,178	\$812,905	0.19	Fair Condition
PH	Pawley Hall	AD	132,406	\$28,636,853	\$3,488,237	0.12	Good Condition
PRY	Pryale Hall	AD	20,829	\$3,802,239	\$990,831	0.26	Fair Condition
PSS	Police & Support Services	UNIV	26,444	\$4,167,443	\$963,684	0.23	Fair Condition
SEB	Science & Engineering Building	AD	165,494	\$51,568,543	\$4,801,782	0.09	Good Condition
SFH	South Foundation Hall	AD	55,041	\$10,047,484	\$1,696,664	0.17	Fair Condition
SRAC	Student Recreation & Athletic Center	AD	253,494	\$41,646,759	\$3,161,382	0.08	Good Condition
SS	Spenser Substation	UNIV	14,769	\$2,446,556	\$73,476	0.03	Excellent Condition
SST	Sunset Terrace	HS	12,587	\$2,513,109	\$469,124	0.19	Fair Condition
VAR	Varner Hall	AD	119,939	\$34,209,874	\$6,442,307	0.19	Fair Condition
VBH	Vandenberg Hall	HS	178,321	\$39,747,301	\$15,451,671	0.39	Below Average
WH	Van Wagner House	HS	43,305	\$9,652,575	\$2,530,657	0.26	Fair Condition
WH	Wilson Hall & Meadow Brook Theatre	AD	98,153	\$38,899,002	\$17,640,917	0.45	Poor Condition
	Grand Totals:	sqft	2,883,348	\$813,805,657	\$189,884,325	0.23	Fair Condition
1		•					

Note: The FRC excludes furnishings and user equipment.



Detailed Project Totals Facility Condition Analysis Project Class by Priority Class

Project Classification	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Subtotal
Plant Renewal	283,655	13,372,643	60,277,090	42,087,539	17,839,629	133,860,555
Deferred Plant Renewal	488,129	3,779,892	10,108,609	16,503,847	10,716,302	41,596,779
Plant Adaptation	59,142	197,604	2,533,472	3,025,169	8,611,604	14,426,991
TOTALS	\$830,926	\$17,350,139	\$72,919,171	\$61,616,555	\$37,167,535	\$189,884,325

Facility Replacement Cost	\$813,805,657
Facility Condition Index	0.23
Total Cost per Square Foot	\$65.86
Gross Square Feet	2,883,348

Detailed Project Totals Facility Condition Analysis System Class by Priority Class

				J	4	3	
System							
Code	System Description	FY'12	FY'13	FY'14-17	FY'18-21	FY'22+	Subtotal
AC	Accessibility	41,297	309,357	1,088,572	1,700,186	992,749	4,132,160
EL	Electrical	53,330	58,627	1,239,867	1,206,832	8,536,997	11,095,653
EN	Energy	7,158	89,494	1,438,090	671,773	6,698	2,213,212
ES	Exterior System	186,287	1,026,294	5,728,732	7,185,285	1,018,560	15,145,158
FS	Fire/Life Safety	197,452	777,969	3,583,768	3,399,378	5,762,784	13,721,352
HE	Health	22,864	122,488	122,516	0	17,559	285,427
HT	High Temp / Heat Water	581	6,118,593	4,189,752	10,547,516	42,580	20,899,021
HV	HVAC	191,889	1,240,083	11,153,035	16,979,310	3,429,760	32,994,077
IS	Interior / Finish System	70,143	2,189,314	9,070,629	10,343,174	4,765,299	26,438,559
IT	Information Technology	0	80,083	21,537,050	58,642	0	21,675,774
PL	Plumbing	34,003	4,765,168	8,809,412	5,441,911	3,009,863	22,060,357
RW	Roads / Walks / Parking Lots	0	42,877	1,402,153	529,912	39,772	2,014,713
SI	Site	20,790	417,713	1,661,847	3,052,637	8,945,292	14,098,278
SS	Security Systems	5,134	0	0	0	0	5,134
VT	Vertical Transportation	0	112,081	1,893,749	500,000	599,621	3,105,451
TOTALS		\$830,926	\$17,350,139	\$72,919,171	\$61,616,555	\$37,167,535	\$189,884,325
	Plant Adaptation				And the state of t		126,991
	Facility Replacement Cost	t				\$813,8	305,657
	Facility Condition Index						0.23
	Total Cost per Square Foo	ot					\$65.86
	Gross Square Feet						383,348
	Plant Renewal						360,555
	Deferred Plant Renewal						596,779
	Plant Adaptation					\$13,8	330,633
	Facility Replacement Cost	<u> </u>				\$813,8	305,657
	Facility Condition Index				-		0.23
	Total Cost per Square Foo	ot					\$65.65
	Gross Square Feet					2,8	383,348
	Name the control of t						

Detailed Project Totals Facility Condition analysis System Class by Category

			Deferred			
System		Plant	Plant	Plant		
Code	System Description	Renewal	Renewal	Adaptation	Subtotal	%
AC	Accessibility	383,111	2,734,142	1,014,906	4,132,160	2.18%
EL	Electrical	6,757,694	3,428,050	909,910	11,095,653	5.84%
EN	Energy	1,501,215	706,475	5,522	2,213,212	1.17%
ES	Exterior System	11,701,617	3,360,541	83,001	15,145,158	7.98%
FS	Fire/Life Safety	7,722,105	759,978	5,239,268	13,721,352	7.23%
HE	Health	28,585	223,485	33,356	285,427	0.15%
HT	Hìgh Temp / Hot Water	15,606,062	5,292,960	0	20,899,021	11.01%
HV	HVAC	25,546,737	6,558,679	888,660	32,994,077	17.38%
IS	Interior System	19,883,870	4,466,663	2,088,026	26,438,559	13.92%
IT	Information Technology	21,595,692	0	80,083	21,675,774	11.42%
PL	Plumbing	20,854,773	1,133,252	72,332	22,060,357	11.62%
RW	Roads / Walks / Parking Lots	627,718	400,233	986,762	2,014,713	1.06%
SI	Site	759,324	10,313,789	3,025,165	14,098,278	7.42%
SS	Security Systems	5,134	0	0	5,134	0.00%
VT	Vertical Transportation	886,920	2,218,531	0	3,105,451	1.64%
	TOTALS	\$133,860,555	\$41,596,779	\$14,426,991	\$189,884,325	100.00%

Plant Renewal	\$133,860,555
Deferred Plant Renewal	\$41,596,779
Plant Adaptation	\$14,426,991
Facility Replacement Cost	\$813,805,657
Facility Condition Index	0.23
Total Cost per Square Foot	\$65.86
Gross Square Feet	2,883,348

V. Implementation Plan

State Funding Request

Per guidance in the State Budget Office letter of September 1, 2011, Subject: **Fiscal Year 2013 Capital Outlay Budget Information**, only Oakland University's top priority capital outlay request is to be submitted. In accordance with that guidance, Oakland University provides the following as the top priority:

Oakland University Engineering Center (\$74,551,739)

The proposed Oakland University Engineering Center (OUEC) is the University's highest priority capital outlay request and 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 bio-medical, automotive, defense, and other high-tech industries. The OUEC will add approximately 68,340 square feet of assignable space to the School of Engineering and Computer Science (SECS), sufficient to house two-thirds of the School, as well as 10,000 square feet of assignable general purpose classroom space to support the growth of the overall student population. The project includes repair/renovation of space being vacated by functions moving into the new OUEC.

Supplemental State Funding Requests

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

Oakland University Communication / Arts/ Media / Performance Center

The proposed Oakland University Communication / Arts/ Media / Performance Center (CAMP) is the University's second highest priority capital outlay request and is designed to provide appropriate academic and studio facilities for these high demand programs. The project will encompass new construction as well as the renovation of existing space and will provide new general purpose classrooms that will accommodate 1,000 students.

NFH Student Services Addition

The proposed 19,400 square foot addition will enable advising services to be in one location and allow for a major upgrade of two heavily used classrooms, bathrooms and the conversion of existing office space adjacent to these services into classrooms.

University Funded Priorities

Campus Infrastructure (funded)

These projects are presently under construction or are in design. They include improvements to the existing high temperature hot water distribution system, the construction of an independent and secure structure that will house information technology hardware, and the renovation of O'Dowd Hall's curtain wall system.

Stephen Sharf Clubhouse (funded)

The proposed 10,000 square feet clubhouse will support the activities and operations of Oakland University's Golf and Learning Center. It will be completely funded by Stephen Sharf, a longtime supporter of Oakland University.

Hannah Hall Lab Renovation (not funded)

The renovation of approximately 10,000 square feet on the third and fourth floors of Hannah Hall for a new gross anatomy lab and other academic departments. Work will commence once the School of Health Sciences moves to the Human Health Building.

<u>Undergraduate Student Housing (not funded)</u>

The goal of the undergraduate student housing development is to provide an additional 440 beds on Oakland's campus. Expanding housing is in keeping with the campus master plan goal of having 4,000 residential students at Oakland University by year 2030.

Parking Garage (not funded)

A new parking deck would provide 660 additional parking spaces to accommodate the increased demand as Oakland University grows.

Plant Renewal / Deferred Plant Renewal

As previously noted, Plant Renewal and Deferred Plant Renewal projects total \$175 million of the \$190 million Facility Condition Analysis. The current annual investment into maintenance is approximately \$1.6 million from General Fund budgets and maintenance endowments; \$1.5 million from Auxiliaries Maintenance Reserves; and \$0.7 million from Information Technology budgets.

ATTACHMENT B

Oakland University Fiscal Year 2013 CAPITAL OUTLAY PROJECT REQUEST Engineering Center Total Project Cost: \$74,551,739 November, 2011

Is The Project A Renovation or New Construction? Is There a 5 Year Master Plan Available? Are Professionally Developed <u>Program Statement</u> and/or	Ren <u>x</u> Yes <u>x</u>	New <u>x</u> No
Schematic Plans Available Now?	Yes <u>x</u>	No
Are Match Resources Currently Available?	Yes <u>x*</u>	No
Has the University Identified Available Operating Funds?	Yes x	No

*See Paragraph D below

A. Project Description Narrative

The proposed 128,428 square foot Oakland University Engineering Center (OUEC) building will provide state-of-the-art instructional, research and development space for Oakland University's School of Engineering and Computer Science (SECS). The proposed building is designed to provide high quality twenty-first century instructional and research facilities for OU's 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. The mission of the SECS includes supporting the global competitiveness of US alternative energy, health care and bio-medical, automotive, defense, and other high-tech industries. The OUEC will not only provide a highly visible focal point to the instructional, research and development activities of the SECS, but will also provide an opportunity to highlight our contributions to the economic development of the region. In addition, the proposed OUEC is designed to accommodate the growth in size and diversity of the stakeholders being served by the SECS, and to enable and promote the growth in size and quality of our educational, scholarly, and community outreach activities.

The new building will house much-needed instructional and research facilities for four current departments and two new focus areas:

- Mechanical Engineering
- Computer Science and Engineering
- Electrical and Computer Engineering
- Industrial and Systems Engineering
- Biomedical Engineering (new focus area)
- Power and Energy Systems (new focus area)

In addition, the new building will support the existing research centers in other buildings:

- Fastening and Joining Research Institute (FAJRI)
- Cyber Physical Systems Research Center
- Center for Robotics, Unmanned and Intelligent Systems
- Clean Energy Research Center
- Automotive Tribology Center
- Stephan and Rita Sharf Computer Integrated Manufacturing Laboratory

Additional space is provided in the new building and in backfill renovations for 1,000 additional general purpose classroom seats, in a range of classroom sizes from 30 to 200 seats.

The on-campus functions of the School of Engineering and Computer Science are currently dispersed over five buildings and nine floors in Dodge Hall of Engineering, Hannah Hall of Science, Science and Engineering Building, Shotwell-Gustafson Pavilion, and the Police and Support Services Building. These SECS functions will be consolidated into a more collaborative environment in the new OUEC building plus parts of two floors of Dodge Hall of Engineering and one floor of the Science and Engineering Building. The new OUEC building will be located in close proximity to the remaining existing SECS functions in Dodge Hall and the Science and Engineering Building, and to collaborating entities in the College of Arts and Sciences and the School of Business Administration.

The design and function of the new Oakland University Engineering Center will follow today's state of the art standards for educational systems, which concentrates on the concept of living and learning communities and the centrality of student-related functions. Goals that will be achieved through the introduction of the new building include:

- Increased emphasis on hands-on learning
- Increased emphasis on informal and peer learning
- Enabling student organizations as a learning channel
- Enhancement of project-based laboratories
- Increased student involvement in original research
- Additional high-tech, appropriately equipped and designed learning spaces
- More flexibility to allow evolution and change in technologies, programs and pedagogies

The new Engineering Center will allow the incorporation of new technologies that are impossible or cost-prohibitive to retrofit within the existing buildings. These technologies may require high-bay space, low vibration space and/or clean room space, all of which will be provided in the new building. The new building will have an extensive and flexible infrastructure of building mechanical and electrical systems that will enhance the efficiency and functionality of existing programs as well as provide flexibility for program growth and change over time.

SECS' increasing emphasis on hands-on and collaborative learning will enhance the preparation of engineering students for entry into the contemporary workforce. Students who are trained in the new Engineering Center will transition easily into the demanding and collaborative work environments in the high-technology industries of Michigan. These students will learn the collaborative, adaptive and entrepreneurial skills required in today's fast-moving economy, and are expected to emerge as leaders in 21st century innovation.

The added space and enhanced capabilities provided to SECS in the new Oakland University Engineering Center will enable increased recruitment and retention of students, and support the University's goal of significantly increased enrollments by 2020.

The new OUEC building is placed immediately east of the existing Dodge Hall to ease the movement between the two buildings. Oriented north/south the plan creates an L-shaped footprint to reach north to the existing campus green and access toward the Oakland Center. This design orientation also creates a semi-enclosed outdoor court that may be utilized for robotic and vehicle tests, ceremonies and students social activities.

Sustainable features will be incorporated into the overall design to facilitate a USGBC LEED rating and

provide for an energy efficient campus building.

B. Other Alternatives Considered

The School of Engineering and Computer Science will be the sole occupant of the proposed new facility. Currently, SECS programs are mainly housed in the Science and Engineering complex but they are scattered among five buildings, with no more than 20% occupancy in any of the five buildings. Relative to national norms, the SECS has only half of the needed teaching and research lab space for the types of programs being delivered. There is no other space on campus that could be cost effectively renovated to meet the needs of all of the SECS programs. Moreover, Oakland University has the lowest ratio of space to students of all the public universities in the state of Michigan. Growth in space at OU has not nearly kept pace with enrollment growth.

Oakland University has recently entered into a partnership with Macomb Community College (MCC) and Oakland Community College (OCC) to offer engineering degrees using a combination of facilities at MCC, OCC and Oakland University campuses. The OU-MCC program is not a substitute for continued growth at the Oakland campus. Without the proposed new OUEC facility, it will not be possible for Oakland to continue its growth and will not be able to meet the increasing demand for qualified engineering and computer science graduates who are so critical to the revival of Michigan's economy.

C. Programmatic Benefit to State of Taxpayers and Specific Clientele or Constituencies

The demand for qualified engineering and computer science graduates continues to exceed the current number of graduates. With its prime location adjacent to a number of health care and bio-medical-related, auto-related and defense-related industry headquarters, Oakland is poised to help meet that demand. The proposed OUEC will enhance the use of existing facilities and provide additional facilities for instructional programs and industry-related initiatives. Oakland provides a number of services directly to industry, primarily in the form of applied research projects, tailored education and training initiatives, and state-supported grants.

D. Funding Resource

If this project receives State funding approval, plans are in place to immediately begin soliciting private support as part of the University's comprehensive campaign for the required matching funds. If necessary, bonds will be issued to supplement the private support.

Oakland University Engineering Center

Esimated Project Cost

		ASF	Efficiency	GSF	\$/GSF	Cost		Totals
1 Buildin	na:							
	lassrooms	10,000	61%	16,393	290	\$ 4,754,098		
	ffices	21,202	61%	34,757	280	7)		
c. Inf	formal Learning Space	7,750	61%	12,705	280			
	tudent Org. Space	1,200	61%	1,967	290	\$ 570,492		
e. Ins	structional Labs	30,800	61%	50,492	485	\$ 24,488,525		
f. Re	esearch Labs	6,000	61%	9,836	525	\$ 5,163,934		
g. Bu	uilding Support	1,389	61%	2,277	213	\$ 483,923		
Total n	new construction	78,341		128,428			\$	48,750,415
	enovation	15,000		15,000	100	\$ 1,500,000	\$	1,500,000
Total b	ouildings	93,341		143,428				
		Total Building Cost					\$	50,250,415
2 Site W	lork:				\$/Bldg. SF			
	UEC Utilities to site			`	_	\$ 1,234,073		
	UEC Landscaping					\$ 1,825,824		
5 . 0	oeo candocaping	Total Site Work Cos	st		·	7,020,021	\$	3,059,897
TOTAL	L CONSTRUCTION COS	ST //to use d them: 2)					_	E2 240 242
IOIA	L CONSTRUCTION COS	or (items i thru 2)					\$	53,310,312
3 Movab	ole (Group 2) Equipment							
a. O	UEC Movable Equipment					\$ 4,842,880		
c. O	UEC Furnishings				:	\$ 3,585,700		
		Total Movable Equip	oment				\$	8,428,580
4 Profes	ssional Fees, surveys, site	investigations, State	supervision					
	Æ Fee	-			;	\$ 4,424,825		
b. St	tate Management Fee				;	\$ 500,000		
c. Co	onstruction Management F	ees			;	\$ 1,600,000		
d. Of	ther Fees				;	\$ 350,000		
		Total Fees and Cha	rges				\$	6,874,825
5 Other	(Moving Costs, Construction	on Contingency)					\$	5,938,022
TOTA	L PROJECT COST						\$	74,551,739

November, 2011

Oakland University Engineering Center

Project Data Sheet

1.	The structure (General, months contingencies)	echanical, electrical, t	fixed equipment, and	\$ 50,250,415
* 2.	Services from five feet out	side of the structure (Sewers, water supply, etc)	\$ 3,059,897
* 3.	Furnishings (Furniture, m	\$ 8,428,580		
4.	Professional fees, surveys	s, site investigations, s	state supervision, etc	\$ 6,874,825
5 .	Other			\$ 5,938,022
TOTAL F	PROJECT COST			\$ 74,551,739
_	ing Center (Only)	70.404		
_	quare feet s square feet s cubic feet	78,431 128,428 1,797,992	*Cost / gross sq. ft. *Cost / gross cu. Ft.	\$ 580 41

Program Summary			each	rooms	subtotal	total
SECS Office Space						5,000
		Administrative Suite				
Office	SECS	Dean Office		1	2,302	2,700
Office	SECS	Associate Dean Office	220	1	220	
			180	1	180	
Office	SECS	Graduate Coordinator Office	180		180	
Office	SECS	Executive Secretary Office	140	1	140	
Office	SECS	Budget Manager Office	140	1	140	
Office	SECS	Development Office	140	1	140	
Office	SECS	Secretarial Workstation		3		
Office	SECS	Work Study Student Workstation	70	2	210	
Office Support	SECS	Reception	35	1	70	
Office Support	SECS	Copy/Print/Fax/Workroom	360	1	360	
	SECS		180	1	180	
Office Support		Office Storage	150		150	
Office Support	SECS	Coat Closet	12	1	12	
Meeting	SECS	Dean's Conference Room	320	1	320	
		Advising			1,287	1,500
Office	SECS	Program Coordinator Office	450	1		1,000
Office	SECS	Academic Advisor Office	150	2	150	
Office	SECS	Secretarial Workstation	150	1	300	
Office	SECS	Student Workstation	70	2	70	
Office Support	SECS	Reception/Waiting	35	1	70	
			325		325	
Office Support	SECS	Computer Kiosk	20	2	40	
Office Support	SECS	Career Area / Resource Library	70	1	70	
Office Support	SECS	Copy/Print/Fax/Workroom	100	1	100	
Office Support	SECS	Secure File Storage	150	1	150	
Office Support	SECS	Coat Closet		1		
			12		12	
Office	65.00	Technologists		2		•
Office Office	SECS SECS	Lab Manager Office Network Administrator Office		2	-	
Office	SECS	Project Engineer Office	-	1	-	
		Other				
A.A. aking	8500			1		800
Meeting	SECS	Faculty Mail, Lounge		1		

Meeting	OU	Seminar / Conference Room	300 500	1	300 500	
Departmental Office Space				- 31		16,202
		Departmental Office Cluster (four total)			2,100	2,400
Office		Chair	180	4	720	-,,
Office		Secretarial Workstation	70	4	280	
Office		Student Workstation	35	4	140	
Office Support		Reception	120	4	480	
Office Support		Office Storage	120	4	480	
		Departmental - Shared				
Office Support		Copy/Print/Fax/Workroom		2		920
Meeting		Conference Room	140	2	280	
			320		640	
		Faculty and Student Offices				12,882
Office		Faculty Office	140	60	8,400	12,002
Office		Visiting or Research Faculty Office		10		
Office		Adjunct Office	140	6	1,400	
Office		PhD Student Office	47	60	282	
Office		GA/RA/TA Office	47	0	2,800	
			47			
			47			
Informal Learning Space			47			7,750
Informal Learning Space Study	SECS	Informal Learning Space		1		7,750
	SECS SECS	Informal Learning Space Quiet Lounge/Study Space	5,600	1	5,600	7,750
Study					5,600	7,750
Study Study	SECS	Quiet Lounge/Study Space	5,600	0	-	7,750
Study Study Study	SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables)	5,600 2,500	0	-	7,750
Study Study Study Study	SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves	5,600 2,500 1,000	0 0	-	7,750
Study Study Study Study Study	SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room	5,600 2,500 1,000	0 0 0	-	7,750
Study Study Study Study Study Study Study	SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending	5,600 2,500 1,000 100	0 0 0	-	7,750
Study Study Study Study Study Study Study Study Study Support	SECS SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending Café - Kitchen and Servery	5,600 2,500 1,000 100	0 0 0	1,500	7,750
Study Study Study Study Study Study Study	SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending	5,600 2,500 1,000 100	0 0 0	1,500	7,750
Study Study Study Study Study Study Study Study Study Support Study Support Study Support	SECS SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending Café - Kitchen and Servery	5,600 2,500 1,000 100 150 100 250	0 0 0	1,500 100 250	
Study Study Study Study Study Study Study Study Study Support Study Support Study Support	SECS SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending Café - Kitchen and Servery	5,600 2,500 1,000 100 150 100 250	0 0 0 10 1 1	1,500 100 250 300	1,200
Study Study Study Study Study Study Study Study Study Support Study Support Study Support	SECS SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending Café - Kitchen and Servery	5,600 2,500 1,000 100 150 100 250 300	0 0 0	1,500 100 250 300	
Study Study Study Study Study Study Study Study Support Study Support Study Support Study Support	SECS SECS SECS SECS SECS SECS	Quiet Lounge/Study Space Pre/Post Classroom Discussion Study Nook Noisy Lounge Quiet Lounge (Tables) Study Alcoves Project/Group Study Room Vending Café = Kitchen and Servery Project Display Space	5,600 2,500 1,000 100 150 100 250	0 0 0 10 1 1 1	1,500 100 250 300	1,200

Office Support Office Support	SECS SECS	Storage Closet Display Space	35 25 10	16 1	175 400 10	
Classrooms						10,000
Classroom Classroom	ou ou	Lecture Hall - 200 Seats Classroom - 100 Seats Classroom - 50 Seats	4,300 2,100 1,200	1 1 3	4,300 2,100 3,600	
Class Laboratories				26		19,800
Class Lab	CSE CSE CSE CSE CSE	Networking Unix Lego Computing Lab Large Computing Lab Storage and Support	600 600 900 600 900 300	0 0 0 0		•
Class Lab Class Lab Support Class Lab Support		SECS Bioengineering/Ergonomics/Motion Energy Lab Bioengineering Prep/Support Energy Prep/Support/Storage	1,200 1,200 300 300	1 1 1	1,200 1,200 300 300	
Class Lab		ISE Product Lifecycle Management Lab SHARF Computer Integrated Manuf. Lab	600 900	1	600 900	
Class Lab Class Lab Class Lab Class Lab Class Lab		CSE Computing Lab - 40 stations Computing Lab - 24 stations Networking and Security Lab HCI and Visual Computing Lab LEGO Lab	1,050 600 1,050 900 900	1 2 1 1	1,050 1,200 1,050 900 900	
Class Lab Class Lab Class Lab Class Lab Class Lab		ME CAD/CATIA Lab Thermo and Fluids Lab Thermo and Fluids Support/Storage Materials Lab Statics and Dynamics Lab	900 900 300 900 600	1 2 1 1	900 1,800 300 900 600	

Class Lab		ECE Computer Engineering Lab - 32 stations		1		
Class Lab		Computer Engineering Lab - 24 stations	900	1	900	
Class Lab		Electrical Circuits Lab	600	1	600	
Class Lab		Electronics Lab	900	1	900	
Class Lab		Communications Lab	600	1	600	
Class Lab		Power and Machines Lab	600	1	600	
Class Lab		Controls Lab	900	1	900	
Class Lab		Computational Lab - 24 Stations	600	1	600	
			600		600	
Class Lab	ECE	Controls and Robotics		0		
Class Lab	ECE	Circuits / Advanced Electronics / Digital	1,200	0	-	
Class Lab	ECE	MEMS / Advanced Lab	1,200	0	-	
Class Lab	ECE	Optical / Wireless / Signal Processing	1,200	0		
Class Lab Support	ECE	Storage and Support	1,200	0		
			300			
Class Lab	ISE	CIM Lab	900	0	-	
Class Lab Support	ISE	Storage and Support	300	0	: 4	
Class Lab	ME	Thermodynamics and Fluids		0		
Class Lab	ME	Statics and Dynamics	1,200	0		
Class Lab	ME	Material Properties	1,200	0		
Class Lab Support	ME	Storage and Support	1,200	0		
			300			
Class Lab	CECS	Bioengineering	1,200	0	25	
Class Lab Support	CECS	Storage and Support	300	0	*	
Project Laboratories						8,000
Project Lab	SECS	Senior Project Lab		-1		
Project Lab	SECS	Sophomore Design Lab	3,000	1	3,000	
Project Lab	SECS	Mechatronics Lab	1,200	1	1,200	
Project Lab	SECS	Project Lab - Workroom	1,200	1	1,200	
Project Lab	SECS	Mechatronics	600	0	600	
Project Lab	SECS	Project Labs Storage & Support	900	1		
			600		600	
Project Lab	SECS	Formula SAE Project Space Formula SAE Automotive Project Lab		1		
Project Lab	SECS	Formula SAE Automotive Shop	1,200	0	1,200	
Project Lab	SECS	Formula SAE Automotive Storage	400	1		
			200		200	

Class and Project Laborator	y Support					3,000
Lab Support Lab Support Lab Support	SECS SECS SECS	Machine Shop Wood Shop Shop Materials Storage	2,200 400	1 0 1	2,200	3,000
Class Lab Support Lab Support Office Lab Support	SECS SECS SECS	Lab Techs Office/Shop Electronics Shop Network Administrator Office Server Room	400 300 200	1 1 2 0	300 300 200	
Research Laboratories		OCIVEI NOOM	200		TV.	6,000
Research Lab Research Lab	ECE	Core Laboratories Tribology Research Lab MEMS Research Lab	900 600	0		3,300
Research Lab Research Lab Support Research Lab		Micro/Nano Clean Room & Characterization Clean Room Clean Room Equipment Airlock / Gowning Characterization Materials - Metrology Lab Materials - Testing Lab Microscopy Suite SEM XPS Future Modality - TEM Small Microscopy Workstation Sample Prep Area Pumps and Chillers	900 300 100 500 900 900 150 150 75 500 250	1 1 1 0 0	900 300 100 500 - - 150 150 300 500	
Research Lab Research Lab Research Lab Research Lab Research Lab Building Support		Research Laboratories Tribology Lab ARES Lab Active Suspension System Lab Microelectronics Systems Design Lab	900 600 600 600	1 1 1 1	900 600 600 600	2,700
Circulation Circulation		Building Entrance Vestibule Lobby	150 300	1	150 300	

	Materials Handling				4.004
Circulation Circulation	Loading Dock Receiving Storage Cages at Receiving	400 320 320	0 0 1		1,094
	Flammable Storage	100	1	320 100	
	Hazardous Waste Storage	100	1	100	
	Cylinders	50	3	150	
	Compactor	144	1	144	
	Recycling	280	1	280	
	Custodial Central Custodial Storage	200	1	200	
	Janitor Closet	5	20	100	
	Health and Safety				175
	Personal Health Room	150	1	150	1/3
	Emergency Response Closet	25	1	25	
	Maintenance				120
	Maintenance Office	120	1	120	120
	Storage Departmental Storage (four required)	500	0	,	
Total Net Square Footage					78,341
Total Gross Square Footage	61% Net / Gross Efficiency				128,428