



Washtenaw
Community College

Capital Outlay Plan

2021-2025



Section A: Executive Summary



EXECUTIVE SUMMARY

Washtenaw Community College is proposing a 50-percent state match on funding to renovate the College's Student Center building into a Center for Success that will combine services for students, employers and adults looking to advance in their careers or enter the workforce.

The purpose of the project is to support the State of Michigan's education goal to increase the number of Michiganders with a postsecondary credential to 60 percent by 2030 and help make Michigan attractive to employers interested in relocating or expanding by increasing access to a highly skilled, highly educated workforce. The College intends to do this by:

- Increasing the percentage of students who graduate with an associate degree or certificate within three years and start a career or successfully transfer to a four-year college to complete a bachelor's degree;
- Reconnecting unemployed and under-employed individuals to academic and job training programs to ensure that the current and future workforce will have the skills necessary to fill in-demand jobs; and
- Providing employers with increased access to a high-skilled, well-trained workforce.

The **renovation** of the Student Center building will create one place for students to begin their academic journey and stay on track through graduation with access to enrollment, financial aid and academic advising, as well as coaching and tutoring, student support resources, and transfer advising. **By integrating the needs of students, employers and the workforce into one Center for Success, WCC is working to ensure that Michiganders in our region have a path to a good job so they can build a life for their families in Michigan.**

WCC has been working aggressively to increase student success with a variety of strategies. Through this project, WCC will be able to expand its academic and career counseling services to ensure that students are informed about career pathways and related course selection. An example of these services is our Success Coach Initiative.

Launched in 2018, WCC's Success Coach Initiative provides free, one-on-one coaching to help students complete their academic goals. This case management model helps keep students motivated and connected to all of the wraparound services available to them such as academic tutoring, work-study and internship opportunities, and other resources to remove barriers to student success. Success Coaches connect students to scholarship opportunities and other community organizations that will assist students to remove

barriers to their success. Coaches helps students with issues like transportation, childcare, and textbook assistance. WCC Success Coaches also work to ensure that students are taking the courses they need to complete their programs efficiently so that every course counts towards degree completion.

In addition, in July 2019, WCC submitted a proposal to the Department of Education under the Title III Grant Program. This request will allow WCC to scale up the Success Coach Initiative and offer these services to a greater number of students. The Title III program provides funds to help Institutions of Higher Education become self-sufficient and expand their capacity to serve low-income students by providing funds to improve and strengthen the institution's academic quality, institutional management, and fiscal stability. This is the foundation of the Success Coach Initiative and further reinforces the need for the renovation of the Student Center building.

As workplaces evolve, many people will need to acquire new skills to advance – or even just keep the jobs they have now. With this in mind, the renovated Student Center building will house both the College's Career Transitions office as well as an office for Michigan Works! Southeast. The combination of these offices in the renovated Student Center building, along with our other academic support offices and career exploration tools, will reconnect job seekers to academic and workforce-training resources to help them start, change or advance in their careers. **Through better alignment of career development and academic services, WCC is creating an avenue for displaced workers to reenter the workforce and underemployed workers to advance. Thus, ensuring that the workforce in our region has the skills and support needed to build family sustaining careers and communities.**

Since 2010, nearly all – 99 percent – of the jobs added to our nation's economy have gone to workers with at least some postsecondary attainment. Further, Michigan needs to fill an additional 15,000 jobs in skilled trades every year until 2024 to meet demand. The renovated Student Center will also house offices and spaces for employers to meet with students to interview for job openings, paid internships, and apprenticeship opportunities. Employers will also have increased access to faculty, academic staff and curriculum planners to ensure that WCC is teaching the skills employers need. Finally, employers will be able to access Workforce Development and Customized Training programs in the same building. These actions will all increase employer access to qualified talent.

By bringing students, employers and job seekers together in one place, the College will be able to increase interactions and exposure among those three key community groups – exposing students to career options through engagement with employers, exposing employers to increased recruiting opportunities through engagement with

students, and reconnecting career seekers to academic and career possibilities through exposure to student services and employers.

About Washtenaw Community College

The education and training support services provided by Washtenaw Community College is a key component of economic growth and success in the Washtenaw County region.

- Each year more than 21,000 students register for Fall, Winter and Spring/Summer semester classes and 6,000 more enroll in Workforce Development and Continuing Education classes and programs.
- In 2018, 2,957 WCC graduates entered the workforce or transferred to a four-year institution to complete a bachelor's degree.
- More than 80,000 guests visit the campus each year, many of whom are here to attend one or more of the 3,800 community events the College hosts.
- With nearly 1,500 full- and part-time staff, WCC is one of the largest employers in Washtenaw County. A 2018 study by Economic Modeling Specialists International (Emsi), determined that the College and its alumni's had an economic impact of \$524.1 million in Washtenaw County supporting 7,897 jobs.

Students come to Washtenaw Community College representing the diversity within our community.

- About 14 percent are first generation college students, about five percent are single parents, about three percent are veterans, and another three percent request physical accommodation.
- The average age of our students is 26 and 14.8 percent (1,838) are college graduates returning to school to gain new skills to use in their current field or to prepare for a new career in another field.
- About 70 percent of all new students are underprepared for college-level math and 20 percent are underprepared for college-level reading based on prior academic performance and college placement exams.

Increasingly community colleges are being asked to effectively serve students with educational and personal barriers while at the same time improve the engagement of employers to ensure that students are being trained for in-demand jobs. **Regardless of their background, all of our students come through our doors with the expectation that we will prepare them with the skills and knowledge they need to thrive in a rapidly evolving educational, technological, and economic environment and ultimately succeed in a job that may not exist yet.**

One example of how we are working to meet the needs of the current and future workforce is our Advanced Transportation Center, which helps prepare the current and future workforce for jobs in the emerging transportation industry.

- Since 2015, WCC has spent more than \$9 million in equipment and facility upgrades to the Advanced Transportation Center.
- This includes \$4.8 million in funding awarded through the State's Community College Skilled Trades Equipment Program (CCSTEP), \$300,000 awarded through a U.S. Department of Labor grant, and a portion of a \$2.47M U.S. Department of Transportation grant awarded to the Center for Connected and Automated Transportation (CCAT), in which WCC participates.
- The College also made a \$3.6M investment to centralize trades programs into one building to increase training across disciplines.

The College's investment allows students to train on state-of-the-art equipment ensuring that they will be prepared for jobs in the rapidly growing industries of intelligent transportation systems, advanced manufacturing, and automotive transportation servicing.

Through the Advanced Transportation Center, WCC is preparing students and people currently in the workforce for new careers in the areas of Smart Cities, the Internet of Things (IoT) and Industry 4.0.

- Through a unique partnership with the University of Michigan Transportation Research Institute, WCC students installed and maintained sensors on more than 8,000 vehicles collecting autonomous vehicle research data.
- WCC also hosted a Smart Cities Conference in 2018 and the Center for Connected and Automated Transportation (CCAT) Global Symposium in 2019 to identify challenges and opportunities in the areas of connected and autonomous vehicles, related transportation infrastructure, big data, and municipal resources and services.
- WCC students studying advanced manufacturing at the College also use a number of open source software programs, such as SolidWorks, to design and test parts prior to fabricating them using the College's CNC and 3-D printing equipment.

Cybersecurity is another area where there is a shortage of talent to fill available jobs.

- In 2018, Washtenaw Community College introduced the automotive cybersecurity educator (ACE), becoming the first community college in the country to have a mobile hacking workbench focused on the connected, digital network within an automobile.

- WCC’s mobile hacking workbench allows students hands-on experience with an exact replica of an automobile’s complete computer and communication systems including the microcontrollers and wiring infrastructure.
- The key educational aim of the unit is to teach students how to ethically hack — or reverse engineer — connected automotive systems to prevent breaches. The automotive industry today is seeking to employ ethical “white hat” hackers to test the integrity and robustness of its vehicle software programming, and where necessary, close the gaps and vulnerabilities through preventive actions before releasing their products to the public.
- WCC is incorporating the Automotive Cybersecurity Educator into its cybersecurity, advanced automotive and other academic programs as well as professional development and workforce training courses and K-12 partnerships.

WCC is also addressing the growing need for health care professionals in the region by expanding the capacity of its health care programs.

- In the area of facilities utilization, WCC re-organized and renovated space in the Technical Industrial (TI) building to create additional simulation, lab and health lecture classrooms, a simulation debriefing practice space, and clinical observation stations.
- As part of the renovation of the TI building, WCC also created mock patient rooms and made updates to the building aesthetics to simulate a hospital environment.
- These changes and others helped WCC grow the number of graduates from WCC’s Nursing and Allied Health programs from 3,307 in 2018 to 3,717 in 2019 – a one-year growth rate of 12.4 percent.

To address the need for bachelor-degreed nurses, WCC collaborated with Eastern Michigan University on a unique program where students are able to receive their BSN in three years by taking classes year-round at WCC and EMU. **This program helped WCC gain recognition as a Center of Excellence in Nursing Education from the National League of Nurses (NLN), and Washtenaw Community College is the only college or university in Michigan to be recognized as a Center of Excellence by the NLN.**

Career pathways are designed to connect progressive levels of education and training, which helps individuals earn marketable credentials, engage in further education and employment, and achieve economic success.

- Soon, WCC will be launching a new website that will incorporate eight career pathways plus a college transfer option as well as Emsi career data for Michigan, Ohio and Indiana.

- This will allow anyone to search or browse for high-demand careers, view salaries and even link to actual job openings. Students and others can use the Emsi career data to make informed choices about their programs of study.

To address the personal barriers and challenges faced by so many students, community colleges must partner with local community-based organizations, which are well-equipped to provide case management and strong support systems to help students overcome barriers and challenges.

- In eastern Washtenaw County, WCC offers job coaching, resume writing, and interviewing skills at our Harriet Street office, which is co-located with Michigan Works! Southeast.
- Other services offered here include workforce development training for those looking to advance their career or obtain an entry-level job as well as certification testing and specific industry skills and free ACT WorkKeys preparation.

The education and training the College provides results in an increased talent pipeline for the State of Michigan. Research indicates that students who study at WCC and enter the workforce upon completion of a certificate or a degree program are more likely to remain in the county and the state and apply the new skills they have gained here. Our proposed project will further enhance the economic competitiveness of Washtenaw County and the State by increasing the completion rate of students enrolled in workforce education and training programs.

The College's Five-Year Capital Outlay Plan 2021-2025 describes our current and future instructional programming needs along with an assessment of present and projected enrollments that drive it. It also takes a detailed look at our existing facilities through a condition survey of all buildings on campus. It must be emphasized that the College's major instructional campus buildings are, on average, 30 to 40 years old and will continue to require renovations and additions to support future instructional programming given our enrollment trends as described herein.

- Section C describes the College's current academic programs along with projected programming changes during the next five years due to changes in our physical facilities.
- Section D of the plan includes current enrollment levels and is reviewed by program area with projections of expected increases in both enrollment and credit hours. Future staffing needs are also discussed and the impact on future enrollment estimates.

- Section E of the plan includes the current facilities assessment with a critical evaluation of the overall condition of all buildings on the College's main campus.
- Section F describes how the College intends to implement the plan.

As always, the College appreciates the support it has received from the State as it continues to fulfill its mission of serving the citizens of Washtenaw County.

Section B: Mission, Values, and Vision



MISSION, VALUES AND VISION

Mission

Our college strives to make a positive difference in people's lives through accessible and excellent educational programs and services.

Values

Teaching and Learning: We embrace teaching and learning as our central purpose.

Support: We make every effort to help learners achieve success.

Diversity: We respect differences in people and in ideas.

Partnerships: We plan and work together with respect, trust, and honesty within the College and with the communities we serve.

Innovation: We seek the best possible ways to conduct our work.

Vision

WCC is a learner-centered, open-door college dedicated to student, community, and staff success. We offer a wide spectrum of community college services with an emphasis on premier technical and career educational programs. The College staff continuously learns to improve learning.

Student Success: Our students come first. We are committed to their learning, success, and satisfaction. We strive to serve every student in an effective, caring, and supportive way. In order to enhance student learning outcomes, we engage in continuous improvement of teaching, programs, processes, and structures. We increase our accessibility by reaching learners where, when, and how they need instruction through the use of learning technologies, workplace learning experiences, and flexible scheduling of classes.

Community Success: We are committed to community learning, success, and satisfaction. WCC's primary contribution to community success is the development of a highly skilled workforce. A strong partnership with area employers emphasizes customized employee training and rapid adaptation of WCC programs to changing job training needs. Through strategic alliances with business, government, labor, and other educational institutions, WCC increases its emphasis on applied technology education, joint technical education programs with the public schools, and basic job-training services to underserved and at-risk groups.

Staff Success: We are committed to staff learning, success, and satisfaction. As a staff, we emphasize teamwork within College units and between the units. We support our colleagues and help them to be successful. We learn to improve learning; that is, we continuously increase our capacity to meet the educational requirements of the students, employers, and communities we serve. Through staff learning, we continuously improve services at each stage of the flow of students through WCC. All staff members align their work to contribute to improved teaching and increased student and community learning.

Section C: Instructional Programming



INSTRUCTIONAL PROGRAMMING

Overview of current academic programs and major academic initiatives

- a. Describe existing academic programs and projected programming changes during the next five years, in so far as academic programs are affected by specific structural considerations (i.e., laboratories, classrooms, current and future distance learning initiatives, etc.).**

For over 50 years, Washtenaw Community College’s open-door admissions policy, affordable tuition and high-quality classes have attracted students from local communities and around the United States. With over 20,000 students registering for credit classes each year¹, and more enrolled in Economic and Community Development classes, WCC serves the varying needs of the community. The College makes a strong impact on the local economy by helping diverse groups of students reach their educational goals as well as training and educating talent. As WCC continues to emphasize student success and completion, coordination and collaboration among various areas are essential.

As described in our 2021-2025 Capital Outlay Plan, Priority 1, a Center for Success will provide opportunities for comprehensive and inclusive student success and completion strategies centered in an expanded Student Center (SC) building.

“The purpose of this project is to create a powerful new Workforce Development ecosystem that is focused on: 1. ensuring that residents in our region receive the postsecondary education and training that is required to attain a career that will support a family; and, 2. employers have access to a high-quality workforce talent pool that they need for economic growth. We will accomplish this by creating a Washtenaw Community College Center for Success that will centralize all academic support, workforce development, and wraparound services provided to students. Centralizing the student experience and services is the foundation for institution-wide transformative change to increase student persistence, retention, and degree or certificate completion to meet the ever-increasing demand of business and industry for a qualified workforce.”

Strategies already in place include changing practices to use high school GPA for college placement and WCC’s Success Coach Initiative, which provides free, one-on-one coaching to help students complete their academic goals. This case management model helps keep students motivated and connected to all of the wraparound services available to them such as academic tutoring, work-study and internship opportunities, and other resources to remove barriers to student success. WCC currently assigns Success Coaches to the following groups of students:

- Students who participate in the Realizing Educational Achievement Can Happen (REACH) program for individuals who have been in foster care that may need additional access to resources and support;
- Students in Adult Transitions working to complete their GED and a credit certificate program;

¹ Annual Student and Financial Aid Profile 2017-2018

- Students enrolled in Career & Technical Education (CTE) programs;
- Students that have been awarded an Ann Arbor Area Community Foundation Scholarship;
- Students in specific gateway course needing additional academic support (i.e. Academic Coaching); and
- Students who participate in the New Student Success Program – a voluntary program for students who have completed fewer than 12 college credits.

Additional ways WCC supports student success includes our Student Success Conference – a conference designed to welcome new students to campus and introduce them to campus resources – as well as success workshops at our Entrepreneurship Center and combined tutoring services.

In addition to new communications software, workshops, orientations, programs and conferences, WCC has engaged in a college-wide emphasis on success and completion.

WCC continues to address the growing need for health care professionals in Washtenaw County with the Center of Excellence for Nursing Education. New programs, such as Nursing, Licensed Practical Nurse to Registered Nurse and a proposed Medical Assistant program will continue to serve the demands for health care professionals in our region.

The recent accreditation of WCC's Child Development Associate Degree by the National Association for the Education of Young Children's (NAEYC) Commission on the Accreditation of Early Childhood Higher Education Programs validates the program's rigor and content. To earn accreditation, programs must demonstrate that they:

- Align to NAEYC's Professional Preparation Standards;
- Respond to the unique needs of their degree candidates and communities;
- Provide intentional learning experiences for their degree candidates to obtain the knowledge and skills needed to be effective early childhood educators; and
- Continuously assess and reflect on their degree candidates' performance

The College makes a strong impact on the regional economy by helping diverse groups of students reach their educational goals as well as training and educating talent. Innovation and continuous improvement are the foundation of all of the programs and courses at WCC. The College has effectively leveraged technology by growing and supporting online education and integrating technologically advanced software and equipment into courses across campus.

Across all of our programs, 67.2 percent of WCC's degree seeking students have identified that they intend to transfer to a four-year college or university to pursue a bachelor's degree. Other students are seeking short-term training to earn industry-recognized certificates. No matter the student's goals, over the next five years, the College will focus on forming a visible footprint of services to promote student success. Beginning with recruitment and admission, entry assessment, orientation, advising, coaching and counseling services, through tutoring, instructional labs, library services, childcare, access and veterans services to career and transfer services, WCC plans to create a physical representation of the student life cycle.

Centralizing the student experience and services is the foundation for institution-wide transformative change to increase student retention and completion.

WCC has focused on being responsive to the ever-changing industry needs and technological changes that prepare employees for the future. Our goal is to continue to innovate and lead in helping more students reach their goals. Updated equipment and learning spaces facilitate promising higher education outcomes. We are confident that a physical space supporting student success and a valuable educational experience and wraparound services will drive increased results to create economic impact in the community and across the state.

- b. Identify the unique characteristics of the institution’s academic mission. (Two-year degree and certificated technical/vocational training, workforce development activities, adult education focus, continuing or lifelong educational programming, partnerships with intermediate school districts(s), community activities; geographic service delivery area(s), articulation agreements or partnerships with four-year institutions, etc.)**

Student success and completion remain central to the mission and values of Washtenaw Community College.

WCC fulfills its mission to make a positive difference in people’s lives through accessible and excellent educational programs and services by the wide variety of educational programs and services offered. The College’s programs and outreach spans from relationships with K–12 organizations through partnerships with employers and four-year institutions.

1. Career and occupational education.

- ❖ The College has statewide agreements with High School Career and Technical Education (CTE) programs for 28 WCC courses that allow high school students to earn college credit for their work.
 - Any student who completed all 12 segments of an approved CTE program at an approved Michigan High School with a final grade of “B” or better may request a recommendation for credit from their high school instructor and be awarded college credit for high school career and technical education course work.
- ❖ The College also has direct agreements with local high schools for an additional 24 WCC courses that allow high school students to earn college credit for their work.
- ❖ In 2017-2018, 234 CTE enrollments were approved for 35 courses resulting in a savings of nearly \$22,000 in tuition and fees.
- ❖ 57.9 percent of WCC students are in occupational programs.
 - The line between transfer and occupational programs is becoming less distinct as some certificates and associate degrees are within an occupation while also being transferable to a four-year institution. As colleges and universities continue to recognize occupational programs as degree

worthy, WCC will continue to foster relationships that will benefit students.

2. **Dual Enrollment:** WCC also offers dual enrollment programs throughout the region. National research shows that high school students who dual enroll in college are more likely to enroll in college after high school and successfully complete their college degree. As the State aggressively pursues higher credential attainment for Michiganders, dual enrollment serves both students seeking credentials and employers who are seeking highly skilled employees. In the 2018 Fall semester, WCC dually enrolled 1,036 students, a 26 percent increase since Fall of 2014.

One outstanding example of our strategy is our partnership with Ypsilanti Community High School that allows students to earn college credit while enrolled in high school. WCC offers these popular programs for students in Ypsilanti Community Schools, Lincoln Consolidated Schools, and other districts in Michigan:

- **Certified Nursing Assistant Certificate:** This certificate program provides an opportunity for entry-level employment for health care jobs. Students are able to earn six college credits for this one-semester program.
 - **Introduction to Manufacturing Processes:** In this program, students learn manufacturing fundamentals including blueprint reading, 3D modeling systems, and output files used to control manufacturing systems – preparing students for high-paying jobs that are in demand. Students are able to earn 16 college credits for this two-semester program.
 - **Child Development Certificate:** This program prepares students for employment in childcare centers working with infants and toddlers, or preschoolers. Because early childhood education is widely recognized as important for a child’s intellectual development, job growth is expected to grow by seven percent over the next four years. Students are able to earn 12 college credits for this two-semester program.
3. **Washtenaw Technical Middle College (WTMC).** Washtenaw Community College houses an award-winning charter high school that continues to attract more students than can be admitted. Space and classroom issues will need to be addressed.
 - ❖ Because WTMC students achieve in the top 1 percent of all high school students in Michigan, the middle college has earned Michigan Department of Education’s "Reward School" status.
 - ❖ Research done by the National Center for Restructuring Education, Schools and Teaching (NCREST) at Columbia University's Teachers College has documented that WTMC students pass 95 percent of the college courses they take, and their grade point average in college courses in 2013 was 3.39.
 - ❖ WTMC was selected as the best of nine highly effective, cutting-edge educational programs in Michigan, earning the “2014 Governor's Education Summit” award for collaboration and innovation.
 4. **Transfer education.** Programs and courses in both general and many occupational education areas provide students with the option of transferring to a four-year college or

university, as well as supporting personal growth. Approximately seventy percent of WCC students plan to transfer to a four-year institution to pursue a bachelor's degree. The College continues to work with four-year institutions to secure additional agreements that promote seamless transfer that also minimizes duplication of or loss of credits for students. Transfer articulation agreements allow students to attain a credential at WCC while simultaneously accumulating credits that will transfer and apply toward a higher-level credential at another institution.

- ❖ **WCC has 109 articulation agreements** with various colleges and universities that provide course requirements and guidance for transfer between WCC programs and those at other higher education institutions.
- ❖ Eleven agreements allow students to transfer prior credits to WCC, while pursuing a degree or certificate at WCC.
- ❖ Eight reverse transfer agreements allow students to transfer credits from their current institution back to WCC to complete a certificate or degree at WCC, while attending another college or university.
- ❖ Forty-nine “3+1 agreements” allow students to complete more than 80 credit hours at WCC towards a bachelor's degree at another institution.

These agreements can reduce by up to three years the time and expense spent at the four-year college, potentially saving each student more than \$57,000 annually when compared to the average cost for Michigan public four-year colleges and universities.

In support of the completion agenda, WCC has completed and signed reverse transfer agreements with eight four-year colleges. These agreements allow the College to communicate with students who have completed much of their associate degree coursework at WCC to transfer back courses completed at a four-year institution. Students will benefit as they gain documentable credentials. The institution will benefit from this agreement through an increase in the number of degrees conferred.

5. ***Continuing education and community services.*** Both credit and noncredit programs address community and business/industry needs, ranging from personal growth courses to technology training programs for business and industry. In addition, much of the GED preparation and testing in Washtenaw County is conducted by WCC's Adult Transitions Department. In fact, Community Development and Workforce are two of the College's strategic priorities, which include a specific focus on eastern Washtenaw County.
6. ***Developmental education.*** Courses in this area strengthen writing, reading and mathematical skills, as well as instruction for those learning English as a Second Language (ESL). Academic Skills (ACS) courses are assigned to those who read below college level. The College also works with Washtenaw Literacy and other community agencies to assist students who have reading skills below the high school level. WCC recently introduced MTH 099 Math Placement Acceleration Lab. This one-credit hour class allows students the opportunity to increase their math placement test score. Students use an online system to practice skills then are able to retake their math placement tests. Instruction is provided as needed on a one-on-one basis.

7. **Student support services.** A variety of services at the College prepares students to fully use and benefit from academic programs and courses. These services include orientation, entry assessment, academic advising, financial aid, transfer assistance, career counseling, personal counseling, computer email accounts, tutoring, childcare, job placement, special needs services, instructional labs, and library services.

Table 3. New Programs for 2019-2020

Program Name	Award
General Studies	Associate Degree
Broadcast Media Arts	Certificate
Client-side Web Developer	Certificate
Digital Strategist	Certificate
Interface Designer	Certificate
Server-Side Web Developer	Certificate
User Experience Designer	Certificate
Business Enterprise Basics	Certificate
Business Enterprise Essentials Basics	Advanced Certificate
Business Enterprise	Associate in Applied Science

Washtenaw Community College offers 138 for-credit programs, with 1,216 credit courses in 95 disciplines. The programs represent an array of credentials from certificates of completion to associate degrees and post-associate certificates. Table 4 summarizes the number of current programs sorted by level of award.

Table 4. All Programs by Type of Award

Type of Award	Number of WCC Programs
Certificate of Completion	2
Certificate	54
Advanced Certificate	19
Post-Associate Certificate	4
Certificates	79
Associate in Applied Science	32
Associate in Arts	16
Associate in Science	10
Associate in General Studies	1
Degrees	59
Total WCC Programs by Award Type	138

These programs are categorized either as career degree/certificate programs or as university transfer programs. Career degree/certificate programs prepare students for jobs and career advancement.

Within the career degree/certificate classification, WCC offers 117 programs. The programs are listed in Section C Appendix A.

WCC offers 21 programs designed specifically for transfer students. These programs are listed in Section C Appendix B.

8. ***Workforce development and community enrichment.*** In support of the WCC mission, the Economic and College Development and Workforce and Community Development divisions professionally develop and personally enrich the lives of people and organizations by providing relevant training programs, services and solutions, which meet the needs of the greater Washtenaw community. The staff does the following:
 - a. Plays a catalytic role in economic development, by participating and supporting local, regional and state economic development initiatives and by staying abreast of occupational trends that lead to training and organizational development opportunities;
 - b. Serves the educational needs of employers, by identifying customer needs, creating and delivering customer-driven solutions and providing accessibility to training, services and information;
 - c. Creates partnerships that support local and regional economic and community development; and
 - d. Establishes initiatives to ensure student success through programming, assessment, articulation and support services.

Serving approximately 6,000 students annually, WCC's Corporate, Workforce Development and Lifelong Learning departments develop and deliver more than 700 classes in foundation skills, entry-level employment training, professional development seminars, customized contract training, and personal interest. Training in the areas of health care, information technology, connected transportation and infrastructure, and advanced manufacturing is a specific focus.

As society and the workplace continue to move to prioritize learning and open education for its members, the residents of Washtenaw County will look toward WCC for programs and courses that help them achieve their personal and career goals, and they will do this several times during their lives. The implications of the lifelong learning trend as related to space, facilities, and equipment will have a major influence on planning for the next five years.

Washtenaw County is unique in the state in terms of its high percentage (48%) of adults, those 25 and older, who hold at least a bachelor's degree. Reflective of this demographic and of the need for lifelong learning, over 15 percent of the WCC student body already holds a bachelor's degree or higher. WCC accepts this unique situation and melds these students into the educational and training programs of the institution, an effort that is a benefit to all of our students, broadening perspectives, raising awareness, modeling continuous learning, and sharing in success and growth.

Customized Training: The Workforce Development team at WCC are experts setting up training programs to upskill the workforce and improve a company's performance. Example partnerships include:

- **Home Health Aide:** WCC teamed up with Kennedy Care, a home health care service provider headquartered in Ann Arbor to create a two-week Home Health Aide course designed to provide the training necessary to prepare students to perform basic care in a home care setting. According to U.S. Department of Labor statistics, the number of home health aide jobs is expected to increase by 41 percent by 2026 – a growth that translates to nearly 1 million new positions.
 - **Building Maintenance Technician:** In partnership with McKinley, Inc., WCC developed and launched a three-week job readiness program to train building maintenance professionals for employment at the company’s apartment and housing units around the Ann Arbor/Ypsilanti area. Students who completed the first paid Maintenance Apprenticeship Program are on the job now.
9. ***Eastern Washtenaw County Outreach and Support:*** In eastern Washtenaw County, WCC offers job coaching, resume writing, and interviewing skills at our Harriet Street office, which is co-located with Michigan Works! Southeast. Other services offered at this office include workforce development training for those looking to advance their career or obtain an entry-level job as well as certification testing and specific industry skills and free ACT WorkKeys® preparation.
10. ***Livingston County:*** Washtenaw Community College has also collaborated with Livingston County ISD to begin offering cybersecurity courses to high school students in the area through the Livingston County Early College. These students will have the opportunity to continue at WCC to earn an associate’s degree in Cybersecurity.
11. ***Health and Fitness Center:*** Washtenaw Community College students are able to take advantage of fitness classes at our Health and Fitness Center. As a certified Medical Fitness Facility, the Health & Fitness Center at Washtenaw Community College offers the highest in quality staffing, equipment and programming under a medical oversight. Fitness staff members are required to have four-year degrees and many maintain additional certifications in specialty areas such as arthritis or cardiac health. Programs are regularly reviewed by the center’s Medical Advisory Board, which includes physicians from St. Joseph Mercy Ann Arbor Hospital and a physical therapist from Probility Physical Therapy. All staff members are required to hold certifications in CPR, AED and First Aid.

c. Identify other initiatives that may impact facilities usage.

The College continues to address the changing economic, sociological, educational, and technological environment by creating new programs. Therefore, WCC has continued to examine a variety of ways to meet the community’s demand for programs that prepare workers for newly emerging fields in technology, balancing this need with the growing need for appropriate space. Several initiatives have resulted from this examination.

United Association Union of Plumbers, Pipefitters, Welders and HVAC Service Technicians (UA). Every year for the last 30 years, the college has hosted the weeklong Instructor Training Program for the UA in classrooms and laboratories across campus. Last

year, approximately 2,500 student instructors for the UA and an additional 400 faculty, industry representatives and staff visited Ann Arbor and WCC for an intensive week of hands-on instruction. UA members use the WCC campus facilities, including classrooms, computer labs, mechatronics facility, welding labs, to name a few. According to the Ann Arbor Convention and Visitors Bureau, this program generates over \$8 million in economic development to the local economy.

International Association of Bridge, Structural, Ornamental and Reinforcing Ironworkers Union. WCC continues to hold the Iron Workers Instructor Training Program (ITP) on the WCC campus. Approximately 825 participants attend the program that trains for proficiency in jobs involving welding, structural steel erection, architectural and ornamental ironwork, concrete reinforcement, rigging, and machinery moving and installation – as well as blueprint reading and computer skills for the ever-changing job market. The regional community benefits when the program comes each year, it generates nearly \$5 million in economic impact within Washtenaw County.

In 2017, the college launched a pre-apprenticeship certificate program for Ironworkers. The certificate program teaches some of the skills needed to become a union Ironworker apprentice in the United States and Canada. A combination of classroom and lab training provides real-world experience, including blueprint reading, math, safety, and welding training used by the union Ironworker trade. Students who successfully complete the program receive a certificate of completion and are eligible for advanced standing in the Ironworker Local Union Apprenticeship Training Program.

Operative Plasterers, Cement Masons International Association. WCC signed a five-year agreement with the OPCMIA in 2017, and the union held its national instructor training program on the campus in June of 2019. Approximately 125 participants attended the training program conducted in the computer labs on campus.

United Union of Roofers, Waterproofers and Allied Workers. WCC signed a five-year agreement with the Roofers Union in 2019, and the union will hold its first international instructor training program on campus in June of 2020. Approximately 120 participants are anticipated to attend training.

Blended (Mixed Mode) courses. WCC continues to offer classes that blend both online and face-to-face delivery that take advantage of both formats. We continue to increase the number of blended courses offered each semester. WCC offered 808 sections of 201 possible courses with 3,299 enrollments in 2017-2018.

Online (Distance Learning) Courses: Online courses utilize materials such as interactive lectures, video, activities, textbooks and workbooks as well as faculty produced open education resources (OERs), which are free or very low-cost learning and teaching materials such as textbooks made available online for anyone to use. Faculty members engage with students through the college's Blackboard course management system in which students receive feedback from instructors and complete exercises and examinations. In 2017-2018, 810 sections of the 168 possible courses were offered with 18,262 enrollments.

Online Programs: In 2018-2019, thirty-three (33) programs (23%) were completely available online through distance learning.

Apprenticeship Programs: Since 2016, the college has doubled its apprenticeship program participants to over 100 apprentices in the areas of advanced manufacturing and information technology. Recent new apprenticeship programs launched with the support of WCC include Michigan Medicine IT help-desk support, maintenance at University of Michigan athletic facilities, and a business program apprenticeship through the National Restaurant Association and Destination Ann Arbor. With the development of the Center of Excellence for Nursing Education, credit and non-credit divisions will be working to expand apprenticeships to the health care industry, as well.

d. Demonstrate the economic development impact of current/future programs (i.e., technical training centers, life science corridor initiatives, etc.).

Health care, information technology and STEM fields continue to exert a strong influence on the development of programs at WCC as the College supports local workforce trends. Student enrollments remain strong in the areas of criminal justice, automotive, business management, video production, human services worker, health, and science. Preparing highly skilled technical support personnel through occupational programs will continue to be a critical target for the College. A concomitant need will be to expand facilities to house equipment so that these programs can flourish.

WCC plays a significant role in the regional economy and is a sound investment from multiple perspectives. Students benefit from improved lifestyles and increased earnings. Taxpayers benefit from a larger economy and lower social costs. Finally, the community as a whole benefits from increased job and investment opportunities, higher business revenues, greater availability of public funds, and an eased tax burden. A recent EMCI study demonstrated that in 2016-17, the college had a \$524.1 million impact on the local region through combined operations, student spending, and alumni employment.

WCC's important partnership with the United Association has spurred initiatives such as the development of online courses and programs. The success of this national partnership has additionally led to the development of national partnerships with the Ironworkers, the International Brotherhood of Electrical Workers (IBEW), the International Union of Bricklayers and Allied Craftworkers, and the Operative Plasterers', Cement Masons International Association (OPCMIA) and the United Union of Roofers, Waterproofers and Allied Workers (UURWAW).

The college is active in its connections to regional economic development organizations as it seeks the best pathways to educating and credentialing students and preparing them for employment. WCC President, Dr. Rose B. Bellanca has led the development and recruitment of talent for Washtenaw County through the Ann Arbor SPARK Talent Committee, currently serves on the Board of Directors and is a member of the Michigan Works! Southeast Workforce Development Board and is on the board for the American Center for Mobility. Further, the WCC Workforce Development Department has served as a sub-contractor to provide the Michigan Works! Southeast Agency with business and career services that address the needs of the un- and underemployed. Finally, the Vice President of Economic,

Community & College Development Dr. Michelle Mueller serves on the Workforce Intelligence Network's (WIN) Board of Directors for Southeast Michigan, the Michigan Works! Southeast Workforce Development Board (Alternate), Greater Ann Arbor Region (GAAR) Committee, SEMCOG Talent Committee, LDFA for Ann Arbor and Ypsilanti Board of Directors, the ITS Michigan Board of Directors and the American Association of Community Colleges Workforce Development Committee. In addition, Brandon Tucker Dean of Advanced Technologies and Public Service Careers serves on the Michigan Council on Future Mobility housed at the Michigan Department of Transportation.

Appendix A. Career Degree/Certificates

<ul style="list-style-type: none"> • Health Sciences (13)
<ul style="list-style-type: none"> ○ Computed Tomography (CT) Post-Associate Certificate
<ul style="list-style-type: none"> ○ Dental Assisting Certificate
<ul style="list-style-type: none"> ○ Health Care Foundations Certificate
<ul style="list-style-type: none"> ○ Magnetic Resonance Imaging (MRI) Post-Associate Certificate
<ul style="list-style-type: none"> ○ Mammography Post-Associate Certificate
<ul style="list-style-type: none"> ○ Medical Billing and Coding Certificate
<ul style="list-style-type: none"> ○ Nursing Assistant Skills Training Certificate of Completion
<ul style="list-style-type: none"> ○ Nursing, Licensed Practical Nurse to Registered Nurse Associate in Applied Science
<ul style="list-style-type: none"> ○ Nursing, Registered Associate in Applied Science
<ul style="list-style-type: none"> ○ Physical Therapist Assistant Associate in Applied Science
<ul style="list-style-type: none"> ○ Radiography Associate in Applied Science
<ul style="list-style-type: none"> ○ Sterile Processing Certificate
<ul style="list-style-type: none"> ○ Surgical Technology Associate in Applied Science
<ul style="list-style-type: none"> • Business and Culinary Management (23)
<ul style="list-style-type: none"> ○ Accounting Associate in Applied Science
<ul style="list-style-type: none"> ○ Accounting for Business Certificate
<ul style="list-style-type: none"> ○ Administrative Assistant I Certificate
<ul style="list-style-type: none"> ○ Administrative Assistant II Advanced Certificate
<ul style="list-style-type: none"> ○ Applied Data Science Certificate
<ul style="list-style-type: none"> ○ Baking and Pastry Arts and Management Associate in Applied Science
<ul style="list-style-type: none"> ○ Baking and Pastry Essentials Certificate
<ul style="list-style-type: none"> ○ Baking and Pastry Skills and Operations Certificate
<ul style="list-style-type: none"> ○ Business Office Administration Associate in Applied Science
<ul style="list-style-type: none"> ○ Computer Software Applications Certificate
<ul style="list-style-type: none"> ○ Core Business Skills Certificate
<ul style="list-style-type: none"> ○ Culinary Arts and Management Associate in Applied Science
<ul style="list-style-type: none"> ○ Culinary Essentials Certificate
<ul style="list-style-type: none"> ○ Culinary Skills an Operations Certificate
<ul style="list-style-type: none"> ○ Digital Business Marketing and Sales
<ul style="list-style-type: none"> ○ Entrepreneurship and Innovation Certificate
<ul style="list-style-type: none"> ○ Human Resource Management (HRM) Certificate
<ul style="list-style-type: none"> ○ Management Advanced Certificate
<ul style="list-style-type: none"> ○ Management Associate in Applied Science
<ul style="list-style-type: none"> ○ Retail and Business Operations Certificate
<ul style="list-style-type: none"> ○ Retail Management Associate in Applied Science
<ul style="list-style-type: none"> ○ Supply Chain Management Associate in Applied Science
<ul style="list-style-type: none"> ○ Supply Chain Operations Certificate
<ul style="list-style-type: none"> • Human Services, Pre-Education & Public Safety (5)
<ul style="list-style-type: none"> ○ Addiction Studies Post Associate Certificate
<ul style="list-style-type: none"> ○ Child Development Associate in Applied Science
<ul style="list-style-type: none"> ○ Child Development Certificate
<ul style="list-style-type: none"> ○ Criminal Justice - Law Enforcement Associate in Applied Science

○ Police Academy Certificate
• Manufacturing & Automotive (19)
○ Advanced Machine Tool Programming Advanced Certificate
○ Auto Body Repair Certificate
○ Automotive Service Technology Associate in Applied Science
○ Automotive Services Technician Certificate
○ Automotive Test Technician Associate in Applied Science
○ Collision Repair and Refinish Technician Advanced Certificate
○ Custom Auto Body Fabrication and Chassis Design Advanced Certificate
○ Engineering Technologist – Manufacturing Associate in Applied Science
○ Fluid Power Certificate
○ Industrial Electronics Technology Certificate
○ Industrial Electronics Technology II Advanced Certificate
○ Introduction to Manufacturing Processed Certificate of Completion
○ Machine Tool Programming (CNC) Certificate
○ Machine Tool Setup and Operation Certificate
○ Mechatronics Associate in Applied Science
○ Motorcycle Service Technology I Certificate
○ Motorcycle Service Technology II Advanced Certificate
○ Occupational Studies Associate in Applied Science
○ Powertrain Development Technician Associate in Applied Science
• Broadcast, Communication, Visual, Digital & Fine Arts (22)
○ 3D Animation Arts Associate in Applied Science
○ 3D Animation Certificate
○ Animation for Film and Broadcast Advanced Certificate
○ Animation for Game Art Advanced Certificate
○ Audio Production and Engineering Certificate
○ Broadcast Media Arts Associate in Arts
○ Broadcast Media Arts Certificate
○ Digital Strategy Advanced Certificate
○ Digital Video Advanced Production Advanced Certificate
○ Digital Video Production Associate in Arts
○ Digital Video Production Certificate
○ Fine and Performing Arts Certificate
○ Graphic Design Associate in Applied Science
○ Graphic Design Certificate
○ Interface Design Certificate
○ Photographic Imaging Certificate
○ Photographic Technology Associate in Applied Science
○ Server-side Web Development Certificate
○ Technical Communication Associate in Arts
○ Technical Communication Certificate
○ User Experience Designer Certificate
○ Web Design and Development Associate in Applied Science
• Science, Computer Technology, Engineering & Math (12)
○ C++ Programming Advanced Certificate

○ Computer Networking Academy I Advanced Certificate
○ Computer Networking Operating Systems I Advanced Certificate
○ Computer Systems and Networking Associate in Applied Science
○ Computer Systems Technology Certificate
○ Cybersecurity Associate in Applied Science
○ Foundations of Information Systems Certificate
○ Linux/UNIX Systems Certificate
○ Mobile Device Programming Advanced Certificate
○ Principles of Cybersecurity Certificate
○ Program in Java Advanced Certificate
○ Web Database Programming Professional Advanced Certificate
• Skilled Trades & Construction (15)
○ Cabinetmaking/Millwork Technology Advanced Certificate
○ Construction Management Associate in Arts
○ Construction Technology Associate in Science
○ Construction Technology I Certificate
○ Construction Technology II Advanced Certificate
○ Engineering and Design Technology Certificate
○ Facility and Energy Management Certificate
○ Heating, Ventilation, Air Conditioning and Refrigeration - Commercial Trade Advanced Certificate
○ Heating, Ventilation, Air Conditioning and Refrigeration Associate in Applied Science
○ Heating, Ventilation, Air Conditioning, and Refrigeration - Residential Certificate
○ Ironworkers Pre-Apprenticeship Certificate
○ Sustainable Building Practices Certificate
○ Welding Technology Associate in Applied Science
○ Welding and Fabrication Principles Certificate
○ Welding and Fabrication Advanced Applications Advanced Certificate
• Apprenticeship & Union Programs (7)
○ Apprentice Completion Certificate
○ Construction Supervision Associate in Applied Science
○ Construction Supervision Associate in Science
○ Construction Supervision Certificate
○ Industrial Training Associate in Applied Science
○ Industrial Training Associate in Science
○ Journeyman Industrial Associate in Applied Science

Appendix B. Transfer Degrees and Certificates (21)

Business Administration - Transfer Associate in Arts
Computer Science: Programming in Java Associate in Science
Criminal Justice Associate in Arts
Early Childhood Education Associate in Arts
Elementary Education Associate in Arts
English as a Second Language Certificate
Environmental Science Associate in Science
Exercise Science Associate in Science
Film Studies Associate in Arts
Fine Arts Associate in Arts
General Studies Associate in General Studies
General Studies in Math and Natural Sciences Associate in Science
Global Studies Associate in Arts
Health Program Preparation Associate in Science
Human Services Associate in Arts
Information Systems: Programming in C++ Associate in Science
Journalism Associate in Arts
Liberal Arts Transfer Associate in Arts
Math and Science Associate in Science
Paralegal Studies/Pre-Law Associate in Arts
Secondary Education Associate in Arts

Section D: Staffing and Enrollment



STAFFING AND ENROLLMENT

Colleges and universities must include staffing and enrollment trends in the annual 5-year comprehensive master plans.

- a. Describe current full-and part-time student enrollment levels by academic program and define how the programs are accessed by the student (i.e., main or satellite campus instruction, collaboration efforts with other institutions, Internet or distance learning, etc.)**

As of October 15, 2019; 12,042 students are enrolled for the Fall 2019 semester. Overall, 25% of these students are enrolled on a full-time basis (12 or more credits). The percentage of full-time students varies by program area.

For the Fall 2019 semester, the program area full-time enrollments are as follows:

Division	Percent Full-Time
Humanities and Social Sciences	28%
Business and Computer Technologies	29%
Math, Science, and Engineering	31%
Advanced Technologies & Public Service	21%
Health	16%
WCC Total Enrollment	25%

The vast majority of the College's programs are accessed through traditional classroom experiences. In Fall 2019, the College is offering 135 credit courses (317 sections) in a full on-line mode and 42 credit courses (97 sections) in a blended (½ on-line, ½ traditional classroom) format.

- b. Project enrollment patterns over the next five years (including distance learning initiatives)**

Since 2012-13 our degree credit enrollments have been comparatively flat in an environment in which most community colleges have seen large enrollment deficits. The college's degree enrollment for Fall 2019 is a slight decrease from Fall 2018. The college has put many factors in place in the last year to enhance recruitment, enrollment and retention, including personal calling campaigns, targeted recruitment, increased flexible scheduling, expanded student services, and many other measures to attract and keep students at WCC. It is expected that over the next five years, enrollment will remain flat or see incremental increases, with a principal growth occurring in distance learning courses and programs.

In considering enrollments over the next five years, several factors need to be examined:

- SEMCOG projections indicate that the overall population in the region will rise slightly through 2025; there will be slightly slower growth in traditional age groups, but substantial increases in the older adult population. We expect to see enrollment growth in the next five years in the older adult population and need address this population's needs, particularly for retraining and career changing in high demand careers.
- Over the last five years, there has been steady growth in the college's distance education offerings, with an 85% increase in online enrollments and 20% increase in mixed mode enrollments during that time. The College is a participant in the SARA state reciprocity agreement to offer online programming in 49 states and is approved by the Higher Learning Commission to offer up to 100% of its programs and courses online. The college expects this to be a significant growth area over the next five years, consistent with past enrollment patterns.
- With the State's expansion in the authorization of Early Middle Colleges, we have also experienced increasing numbers of middle college students. Local districts are taking advantage of our on-campus offerings and students from middle colleges outside Washtenaw County are taking advantage of our on-line offerings.
- While distance learning classes are seeing enrollment growth, only about 18 percent of our student headcount exclusively take online classes. The majority (82%) of students attend traditional or blended classes. In addition, the support staff for online classes would benefit from working in the Student Learning Center of Excellence with the rest of the College's student support staff.

c. Evaluate enrollment patterns over the last five years

After having a slight increase from Fall 2017 to Fall 2018, the college experienced another decrease in enrollment this fall. Based on our annual headcount (unduplicated students), WCC has experienced an enrollment increase of 3.5% over the last five years. The fall enrollment drop is much smaller than the enrollment drop of other Michigan colleges that have experienced double digit drops in enrollment over the same time period.

The College continues to earn and enjoy the support of the community and of our constituents. We respond to the changing needs of our students, adding sections and courses as appropriate. The current economic situation has driven many students to seek retraining and skills upgrades. WCC has both marketed its ability to provide such services and we have enrolled many new students as a result. In a different direction, we see more of our students continue their formal education beyond the levels provided here at the College. We expect that pattern to continue.

Students come to Washtenaw Community College representing the diversity within our community. Many – about 22 percent – are first generation college students,

about four percent are single parents, about three percent are veterans, and another three percent request physical accommodation. The average age of our students is 26 and 15.7 (1,890) are college graduates returning to school to gain new skills to use in their current field or to prepare for a new career in another field. Regardless of their background, all of our students come through our doors with the expectation that we will prepare them with the skills and knowledge they need to thrive in a rapidly evolving educational, technological, and economic environment and ultimately succeed in a job that may not exist yet. Employers and partners in business and industry expect that we will train, prepare and deliver a high-skilled workforce to meet their quickly changing needs.

d. Student/Faculty Ratios –

The ratios for instructional staff to students for major program areas at the College may be calculated using credit hour or by contact hour generation. Student/faculty FTE ratios based on student credit hours where one student FTE equals 30 semester hours are as follows:

General Education	19.9
Business / Computer	16.7
Technical	11.8
Health care	7.1

Student / faculty FTE ratios based on contact hour generation where one student FTE equals 480 contact hours are as follows:

General Education	22.3
Business / Computer	19.0
Technical	17.8
Health care	14.2

e. Project future staffing needs based on 5-year enrollment estimates and future programming changes.

It is anticipated that the college's current staffing models will accommodate projected program growth. Positions that are currently vacant will be filled to meet the anticipated needs in program demand. Under the leadership of current full-time faculty members, part-time instructors will be employed to meet any additional demand.

The average credit hours taken per student is 8.0 for Fall 2019. This is, of course, a statistic that is relatively fixed given the large number of our students. An analysis of our underlying financial base indicates that, in order to fund the institution, we need to increase both headcount and credit hours. The use of part-time faculty remains at acceptable levels. During the previous academic year, 2018-19, we experienced less than a 34% use of part-time staff (according to the computation specified in the

collective bargaining agreement) whereas the agreed upon limit is 37%. Thus, the College has room to adjust to new initiatives and demands. At the same time, the College continues to manage its staffing allocations to provide full-time faculty support appropriate to the growth and decline within given academic areas.

f. Identify current average class size and projected average class size based on institution’s mission and planned programming changes.

Average class size is determined by many factors, not the least of which is the maximum allowed class size, a factor that is influenced by facilities, collective bargaining agreements, accreditation specifications, safety, and enrollment demand. Also influencing enrollment is the location and type of course. We calculated the classroom utilization at the end of the semester, though enrollment is often higher at the beginning of the semester. It has been calculated that we lose approximately two (2) students from our larger sections through attrition. At the end of the semester we calculate an average class utilization of 82% of the maximum enrollment. Shown below are the average class size and utilization percentage by some of our common maximum enrollment options.

Max Enrollment	Fall 2018	Winter 2019	Both	Average for Both
30	23.8	22.5	23.1	77%
25	20.2	18.8	19.5	78%
24	20.0	19.7	19.8	83%
22	18.5	16.6	17.7	80%
20	16.8	15.5	16.1	81%
All	18.0	17.0	17.5	80%

Further influencing the utilization of classroom space is the location of courses. Clinical courses have the highest utilization rate of courses scheduled outside of main campus with an average 82% of the seats filled at the end of the semester.

SITE	AVERAGE
Main Campus	87%
Clinical	82%
Extension	60%
North	66%

We continue to work to increase our fill ratio for all of our sections while balancing our other obligations. We must provide the courses that students need to complete their degree program even if those sections are not at full enrollment. Further, we have an obligation to our constituents to provide courses at convenient locations throughout the county. The small number of off-campus sites has a minimal impact (approximately -0.7%) on our overall fill rate. The value of these off-campus sections is reviewed on a regular basis and we work to balance fiscal responsibility with service to the community. We anticipate that the average class size will remain constant over the next few years.

Section E: Facility Assessment



FACILITY ASSESSMENT

A professionally developed comprehensive facilities assessment is required. The assessment must identify and evaluate the overall condition of capital facilities under college or university control. The description must include facility age, use patterns and an assessment of general physical condition. The assessment must specifically identify:

- a. **Summary description of each facility (administrative, classroom, biology, hospital, etc.) according to categories outlined in “net-to-gross ratio guidelines for various building types,” DTMB-Office of Design and Construction Capital Outlay Design Manual, appendix 8. If facility is of more than one “type,” please identify the percentage of each type within a given facility.**

See attached assessment document.

- b. **Building and/or classroom utilization rates (percentage of rooms used, and percent capacity.) Identify building/classroom usage rates for peak (M-F 10-3), off-peak (M-F, 8-10 a.m., 3-5 p.m.) evening, and weekend periods.**

The utilization rates for WCC classroom buildings for peak, off-peak, evening, and weekend time frames as defined by the capital outlay parameters. For purposes of calculating the utilization rate, the college determined for a given building and defined time period, the % of all classrooms which were utilized at least once during the defined time period. Note that some classrooms are used as labs which are available for faculty and students to use during open building hours.

Building	Peak	Off Peak	Evening	Weekend
	M-F 10am-3pm	M-F 8-10am M-F 3-5pm	M-Th 5-10pm	F 5-10pm Sa/Su 8am- 10pm
Business Education	100%	100%	100%	65%
Great Lakes Regional Training Center	29%	29%	29%	0%
Gunder Myran	95%	89%	82%	26%
Henry S. Landau Skilled Trades	60%	80%	100%	60%
Crane Liberal Arts & Science	90%	89%	90%	65%
Morris J. Lawrence	69%	69%	92%	77%
Occupational Education	95%	95%	95%	46%
Student Center	100%	100%	100%	33%
Technical & Industrial	92%	86%	78%	48%

- c. Mandated facility standards for specific programs, where applicable (i.e., federal/industry standards for laboratory, animal, or agricultural research facilities, hospitals use of industrial machinery, etc.);**

See attached assessment document.

- d. Functionality of existing structures and space allocation to program areas served;**

See attached assessment document.

- e. Replacement value of existing facilities (insured value of structures to the extent available);**

The replacement value of existing College facilities as of June 30, 2018, excluding land is \$331,891,017.

- f. Utility system condition (i.e., heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.);**

See attached assessment document.

- g. Facility infrastructure condition (i.e., roads, bridges, parking structures, lots, etc.);**

See attached assessment document.

- h. Adequacy of existing utilities and infrastructure systems to current and 5-year projected programmatic needs;**

See attached assessment document.

- i. Does the institution have an enterprise-wide energy plan? What are its goals? Have energy audits been completed on all facilities, if not, what is the plan/timetable for completing such audits?**

The College has a campus-wide energy plan with the goals of improving overall efficiency of the campus operations and reducing energy consumption and greenhouse gas inventories. While the College employs internal systems to measure the consumption and efficiencies of energy we will retain a professional engineering firm by FY 2021 to complete a campus-wide energy audit. Through the replacement of outdated and inefficient equipment combined with the use of technology, the College continues the campus-wide energy plan for savings in budget, greenhouse gas emissions, and improved sustainability.

- j. Land owned by the institution, and includes a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose**

The College currently owns 291 acres of land. This acreage provides the College with the capacity to expand in the future, if needed, but also serves as an “outdoor laboratory” with its wetlands and wildlife. The land is in a very desirable location, and could be sold, if necessary, subject to rezoning.

k. What portions of existing buildings, if any, are currently obligated to the State Building Authority and when are these State Building Authority leases set to expire.

The College currently has five buildings obligated to the State Building Authority for leases. These buildings include:

1. Business Education Building (BEB) in 1997. The lease expires in 2032.
2. Technology Education Building (GMB) in 2002. The lease expires in 2037.
3. Plumbers and Pipefitters Addition (GLRTC) in 2005. The lease expires in
4. 2040.
5. Skilled Trades Training Program Renovations (OEB) in 2012. The lease expires in 2052.
6. Skilled Trades Training Program Renovations (HLC) in 2012. The lease expires in 2052.

Deferred Maintenance Report

Updated September 2019
Facilities Management

Glossary

Current Replacement Value (CRV)

The CRV is the cost to construct a replacement building in today's dollars. The figure is based on the square footage of the current structure and the estimated current construction cost for that type of structure.

One Year Deferred Maintenance Backlog (1 YR DMB)

This is the value of projects that have been deferred and require completion in order to safely maintain facilities and related infrastructure for their current use. The 1 year DMB amounts shown are for items requiring immediate attention to fix critical problems.

Facilities Condition Index (FCI)

Simply put, the FCI is the current DMB divided by the CRV. The resulting number is compared against nationally accepted standards and used to determine the condition of the building, campus or college.

FCI < 5% = Good

FCI > 5% and < 10% = Fair

FCI > 10% = Poor

One Year DMB Excess

This represents the amount the DMB exceeds the APPA benchmark of a building with a 5% FCI - essentially the dollar amount to be spent immediately to reduce the DMB to attain the APPA rating of "Good". In situations where a building is in better than "Good" condition (FCI < 5%), the one year DMB excess is shown as zero.

Five Year Deferred Maintenance Backlog (5 Yr DMB)

Similar to the One Year DMB, the Five Year DMB represents the total value of projects that will require attention within the next five years to repair and/or replace problems items before they become critical.

Five Year DMB Excess

Similar to the One Year DMB Excess value, this amount represents the investment to bring the DMB in line with the APPA benchmark of 5% of the Current Replacement Value. In situations where a building is in better than "Good" condition - a bit more difficult over a five year span, the five year DMB excess is shown as zero.

FCI SUMMARY FOR ALL CAMPUS BUILDINGS

		2021-25	
	<u>Building</u>	<u>FCI</u>	<u>Rating</u>
1	Athletic Field House (AFH 027)	0.66%	Good
2	Business Education Building (BE 013)	1.26%	Good
3	Chemical Storage Building (CS 019)	12.55%	Poor
4	Crane LASB (LASB 002)	1.38%	Good
5	Energy Center (EC 017)	2.91%	Good
6	Family Education Building (FE 006)	6.01%	Fair
7	Great Lakes Regional Training Center (GL 024)	1.67%	Good
8	Gunder Myran Building (GM 022)	1.07%	Good
9	Hazardous Materials Building (HM 014)	7.53%	Poor
10	Health and Fitness Center (HFC 025)	2.57%	Good
11	Landau Skilled Trades Building (HL 028)	0.83%	Good
12	Maintenance Building (MB 012)	13.25%	Poor
13	Morris Lawrence Building (ML 011)	20.98%	Poor
14	Motorcycle Storage Building (MS 026)	2.54%	Good
15	Whitworth Occupational Education Building (OE 007)	5.39%	Fair
16	Parking Structure (PS 029)	1.01%	Good
17	Damon B. Flowers Building (DF 008)	5.17%	Fair
18	Pump House (Campus Utility Building CU 015)	1.92%	Good
19	Storage and Receiving Building (SRB 016)	1.23%	Good
20	Student Center Building (SC 004)	0.94%	Good
21	Technical and Industrial Building (TI 001)	1.41%	Good

Deferred Maintenance Report - Entire College

College Stats

Number of Buildings	21
Oldest Building	1970
Newest Building	2012
Avg. Building Age	23
Avg. Cost per S.F. (total = 1,201,820 s.f.)	\$276

Facilities Condition Index - Entire College 2021-25

	First Year Data					Five Year Data				
1,201,820	\$331,891,017	\$11,470,015	(\$5,124,535)	3.5%	Good	\$36,266,701	\$19,645,266	10.9%	\$6,637,820	\$13,891,161
TOTAL S.F.	CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Athletic Field House

Campus:	Main	Use Types:	Notes:
Bldg. No.:	AFH (027)	100% Athletics	
Building:	Athletic Field House		
Area (s.f.):	2,417		
Year Built:	2010		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	53%	\$256,202	0	\$0	1	\$2,562	
Roof	15%	\$72,510	0	\$0	3	\$2,175	Metal roof.
Glazing		\$0					None
Cladding	4%	\$19,336	2	\$387	5	\$967	Brick
HVAC	1%	\$4,834	3	\$145	4	\$193	
Plumbing	2%	\$9,668	2	\$193	5	\$483	Well pump system replaced due to failure and upgraded for more efficient system.
Primary/Secondary	4%	\$19,336	2	\$387	3	\$580	
Distribution	4%	\$19,336	0	\$0	1	\$193	
Lighting	1%	\$4,834	1	\$48	2	\$97	Outdoor lighting system upgraded to modern lighting control system.
Voice/Data	1%	\$4,834	0	\$0		\$0	
Ceilings	2%	\$9,668	1	\$97	2	\$193	
Walls	4%	\$19,336	1	\$193	2	\$387	
Doors	4%	\$19,336	1	\$193	5	\$967	
Floors	1%	\$4,834	1	\$48	5	\$242	
Bldg., Fire, ADA, Elevator	1%	\$4,834	1	\$48	2	\$97	
Immed. Site, Ext. Ltg., etc.	3%	\$14,502	10	\$1,450	3	\$435	
CRV Totals:	100%	\$483,400		\$3,190		\$9,571	

First Year Data					Five Year Data				
\$483,400	\$3,190	(\$20,980)	0.7%	Good	\$12,762	(\$11,408)	2.6%	\$9,668	\$12,220
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Business Education Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	BE (013)	15% Lab	
Building:	Business Education	25% Administration	
Area (s.f.):	41,673	60% Classroom	
Year Built:	1996		
Floors:	2		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	20%	\$2,098,424	0	\$0	5	\$104,921	Interior floor settlement causing tile to crack and loosen in corridor 142. Gypsum Board exterior soffits replaced with Driivit cementitious material.
Roof	5%	\$524,606	2	\$10,492	58	\$304,272	Original single ply EDPM ballast roof, in fair condition.
Glazing	4%	\$419,685	1	\$4,197	40	\$167,874	Original, no problems identified.
Cladding	7%	\$734,449	2	\$14,689	15	\$110,167	Brick/Precast. Minor efflorescence on surface of brick on west elevation of building. Exterior soffit along north and east elevations have been replaced.
HVAC	14%	\$1,468,897	2	\$29,378	5	\$73,445	Data center CRAC unit in need of replacement. Air balance issues to some rooms at ends of trunk runs. Sound issue complaints in some classrooms.
Plumbing	9%	\$944,291	2	\$18,886	5	\$47,215	Minor issues reported.
Primary/Secondary	5%	\$524,606	0	\$0	0	\$0	No reported problems.
Distribution	6%	\$629,527	0	\$0	0	\$0	No reported problems.
Lighting	5%	\$524,606	1	\$5,246	35	\$183,612	Stairway lighting to be upgraded this FY with retrofit LED lamps to eliminate the ballast.
Voice/Data	3%	\$314,764	0	\$0	0	\$0	No reported problems.
Ceilings	4%	\$419,685	2	\$8,394	5	\$20,984	Ceiling grid damaged at pull own screens when screens were mounted to grid. Screens are now hung from structure above.
Walls	4%	\$419,685	2	\$8,394	15	\$62,953	Wall finishes were moved away from the Zolotone finish to solid color for easier repair and maintenance.
Doors	3%	\$314,764	3	\$9,443	15	\$47,215	Exterior door should be considered for replacement in near future. Interior door hardware is due for upgrade.
Floors	4%	\$419,685	2	\$8,394	25	\$104,921	Quarry tile cracks in corridor 142 from floor settlement, otherwise no problems identified. Carpet was replaced in 2014 with rubber floor tile on the second floor.
Bldg., Fire, ADA, Elevator	4%	\$419,685	2	\$8,394	0	\$0	Fully sprinkled building; fire alarm system was upgraded to an addressable system in 2014; ADA compliant.
Immed. Site, Ext. Ltg., etc.	3%	\$314,764	2	\$6,295	5	\$15,738	Some exterior paving heaving along the southeast corner of the building potential tripping hazard. Additional exterior security camera is required to cover west portion of Parking lot #4
CRV Totals:	100%	\$10,492,122		\$132,201		\$1,243,316	

First Year Data					Five Year Data				
\$10,492,122	\$132,201	(\$392,405)	1.3%	Good	\$1,375,517	\$850,911	13.1%	\$209,842	\$484,946
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Chemical Storage

Campus:	Main	Use Types:	100% Chemical Storage	Notes:	Prefabricated unit.
Bldg. No.:	CS (019)				
Building:	Chemical Storage				
Area (s.f.):	193				
Year Built:	2001				
Floors:	1				

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	60%	\$17,370	10	\$1,737	15	\$2,606	Self contained prefabricated storage unit. Roof, walls and floors are integral parts of structure. Exterior paint condition an ongoing issue.
HVAC	20%	\$5,790	25	\$1,448	50	\$2,895	Replace ventilation system.
Plumbing	5%	\$1,448	0	\$0	0	\$0	Spill containment drain system.
Primary/Secondary	2%	\$579	5	\$29	10	\$58	Primary: none. Secondary: minimal, PM and parts replacement.
Distribution	2%	\$579	5	\$29	15	\$87	Minimal, no reported problem.
Lighting	2%	\$579	5	\$29	10	\$58	Minimal explosion-proof fixtures, no reported problems.
Doors	5%	\$1,448	25	\$362	25	\$362	Door hardware needs to be upgraded including single door cyclinder cores.
Bldg., Fire, ADA, Elevator	2%	\$579	0	\$0	0	\$0	Not sprinkled.
Immed. Site, Ext. Ltg., etc.	2%	\$579	0	\$0	0	\$0	Minimal, no reported problems.
CRV Totals:	100%	\$28,950		\$3,633		\$6,065	

First Year Data					Five Year Data				
\$28,950	\$3,633	\$2,186	12.6%	Poor	\$9,698	\$8,251	33.5%	\$579	\$2,519
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Crane Liberal Arts and Science Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	LASB (002)	10% Auditorium	Major addition in 1999. Major lab remodeling in 2003
Building:	Liberal Arts/Science	15% Administration	
Area (s.f.):	180,757	30% Lab	
Year Built:	1970	45% Classroom	
Floors:	4		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	19%	\$10,041,855	0	\$0	1	\$100,419	Cast-in-place concrete showing signs of cracks admitting water into building on north and south elevations. Waterproofing was replaced in 2014. Rusting of pre-cast for addition is growing and becoming unsightly. Original building
Roof	5%	\$2,642,593	0	\$0	11	\$290,685	Last re-roofing was done during the 2004 renovations for the original 1970 building. The 1999 addition has its original ballasted roof.
Glazing	4%	\$2,114,075	1	\$21,141	5	\$105,704	Windows have been replaced on all three floors of the original section of building.
Cladding	8%	\$4,228,149	1	\$42,281	7	\$295,970	Brick, precast concrete. Precast showing rust damage in 1999 addition. Funding source being investigated. Precast concrete sills were replaced in 2015-2017.
HVAC	14%	\$7,399,261	1	\$73,993	8	\$591,941	Air handling systems in the original 1970 building are 17 year old and in good working order. Some temperature control issues in the 3 floors of the addition. Lab fume hoods to receive new flow controls and air sampling
Plumbing	10%	\$5,285,187	1	\$52,852	5	\$264,259	Laboratory plumbing, restroom plumbing, and general plumbing throughout the original 1970 building have been replaced in the last 13 years and have no reported problems.
Electrical Systems	6%	\$3,171,112	1	\$31,711	3	\$95,133	Original transformer and switchgear were replaced in 2015.
Electrical Distribution	4%	\$2,114,075	1	\$21,141	3	\$63,422	No reported problems.
Lighting	4%	\$2,114,075	1	\$21,141	2	\$42,281	No reported problems.
Voice/Data	4%	\$2,114,075	1	\$21,141	1	\$21,141	No reported problems.
Ceilings	4%	\$2,114,075	1	\$21,141	5	\$105,704	Some tiles damaged or stained due to water.
Walls	4%	\$2,114,075	0	\$0.00	5	\$105,704	Mold and asbestos has been abated on the first floor in 2014.
Doors	2%	\$1,057,037	2	\$21,141	5	\$52,852	Door hardware needs to be upgraded. Some wood doors must be replaced.
Floors	5%	\$2,642,593	14	\$369,963	30	\$792,778	First floor tiled corridors continue to have cracking and popping of tile due to sub-floor movement.
Bldg., Fire, ADA, Elevator	4%	\$2,114,075	0	\$0	0	\$0	Fully sprinkled building; original fire alarm system with horns and pull, and smoke detectors in ceiling. Toilet rooms updated in 1999 to comply with ADA. Elevator replaced in 2000.
Immed. Site, Ext. Ltg., etc.	3%	\$1,585,556	2	\$31,711	5	\$79,278	Concrete sidewalk closetest to CLASB was replace last year.
CRV Totals:	100%	\$52,851,867		\$729,356		\$3,007,271	

First Year Data					Five Year Data				
\$52,851,867	\$729,356	(\$1,913,238)	1.4%	Good	\$3,736,627	\$1,094,034	7.1%	\$1,057,037	\$1,804,362.75
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Energy Center

Campus:	Main	Use Types:	Notes:
Bldg. No.:	EC (017)	95% Power House	
Building:	Energy Center	5% Offices	
Area (s.f.):	15,724		
Year Built:	1999		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	10%	\$933,574	8	\$74,686	8	\$74,686	minor cracks in foundation walls
Roof	0%	\$0	0	\$0	0	\$0	Basement space, no roof.
HVAC	60%	\$5,601,443	2	\$112,029	7	\$392,101	Primary heating pumps replaced Small boiler to be evaluated for replacement or supplemental heating appliance. Boiler controller package needs to be replaced.
Plumbing	10%	\$933,574	7	\$65,350	10	\$93,357	No reported problems.
Primary/Secondary	12%	\$1,120,289	1	\$11,203	5	\$56,014	Main switchgear to entire campus, no reported problems.
Distribution	1%	\$93,357	3	\$2,801	5	\$4,668	No reported problems.
Lighting	1%	\$93,357	0	\$0	5	\$4,668	Lighting was upgraded to LED in 2015.
Voice/Data	1%	\$93,357	0	\$0	1	\$934	No reported problems.
Ceilings	1%	\$93,357	1	\$934	3	\$2,801	Some ceiling tile damage reported.
Walls	1%	\$93,357	2	\$1,867	2	\$1,867	Some wall damage.
Doors	1%	\$93,357	1	\$934	10	\$9,336	Some damage to doors and hardware needs to be replaced. Door hardware needs to be upgraded.
Floors	1%	\$93,357	1	\$934	45	\$42,011	Epoxy floor finish is 14 years old and needs to be replaced.
Bldg., Fire, ADA, Elevator	1%	\$93,357	1	\$934	5	\$4,668	No reported problems.
Immed. Site, Ext. Ltg., etc.	0%	\$0	0	\$0	0	\$0	Underground - n/a.
CRV Totals:	100%	\$9,335,739		\$271,670		\$687,110	

First Year Data					Five Year Data				
\$9,335,739	\$271,670	(\$195,117)	2.9%	Good	\$958,780	\$491,993	10.3%	\$186,715	\$378,471
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Family Education Building

Campus:	Main	Use Types:	100% Child Care	Notes:
Bldg. No.:	FE (006)			
Building:	Family Education			
Area (s.f.):	8,923			
Year Built:	1980			
Floors:	1			

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	021-25 Cost	
Structure	18%	\$310,633	5	\$15,532	10	\$31,063	Potential settlement causing cracking in gypsum board walls sporadically throughout building - mostly at clearstory windows.
Roof	6%	\$103,544	5	\$5,177	5	\$5,177	Roof replaced in 2018. 80% roof is shingled; 20% is fully adhered single ply EDPM.
Glazing	5%	\$86,287	10	\$8,629	50	\$43,143	Flashing at clearstory windows leaks depending on direction of wind driven rain. Storefront aluminum entrance needs to be modified.
Cladding	10%	\$172,574	10	\$17,257	50	\$86,287	Metal panels and brick. Metal panel finish peeling, needs to be replaced Steel plate lintel rusting at entrance opening. Brick spalling at site walls.
HVAC	18%	\$310,633	3	\$9,319	15	\$46,595	HVAC system was upgraded in 2004 and again in 2013. No problems reported.
Plumbing	7%	\$120,802	15	\$18,120	30	\$36,241	Hard water has damaged water heater, faucets and flush valves; water softener needed.
Primary/Secondary	5%	\$86,287	0	\$0	0	\$0	Primary: none in building. Secondary: no reported problems.
Distribution	3%	\$51,772	2	\$1,035	10	\$5,177	Distribution system needs to be upgraded
Lighting	4%	\$69,030	5	\$3,451	25	\$17,257	Lighting system is in need of upgrade to LED fixtures for energy efficiency and reliability.
Voice/Data	3%	\$51,772	0	\$0	10	\$5,177	No reported problems.
Ceilings	4%	\$69,030	10	\$6,903	40	\$27,612	Many gypsum board ceilings limit access to equipment above. Some cracking in gypsum board ceilings near clearstory windows.
Walls	4%	\$69,030	5	\$3,451	20	\$13,806	Gypsum board on wood stud framing. Some cracking in gypsum board at windows.
Doors	3%	\$51,772	5	\$2,589	50	\$25,886	Exterior classroom doors replaced with fiberglass units. Have not been able to make main entrance door ADA automatic assist as no headroom at top of door for hardware. Interior doors are knob type. Door hardware needs to be upgraded. Hardware needs continued repair lately.
Floors	3%	\$51,772	2	\$1,035	25	\$12,943	Carpet was replaced in 2014.
Bldg., Fire, ADA, Elevator	4%	\$69,030	5	\$3,451	20	\$13,806	Minimal smoke detectors; building is not sprinkled. Fire alarm system was upgraded in 2014. There was an upgrade for exit and emergency lighting. Toilet rooms not ADA compliant.
Immed. Site, Ext. Ltg., etc.	3%	\$51,772	15	\$7,766	50	\$25,886	Entrance walkway was replaced in 2018 to improve pedestrian safety.
CRV Totals:	100%	\$1,725,738		\$103,717		\$396,057	

First Year Data					Five Year Data				
\$1,725,738	\$103,717	\$17,430	6.0%	Fair	\$499,774	\$413,487	29.0%	\$34,515	\$134,470
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Great Lakes Regional Training Center

Campus:	Main	Use Types:	Notes:
Bldg. No.:	GL (024)	50% Classrooms	This building connects directly to the Occupational Education Building
Building:	Great Lakes RTC	30% Labs	
Area (s.f.):	21,946	10% Office	
Year Built:	2003	10% Computer labs	
Floors:	2		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	21-25 Cost	
Structure	18%	\$1,134,490	0	\$0	5	\$56,724	Exterior concrete stairs are deteriorating and need to be repaired. Stairs were repaired in 2014
Roof	6%	\$378,163	2	\$7,563	20	\$75,633	Roof leaks reported
Glazing	5%	\$315,136	0	\$0	3	\$9,454	
Cladding	10%	\$630,272	0	\$0	2	\$12,605	
HVAC	18%	\$1,134,490	3	\$34,034.70	20	\$226,898	HVAC system was retro-commissioned and temperature controls replaced in 2015. Roof top unit needs to be replaced.
Plumbing	7%	\$441,191	2	\$8,824	20	\$88,238	Storm and sanitary lift station pumps scheduled to be replaced.
Primary/Secondary	5%	\$315,136	0	\$0	5	\$15,757	
Distribution	3%	\$189,082	1	\$1,891	5	\$9,454	
Lighting	4%	\$252,109	20	\$50,422	15	\$37,816	No reported problems.
Voice/Data	3%	\$189,082	0	\$0	2	\$3,782	
Ceilings	4%	\$252,109	0	\$0	5	\$12,605	Some ceiling tiles are water damaged and need to be replaced.
Walls	4%	\$252,109	0	\$0	5	\$12,605	No reported problems.
Doors	3%	\$189,082	0	\$0	5	\$9,454	Door hardware needs to be upgraded.
Floors	3%	\$189,082	0	\$0	15	\$28,362	Carpet in some spaces need to be replaced
Bldg., Fire, ADA, Elevator	4%	\$252,109	1	\$2,521	5	\$12,605	No reported problems.
Immed. Site, Ext. Ltg., etc.	3%	\$189,082	0	\$0	5	\$9,454	Concrete stair and ramp replaced in 2018
CRV Totals:	100%	\$6,302,722		\$105,255		\$621,448	

First Year Data					Five Year Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE
\$6,302,722	\$105,255	(\$209,881)	1.7%	Good	\$726,704	\$411,568	11.5%	\$126,054	\$271,395

Deferred Maintenance Detail Report - Gunder Myran Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	GM (022)	10% faculty offices	5th level is a mechanical penthouse
Building:	Gunder Myran Building	30% Library	
Area (s.f.):	139,390	40% classrooms	
Year Built:	2002	20% computer labs	
Floors:	5		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	18%	\$9,455,776	0	\$0	3	\$283,673	No reported problems
Roof	5%	\$2,626,605	2	\$52,532	5	\$131,330	Minor flashing and roof curb deterioration
Glazing	5%	\$2,626,605	1	\$26,266	1	\$26,266	No reported problems
Cladding	9%	\$4,727,888	0	\$0	1	\$47,279	Joint sealant replacement required
HVAC	15%	\$7,879,814	2	\$157,596	10	\$787,981	Vibration and isolation springs for air-handling equipment need to be replaced. VFD's need to be replaced. Humidifiers need to be replaced. A/C unit replaced in Telecom closet to address temperature issues.
Plumbing	10%	\$5,253,209	2	\$105,064	3	\$157,596	Temperature issue in cold water feed to photography lab.
Primary/Secondary	6%	\$3,151,925	0	\$0	1	\$31,519	Electical tranformer replaced in 208.
Electrical Distribution	4%	\$2,101,284	2	\$42,026	2	\$42,026	No reported problems
Lighting	4%	\$2,101,284	1	\$21,013	7	\$147,090	Emergency lighting replacement required Atrium lighting in library needs replacement with LED fixtures.
Voice/Data	4%	\$2,101,284	0	\$0	1	\$21,013	No reported problems
Ceilings	4%	\$2,101,284	1	\$21,013	2	\$42,026	Stained ceiling tiles throughout
Walls	4%	\$2,101,284	1	\$21,013	2	\$42,026	Damaged column corners; wall protection program in place;
Doors	3%	\$1,575,963	2	\$31,519	2	\$31,519	Minimal door hardware replacement; some doors damaged. Door hardware needs to be upgraded .
Floors	4%	\$2,101,284	2	\$42,026	5	\$105,064	Carpeting needs to be replaced throughout. Carpet on the 2nd floor replaced in 2013. 3rd floor corridors converted to rubber flooring material.
Bldg., Fire, ADA, Elevator	2%	\$1,050,642	1	\$10,506	2	\$21,013	Elevator load tests required; overhaul
Immed. Site, Ext. Ltg., etc.	3%	\$1,575,963	2	\$31,519	3	\$47,279	Repairs to parking lot 6; fix underground lighting break.
CRV Totals:	100%	\$52,532,091		\$562,093		\$1,964,700	

First Year Data					Five Year Data				
\$52,532,091	\$562,093	(\$2,064,511)	1.1%	Good	\$2,526,794	(\$99,811)	4.8%	\$1,050,642	\$1,556,000.53
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Hazardous Materials Shed

Campus:	Main	Use Types:	Notes:
Bldg. No.:	HMS (014)	100% HazMat Storage	
Building:	Hazardous Materials Building		
Area (s.f.):	564		
Year Built:	1997		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	25%	\$21,150	1	\$212	15	\$3,173	Metal roof showing signs of corrosion and should be painted.
Roof	20%	\$16,920	2	\$338	50	\$8,460	Minor leaks reported.
Glazing	0%	\$0	0	\$0	0	\$0	None
Cladding	20%	\$16,920	2	\$338	25	\$4,230	Metal siding showing signs of rust.
HVAC	0%	\$0	0	\$4,000	0	\$0	Plans to add power venilation.
Plumbing	0%	\$0	0	\$0	0	\$0	None
Primary/Secondary	3%	\$2,538	1	\$25	10	\$254	Primary: none. Secondary: no reported problems.
Distribution	0%	\$0	5	\$0	10	\$0	Minimal, no reported problems.
Lighting	4%	\$3,384	5	\$169	25	\$846	Minimal, maybe too low light level.
Voice/Data	0%	\$0	0	\$0	0	\$0	None
Ceilings	0%	\$0	0	\$0	0	\$0	None
Walls	0%	\$0	0	\$0	0	\$0	No interior partitions.
Doors	12%	\$10,152	10	\$1,015	50	\$5,076	Door hardware needs to be upgraded including all door cyclinder cores.
Floors	12%	\$10,152	1	\$102	10	\$1,015	Floor needs to be re-sealed.
Bldg., Fire, ADA, Elevator	0%	\$0	0	\$0	0	\$0	None
Immed. Site, Ext. Ltg., etc.	4%	\$3,384	5	\$169	50	\$1,692	Minimal, no reported problems.
CRV Totals:	100%	\$84,600		\$6,369		\$24,746	

First Year Data					Five Year Data				
\$84,600	\$6,369	\$2,139	7.5%	Poor	\$31,114	\$0	0.0%	\$1,692	\$7,915
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Health and Fitness Center

Campus:	Main	Use Types:	Notes:
Bldg. No.:	HFC (025)	5% Administrative Offices	
Building:	Health & Fitness Center	2% conference	
Area (s.f.):	76,831	10% Mechanical	
Year Built:	2007		
Floors:			

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	17%	\$4,824,428	0	\$0	1	\$48,244	Precast concrete bowing, cracking. Repairs have been addressed
Roof	7%	\$1,986,529	0	\$0	2	\$39,731	No reported problems.
Glazing	5%	\$1,418,949	0	\$0	3	\$42,568	No reported problems.
Cladding	7%	\$1,986,529	0	\$0	1	\$19,865	Exterior brick showing signs of cracking and movement.
HVAC	16%	\$4,540,638	1	\$45,406	3	\$136,219	Energy Recovery Unit #3 needs fan motor replacement.
Plumbing	8%	\$2,270,319	0	\$0	4	\$90,813	Steam generators for steam room need to be replaced. Pool sand filters need to be replaced.
Primary/Secondary	5%	\$1,418,949	0	\$0	5	\$70,947	No reported problems.
Distribution	4%	\$1,135,160	0	\$0	7	\$79,461	No reported problems.
Lighting	4%	\$1,135,160	10	\$113,516	0	\$0	Minor problems addressed with upgrades of LED lighting in majority of spaces and new lighting over front desk area.
Voice/Data	1%	\$283,790	1	\$2,838	0	\$0	No reported problems.
Ceilings	2%	\$567,580	1	\$5,676	3	\$17,027	Minor problems reported.
Walls	2%	\$567,580	1	\$5,676	5	\$28,379	Minor problems reported.
Doors	3%	\$851,370	1	\$8,514	2	\$17,027	Door hardware needs to be upgraded including all door cyclinder cores. Locker room locks upgraded to better design.
Floors	2%	\$567,580	20	\$113,516	15	\$85,137	Carpet on 2nd floor replaced in 2017; fitness floor carpet replaced in 2016; locker room carpet replaced in 2017.
Bldg., Fire, ADA, Elevator	4%	\$1,135,160	0	\$0	2	\$22,703	No reported problems.
Pool Equipment	10%	\$2,837,899	15	\$425,685	10	\$283,790	The TMI water balance control unit needs to be serviced and/or replaced. Family locker room showers were renovated. Pool handrails need to be replaced. Trench drains need to be replaced. Heat exchangers in pool equipment room have been replaced.
Immed. Site, Ext. Ltg., etc.	3%	\$851,370	1	\$8,514	10	\$85,137	Platform tennis deck surface needs to be refinished.
CRV Totals:	100%	\$28,378,989		\$729,340		\$1,067,050	

First Year Data					Five Year Data				
\$28,378,989	\$729,340	(\$689,609)	2.6%	Good	\$1,796,390	\$377,441	6.3%	\$567,580	\$926,857.79
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Henry S. Landau Skilled Trades Building

Campus:	Main	Use Types:	100% Vo/tech	Notes:	Major Renovations: Capital Outlay project completed: October 2011
Bldg. No.:	HL (028)				
Building:	Henry S. Landau Skilled Trades Building				
Area(s.f.):	7,362				
Year Built:	2012				
Floors:	1				

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	19%	\$208,086	0	\$0	0	\$0	No reported problems.
Roof	13%	\$142,374	2	\$2,847	2	\$2,847	No reported problems.
Glazing	2%	\$21,904	0	\$0	5	\$1,095	No reported problems.
Cladding	15%	\$164,278	0	\$0	2	\$3,286	No reported problems.
HVAC	15%	\$164,278	2	\$3,286	5	\$8,214	Dust collection system is due for an overhaul.
Plumbing	4%	\$43,808	1	\$438	0	\$0	No reported problems.
Primary/Secondary	2%	\$21,904	0	\$0	0	\$0	No reported problems.
Distribution	4%	\$43,808	0	\$0	0	\$0	No reported problems.
Lighting	4%	\$43,808	1	\$438	2	\$876	No reported problems.
Voice/Data	2%	\$21,904	0	\$0	0	\$0	No reported problems.
Ceilings	1%	\$10,952	0	\$0	2	\$219	No reported problems.
Walls	4%	\$43,808	0	\$0	2	\$876	No reported problems.
Doors	4%	\$43,808	2	\$876	2	\$876	Door hardware needs to be upgraded.
Floors	4%	\$43,808	2	\$876	2	\$876	No reported problems.
Bldg., Fire, ADA, Elevator	4%	\$43,808	0	\$0	0	\$0	No reported problems.
Immed. Site, Ext. Ltg., etc.	3%	\$32,856	1	\$329	2	\$657	No reported problems.
CRV Totals:	100%	\$1,095,188		\$9,090		\$19,823	

First Year Data					Five Year Data				
\$1,095,188	\$9,090	(\$45,669)	0.8%	Good	\$28,913	(\$25,846)	2.6%	\$21,904	\$27,686
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Maintenance Building

Campus:	Main	Use Types:	100% Maintenance	Notes:	With mezzanine above east half of building and a 5-door garage addition at west end.
Bldg. No.:	MB (012)				
Building:	Maintenance Building				
Area (s.f.):	15,356				
Year Built:	1992				
Floors:	1				

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	2021 Cost	2019 Cost	1-5 Yrs	2021-25 Cost	
Structure	20%	\$303,998	5	\$15,200	15	\$45,600	Rusting at bases of steel columns at salt storage area.
Roof	10%	\$151,999	10	\$15,200	50	\$76,000	Minor leaks in some areas.
Glazing	0%	\$0	0	\$0	0	\$0	None
Cladding	10%	\$151,999	15	\$22,800	30	\$45,600	Rusting around various area of building perimeter at base.
HVAC	15%	\$227,999	20	\$45,600	50	\$113,999	HVAC units need to be replaced. Should be moved to centralized rooftop unit. BAS should be included.
Plumbing	9%	\$136,799	15	\$20,520	25	\$34,200	Sanitary sewer drains, trench drains and oil interceptor replaced in 2018.
Primary/Secondary	6%	\$91,199	5	\$4,560	50	\$45,600	Primary: none. Secondary: no reported problems. Three phase power should be installed.
Distribution	5%	\$76,000	20	\$15,200	50	\$38,000	Electrical service needs to be upgraded
Lighting	5%	\$76,000	20	\$15,200	25	\$19,000	Lighting upgraded to LED in unconditioned storage in 2016 and mechanics area in 2012.
Voice/Data	2%	\$30,400	0	\$0	0	\$0	No reported problems.
Ceilings	0%	\$0	0	\$0	0	\$0	None
Walls	4%	\$60,800	10	\$6,080	25	\$15,200	No reported problems.
Doors	4%	\$60,800	20	\$12,160	30	\$18,240	Exterior doors don't align properly and bind. Door to salt storage area rusting, won't close completely. Doors and hardware need to be upgraded including all door cyclinder cores.
Floors	4%	\$60,800	15	\$9,120	50	\$30,400	No reported problems.
Bldg., Fire, ADA, Elevator	4%	\$60,800	20	\$12,160	25	\$15,200	No reported problems.
Immed. Site, Ext. Ltg., etc.	2%	\$30,400	25	\$7,600	50	\$15,200	No reported problems.
CRV Totals:	100%	\$1,519,991		\$201,399		\$512,237	

First Year Data					Five Year Data				
\$1,519,991	\$201,399	\$125,399	13.3%	Poor	\$713,636	\$637,636	47.0%	\$30,400	\$173,127
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Morris Lawrence Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	ML (011)	10% Administration	Original building, with 2 additions. A 1,365 s.f. storage addition was completed in 2013.
Building:	Morris Lawrence	40% Auditorium	
Area (s.f.):	72,789	50% Classroom	
Year Built:	1990		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	18%	\$4,840,705	15	\$726,106	5	\$242,035	Settlement caused sanitary line under building to sag. Condition has been corrected. Cracks in concrete and block walls possibly caused by settlement. Exposed structural steel under skylight at each entrance is rusting, needs to be repainted. Exterior columns at each entrance, some cracking, efflorescence on brick surfaces. Rust from rebar showing through exposed beams at each entrance. Slabs in mechanical room don't slope to drain.
Roof	7%	\$1,882,496	30	\$564,749	10	\$188,250	Original roof was replaced in 2005. Firing range roof needs to be replaced. Flashing needs to be replaced.
Glazing	5%	\$1,344,640	25	\$336,160	8	\$107,571	Glazed curtain wall at main lobby has leaked in the past and been repaired. Future leaks are anticipated. Glazing along 104 & 106 office suites is scheduled for replacement during major renovation by 2021
Cladding	7%	\$1,882,496	5	\$94,125	2	\$37,650	Precast/brick. Water is getting into cavity between brick and block, possibly through wind driven rain through roof flashing, or other openings, and not weeping back out causing efflorescence in some areas and potential mold.
HVAC	16%	\$4,302,849	30	\$1,290,855	40	\$1,721,140	Original boilers were replaced three new condensing boilers. Firing range boiler and AHU 1 are being replaced. Remaining three will be done during major renovation completed by 2021 Chillers were replaced in 2016
Plumbing	8%	\$2,151,424	15	\$322,714	8	\$172,114	Plumbing lines are both galvanized and copper. Corrosion damage at joints from hard-untreated water, causing leaking. Water softener at end of life, beginning to need more than normal maintenance.
Primary/Secondary	5%	\$1,344,640	20	\$268,928	8	\$107,571	Primary: power supply is adequate. One transformer replaced recently. Secondary: no identified issues.
Distribution	4%	\$1,075,712	15	\$161,357	65	\$699,213	Not enough power to seminar rooms, conference and lobby space. Seminar rooms will have upgrades to power during renovations.
Lighting	4%	\$1,075,712	50	\$537,856	12	\$129,085	Original. Conversion to LED in Towsley Auditorium. Canned track lighting fixtures upgraded to LED lamps. Energy efficient lighting will be included in renovation.
Voice/Data	4%	\$1,075,712	2	\$21,514	2	\$21,514	No identified issues.
Ceilings	4%	\$1,075,712	50	\$537,856	2	\$21,514	Suspended lay-in and gypsum board ceiling show minor damage from previous leaking through roof flashing.
Walls	4%	\$1,075,712	25	\$268,928	80	\$860,570	Vinyl wall covering recently replaced in some areas with Acrovyn wall covering.

Deferred Maintenance Detail Report - Morris Lawrence Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	ML1 (011)	10% Administration	Original building, with 2 additions. A 1,365 s.f. storage addition was completed in 2013.
Building:	Morris Lawrence	40% Auditorium	
Area (s.f.):	72,789	50% Classroom	
Year Built:	1990		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:			Notes:	
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs		2021-25 Cost
Doors	3%	\$806,784	25	\$201,696	5	\$40,339	Exterior door hardware wearing out needing more maintenance. Door hardware needs to be upgraded. Sliding doors failing on regular basis, due partially to orientation. Controls need to be repaired or replaced. Interior doors have lock hardware assembly failures. Exterior sliding doors should be replaced.
Bldg., Fire, ADA, Elevator	4%	\$1,075,712	10	\$107,571	5	\$53,786	Door hardware has knobs instead of lever handles. Building fully sprinkled. Fire alarm system is combination of new and existing.
Immed. Site, Ext. Ltg., etc.	3%	\$806,784	0	\$0	70	\$564,749	Exterior pavement at east entrance heaved up; holding water at entrance doors; potential tripping hazard.
CRV Totals:	99%	\$26,623,878		\$5,642,111		\$4,967,101	

First Year Data					Five Year Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE
\$26,892,806	\$5,642,111	\$4,297,470	21.0%	Poor	\$10,609,212	\$9,264,572	39.5%	\$537,856	\$2,659,699

Deferred Maintenance Detail Report - Motorcycle Storage

Campus:	Main	Use Types:	Notes:
Bldg. No.:	MS (026)	100% Storage	
Building:	Motorcycle Storage		
Area (s.f.):	871		
Year Built:	2008		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	27%	\$35,274	2	\$705	10	\$3,527	No reported problems.
Roof	27%	\$35,274	2	\$705	5	\$1,764	Asphalt shingles, no reported problems.
Glazing	0%	\$0	0	\$0	0	\$0	None
Cladding	27%	\$35,274	3	\$1,058	5	\$1,764	
HVAC	0%	\$0	0	\$0	0	\$0	None
Plumbing	0%	\$0	0	\$0	0	\$0	None
Primary/Secondary	3%	\$3,919	0	\$0	0	\$0	Primary: none. Secondary: Minimal, no reported problems.
Distribution	3%	\$3,919	0	\$0	2	\$78	
Lighting	3%	\$3,919	15	\$588	0	\$0	Interior lighting is needed.
Voice/Data	0%	\$0	0	\$0	0	\$0	None
Ceilings	0%	\$0	0	\$0	0	\$0	None
Walls	0%	\$0	0	\$0	0	\$0	No interior partitions.
Doors	10%	\$13,064	2	\$261	5	\$653	Pedestrian and overhead door, no reported problems.
Floors	0%	\$0	0	\$0	0	\$0	
Bldg., Fire, ADA, Elevator	0%	\$0	0	\$0	0	\$0	None
Immed. Site, Ext. Ltg., etc.	0%	\$0	10	\$0	10	\$0	None
CRV Totals:	100%	\$130,644		\$3,318		\$7,786	

First Year Data					Five Year Data				
\$130,644	\$3,318	(\$3,214)	2.5%	Good	\$11,105	\$4,573	8.5%	\$2,613	\$4,834
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Larry L. Whitworth Occupational Education Building

Campus:	Main	Use Types:		Notes:	
Bldg. No.:	OE (007)		10% Administration		With partial mezzanine, with Auto Service addition.
Building:	Occupational Education		40% Vo/tech		Major Renovations completed October 2011.
Area (s.f.):	136,432		50% Classroom		
Year Built:	1980				
Floors:	1				

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	20%	\$6,316,110	5	\$315,805	0	\$0	Some cracking of steps due to settlement, repairs are funded.
Roof	5%	\$1,579,027	8	\$126,322	3	\$47,371	No reported problems.
Glazing	3%	\$947,416	4	\$37,897	3	\$28,422	Some minimal moisture/air penetration through original glazing mostly at southwest corner of building. The windows need to be replaced.
Cladding	7%	\$2,210,638	3	\$66,319	2	\$44,213	Brick and precast. Brick cladding was spalling at face. Recent repairs include brick replacement and tuck pointing.
HVAC	16%	\$5,052,888	5	\$252,644	13	\$656,875	New Energy Recovery Units installed in penthouse of original (1981) building. However, Auto Center addition of 1990 HVAC units are original and need to be replaced. The HVAC units in the demo labs are scheduled to be replaced in FY 23
Plumbing	9%	\$2,842,249	7	\$198,957	2	\$56,845	Solar panels and related hot water storage tank needs to be repaired.
Primary/Secondary	6%	\$1,894,833	2	\$37,897	0	\$0	No reported problems.
Distribution	4%	\$1,263,222	7	\$88,426	3	\$37,897	No reported problems.
Lighting	4%	\$1,263,222	7	\$88,426	1	\$12,632	No reported problems.
Voice/Data	3%	\$947,416	1	\$9,474	0	\$0	No reported problems.
Ceilings	4%	\$1,263,222	2	\$25,264	0	\$0	No reported problems.
Walls	5%	\$1,579,027	5	\$78,951	0	\$0	No reported problems.
Doors	3%	\$947,416	8	\$75,793	2	\$18,948	Exterior doors: some hardware deterioration. Door hardware needs to be upgraded. Interior doors: all wood doors have been replaced with hollow metal doors with faux wood finish. Overhead doors in Auto Center need to be replaced.
Floors	4%	\$1,263,222	16	\$202,116	2	\$25,264	Most floor are VCT and epoxy, offices are carpet. Concrete flooring in Auto Center and mechanical rooms are scheduled to receive epoxy coatings.
Bldg., Fire, ADA, Elevator	4%	\$1,263,222	4	\$50,529	2	\$25,264	Toilets have been upgraded to meet intent of ADA. Door hardware is not ADA compliant. Building is 100% sprinkled. Fire alarm system is up to date with strobes, pulls and duct detectors.
Immed. Site, Ext. Ltg., etc.	3%	\$947,416	5	\$47,371	2	\$18,948	North entrance concrete has been replaced and low course of brick replaced as needed and tuck pointed.
CRV Totals:	100%	\$31,580,550		\$1,702,192		\$972,681	

First Year Data					Five Year Data				
\$31,580,550	\$1,702,192	\$123,164	5.4%	Fair	\$2,674,873	\$1,095,845	8.5%	\$631,611	\$1,166,586
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Parking Structure

Campus:	Main	Use Types:		Notes:	
Bldg. No.:	PS (029)		3% Administration		
Building:	Parking Structure		97% Parking		Opened January 2012
Area (s.f.):	167,303				
Year Built:	2012				
Floors:	4				

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	70%	\$13,496,700	0.5	\$67,484	1.5	\$202,451	5 year maintenance overhaul performed by qualified contractor as prescribed by architect.
Roof	2%	\$385,620	5	\$19,281	20	\$77,124	Leaking issue in Public Safety vegetative roof.
Glazing	1%	\$192,810	0	\$0	5	\$9,641	No reported problems.
Cladding	7%	\$1,349,670	2	\$26,993	5	\$67,484	No reported problems.
HVAC	5%	\$964,050	2	\$19,281	20	\$192,810	Minor air flow and temperature issues reported.
Plumbing	1%	\$192,810	1	\$1,928	15	\$28,922	Some toilet drainage reported.
Primary/Secondary	3%	\$578,430	1	\$5,784	0	\$0	No reported problems.
Distribution	1%	\$192,810	0	\$0	0	\$0	No reported problems.
Lighting	2%	\$385,620	5	\$19,281	20	\$77,124	Multiple LED fixtures have to be replaced due to fixture mounted occupancy sensor issues.
Voice/Data	1%	\$192,810	0	\$0	0	\$0	No reported problems.
Ceilings	1%	\$192,810	0	\$0	0	\$0	No reported problems.
Walls	1%	\$192,810	0	\$0	0	\$0	No reported problems.
Doors	1%	\$192,810	3	\$5,784	10	\$19,281	No reported problems.
Floors	1%	\$192,810	5	\$9,641	5	\$9,641	Some deterioration of deck waterproofing over occupied areas needs to be replaced. Corrected during 5 year matenance repairs.
Bldg., Fire, ADA, Elevator	1%	\$192,810	0	\$0	25	\$48,203	No reported problems.
Immed. Site, Ext. Ltg., Security cameras, etc.	2%	\$385,620	5	\$19,281	5	\$19,281	No reported problems.

CRV Totals:	100%	\$19,281,000		\$194,738		\$751,959	
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First Year Data					Five Year Data				
\$19,281,000	\$194,738	(\$769,312)	1.0%	Good	\$946,697	(\$17,353)	4.9%	\$385,620	\$574,959
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Plant Operations Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	DF (008)	100% Administration	
Building:	Damon B. Flowers		
Area (s.f.):	7,368		
Year Built:	1983		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	20%	\$326,845	4	\$13,074	20	\$65,369	Suspected settlement causing cracking to walls and floor at locker/lounge end of building.
Roof	5%	\$81,711	2	\$1,634	10	\$8,171	Roofing, flashing, fascia, and soffit replaced in 2016.
Glazing	2%	\$32,685	5	\$1,634	2	\$654	No reported problems.
Cladding	6%	\$98,054	5	\$4,903	2	\$1,961	Exterior brick had issue with spauling of face. Recent repairs corrected issue with brick replacement and tuck pointing.
HVAC	24%	\$392,214	8	\$31,377	10	\$39,221	Six of the seven air handling units were replaced in 2002. Restroom/lockerroom HVAC unit replaced, duct detectors replaced on remaining units. Telecommunication closet not air conditioned, Overheating of equipment potentially will reduce equipment life.
Plumbing	9%	\$147,080	7	\$10,296	3	\$4,412	Water heater replaced with properly sized unit.
Primary/Secondary	6%	\$98,054	3	\$2,942	20	\$19,611	Primary: original, still working ok, but undersize required for present operations. Secondary: no reported problems.
Distribution	3%	\$49,027	3	\$1,471	3	\$1,471	Panels upgraded in 2014 with Square D.
Lighting	5%	\$81,711	4	\$3,268	2	\$1,634	Original, no reported problems.
Voice/Data	3%	\$49,027	0	\$0	0	\$0	No reported problems except for non air-conditioned telecommunication closet causing premature wear.
Ceilings	4%	\$65,369	3	\$1,961	1	\$654	No reported problems. Ceiling access panels added for equipment accessibility
Walls	3%	\$49,027	2	\$981	1	\$490	Gypsum board on metal stud. No reported problems.
Doors	2%	\$32,685	4	\$1,307	3	\$981	Exterior galvanized steel doors are corroded from salt and weather. Door hardware to 8 doors require upgrading to lever style handle.
Floors	4%	\$65,369	10	\$6,537	60	\$39,221	Carpet and VCT in most areas has no reported problems. VCT in restroom is worn and should be replaced. Carpet should be replaced in Small Business offices.
Bldg., Fire, ADA, Elevator	1%	\$16,342	4	\$654	0	\$0	Hardware to 8 doors remains as type style with plans upgrade. No sprinkler system in building. Fire alarm system has been upgraded with strobes and horns.
Immed. Site, Ext. Ltg., etc.	3%	\$49,027	5	\$2,451	2	\$981	Wall pack lighting replaced. The Building's sanitary sewer line and manhole need to be repaired.
CRV Totals:	100%	\$1,634,225		\$84,489		\$184,831	

First Year Data					Five Year Data				
\$1,634,225	\$84,489	\$2,778	5.2%	Fair	\$269,320	\$187,609	16.5%	\$32,685	\$86,549
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Pump House

Campus:	Main	Use Types:	Notes:
Bldg. No.:	CU (015)	100% Utility	
Building:	Campus Utility		
Area (s.f.):	393		
Year Built:	2012		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	15%	\$147,375	0	\$0	1	\$1,474	
Roof	2%	\$19,650	0.5	\$98	2	\$393	
Glazing	0%	\$0		\$0		\$0	No glazing.
Cladding	7%	\$68,775	0	\$0	2	\$1,376	
HVAC	1%	\$9,825	2	\$197	5	\$491	
Plumbing	51%	\$501,075	3	\$15,032	8	\$40,086	
Primary/Secondary	9%	\$88,425	0.5	\$442	3	\$2,653	
Distribution	9%	\$88,425	3	\$2,653	5	\$4,421	Sensative VFD units susceptible to external electrical surge/sag.
Lighting	1%	\$9,825	3	\$295	1	\$98	
Voice/Data	1%	\$9,825	0	\$0	2	\$197	
Ceilings	0%	\$0	0	\$0		\$0	
Walls	1%	\$9,825	0	\$0	2	\$197	
Doors	1%	\$9,825	0.5	\$49	2	\$197	
Floors	0%	\$0	0	\$0		\$0	Unfinished concrete.
Bldg., Fire, ADA, Elevator	1%	\$9,825	0.5	\$49		\$0	
Immed. Site, Ext. Ltg., etc.	1%	\$9,825		\$0	2	\$197	
CRV Totals:	100%	\$982,500		\$18,815		\$51,778	

First Year Data					Five Year Data				
\$982,500	\$18,815	(\$30,310)	1.9%	Good	\$70,593	\$21,468	7.2%	\$19,650	\$33,769
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Storage and Receiving Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	SRB (016)	25% Maintenance	With two partial mezzanines.
Building:	Storage & Receiving	75% Storage	
Area (s.f.):	35,172		
Year Built:	1997; 12,000 s.f. addition completed 8/2015		
Floors:	1		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	20%	\$1,367,411	1	\$13,674	6	\$82,045	Potential settlement at east entry causing cracking. Various area of block wall showing signs of cracking and breaking apart.
Roof	13%	\$888,817	1	\$8,888	2	\$17,776	Gutters along north elevation replaced to match size and grade of addition gutters.
Glazing	1%	\$68,371	0	\$0	0	\$0	Very minimal, no reported problems.
Cladding	15%	\$1,025,558	1	\$10,256	2	\$20,511	Water runoff from roof saturating block walls at various locations, causing minor efflorescence.
HVAC	15%	\$1,025,558	2	\$20,511	3	\$30,767	Two roof top units, controls issues at the addition west unit, one college mounted gas heater, stand-alone heating/cooling unit for office space.
Plumbing	4%	\$273,482	1	\$2,735	2	\$5,470	No reported problems.
Primary/Secondary	3%	\$205,112	1	\$2,051	13	\$26,665	DTE transformer disconnect switch is planned to be installed to allow for routine electrical switchgear maintenance.
Distribution	4%	\$273,482	2	\$5,470	1	\$2,735	No reported problems.
Lighting	4%	\$273,482	2	\$5,470	1	\$2,735	No reported problems.
Voice/Data	2%	\$136,741	0	\$0	0	\$0	Minimal, some data lines damaged, repairs are funded.
Ceilings	0%	\$0	0	\$0	0	\$0	None
Walls	4%	\$273,482	1	\$2,735	1	\$2,735	No reported problems.
Doors	4%	\$273,482	1	\$2,735	1	\$2,735	Door hardware needs to be upgraded including all door cylinder cores.
Floors	4%	\$273,482	2	\$5,470	1	\$2,735	No reported problems.
Bldg., Fire, ADA, Elevator	4%	\$273,482	0	\$0	1	\$2,735	Building is 100% sprinkled. Smoke detectors only.
Immed. Site, Ext. Ltg., etc.	3%	\$205,112	2	\$4,102	3	\$6,153	Exterior concrete stairs in need of replacement.
CRV Totals:	100%	\$6,837,053		\$84,096		\$205,795	

First Year Data					Five Year Data				
\$6,837,053	\$84,096	(\$257,757)	1.2%	Good	\$289,891	(\$51,962)	4.2%	\$136,741	\$194,719
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Student Center Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	SC (004)	10% Kitchen/Food Service	With partial basement and penthouse.
Building:	Student Center	20% Student Activities	Minor Renovations in 2003-2004
Area (s.f.):	164,598	25% Classroom	
Year Built:	1976	40% Administration	
Floors:	3	5% Facility Services	

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	19%	\$9,747,443	1	\$97,474	2	\$194,949	Settlement potentially causing cracking at west end of building. Partial basement and tunnel under building. Basement does not leak. Tunnel has some leaking. Possible leak in sanitary line needs to be investigated. Culinary arts reach in and walk in refrigeration in need of replacement. Approximately 50% of reach-in and undercounter refrigeration units have been replaced..
Roof	7%	\$3,591,163	0	\$0	2	\$71,823	Existing single ply EPDM mechanically fastened roof was replaced in 2015 with high albedo EPDM fully adhered roofing membrane.
Glazing	4%	\$2,052,093	1	\$20,521	1	\$20,521	Seals deteriorating. Air infiltration noticed at many windows.
Cladding	7%	\$3,591,163	0	\$0	0	\$0	Cast in place concrete. Some rebar rust showing through wall.
HVAC	16%	\$8,208,373	2	\$164,167	70	\$5,745,861	Eight existing Air Handling units are scheduled to be replaced during major renovation.
Plumbing	6%	\$3,078,140	1	\$30,781	2	\$61,563	Galvanized plumbing 4" and smaller has leaking at joints. Lines 2" and smaller are mostly copper, with no identified issues. Sanitary lines are deteriorating. Fixtures, drip. Fixtures scheduled and funded for replacement on first floor. Sanitary sewer and storm sewers, and drainage system in basement need to be repaired or replaced.
Primary/Secondary	6%	\$3,078,140	1	\$30,781	2	\$61,563	Transformers and electrical switchgear was replaced in 2005.
Distribution	4%	\$2,052,093	0	\$0	5	\$102,605	Walker duct makes retrofitting difficult. Power ok for present.
Lighting	5%	\$2,565,116	1	\$25,651	7	\$179,558	Lighting in stairwells difficult to reach for replacement. Ballasts and lights are original. Lighting in central area of 2nd floor needs to be upgraded. Lighting is being converted to LED with lighting controls within project renovations.
Voice/Data	4%	\$2,052,093	0	\$0	0	\$0	No reported problems.
Ceilings	4%	\$2,052,093	1	\$20,521	1	\$20,521	Most of ceiling space is exposed construction.
Walls	4%	\$2,052,093	1	\$20,521	1	\$20,521	Exposed concrete and drywall. Major areas throughout the building have been painted.
Doors	3%	\$1,539,070	1	\$15,391	1	\$15,391	Exterior glass and aluminum doors, hardware failing. Interior doors hardware mortise locks and lever handles are wearing out. Door hardware needs to be upgraded.
Floors	4%	\$2,052,093	1	\$20,521	7	\$143,647	Ceramic tile on main stairs has popped and been replaced in some areas. Future popping is expected. Tile popping in one men's toilet room. Has been repaired but more popping expected. Carpet should be replaced throughout.
Bldg., Fire, ADA, Elevator	4%	\$2,052,093	1	\$20,521	1	\$20,521	Building is now fully sprinklered
Immed. Site, Ext. Ltg., etc.	3%	\$1,539,070	1	\$15,391	1	\$15,391	Extensive cracking of paving and exterior stairs and caps on concrete site walls. Repairs are funded. Exterior lighting surrounding building has been upgraded to LED.
CRV Totals:	100%	\$51,302,330		\$482,242		\$6,674,433	

First Year Data					Five Year Data				
\$51,302,330	\$482,242	(\$2,082,875)	0.9%	Good	\$7,156,675	\$4,591,558	14.0%	\$1,026,047	\$2,457,382
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Deferred Maintenance Detail Report - Technical and Industrial Building

Campus:	Main	Use Types:	Notes:
Bldg. No.:	TI (001)	10% Lab	Minor renovations in 1995, 2001.
Building:	Technical & Industrial	15% Administration	Major renovations in 2008
Area (s.f.):	105,757	35% Vo/tech	
Year Built:	1970	40% Classroom	
Floors:	2		

Components	CRV of Component		% of Component Requiring Repair/Replace in:				Notes:
	%	\$	0-1 Yr	2021 Cost	1-5 Yrs	2021-25 Cost	
Structure	18%	\$5,115,332	2	\$102,307	4	\$204,613	Window sills along east and south elevations are scheduled for replacement.
Roof	6%	\$1,705,111	1	\$17,051	1	\$17,051	No reported problems.
Glazing	5%	\$1,420,926	1	\$14,209	25	\$355,231	Glazing and precast sills are in need of replacement along east and south elevations for 1st and 2nd floor. Storefront entrances replaced at NE and SW entrances in 2017.
Cladding	7%	\$1,989,296	0	\$0	0	\$0	Brick/precast/cast-in-place concrete/block. No reported problems.
HVAC	15%	\$4,262,777	2	\$85,256	4	\$170,511	Exhaust system required for ceramics lab
Plumbing	8%	\$2,273,481	1	\$22,735	2	\$45,470	No reported problems.
Primary/Secondary	5%	\$1,420,926	0	\$0	1	\$14,209	No reported problems.
Distribution	4%	\$1,136,740	10	\$113,674	1	\$11,367	No reported problems.
Lighting	4%	\$1,136,740	2	\$22,735	5	\$56,837	Lay in ceiling fixtures were upgraded in 2016 to LED with light harvesting features.
Voice/Data	4%	\$1,136,740	0	\$0	0	\$0	
Ceilings	4%	\$1,136,740	0	\$0	1	\$11,367	Ceiling staining occurring from HVAC leakage issues.
Walls	5%	\$1,420,926	0	\$0	1	\$14,209	
Doors	3%	\$852,555	0	\$0	1	\$8,526	Interior doors: doors ok, hardware is wearing out. Mortise locks and lever handles are failing. Door hardware needs to be upgraded.
Floors	4%	\$1,136,740	1	\$11,367	25	\$284,185	
Bldg., Fire, ADA, Elevator	4%	\$1,136,740	0	\$0	5	\$56,837	Building is fully sprinkled.
Immed. Site, Ext. Ltg., etc.	4%	\$1,136,740	1	\$11,367	15	\$170,511	Some paving heaving on south side of building. Exterior lighting controls upgraded for parking lot and outside lighting.
CRV Totals:	100%	\$28,418,511		\$400,701		\$1,420,926	

First Year Data					Five Year Data				
\$28,418,511	\$400,701	(\$1,020,225)	1.4%	Good	\$1,821,627	\$400,701	6.4%	\$568,370	\$932,696
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	\$/YR REDUCE

Section F: Implementation Plan



Implementation Plan

The Five-Year Capital Outlay Plan should identify the schedule by which the institution proposes to address major capital deficiencies, and:

- a. **Prioritize major capital projects requested from the State, including a brief project description and estimated cost, in the format provided. (Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate.)**

Priority 1

Student Center Renovation Project – Center of Success

The purpose of this project is to support the State of Michigan's education goal to increase the number of Michiganders with a postsecondary credential to 60 percent by 2030 and help make Michigan attractive to employers interested in relocating or expanding by increasing access to a highly skilled, highly educated workforce. The College intends to do this by:

- Increasing the percentage of students who graduate with an associate degree or certificate within three years and start a career or successfully transfer to a four-year college to complete a bachelor's degree;
- Reconnecting unemployed and under-employed individuals to academic and job training programs to ensure that the current and future workforce will have the skills necessary to fill in-demand jobs; and,
- Providing employers with increased access to a high-skilled, well-trained workforce.

This project will result in the **renovation** of Washtenaw Community College's Student Center into a center for students, employers and the workforce that brings together academic and wrap-around support for students; workforce training and recruiting for employers; and job placement, professional development and career counseling services for career changers or others looking to upskill in their current career. This will be accomplished through the renovation 80,000 sq. ft. of the College's existing Student Center building as well as an additional 7,000 sq. ft. expansion of the existing space.

Specific project work will include:

- Renovation of interior space and re-alignment of existing offices that will result in the creation of a designated Transfer Center, coaching space for students to meet with Success Coaches, a designated computer lab for Financial Aid, and expanded spaces for students to study and gather outside of class;
- Relocation and consolidation of workforce development, customized training, and career services staff into the renovated Student Center building to create more opportunities for students and job seekers to interact with employers;

- Renovation of the north entrance of the building that will create a new front entrance to improve movement into and through the facility, allow for installation of an elevator that will serve all three floors and increase accessibility for all, and support an additional 7,000 sq. ft. meeting space to be created on the second floor over the renovated front entrance; and
- Repurposing existing space to consolidate student, employer and workforce development services into a single area including meeting room space for employers to meet with faculty and students.

The total cost of the project is \$23,000,000 and affects all three floors of the Student Center building. The renovation supports the following student, workforce and employer service centers as outlined below:

- Career Transitions Office
- Continuing Education
- Customized Training
- Experiential Learning including Internships and Apprenticeships
- Financial Aid and Financial Aid/Loan Counseling
- GED Instructional Classrooms
- Interactive Informational Displays
- International Student Center
- Michigan Works! Southeast
- One-Stop Student Service Counter and Student ID Station
- Student Resources and Academic Success Coaching
- Student Study and Gathering Space
- Transfer Center
- Testing Center for course placement, instructional and industry-based certification testing
- Veterans Center
- Workforce Development

b. If applicable, provide an estimate relative to the institution’s current deferred maintenance backlog. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impact, immediately versus over the next five years.

Current list includes the following projects. For additional details, please see the deferred maintenance report for the entire College in Section E:

PROJECT DESCRIPTION		BUDGET
BEB	Replace ceramic tile in (4) restrooms	\$ 80,000
BEB	Replace AHU humidifiers	\$ 12,000
BEB	Replace roof	\$ 300,000
BEB	North and South Storefront Replacement	\$ 120,000
BEB	Replace transformers	\$ 96,000
BEB	Lighting Control & LED Lamp Upgrades	\$ 160,000

BEB	Replace smoke control system	\$ 125,000
Campus	Flooring Replacement	\$ 750,000
Campus	Install safety anchors for roof maintenance	\$ 120,000
Campus	Resurface Parking Lot 6	\$ 600,000
Campus	Repair concrete sidewalks	\$ 400,000
Campus	Install electrical covers for tunnel cable trays	\$ 22,000
Campus	Repair water leaks in tunnel system	\$ 65,000
Campus	Replace building entry heating units	\$ 240,000
Campus	Upgrade tunnel lighting with motion detection	\$ 35,000
Campus	Seal and paint all mechanical and electrical area floors	\$ 60,000
Campus	Upgrade the Honeywell EBI Platform and zone managers	\$ 28,000
Campus	Replace master clock system with wireless	\$ 150,000
LA	Replace wooden doors	\$ 30,000
LA	Repair parapet roof	\$ 60,000
LA	Install tunnel floor drain at low point	\$ 22,000
LA	Replace corridor tile flooring	\$ 1,100,000
LA	Upgrade greenhouse unit heater	\$ 16,000
LA	Replace greenhouse water and drain lines	\$ 90,000
LA	Replace roof on addition	\$ 250,000
LA	Remove iron deposits seepage in concrete exterior	\$ 25,000
LA	Upgrade elevator interior	\$ 42,000
LA	Waterproof metal on greenhouse	\$ 20,000
EC	Complete 10Y overhaul of 2 nd chiller	\$ 50,000
EC	Chiller Plant sumps	\$ 20,000
EC	Refurbish entire plant epoxy floor	\$ 25,000
EC	Replace small summer boiler	\$ 175,000
FEB	Repair exterior brick facing on west side	\$ 60,000
FEB	Replace hot water tanks	\$ 16,000
FEB	Install DDC panels for remote access	\$ 33,000
FEB	Maintain tuck pointing	\$ 12,000
FEB	Replace wood doors and hardware	\$ 45,000
FEB	Replace lighting	\$ 200,000
GL	Replace lighting in 108 & 112	\$ 45,000
GL	Replace plumbing fixtures	\$ 75,000
GL	Install above ground sewage pumps	\$ 40,000
GM	Replace outside and mixed air dampers AHU 1, 2, & 3	\$ 30,000
GM	Replace vestibule entrance mat	\$ 15,000
GM	Replace stair tread in stairwell C	\$ 83,000
GM	Replace secondary, isolation and check valves	\$ 55,000
GM	Add DP sensor in penthouse for the chilled water loop	\$ 16,000
GM	Install bonding and grounding rods in penthouse	\$ 35,000

GM	Replace humidification system	\$ 150,000
HFC	Upgrade sewage lift station grinder pumps	\$ 50,000
HFC	Paint exterior concrete surfaces	\$ 75,000
HFC	Install main disconnect for primary service feed	\$ 20,000
HFC	Replace lap pool surge tank	\$ 25,000
HFC	Install pulley system for pool deck light fixtures	\$ 35,000
HFC	Replace bronze pumps with cast iron pumps	\$ 50,000
HFC	Seal penthouse floor	\$ 40,000
HFC	Replace boiler room AHU heating and chiller coils	\$ 25,000
HFC	Replace Victaulic piping system	\$ 50,000
HFC	Replace w and edge protection	\$ 15,000
HFC	Replace carpet in offices, conference room and kids area	\$ 46,000
HFC	Replace divider door in conference room	\$ 15,000
HM	Add power ventilation	\$ 4,000
MLB	Repair gun range roof	\$ 190,000
MLB	Repair water infiltration into atrium	\$ 200,000
MLB	Replace carpet multiple areas	\$ 350,000
MLB	Upgrade BAS to DDC	\$ 327,186
MLB	Replace aluminum primary feeder wiring	\$ 85,000
MLB	Replace the sliding doors, both entrances	\$ 450,000
MLB	Repair the joint to the precast on the building	\$ 250,000
MLB	Waterproof exterior masonry walls	\$ 200,000
MLB	Replace lobby flooring	\$ 200,000
MLB	Replace Victaulic piping	\$ 576,620
MLB	Repair foundation leaks in gun range	\$ 50,000
MLB	Install access doors to roof from penthouse	\$ 17,000
MLB	Repair drainage flow for MLB retention pond	\$ 120,000
MLB	Install additional data/voice jacks to mechanical areas	\$ 12,000
MLB	Upgrade lights to LED for overhangs and lobby area	\$ 475,300
MLB	Replace broken under-slab storm drain lines	\$ 90,000
MLB	Replace seminar walls	\$ 400,000
MLB	Upgrade VFD controls to BAS	\$ 45,000
MLB	Upgrade building electrical system	\$ 522,484
MLB	Replace windows on north side	\$ 100,000
MLB	Replace kitchen sanitary line	\$ 60,000
MLB	Replace wood stage flooring	\$ 80,000
MLB	Install access doors to equipment in ceiling	\$ 15,000
MLB	Upgrade plastic drain collars	\$ 8,000
MLB	Replace west landscaping	\$ 80,000
MLB	Repair wall finishes	\$ 75,000
MLB	Replace remaining 3 AHUs	\$ 1,800,000
MLB	Replace skylight	\$ 400,000

MLB	New electronic event directories`	\$ 70,000
OE	Repair mechanical room floor	\$ 30,000
OE	Replace B & G pumps	\$ 125,000
OE	Maintain precast concrete on north upper level	\$ 18,000
OE	Install isolation valves on geothermal system	\$ 15,000
OE	Refinish Auto Shop floors	\$ 200,000
OE	Replace Auto Center Demo Lab A/C units	\$ 55,000
OE	Replace Welding Lab dust collection system	\$ 400,000
PO	Install 800A panel for electrical distribution	\$ 15,000
PO	Renovate restroom flooring, fixtures and partitions	\$ 40,000
PO	Maintain tuck pointing	\$ 12,000
PO	Install BAS system for remote access	\$ 18,000
PO	Renovate old security area, restrooms and corridor area	\$ 25,000
PS	Maintain joints and concrete	\$ 143,500
SC	Install building humidifier system	\$ 350,000
SC	Repair bonding and grounding issues	\$ 40,000
SC	Replace all AHUs in both penthouses	\$ 1,000,000
SC	Seal penthouse floor	\$ 30,000
SC	Replace cabinet unit heaters including BAS	\$ 200,000
SC	Replace heating pumps and heat exchangers	\$ 150,000
SC	Repair roof leaks and skylights water leaks	\$ 40,000
SC	Replace stairwell lighting and staircase	\$ 40,000
SC	Replace second floor HVAC diffusers	\$ 300,000
SC	Install additional HVAC for Data Center	\$ 35,000
SC	Replace B & G pumps	\$ 125,000
SC	Install bird netting around exterior	\$ 70,000
SC	Repair iron deposits seeping through exterior concrete	\$ 25,000
SRB	Install outside main disconnect for primary service feed	\$ 25,000
SRB	Install Paint booth	\$ 10,000
SRB	Install radiant heat panels	\$ 12,000
TI	Replace elevator	\$ 92,000
TI	Install UPS gear in 1st floor electrical room	\$ 65,000
TI	Provide heating to 2nd floor north hallway	\$ 60,000
TI	Replace all single glazed windows with double pane	\$ 200,000
TI	Replace precast sills on exterior windows	\$ 75,000
TI	Replace drywall exterior soffit	\$ 60,000
TI	Replace exterior waterproofing and storm drains	\$ 150,000
TI	Upgrade emergency lights	\$ 45,000
TI	Repair iron deposits seeping through exterior concrete	\$ 25,000
TI	Replace emergency lighting	\$ 60,000
TI	Replace air compressor and dryer	\$ 60,000
TI	Replace water softener	\$ 40,000

Deferred maintenance, by definition, is maintenance work that has been backlogged and delayed due to lack of available resources. The impact of delaying these projects will have an immense impact on academic programs. Failures of facility utility systems or building envelope issues could render the space unfit for use for the educational or administrative functions for the short- or long-term, depending on the type of failure, ultimately leading to greater costs to remedy if not addressed.

c. Include the status of on-going projects financed with State Building Authority resources and explain how completion coincides with the overall Five-Year Capital Outlay Plan.

The College recently was fortunate to have a \$5.7 million project for the Advanced Transportation Center authorized for construction in Public Act 207 of 2018. The College has recently submitted the schematic design and cost estimate for the project to DTMB and as a result of significantly increased construction costs, the project cost has increased to \$7.9 million. The College has requested State approval for this increased project cost, with the College funding the entire incremental cost. Final project design documents will be submitted to the State later this year and estimated completion of the project is in the year 2020. The Advanced Transportation Center project does not impact the College’s deferred maintenance program since it will be new construction. Further, that project also does not impact the capital outlay project for the Center for Student Success that is the subject of this our current capital outlay request.

d. Identify to the extent possible, a rate of return on planned expenditures. This could be expressed as operational “savings” that a planned capital expenditure would yield in future years.

Most of the projects described in the implementation plan will have a seven-year payback or less. The mechanical and electrical retrofits will have an immediate operational impact and reduction of operational expenditures.

e. Where applicable, consider alternatives to new infrastructure, such as distance learning.

The College currently offers many distance and blended courses. However, at this time we are not proposing any new construction in this 5-year Capital Outlay Plan.

f. Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2021 through fiscal year 2025.

BUILDING	PROJECT	FY COMPLETE	BUDGET
Morris Lawrence Building	Replace 3 AHU units	2021	\$1,800,000
Student Center Building	Replace 8 AHU units	2022	\$4,000,000

- g. Identify the amount of non-routine maintenance the institution has budgeted for in its current fiscal year and relevant sources of financing.**

The College maintains a current annual Deferred Maintenance budget of \$2.5 million for non-routine maintenance for the current fiscal year. The funding source is the College's general fund.