## Basic Information: 2024 State Appropriation Request

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Center for Interdisciplinary Collaboration, Engagement &amp; Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street address(es) of the building(s) affected by project, including county name:</td>
<td>220 West King Street, Winona, Minnesota 55987; Winona County</td>
</tr>
</tbody>
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## Project Scope

<table>
<thead>
<tr>
<th>New GSF:</th>
<th>73,000</th>
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<tbody>
<tr>
<td>Renewed GSF:</td>
<td>0</td>
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<tr>
<td>Demolished GSF:</td>
<td>78,333</td>
</tr>
</tbody>
</table>

## Project Timeline (all dates are approximate and subject to change)

| Proposed design start date: | 07/2024 |
| Proposed bid/procurement date: | 02/2026 |
| Proposed construction start date: | 07/2026 |
| Proposed occupancy date: | 05/2028 |

## Facilities Data

<table>
<thead>
<tr>
<th>Current Replacement Value (CRV) of the building(s) affected by project:</th>
<th>Gildemeister $16,516,433</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Watkins $15,686,647</td>
</tr>
<tr>
<td>Current FCI of building(s)/area(s) affected by project:</td>
<td>Gildemeister 0.30</td>
</tr>
<tr>
<td></td>
<td>Watkins 0.41</td>
</tr>
<tr>
<td>Backlog ($) removed by project:</td>
<td>Gildemeister $4,941,406</td>
</tr>
<tr>
<td></td>
<td>Watkins $6,415,143</td>
</tr>
<tr>
<td>Anticipated campus-wide FCI resulting from this project:</td>
<td>0.14</td>
</tr>
<tr>
<td>Number of classrooms and/or labs directly affected by this project:</td>
<td>Demo 17 classrooms, 11 lab/studios, Build new 11 classrooms, 16 lab/studios</td>
</tr>
</tbody>
</table>
November 10, 2022

Brian D. Yolitz
Associate Vice Chancellor for Facilities
30E 7th Street, Suite 350
St. Paul, MN 55101

Dear Associate Vice Chancellor Yolitz,

RE: Predesign Submittal for the new Center for Interdisciplinary Collaboration, Engagement and Learning at Winona State University

In accordance with Minnesota Statutes §16B.335, Subdivision 3, enclosed you will find the Predesign submittal for the new Center for Interdisciplinary Collaboration, Engagement and Learning in Winona, Minnesota. This predesign outlines Winona State University’s capital budget request for the 2024 state legislative session.

The project consists of a new, highly-sustainable 73,000 square-foot academic building that replaces the aging Gillemiere and Watkins Halls. The new building will create modern learning spaces to support the demand for fields of study that combine practice of science, art, design, and technology. Additionally, it will provide learning spaces, studio spaces, student support spaces, and faculty workspaces that encourage innovation, creativity, collaboration, and experimentation and are flexible and adaptable to meet future needs. Finally, the net zero energy facility will exemplify Winona State University’s leadership in sustainability and resiliency.

We strongly believe this project will address the university’s mission to enhance the intellectual, social, cultural, and economic vitality of the people and communities we serve and be a community of learners improving our world. We look forward to working with you and your team as we work to secure legislative approval of this project.

Sincerely yours,

Scott G. Olson, Ph.D.
President
November 4, 2022

President Scott Olson  
Winona State University  
175 W Mark Street  
Winona, Minnesota 55987

Re: Center for Interdisciplinary Collaboration, Engagement and Learning Predesign  
HGA Commission Number: 1041-327-02

Dear President Olson:

We are pleased to submit to you the final predesign for the Center for Interdisciplinary Collaboration, Engagement and Learning at Winona State University. The attached document has been prepared in accordance with the Minnesota State Predesign Guidelines and in collaboration with you, your staff and the Steering Committee.

The scope of our work on the project has been to consider design alternatives for the existing Gildemeister and Watkins Halls. Through our campus engagement and conversations with the Steering Committee, we are recommending replacement of these two facilities with a new building that exceeds state standards in regard to sustainability goals and flexibly addresses current and future academic needs on Winona’s campus. The proposed project is in alignment with the new Comprehensive Facility Plan goals to set a path toward carbon neutrality on campus.

Thank you for the opportunity to work with your staff on this exciting endeavor.

Sincerely,

Rebecca Celiş, AIA  
Vice President  
MN Registration #48640

I certify that this report was prepared by me or under my direct supervision and that I am a duly licensed architect under the laws of the State of Minnesota.
Table of Contents

i. Project Data Form
ii. Letter from Campus
iii. Letter from Consultant
iv. Table of Contents
v. Scoring Checklist
vi. Project Participants

1. Summary 19
2. Project Background 31
3. Project Description 91
4. Sustainability and Energy 143
5. Financial Information - Capital Expenditures 163
6. Financial Information - Operating Expenses 177
7. Schedule 185
8. Occupancy Plan 191
9. Appendix
## Scoring Checklist

### Integrated Planning

**Goal:** The project aligns campus facilities, technology, and academic planning, and shows coordinated campus priorities.

**WSU Response:** The project has been conceived by multiple colleges coming together as part of the Academic Master Plan as a multidisciplinary academic resource.

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<th>STRATEGY</th>
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<tbody>
<tr>
<td>1.1</td>
<td>Academic priorities: Targets institutional, regional, and state academic and facilities planning priorities. <strong>Project Response:</strong> The project supports and fulfills numerous facets of the campus's Strategic Framework and Academic Plan and aligns closely with the Minnesota State Board of Trustees Capital Budget Guidelines by providing modern and academic and student support spaces, advancing campus equity and access, building for net zero energy operation, and reducing the overall campus footprint. The project is also identified as a short-term priority in the university's recently completed Comprehensive Facilities Plan that sets as goals a preeminent student experience and carbon neutrality by 2050.</td>
<td>Section 2.1, 2.2</td>
</tr>
<tr>
<td>1.2</td>
<td>Meets long-term space requirements for programs on a regional and multi-regional basis for programs (including multiple campuses of a single institution). <strong>Project Response:</strong> The academic programs included in the project require specialized lab and studio spaces which are not duplicated in other campus buildings or locations within the region. The building is designed for cost-efficient, long-term adaptability so the building maintains long-term relevance. Additionally, the building provides foundational programs and services that are utilized by the whole campus community.</td>
<td>Sections 2.2, 2.3</td>
</tr>
<tr>
<td>1.3</td>
<td>Supports the institution's Technology Plan. <strong>Project Response:</strong> The campus Information Technology Plan was updated in June 2021. This project aligns with the teaching and learning strategies outlined in the plan including providing agile, high-quality learning technology, active learning classrooms, and being a &quot;sandbox&quot; for developing and evaluating new technology solutions.</td>
<td>Section 8.2</td>
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<td>NUMBER</td>
<td>STRATEGY</td>
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<tr>
<td>1.4</td>
<td>Addresses specific community or campus cultural needs.</td>
<td>Sections 2.3, 31, 32</td>
</tr>
<tr>
<td></td>
<td><strong>Project Response:</strong> The Art &amp; Design, Computer Sciences, and Mathematics &amp; Statistics departments meet or exceed the general student body at WSU regarding 2nd-Year Retention but lag in 6-Year Graduation Rates. The graduation rate lag is even greater among First Generation, Student of Color, and Low-Income students. The new CICEL building will help close this gap by providing improved learning experiences and expanding access to student support services, study space, and student project space. Replacing Gildemeister and Watkins Halls with the new CICEL building will allow the departments to improve and expand their course offerings and develop new collaborative programs of study that exceed the needs and expectations of our future students.</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Includes space(s) to deliver programs that address continuing or emerging high demand fields.</td>
<td>Sections 2.2, 2.3, 3.2</td>
</tr>
<tr>
<td></td>
<td><strong>Project Response:</strong> Students taking courses or graduating with the degrees offered by the Art &amp; Design, Computer Sciences, and Mathematics &amp; Statistics departments will be entering high demand and high growth career fields such as Data Science and Software Development, Marketing and Advertising, Health Care, and Education. Furthermore, the innovative approach this project takes to collaboration across disciplines ensures that this program can adapt to emerging high demand fields. Student Support Services within this project will ensure every student who attends WSU can succeed.</td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Promotes or increases retention and completion within the Minnesota State system.</td>
<td>Sections 2.1, 2.2, 2.3, 3.2</td>
</tr>
<tr>
<td></td>
<td><strong>Project Response:</strong> The project includes key student services that enhance and support student retention and completion. These services will include: the TRIO program which supports first-generation, low-income, and ability-challenged students; International Student &amp; Scholar Services which helps international students succeed; and the OASIS Advocacy Center which provides a safe space for victims and survivors of sexual and relationship violence.</td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Improves baccalaureate opportunities.</td>
<td>Sections 2.3, 3.2</td>
</tr>
<tr>
<td></td>
<td><strong>Project Response:</strong> The Art &amp; Design, Computer Sciences, and Mathematics &amp; Statistics departments provide courses for a significant portion of the WSU student body; over one-third of the undergraduate students enroll in their courses in any academic year. Over 80% of first-time undergraduate students enroll in courses offered by one of the departments during their time at WSU. In addition to those students pursuing majors from the three departments, students enroll in courses to fulfill their General Education Program (GEP) requirements which are coordinated with the Minnesota Transfer Curriculum (MnTC). In FY 2022, over 60 GEP courses are offered by the three departments.</td>
<td></td>
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</tbody>
</table>
### ENROLLMENT, DEMOGRAPHICS AND ACADEMIC PROGRAM CONSIDERATIONS

The project includes spaces that take into account student demographics around diversity, age, life experience, and exposure to higher education, or includes spaces that respond to programs serving workforce needs.

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<th>NUMBER</th>
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<tbody>
<tr>
<td>2.1a</td>
<td>Only for projects impacting Student Services programs: documents at least one (1) of the following and uses the data to document how the Student Services related program has been successful and needs a facilities project continue/grow that success:</td>
<td>Sections 2.3, 3.2</td>
</tr>
<tr>
<td></td>
<td>1. The college/university's Student Services model has recently been rethought or reorganized, and the proposed changes have been implemented in practice</td>
<td></td>
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<tr>
<td></td>
<td>2. The Student Services departments impacted by this project have recently increased the number of staff who directly interact in-person with students and cannot be housed within existing space</td>
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<td></td>
<td>3. The college/university has demonstrated, taking into account student feedback, the student service modality that best meets the needs of their student population.</td>
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<td></td>
<td><strong>Project Response:</strong> With working and learning in spaces that are deliberately engaging and collaborative, it is certain that key student services will be required to enhance and support the efforts. Key features of our successful Warrior Success Center, Teaching, Learning &amp; Technology Services, and TRIO program will be housed in the building along with specific tutoring and advising services and career and business engagement support.</td>
<td></td>
</tr>
<tr>
<td>2.1b</td>
<td>Only for projects impacting specific academic programs: Project Documentation provides the following, at a minimum, and uses the data and narrative to demonstrate academic program strength and success, as well as facilities needs for those programs directly impacted by this project:</td>
<td>Sections 2.3, 3.2</td>
</tr>
<tr>
<td></td>
<td>1. Five-year trend data for program enrollment and completion (growth data) -- percent change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Program-level student success outcomes disaggregated by race/ethnicity, first generation, and Pell Grant eligibility, with a narrative to demonstrate what actions have been and will be taken to address (reasonable and feasible)</td>
<td></td>
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<tr>
<td></td>
<td>3. Workforce need: Data on the job market related to the programs, including the rate of past and future growth in job demands and a metric on the saturation level</td>
<td></td>
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<tr>
<td></td>
<td><strong>Project Response:</strong> Students taking courses or graduating with the degrees offered by the Art &amp; Design, Computer Sciences, and Mathematics &amp; Statistics departments will be entering high demand and high growth career fields such as Data Science, Software Development, Marketing and Advertising, Healthcare, and Education. WSU students graduating from these departments have post-graduation outcomes of over 90%.</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Project Response</td>
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<tr>
<td>---------</td>
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</tr>
<tr>
<td>2.2</td>
<td>Demonstrates need for in-person campus facilities (rooms for private consultation/counseling, labs, access to specialized equipment or technology, etc.)</td>
<td><strong>Project Response:</strong> The three departments require specialized and unique learning environments that are not duplicated elsewhere on campus. Likewise, these learning experiences cannot be provided with online coursework. Art courses such as painting and sculpting require physical manipulation of objects and specialized ventilation and lighting to create a safe learning environment. Design courses require specialized equipment such as 3D printers and laser cutters. Computer science students require labs where they learn to build hardware and assemble network wiring. Their work requires specialty software not available on their personal computers. Cybersecurity courses need electronically shielded rooms that simulate real-world security environments. All departments need studio and lab spaces for both in-class and out-of-class work on projects and coursework.</td>
</tr>
<tr>
<td>2.3</td>
<td>Provides evidence of specialized program or student needs that support the need for renovation.</td>
<td><strong>Project Response:</strong> The demand for this project is not a result of needing new program space, but instead an urgent need to replace outdated, non-functional space that is expensive to maintain and no longer meets the needs of the students. The new CICEL building will allow the departments to improve and expand their course offerings and develop new collaborative programs of study in space that is sustainable, forward-thinking and meets the needs of the future.</td>
</tr>
<tr>
<td>2.4</td>
<td>Project responds to ongoing changes in student demographics (gender identity, race, age, etc.) and strives to eliminate opportunity gaps.</td>
<td><strong>Project Response:</strong> This project will create learning, work, and social spaces designed for equity and access. Users from all backgrounds, cultures, and abilities will feel comfortable and welcome. The most recent knowledge of equity design will be leveraged for this project. To support our students, WSU’s TRIO program will be in the building to provide advising, tutoring, and career guidance for qualified students. Additional student support will be provided by International Student &amp; Scholar Services and the OASIS Advocacy Center which provides a safe space for victims and survivors of sexual and relationship violence.</td>
</tr>
<tr>
<td>2.5</td>
<td>Project demonstrates potential to improve enrollment and eliminates opportunity gaps.</td>
<td><strong>Project Response:</strong> Over one-third of the undergraduate students enroll in Art &amp; Design, Computer Sciences, and Mathematics &amp; Statistics courses in any academic year. Over 80% of first-time undergraduate students enroll in courses offered by one of the departments during their time at WSU. In addition, over 60 General Education Program (GEP) courses are offered by the three departments. The broad reach of these programs among the student population will help WSU grow enrollment and narrow opportunity gaps.</td>
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</tbody>
</table>
### FLEXIBILITY, ADAPTABILITY AND ACCESSIBILITY

The project scope describes features that promote adaptability of spaces to future program needs.

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<tr>
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<tr>
<td>3.1</td>
<td>Includes features that yield active learning spaces and help the campus transition from traditional classroom learning to collaborative, group learning methods. <strong>Project Response:</strong> The Winona campus has many “traditional” learning spaces that are slowly being retrofitted into active learning space, makers’ space, and interdisciplinary space, as demand increases. This project creates deliberately designed experiential learning spaces that spark interactions, creativity, curiosity, the desire to dig deeper and learn. This project seeks to be transformational and a catalyst for innovation and change.</td>
<td>Section 3.3</td>
</tr>
<tr>
<td>3.2</td>
<td>Project includes flexible and adaptable features, including room types and furnishings, that allow for cost effective adaptability for future programs. <strong>Project Response:</strong> The efficient and modular design of CICEL creates spaces of various sizes and allows for long-term flexibility and adaptability of the building. This cost-effective approach anticipates a future we cannot imagine in the current moment.</td>
<td>Section 3.3</td>
</tr>
<tr>
<td>3.3</td>
<td>Includes spaces or features that promote inclusion (gathering in groups, seeing others using the space as a way to feel safe and welcomed); includes spaces that can be used for large group gatherings (not just study space) to address a sense of belonging. <strong>Project Response:</strong> Many different types of learning styles are accommodated within the proposed program. Student Services that benefit some of the most vulnerable within our WSU community will have a safe and welcoming environment in which to serve students. Four thousand square feet of shared commons spaces at the core of the building promote collaboration and interdisciplinary learning. The outdoor green spaces are gathering hubs that extend teaching environment outdoor and provides hands-on learning and exhibition opportunities.</td>
<td>Sections 3.2, 3.3</td>
</tr>
<tr>
<td>3.4</td>
<td>Establishes the space as a shared campus asset, not owned by any one department. <strong>Project Response:</strong> This project is an invitation to everyone both, on campus as well as within the larger community, to interact and build solutions together. Multiple Student Support programs, shared and open space, and flexible collaboration space make the building a destination for everyone on campus. Additionally, as campus needs change over time, the modular design can be renovated for future users with minimal impact and disruption.</td>
<td>Sections 3.2, 3.3</td>
</tr>
<tr>
<td>3.5</td>
<td>Project uses alternative approaches to providing traditional, enclosed offices for faculty or staff. <strong>Project Response:</strong> At this time, the program includes 100 SF private offices to support both the confidential interactions between faculty, staff and students, and the quiet focus time needed for intellectual work. If office workspace needs change over time, the modular nature of the program allows this space to be converted to collaborative workspace or learning space without major disruption.</td>
<td>Section 3.2</td>
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<tr>
<td>NUMBER</td>
<td>STRATEGY</td>
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| 3.6    | Campus follows a written academic scheduling policy and uses it to maximize current space utilization and ease of class scheduling for students.  

**Project Response:** The space is designed to be purposefully flexible, with a modular design that can be reduced or expanded to accommodate class sizes from 20 to 120. Building spaces that have a single fixed occupancy size in 2022 may not be desirable in 2032! Modular designs for these spaces provide flexibility and encourages active and creative learning. This building has classrooms that are designed to be resources for the entire University. This predesign has imagined a scheduling policy based on use rather than department which will result in increased utilization of each space. | Section 2.4, 3.2 |
| 3.7    | Project plans go beyond “code minimum” of ADA accessibility to provide Universal Design features that accommodate a wider range of abilities.  

**Project Response:** This project will not only accommodate but celebrate diversity of physical abilities and learning types. Users from all backgrounds, cultures, and abilities will feel comfortable and welcome. Equitable design is included as one of the ten Design Priorities in WSU’s new Comprehensive Facilities Plan. This project’s focus on innovation comes from a place of deep conviction that when more voices are represented at the table, better and more innovative solutions result. | Sections 3.2, 3.3 |
| 3.8    | Evidence that technology, flexible space use, and scheduling options have been fully maximized before proposing the need for new/renovated space.  

**Project Response:** In the case of Gildemeister Hall and Watkins Hall, the space itself has become a hindrance to utilization, collaboration, and flexible use due to its hyper-specific and inflexible design and costly maintenance. According to the life cycle analysis of renovation compared to new construction, it is less costly to construct a new building than to bring the old buildings up to code. | Section 2.3, 6.3 |
INFRASTRUCTURE, SUSTAINABILITY, AND ENERGY EFFICIENCY
Project reduces energy consumption, reuses or revamps existing infrastructure, and promotes sustainability on campus.

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<tr>
<td>4.1</td>
<td>Project documents analysis of space needs that could be satisfied through short- or long-term methods, such as leasing off-campus space, or sharing space with other colleges and universities within the system.</td>
<td>Sections 2.5, 3.1, 3.2</td>
</tr>
</tbody>
</table>

**Project Response:** This project proposes demolishing two cost-inefficient, underutilized, energy-inefficient buildings and replacing them with campus green space and a building that acts as a hub for innovation, sustainability, interdepartmental collaboration, and community engagement. These needs could not be met by leasing off-campus space or sharing space with other colleges and universities within the system.

| 4.2    | Project addresses “adjacent needs” in, or near to, the project area, such as HEAPR-like work (roofs, HVAC, ADA accessibility improvements, etc.) or COPE issues, and demonstrates how the campus will use these improvements to reduce overall operating expenses. | Sections 2.5, 6, 8.1 |

**Project Response:** Gildemeister Hall and Watkins Hall have the highest FCI values among the academic buildings on campus and have never been significantly renovated since their initial construction almost 60 years ago. Life-cycle costs analysis indicates that replacing these buildings is the most cost-effective approach and avoids excessive ongoing maintenance costs. This has the added benefit of freeing up HEAPR funds for other needs on campus.
**FINANCIAL IMPACT**

Project uses outside funding to minimize the financial impact on campus; project is financially viable for the campus; project accounts for and anticipates all project costs.

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<tr>
<td>5.1</td>
<td>Advances cooperation among campuses to reduce costs and enables the sharing of administrative operations, academic programs, and academic support.</td>
<td>Not applicable to this project</td>
</tr>
<tr>
<td>5.2</td>
<td>Identifies and reduces total operating costs required (including new staff, anticipated utility costs, and any additional costs required as a result of the project). <strong>Project Response:</strong> The new building will reduce annual building operating expenses by 50%. This will save over $27 million in operational costs over the first 50-years.</td>
<td>Sections 6.1, 6.3</td>
</tr>
<tr>
<td>5.3</td>
<td>Project accounts for special expenses relating to operations of new equipment or technology. <strong>Project Response:</strong> The project will include new, modern, energy efficient equipment and technology requiring less maintenance and energy to operate, thus reducing annual operating costs. Campus technology is funded through both campus operating funds and student technology fees. The technology budget is updated annually and will include funds for operating and maintain technology in the building.</td>
<td>Section 5.1</td>
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PROJECT PARTICIPANTS

Winona State University (WSU)
CICEL Steering Committee

- Dr. Hamid Akbari WSU SC, Dean, College of Business
- Dr. Vern Bacher WSU Professor, College of Business
- Nathan Engstrom WSU SC, Director, Sustainability
- Dr. Emilie Falc WSU Chair, Communications Studies
- Jim Goblirsch WSU SC, AVP Facilities Management
- Dr. Ken Graetz WSU SC, Director, Teaching, Learning & Technology
- Dr. Kenneth Janz WSU SC, Director, Teaching, Learning & Technology
- Scott Kluver WSU SC, Director, Physical Plant
- Tim Matthees WSU SC, Director, Planning & Construction
- Dr. William McBreen WSU Dean, College of Nursing & Health Science
- Dr. Peter Miene WSU SC, Dean, College of Liberal Arts
- Dr. Charla Miertschin WSU SC, Dean, College of Science and Engineering
- Dr. Tarrell Portman WSU SC, Dean, College of Education
- Dr. Rita Rahoi-Gilchrest WSU SC, Assoc. Dean of Liberal Arts
- Dr. Edward Reilly WSU SC, Assoc Provost/AVP for Academic Affairs
- Dr. Pat Rogers WSU SC, Provost and VP for Academic Affairs
- Eric Wright WSU Systems Admin, Computer Science
- Dr. Mingrui Zhang WSU Chair, Computer Science

We also thank and acknowledge the numerous members of the WSU Community who provided feedback and guidance through both formal and informal interaction with our predesign process.

HGA Design and Planning Team

- Kelsey Arens, Administrative Assistance
- Jim Bradburn, Sustainability Modeling*
- Rebecca Celis, Principal in Charge
- Leighton Deer, Mechanical Engineering
- Brit Erenler, Landscape Architecture*
- Ashleigh Grizzell, Project Manager
- Kenny Horns, Civil Engineering
- David Johansson, Architecture
- Sarah Jorczak, Structural Engineering
- Russ Knudson, Energy and Infrastructure
- Brad Kult, Technology
- Ariane Laxo, Programmer/Planner
- Kenos Leong, Architecture
- Ena Murphy, Academic Planner
- Paul Neuhaus, Design
- Luke Nichols, Landscape Architecture
- Joe Tarlizzo, Cost Estimating
- Patrick Thibaudeau, Sustainability*
- Joe Wetternach, Electrical Engineering*

*Former HGA Contributors
1.

Summary
1. Project Summary 21
2. Project Process 22
3. Alternatives Considered 26
4. Project Location 28
MAJOR IMPACTS OF THE PROJECT

• Provides department opportunities for innovation in the areas of bioinformatics, data visualization, design thinking, interactive design, and sustainability and to develop new programs of study. The demand for these programs exceeds the current space.

• Builds an interdisciplinary collaboration among science, technology, and art by collocating math and statistics, computer science and art and design within the building.

• Promotes engagement with shared common spaces for casual and group study, collaboration with local community and regional business partners, student and faculty research, and other campus and community events.

• Supports a wide variety of learning styles and includes active-learning classrooms, high-touch art/design and maker/fabrication studios, and high-tech and augmented reality labs.

• Reduces operating costs by 50% compared to the existing buildings and demolition of Gildemeister (FCI 0.30) and Watkins (FCI 0.41) eliminates over $11 million from the deferred maintenance backlog.

• Promotes health and well-being through daylighting, high-quality ventilation, elimination of harmful products and materials, and a focus on user comfort and satisfaction.

• Advances WSU’s sustainability goals: operates carbon neutral, uses net zero energy, balances on-site water use, and creates zero operational waste.

• Serves as a teaching tool for sustainability with a low energy use design of 30 EUI. Observing the performance of the building offers students and faculty teaching and research opportunities that can be leveraged for further benefit.

• Designed for inclusion, equity, and access. Users from all backgrounds, cultures, and abilities will feel comfortable and welcome.

• Planned for adaptability and change to ensure future usefulness and relevance.
2. PROJECT PROCESS

The predesign process included a series of five workshops were held with a variety of faculty, staff, and administrators from WSU, as shown in this predesign schedule.

- Confirm stakeholder groups
- Gather existing information (floor plans, site survey, Master Plan backup)
- Pre-meeting survey

WORKSHOP #1
- Tour existing facilities
- Existing conditions assessment
- Define project parameters
- Goals and challenges
- Sustainability and operational goals
- Project benchmarking
- Review comprehensive master plan
- Benefits and risks of replacement/renovation
- Design thinking exercises

WORKSHOP #2
- Recap tour and benchmarking
- Goals and vision
- Develop draft program
- Facilities focus group with engineering team
- Cost benchmarking
- B3 Benchmarking
- Review and prioritize Net Zero Energy strategies
- Resiliency Workshop

WORKSHOP #3
- Finalize program and draft space needs analysis
- Budget update
- Conceptual site plans/massing diagrams
- Net Zero Energy strategy development
- Design charrette: Renovate or Replace?

Key Team Members
- Core Design Team
- Specialized Expertise Team

Deliverable
- Pre-meeting survey

Client Role
- Provide design team access to full master plan report and building floor plans

Core Design Team
Specialized Expertise Team
Extended Design Team

Project benchmarking, existing program analysis
Provide access and commentary on existing facilities, identify issues, needs and goals

Core Design Team
Specialized Expertise Team

Draft of spatial program, site and building options
Evaluate options
Review and comment
• Due November 10, 2022
• Final 95% Predesign Document per Minnesota State Predesign Standards

WORKSHOP #4
• Review and input on:
  • Final program
  • Site and massing options
  • Net zero energy and sustainability strategies
  • Program test fit activity
  • Final cost estimate

WORKSHOP #5
• Page Turn Review of 95% Predesign Draft
  • Goals and program narrative
  • Sustainability narrative
  • Engineering narratives
  • Final cost estimate review

FINAL REPORT
• Final 95% Predesign Document per Minnesota State Predesign Standards

Core Design Team
Core Design Team
Core Design Team

Specialized Expertise Team
Extended Design Team

Spatial program, site and building options, sustainability opportunities, budget

Review and comment, select preferred direction, align scope and budget

Predesign document draft

Review and comment

Final report draft

Review and comment
A series of five workshops were held with a variety of faculty, staff, and administrators from WSU, as shown in this predesign schedule. Additional user meetings that were led by WSU are also included below.

**Visioning Session:**
- Visioning with Deans, Department Chairs, and Academic Leadership
- Composed Project Vision Statement

**Workshop #1 (Week 2):**
- Site Tour with WSU Leadership
- Project Visioning and Goal Setting
- Program Visioning
- Sustainability Visioning

**Workshop #2 (Week 4):**
- Resiliency Workshop
- Engineering/Facilities Tour and Meeting
- Program Development and Discussion

**Workshop #3 (Week 7):**
- Campus, Neighborhood, and Community Forces
- Massing, Orientation, and Site Forces
- Program Module Development
- Blocking and Stacking/Plan Concepts

**Feedback Sessions (Weeks 7-11):**
- Presentations and feedback discussions with each College
- Led by WSU facilities

**Workshop #4 (Week 11):**
- Finalize Architectural Program
- Site, Massing and Sustainability Options
- Program Test Fit Activity
- Test Fit Reconciliation and Discussion

**Feedback Sessions (Weeks 12-15):**
- Presentations and feedback discussions with each bargaining unit through Meet & Confer
- Led by WSU facilities

**Workshop #5: (Week 14):**
- Review 95% Predesign Submittal with all participating campus stakeholders
Throughout all four workshops, multiple engagement exercises were used to encourage participation from a wide variety of users. Initial program and sustainability vision was informed by a survey that was distributed to select stakeholders in advance of workshop #1. During workshop #1, the vision for the project was established through a dot/voting exercise. Workshop 2 featured a hands-on resiliency workshop, and workshop 3 included a participatory conversation in regards to finalizing the program modules. In workshop #4, participants were given colored chips representing various program elements and were allowed to test floor plan options on a building framework to talk about adjacencies and overall building concepts.
3. Alternatives Considered

From the beginning of the predesign, the design team studied options for renovating the existing buildings, replacing them, or doing some combination (leaving one existing building in place and doing an addition to it). The tables below from workshops #1 and #2 identify some of pros and cons of these three options that were discussed, compared to the overall goals of the project.

The design team vetted multiple options from both a campus fit, sustainability/energy, cost and program fit perspective. The table at the bottom of this page illustrates high level cost estimates derived from SF calculations only and prior to any programming work being completed. Due to the amount of work needed to fully renovate the existing Gildemeister and Watkins Halls, the cost of renovation is significant.

### Project Alternatives

<table>
<thead>
<tr>
<th>Project Alternatives</th>
<th>Value</th>
<th>Usefulness</th>
<th>Cost Effectiveness</th>
<th>Transformative</th>
<th>Fosters New Thinking</th>
<th>Enthusiasm</th>
<th>Supported by Entire WSU Community</th>
<th>Showcase</th>
<th>Gateway</th>
<th>Highlights Interdisciplinary Work</th>
<th>Engagement</th>
<th>Foster Community Connections</th>
<th>Sustainability</th>
<th>NZE Goals</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovate</td>
<td></td>
<td></td>
<td></td>
<td>- Harder to think outside the box</td>
<td>+ Current inhabitants excited</td>
<td>- Difficult to achieve iconic/visible presence</td>
<td>- Multiple entrances are confusing</td>
<td>- Stuck in old ways of thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Reno + Partial Demo and Addition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+ Opportunity to address and invite in the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
<td>+ Maximize program: less SF, may be more efficient</td>
<td>+ Better Life Cycle Cost</td>
<td>+ Inspire new ways of thinking</td>
<td>+ Iconic</td>
<td>+ Visible</td>
<td>- May be challenging to get buy-in from current inhabitants</td>
<td>+ Recruiting tool</td>
<td>+ Inspire community collaboration</td>
<td>+ Opportunity to address and invite in the community</td>
<td>+ New, single front door</td>
<td>+ Optimize site, HVAC, water, all strategies</td>
<td>- Demolition/waste</td>
<td>+ Opportunity to design with resilient strategies</td>
<td></td>
</tr>
</tbody>
</table>

### Cost Estimate

<table>
<thead>
<tr>
<th></th>
<th>GSF</th>
<th>$ PER SF</th>
<th>($ MIL) TOTAL</th>
<th>SOFT COSTS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovate</td>
<td>73,504</td>
<td>$552</td>
<td>$40.6</td>
<td>$14.1</td>
<td>$54.7</td>
</tr>
<tr>
<td>Partial Reno + Partial Demo and Addition</td>
<td>73,080</td>
<td>$605</td>
<td>$44.2</td>
<td>$15.4</td>
<td>$59.6</td>
</tr>
<tr>
<td>New</td>
<td>73,000</td>
<td>$632</td>
<td>$44.6</td>
<td>$15.5</td>
<td>$60.1</td>
</tr>
</tbody>
</table>
Energy models revealed that it would be impossible to meet the campus goal for a net zero energy building within the constraints of the existing buildings, given orientation, massing, fenestration, and structural frame.

The desire for flexibility of learning spaces and the need for collaborative commons space would be challenging to accommodate in a renovation scheme.

Due to all of these factors, WSU decided to proceed with a request for new construction, rather than renovation. The demolition of Watkins and Gildemeister with the replacement of one new building offers the following advantages:

- Optimized site location for on-site/renewable energy
- Optimized form for maximizing daylighting potential
- Optimized massing and site orientation to take advantage of passive thermal strategies and reduce energy load
- Optimized structural grid for learning space flexibility
- Optimized floor to floor height for group learning spaces
- Reoriented campus front door to form a gateway connection to the community
4. PROJECT LOCATION

This predesign proposes that two low efficiency, high maintenance cost, and low return on investment buildings, Gildemeister and Watkins Hall, be demolished and replaced with one Net Zero flexible academic building. The location for this project is at the edge of campus, creating a critical connection between the campus and the surrounding community. For the purposes of this predesign, Option B was considered, however, Option A, as outlined in the CFP, should also be made available to the future project design team for further study and possible building placement.

EXISTING BUILDINGS

HIGH
MEDIUM
LOW

Optional energy efficiency (lower is better)

OPTION A
SEE ALSO - 2022 CAMPUS FACILITIES PLAN

OPTION B
SEE ALSO - 2022 CAMPUS FACILITIES PLAN
2.

Project Background
BASIS OF NEED
PROJECT BACKGROUND

1. WSU Mission 33
2. Relevance to WSU Strategic Plan 35
3. Needs Analysis 50
4. Space Utilization and Scheduling 56
5. Existing Campus Facilities and Infrastructure 60
1. WSU MISSION

MISSION

WSU’s mission is to enhance the intellectual, social, cultural, and economic vitality of the people and communities we serve. We offer undergraduate programs based on the traditions and values of the arts and sciences and an array of graduate and professional programs that are especially responsive to the needs of the Upper Midwest. We prepare our graduates to serve generously, lead responsibly and respond imaginatively and creatively to the challenges of their work, their lives, and their communities. **WSU is a community of learners improving our world**

As a Carnegie Engaged campus, we are serious about our relationships with the local communities of Winona and Rochester and our expanded surrounding communities in the region. For us, any proposal for a new campus building must support and encourage engagement and collaboration. Any new building or renovation planning must keep sustainability and resiliency in mind. Thus, simply building a new box with classrooms and offices would unlikely inspire new thinking and learning. Instead, we seek to establish inspiring spaces that are not the typical academic classrooms and offices. We will create living learning spaces that invite engagement from all disciplines and practices focused on problem based civic engagement—spaces where our current relationships with the communities around us can be both hosted and expanded, and where faculty and students participate in community-based work that not only develops research skills but helps them apply their new knowledge and skills as a result.

We envision a building that becomes an inviting gateway to our main Winona campus, where students from all disciplines form learning communities actively engaged to build new skills and solutions—not just for today but also for the future. We have challenged the pre-design team to develop new spaces that can 1) be configured for **flexible and innovative** uses; 2) incorporate vital **student support services** that encourage students and faculty to work and learn as a true community; 3) help develop foundational **teamwork, communication, and critical thinking skills**; and 4) provide highly visible studio/lab environments where students, faculty, community, and staff have shared access and technology support for **collaborative learning**.

FLEXIBLE AND INNOVATIVE

The Winona campus has many “traditional” learning spaces that are slowly being retrofitted into active learning space, makers’ space, and interdisciplinary space, as demand increases. This project allows us to create deliberately designed spaces that nurture collaborative and active learning. The spaces will house some faculty offices, but the vision for this building is to have faculty, staff, students, and community moving in and out of the spaces as new research projects arise, or interdisciplinary and collaborative learning takes place. The space is designed to be purposefully flexible, with a modular design that can be reduced or expanded to accommodate class sizes from 20 to 120. Building spaces that have a single fixed occupancy size in 2022 may not be desirable in 2032! Modular designs for these spaces provide flexibility and encourages active and creative learning.

STUDENT SUPPORT SERVICES

With working and learning in spaces that are deliberately equitable and accessible, it is certain that key student services will be required to enhance and support the efforts. These services will include: the TRIO program which supports first-generation, low-income, and ability-challenged students; International Student & Scholar Services which helps international student succeed; and the OASIS Advocacy Center which provides a safe space for victims and survivors of sexual and relationship violence.

TEAMWORK, COMMUNICATION, AND CRITICAL THINKING

The heart of WSU’s success (the highest student success rate in the Minnesota State system) is our faculty’s approach to engaged learning. Faculty have deliberately and effectively moved toward active learning strategies and real-world experiences.
Students in all disciplines gain highly valued skills necessary for success beyond their degrees. Interactive and flexible learning spaces provide faculty and students the opportunities to arrange and rearrange spaces for a variety of learning configurations, access technologies when and where they are needed, and build unique communities of interdisciplinary learners.

**COLLABORATIVE LEARNING**

As unique learning teams and communities form, all participants gain vital skills and experiences in collaboration. The work we have been doing in interdisciplinary “shark tank” challenges gives us a glimpse of the possibilities for short and long-term successful collaborations. As these experiences grow and are incorporated by the faculty into new learning opportunities, we will rely heavily on the spaces being flexible, staffed appropriately (technology, lab managers, just-in-time tutors, etc.), and an inspiring resource for social and ecological literacy.
2. RELEVANCE TO WSU STRATEGIC FRAMEWORK

WSU STRATEGIC FRAMEWORK
The Strategic Framework provides a broad planning strategy which transforms WSU’s foundational values into planning goals. The framework is built upon five Strategic Goals:

Student Learning
The Student Learning strategic goal focuses on teaching practices, learning pathways, assessment of processes, academic planning, technology, public accountability to:
• Reinvent teacher education
• Clarify student pathways
• Coordinate university-wide assessment plans and processes
• Maintain public accountability
• Develop and implement Academic Plan 2020-2025
• Leverage tomorrow’s technology in academics

The project program includes training of mathematics and arts teachers and tomorrow’s technology leaders in technology rich learning spaces.

Student Success
The Student Success strategic goal focuses on entrepreneur experiences, advising and program investments to:
• Improve the Student Experience
• Achieve Advising Excellence
• Focus Academic Investments
• Enhance Graduation Planning
• Provide Co-Curricular Transcripts and Programming
• Expand eServices

The project includes best-in-class learning, student support, and community spaces for our high impact programs that reach every student who attends WSU.

Inclusive Excellence
The Inclusive Excellence strategic goal focuses on retention, recruitment, and campus climate to:
• Increase campus diversity, equity, and inclusion
• Assess and address the strengths and gaps in current practices for diversity and inclusivity in the WSU community
• Create organizational structures and processes that ensure the enhancement of a culturally competent, welcoming and pluralistic university
• Close the Achievement Gap

• Build long-term relationships with under-represented alumni (BIPOC, LGBTQ+ and others)
• Create spaces for open dialogue for topics of diversity

The project program includes support services for underrepresented and culturally diverse groups and will utilize the most recent knowledge of equity design so users from all backgrounds, cultures, and abilities will feel comfortable and welcome.

Relationships
The Relationships strategic goal focuses on community engagement, WSU-Rochester and Warrior pride to:
• Strengthen Rochester community access
• Enhance shared community and campus services
• Develop and enhance programs to strengthen a culture of civility and collegiality on our campus and in our local communities
• Enhance community engagement that supports teaching and learning
• Expand facilities and programs in Rochester, specifically at the Broadway Campus
• Implement Warrior Pride initiatives

The project program will expand the academic programs’ ability to collaborate with community partners and offer on-campus and off-campus internship experiences.

Stewards of Place & Resources
The Stewards of Place and Resources strategic goal focuses on engagement, arts and culture, sustainability, facilities, recreation, athletics, and wellness to:
• Expand support for arts and cultural activities
• Expand recreation, athletics and wellness spaces
• Enhance the practice and teaching of sustainability
• Enhance support for engaged learning
• Implement sustainable energy savings program
• Enhance instruction spaces for collaboration in art, computer science and math
• Enhances facilities planning in Winona and Rochester
• Implement WSU Thriving 2035: Re-imagining Residence Life Plan

The project has been a priority for WSU for numerous years and has become increasingly relevant as evidenced by the highlighted bullet points above.
The Academic Plan provides the overall framework for academics at WSU. From this framework each College develops a plan specific to their academic goals.

**Goal 1: Winona State is unrelenting in its pursuit of excellence in academics.**

Winona State’s rich history as a residential campus is rooted in the liberal arts and world-class professional education. We serve our mission as a public university by helping students achieve their individualized goals across all academic disciplines. To accomplish this, we will:

1. **Promote and support the curriculum at all levels through innovative, discipline-based approaches to teaching and learning;**
2. **Integrate digital literacy and appropriate technologies into the educational experience;**
3. **Identify educational needs and respond with innovative programming;**
4. **Develop and promote a variety of curricular offerings for transfer, non-traditional, distance, and adult learners;**
5. **Create relevant and sustainable graduate programming;**
6. **Support outstanding faculty scholarship, creative achievement, and professional development, especially when such work creates unique opportunities for students;**
7. **Facilitate efforts and initiatives to help students attain degrees; and**
8. **Maintain appropriate accreditations.**

*The project spaces are deliberately designed spaces to nurture collaborative, innovative, and technology-rich learning.*

**Goal 2: Winona State strives to be a model for community engagement.**

The Winona State University community is strengthened by a variety of engaged learning experiences, activities, and community partnerships that are created and sustained by our faculty, staff, and students. In order to continue to support this engagement, we will:

1. **Partner with organizations, agencies, and individuals in the region and beyond to create innovative, hands-on, educational experiences that support student learning; and**
2. **Expand mutually beneficial relationships with community partners.**

*The project includes space for community partners to collaborate with students and faculty.*

**Goal 3: Winona State embraces equity and inclusion as core values that enrich teaching, scholarship, and service.**

Winona State affirms and celebrates the diverse identities and lived experiences of faculty, staff, and students. We aspire to create and maintain a community with an inclusive atmosphere where everyone is welcome. In order to do so, we will:

1. **Recognize and represent the rich diversity of experiences through academic and co-curricular opportunities;**
2. **Create welcoming opportunities for students from varied cultural backgrounds and encourage all students on our campus to engage with one another.**
3. **Integrate global perspectives into the curriculum and encourage study-away opportunities; and**
4. **Attract, support, and retain diverse faculty, staff, and students.**

*The project includes space for TRIO and International Student Services and designed for equity so users from all backgrounds, cultures, and abilities will feel comfortable and welcome.*

**Goal 4: Winona State will continue to invest in intellectual capital, labor, and resources.**

The pursuit of academic excellence, engagement, and inclusion requires ongoing investment in the people, labor, and resources that make up WSU. In order to support the goals of this Academic Master Plan, we will:

1. **Invest in human resources by making intentional hiring decisions and providing all employees with opportunities for ongoing professional development and training;**
4.2. Monitor and invest in infrastructure, facilities, and equipment; and

4.3. Create, maintain, and make strategic use of collaborative campus learning spaces.

The project is designed to be flexible and adaptable to promote long-term relevance as academic and curricular needs change.

BOARD OF TRUSTEES CAPITAL BUDGET GUIDELINES

Adapting and modernizing academic and support spaces critical to student success.

Gildemeister Hall and Watkins Hall are obsolete and cannot be reconfigured to create suitable spaces for modern learning needs. 95% of the building systems are in backlog or due for renewal. The interior layouts, fixtures, and finishes reflect pedagogy of the 1960’s and no longer support the needs of our students and faculty. The new building will remove over $11 million in deferred maintenance and reduce building operating costs by 50%. Having spaces designed for current needs, and be adaptable for future needs, will increase building utilization for both scheduled and unscheduled learning activities.

Facilitate fulfilling the vision of Equity 2030.

This project will create learning, work, and social spaces designed for equity and access. Users from all backgrounds, cultures, and abilities will feel comfortable and welcome. The most recent knowledge of equity design will be leveraged for this project. To support our students, WSU’s TRIO program will be in the building to provide advising, tutoring, and career guidance for qualified students.

Advancing resilience and environmental sustainability.

Winona State University’s 2022 Comprehensive Facility Plan [link] has set a goal of carbon neutrality by 2050. Our recent on-campus installation of 1.4 megawatts of Solar PV and this CICEL project are key steps to reaching this goal. In addition to producing renewable energy and being net zero energy and carbon neutral, the building and site will be water balanced, low waste, and toxin free. The project is estimated to reduce campus energy use by 8.7 million kBTU, carbon emissions by 1.8 million lbs, and water use by 890,000 gallons.

No net increase in academic footprint.

This project replaces two aged structures with a single new structure. The new building will reduce the overall campus square footage by 5,300 square feet and add an acre of green space to the academic core of campus. Additionally, maintaining and servicing one building versus two buildings will provide operational savings.
According to the Comprehensive Facilities Plan (CFP) [link], the future of the Winona campus will champion two goals: carbon neutrality by 2050 and providing a preeminent student experience. These long term goals will guide decision-making on campus in the short, medium, and long-terms. CICEL is a pioneering project included in the CFP's short-term development. Carbon neutrality means net-zero carbon emission. The campus will follow the Carbon Neutrality Roadmap (see Section 4) in the CFP to reduce energy consumption and increase renewable energy production. The campus will continue to enhance its environment to provide a preeminent student experience where a diverse group of students learn through gapless, welcoming, and personalized experiences.

To support WSU's carbon neutral goal by 2050, the Roadmap to Carbon Neutrality defined four key strategies in the 2022 Comprehensive Facilities Plan which includes 1) campus carbon performance management, 2) low carbon heating, 3) low demand cooling, and 4) on-campus renewable energy. The CICEL project demonstrates these strategies in two ways. First, the removal of two low-efficiency and high-maintenance existing buildings will reduce the campus’ energy consumption. Secondly, CICEL will demonstrate state-of-the-art sustainable and resilient design with integrated on-site renewable energy production (geothermal and solar PV) and high-efficiency building systems. CICEL is a key building block of WSU's CFP and a milestone toward its carbon neutrality goal.

To achieve the building’s net-zero energy goal, CICEL requires installation of geothermal wells in adjacent land. This gives an opportunity to enhance WSU’s campus with the addition of a large-scale green space for campus-wide gathering, recreation, and learning. Site Option A of CICEL will position new green spaces near the north-south campus corridor and concentrate the campus’ energy at its core while Site Option B creates a green space at the western edge of campus to share with the neighboring community and absorb stormwater runoff.

In accordance with the CFP’s Guiding Principles, CICEL and the new green spaces will support an integrated academic program with flexible space for hands-on learning and advance the campus culture that promotes DEAI (Diversity, Equity, Accessibility, Inclusivity) and collaboration. The efficient and modular design of CICEL creates spaces of various sizes and allows for long-term flexibility and adaptability of the building. Shared commons spaces at the core of the building promote collaboration and interdisciplinary learning. The outdoor green spaces are gathering hubs that extend teaching environment outdoor and provides hands-on learning and exhibition opportunities.

Just as student experience is at the heart of the Guiding Principles within the Comprehensive Facilities Plan (CFP), student experience is at the heart of the vision for this project. The CFP embodies these principles at a campus scale whereas CICEL embodies them at a building scale. Student experience has driven the concept for everything from the program modules, generous amount of common space, the Student Services offerings within the building, and the focus on innovation and collaboration, including the ability for students to connect with community in a way that was previously inaccessible. This project prioritizes on-campus locations for in-person learning, technology, and tools. This experience is unique to an on-campus experience that is student-focused.
The Center for Interdisciplinary Collaboration, Engagement, and Learning will be a multi-faceted building serving multiple colleges, departments and student support services, all with overlapping interests.

The three departments enroll a significant number of students of color (SoC), first generation (FirstGen), and post traditional (PostTrad) students.
STUDENT EXPERIENCE

DIVERSITY, EQUITY, ACCESSIBILITY, INCLUSIVITY

ADDRESS WSU HOLISTICALLY
WINONA + ROCHESTER

STRATEGIC & EFFICIENT

FOSTER COLLABORATION & INNOVATION

SUSTAINABILITY & RESILIENCY

ACADEMIC EXCELLENCE

MEASURES OF SUCCESS

Excerpt from Comprehensive Facilities Plan (CFP) [link]
GUIDING PRINCIPLES

OUR BRILLIANT TOMORROW

The Comprehensive Facilities Plan is part of WSU’s Strategic Planning effort that supports the larger WSU Strategic Framework.

Early engagement with WSU identified seven themes as measures of success, shown on the left, with Student Experience at the heart of the plan. These themes were validated by engagement with students and faculty, informing the plan’s Guiding Principles.

Comprehensive Facilities Plan Guiding Principles

• Advance the campus culture that promotes DEAI (Diversity, Equity, Accessibility, Inclusivity) and collaboration

• Generate plans that are data-informed and actionable, outlining the “why”

• Craft innovative and adaptable spaces that support all student typologies and the “Future of Learning”

• Reinforce academic excellence through hands-on learning and one-on-one interactions to drive enrollment

• Integrate sustainability and resiliency into physical space, materials, and processes

• Support WSU growth in Rochester and grow outreach and engagement within the community
PREEMINENT STUDENT EXPERIENCE
UNIQUELY WINONA

CARBON NEUTRAL BY 2050
NET-ZERO CARBON EMISSIONS
VISION

WINONA CAMPUS

In Winona, WSU will provide preeminent student experience, where a diverse group of students learn through gapless, welcoming, personalized experiences and achieve success that exceeds their expectations.

Comprehensive Facilities Plan Guiding Principles

- Advance the campus culture that promotes DEAI (Diversity, Equity, Accessibility, Inclusivity) and collaboration
- Generate plans that are data-informed and actionable, outlining the “why”
- Craft innovative and adaptable spaces that support all student typologies and the “Future of Learning”
- Reinforce academic excellence through hands-on learning and one-on-one interactions to drive enrollment
- Integrate sustainability and resiliency into physical space, materials, and processes
- Support WSU growth in Rochester and grow outreach and engagement within the community
SHORT-TERM RECOMMENDATIONS

SUMMARY

FACILITIES

- Gildemeister, Watkins, Prentiss-Lucas Halls Demolition
- Loughrey Field Relocation
- Education Village Utilization Study
- Krueger Library & 1st floor East of Maxwell Renovation
- Sheehan Hall & Laird Norton Renovation
- CICEL & Mark & Main Housing Construction
- Athletics / Recreation / Community Hub Study
  Include Memorial Hall and McCown Gym

SITE

- Campus Mall & Science Garden
- Howard Street and King Street Enhancements

ENERGY INFRASTRUCTURE

- Existing Building Energy Improvements (various buildings)
- IWC Solar Carport & PV Installation (various buildings)
- Geothermal Well Installation (various locations)
ART & DESIGN

The Art and Design Department trains students for successful, exciting careers in the creative industries of the 21st century by providing an outstanding, cutting-edge education that emphasizes working together, creative problem-solving and using the latest technologies. Students are trained to be versatile creators, thinkers, and educators.

Degree Programs

Art Teaching
The B.S. in Art Teaching trains students to be a successful, resourceful K-12 art teacher. They learn the theory and practice of teaching art in schools and develop their own artistic and creative voice. After completing the Art Teaching program, students earn the Minnesota K-12 Art Teaching Licensure.

Graphic Design
Graphic Design is a classic design program relying on a base of strong fine and liberal arts. This base pairs with skills from various other fields of study. Although the program is based in the Art & Design Department, students also take courses in the Computer Science, Communication Studies, Marketing and Mass Communication departments. Students build on a foundation of design theory, studio arts and art history and work with professional design software and technology. Study includes modern design practices and up-and-coming visual communication media.

I-Design
With WSU’s I-Design major, students develop their creative identity through problem-solving skills, new media and technology, group effort and global cultural experience. Using the Design Thinking approach, the I-Design major offers an adaptive design education that is customized for the WSU environment and blends several areas of study. The major requires “international exposure” that may be fulfilled as a semester-long study abroad or a multi-week-long summer faculty-led study away experience. As the creative field continues to grow, the program prepares students to become leaders in multiple design-related industries and your community. The I-Design major brings in a focus elective allowing students to choose from Studio Practices, Conceptual Illustration, Technology & Interactivity, Business & Marketing, Sustainable Applications, Community Development, and Integrated Studies.

Studio Art
The Studio Art major is a redesigned 21st-century program focused on providing an outstanding modern Studio education. The program offers students the opportunity to learn classic art practices such as oil painting and drawing and utilize state-of-the-art technology in digital art and photography courses. Students are equipped with the skills needed to become a visual artist or creative industry professional in today’s exciting arts world. The new Studio Art curriculum offers painting and drawing courses that cover a broad variety of topics including color theory, anatomy and figure drawing, collaborative social practice, digital drawing and abstraction. Others include various types of photography, digital compositing and collage and oil painting.

History of Art Minor
The History of Art Minor studies artistic artifacts and the cultures they come from. This includes everything from cave paintings to today’s electronic and digital arts. The minor trains students to appreciate, understand and analyze pieces of art. History of Art offers a pathway to careers in museums, art galleries, the art market and arts administration.

Studio Art Minor
The Studio Art Minor develops students’ artistic skills. The focus areas include painting, drawing, artistic photography, and digital arts. The visual and creative skills that students gain in Studio Art have proven valuable for students looking for careers in computing, marketing, and advertising and media production. The skills also translate well to counseling and mental health.

COMPUTER SCIENCE

Computer Science students take an up-to-date set of courses and participate in exciting projects to develop their programming skills and technical knowledge and to develop their communication and critical thinking skills. Students can choose from two options: Computer Science and Applied Computer Science. Both options require a common core set of courses designed to give students a fundamental understanding of both theoretical and applied computer science.
Degree Programs

Computer Science
Students complete a common core set of courses designed to give a fundamental understanding of both theoretical and applied computer science, and an introduction to current topics and practices in the industry. In the Computer Science Major option, they deepen their knowledge with advanced courses in Theory, Programming Languages and Operating Systems, Calculus, and 5-7 elective computer science courses.

Applied Computer Science
The Applied Computer Science Major includes the common core courses and provides a way to consider the application of computer science to a specific emphasis. Students take advanced courses in Web Programming, Database Systems, and Human Computer Interaction, along with 5-7 computer science elective and applied area courses. Currently, the three applied areas are:

- Bioinformatics
- Computer Information Systems
- Human Computer Interaction

Beyond the Classroom

Research
Senior student research projects encompass a wide variety of computer science topics. With the assistance of faculty and staff, students conduct and present research in various computer science topics. These projects range from mobile applications to hardware analysis.

Practicum
The Computer Science Practicum provides majors with practical experience in a non-academic setting. Students are introduced to the work environment where they see an application of many of the concepts learned in the classroom. The Practicum provides a work experience that is substantially different from any previous or current work experiences.

Software Testing and Development Lab
WSU students staff the Software Testing and Development Lab and work to provide services to local and regional businesses and industries. These services include software testing and development, and other types of computer and networking related technical services. These paid positions are under the direction and supervision of Computer Science faculty and staff.

MATHEMATICS & STATISTICS

The Mathematics & Statistics program provides the opportunity for individuals to study, excel in, and appreciate the world of mathematical sciences. Students become a regional source of mathematical expertise to support their governmental, educational, and industrial efforts. The department creates an environment that encourages new intellectual growth and breadth of understanding for faculty and students and the university community. Additionally, Mathematics & Statistics provides foundational skills for all disciplines taught at WSU; this is evidenced by the 32 (97 credit hours) General Education Program (GEP) courses provided by the department.

Degree Programs

Data Science
WSU created the first undergraduate program in Data Science in the upper Midwest. The degree program requires knowledge from statistics, computer science, and a domain-specific application area. This program was developed in consultation with several industry partners which ensures graduates will have the skills necessary to meet the rapidly growing demand for data scientists. The discipline of data science focuses on transforming data into knowledge. This degree requires a student to acquire knowledge and expertise in data science through an understanding of analytical and computational techniques, an interdisciplinary emphasis, and a capstone experience.

Mathematics
Mathematics majors gain the tools to find meaning in complex situations, learn about a wide variety of structures and relationships, and develop mathematical thinking skills required for solving problems in any field. Mathematics is an age-old field whose relevance continues to grow in today’s modern world. Whether it’s predicting weather, making sound business choices, modeling disease, or securing digital information, mathematics is at the heart of all analysis.

Mathematics Education
The mathematics teaching major prepares students for teaching mathematics in grades 5 to 12. This
program is administered through the Department of Mathematics and Statistics and the College of Education. Courses are continuously updated to reflect new licensure requirements from the Minnesota Professional Educator Licensing and Standards Board.

Statistics
The BS Statistics Program provides students with instruction in the science of data interpretation, to use data to arrive at informed, intelligent decisions. Students gain the ability to extract, synthesize, and communicate meaning from the sea of data that surrounds us in our information-saturated world. From astronomy; biology; economics; social science; education; public health; psychology; medicine; sports; and marketing; statisticians are relied on to advance the state of knowledge in the field. Students can complete a statistics research project or participate in internship. Recent graduates have completed internships at the Mayo Clinic, insurance companies, local industry, and non-profit organizations. Students can choose a specialty focus in Actuarial Science, Quality Assessment and Improvement, or Biostatistics.

Statistical Consulting Center
The Statistical Consulting Center (SCC) is an educational and service unit operated by the Department of Mathematics and Statistics at Winona State University. Their primary mission is to enhance research efforts by providing quality statistical support to faculty and students and to promote interdisciplinary research efforts and collaboration in our community. The center is staffed by WSU faculty members who have extensive training in statistics and students who have excelled in their statistics.

The SCC offers services to members of the Winona State Community as well as to individuals, businesses, and organizations in our broader community. Services available through the center include:
- Assistance with study design
- Assistance with data analysis
- Assistance with the use of various statistical software packages
- Assistance with the interpretation and presentation of results
- Presentations on statistical methods for various classes/departments on campus
- Workshops on statistical methodology

TRIO
TRIO Offers the Support to Succeed
TRIO Student Support Services (TRIO-SSS) and TRIO Student Ability Services (TRIO-SAS) helps eligible students reach their goal of graduation and gain a lifetime of confidence.

TRIO advisors meet with students one-on-one to provide encouragement, advice, course selection, career exploration and much more. Our vision is to be a student-centered community providing effective and meaningful support for students to achieve their goals.

TRIO is funded by a federal grant to serve up to 325 students per year who meet certain eligibility requirements.

Students must be a U.S. citizen or have permanent resident status. They also need to have academic need and meet at least one of these criteria:
- Are a first-generation college student, meaning neither parent has earned a four-year college degree
- Are low-income according to federal low-income guidelines
- Have a documented learning, physical or psychological disability registered with WSU Access Services

TRIO Mission
TRIO Student Support Service program is a community of support for first-generation students, students who come from low-income families and students with documented disabilities.

This program is designed to help these students achieve their goals. Our dedicated advisors provide customized assistance to increase lifelong learning and development for each person.

TRIO is funded by a federal grant and connected to the Educational Opportunity Association (EOA). The EOA hosts educational opportunities and provides scholarships to students in the Midwest.

TRIO Vision
We are a student-centered community providing effective and meaningful support for students to achieve their goals.
TRIO Services

Academic Advising & Support
- Academic advising
- Help navigating college life
- Exploring major and minor options
- Mapping a graduation plan
- Preparing for graduate and professional programs
- Help writing resumes and cover letters
- Skill development and career exploration

Tutoring
- Drop-in tutoring for math and English
- As much drop-in and individual tutoring as you need through WSU Tutoring Services
- Study skills and time management coaching

Money Management & Financial Wellness
- Using the financial aid system and completing the FAFSA
- Budgeting and money management skills
- Learning how to spend wisely and build savings
- Applying for scholarships

Leadership Club & Events
- The TRIO Student Leaders Club includes developing leadership skills, meeting interesting people and preparing for your future.
- TRIO also hosts many events and workshops focused on timely topics that help students get the most from their college experience.

Deciding on a Major or Minor
- Understanding options for majors at WSU (and beyond)
- Learning how to explore options and research the right information for you
- Choosing “exploratory” classes to help with major selection

Career & Graduate School Planning
- Understanding your post-graduation options
- Resume help and getting with Handshake and other job search tools
- Understanding graduate school options and help researching schools
- Help with graduate school application process
- Help with preparing for graduate school entrance exams (such as the GRE, LSAT and GMAT)

INTERNATIONAL STUDENT & SCHOLAR SERVICES

The International Student & Scholar Services (ISSS) office assists international students achieve their goal to pursue a degree at Winona State University. The ISSS team provides the following services:

Admission Assistance:
- How to Get an I-20
- Apply for F1 Visa
- Apply for Housing
- Plan for Health Insurance
- Make Travel Arrangements
- Attend New International Student Orientation (NISO)
- Get to Know Winona
- Get Involved at Winona State University

Cross-Cultural Outreach Program (CCOP)
The Cross-Cultural Outreach Program brings WSU international students, WSU faculty, Winona-area teachers and community organizations together to share cultures and ideas.

International students receive a scholarship and complete projects each semester as part of the CCOP.

Employment
The ISSS office assist international students with obtaining both on-campus and off-campus employment and internships. Their assistance includes:
- Job searching
- Applications and interviews
- Regulatory compliance for both employee and employer

OASIS ADVOCACY CENTER

The OASIS Advocacy Center is a safe space for victims, survivors, and those who passionately support victims and survivors. The Center services include:
- Meet with the campus confidential advocate
- Provide information on campus and community services
- Provide referrals for help or support with issues of sexual violence, relationship violence, stalking or sexual harassment
- Organize student support groups
- Space to seek solace and a safe, quiet space for reflection and support.

The OASIS Advocacy Center is supported through the Office of Equity & Inclusive Excellence.
3. NEEDS ANALYSIS

The Art & Design, Computer Sciences, and Mathematics & Statistics departments provide courses for a significant portion of the WSU student body; over one-third of the undergraduate students enroll in their courses in any academic year. Over 80% of first-time undergraduate students enroll in courses offered by one of the departments during their time at WSU. In addition to those students pursuing majors from the three departments, students enroll in courses to fulfill their General Education Program requirements and as electives to enrich their educational experience.

Enrollment Model

The mission of the General Education Program (GEP) Being a residential campus, WSU’s enrollment experienced a significant decline due to the COVID pandemic. Fall 2022 enrollment shows an increase in new entering first-year students; this will result in an
overall increase in total enrollment as the previous small first-year cohort groups matriculate.

WSU's enrollment projection model prepared by WSU ITS Data Services predicts gradual, steady growth over the next several years. Key inputs for this projection are: 1. historical enrollment, retention, and graduation trends for undergraduate and graduate students; and 2. future enrollment scenarios for fall-entering new first-time (NEF) and transfer (NET) undergraduate students. While this model does not account for shifting demographics, academic profile of incoming students, or new graduate programs, its assumption on the continuation of retention and graduation trends is reasonable to project the overall enrollment in the near future.

Scenario Notes:

- **Extremely Optimistic**: A scenario to achieve FY2026 enrollment with headcount greater than 6,500 and FYE greater than 6,000
- **Optimistic**: A scenario roughly reflecting the NEF projection model based on the historical and projected trend of high school graduates in MN (adjusted), WI and other states and the historical data on WSU enrollment
- **Plausible**: A scenario assuming a steady growth in NEF/NET enrollment
- **Pessimistic**: A scenario assuming a graduate increase in NEF/NET enrollment
- **Extremely Pessimistic**: A scenario assuming a slow increase in NEF/NET enrollment
Course enrollment in the Art & Design, Computer Sciences, and Mathematics & Statistics departments has trended downward along with the overall enrollment.

As many students enroll in courses to fulfill their General Education Program requirements and as electives to enrich their educational experience, the number of degrees awarded does not indicate the full value of these departments to the university’s academic experience.

**GEP Program**

The mission of the General Education Program (GEP) at Winona State University is to provide a broad base of skills and knowledge to prepare students for informed, responsible citizenship in a changing world. Winona State University’s GEP includes ten goal areas and four additional graduation requirements. The Goal Areas are coordinated with the Minnesota Transfer Curriculum (MnTC).
RETENTION, COMPLETION, AND SUCCESS OUTCOMES

Retention and completion

The Art & Design, Computer Sciences, and Mathematics & Statistics departments meet or exceed the general student body at WSU regarding 2nd-Year Retention Rate. This indicates students declaring an intent to pursue degrees offered by the departments are achieving academic success and are satisfied with their first year at WSU.

The 6-Year Graduation Rate of students pursuing majors offered by the departments lags behind the general student body. The new CICEL building will help close this gap by providing improved learning experiences and expanding access to student support services, study space, and student project space.

The Post Graduation Success Outcomes of students pursuing majors offered by the departments tracks closely with the general student body. Outcomes are based on the Minnesota State Graduate Follow-Up Survey which collects post-graduation outcomes over one year after graduation with an 85% response rate target. The typical success outcome calculation is a percentage of responding students employed in a related field or continuing education.

Impact on enrollment growth

As the three departments serve such a significant percentage of WSU’s students, the poor condition of these outdated facilities has impacted WSU’s ability to recruit and enroll students and recruit and retain faculty and staff. Gildemeister and Watkins Halls do not meet the needs and expectations of today’s and tomorrow’s students, nor do they compete with facilities at peer institutions. Additionally, the constraints of the existing buildings limit development of new course offerings and growth of the departments.

Replacing Gildemeister and Watkins Halls with the new CICEL building will allow the departments to improve and expand their course offerings and develop new collaborative programs of study that exceed the needs and expectations of our future students. This project will trend the projected enrollment model toward the Extremely Optimistic scenario.
Programs that address continuing or emerging high demand fields

Students taking courses or graduating with the degrees offered by the Art & Design, Computer Sciences, and Mathematics & Statistics departments will be entering high demand and high growth career fields. As examples, per the Minnesota DEED Occupations in Demand data tool:

- Data Science and Software Development careers are projected to grow over 20% in the next 10-years
- Marketing and Advertising careers are projected to grow over 5% in the next 10-years
- 35% of WSU students pursue Health Care careers, which require foundational and advanced mathematics and statistical skills, are expected to grow over 10% in the next 10-years.
- 15% of WSU students pursue Education careers, which require foundational and advanced mathematics and statistical skills, are expected to grow over 5% in the next 10-years.

![Occupations in Demand Table](image)

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Job Title</th>
<th>Current Demand Rank</th>
<th>Current Demand Indicator</th>
<th>28th Percentile Wage</th>
<th>Median Wage</th>
<th>Projected 10-year Growth Rate</th>
<th>Projected 10-year Openings</th>
<th>Education Requirements</th>
<th>On-the-job Training Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>151211</td>
<td>Computer Systems Analysts</td>
<td>35</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$91,995/yr</td>
<td>$103,692/yr</td>
<td>5.6%</td>
<td>14,372</td>
<td>Bachelor's degree</td>
<td>Short term on the job training</td>
</tr>
<tr>
<td>151212</td>
<td>Information Security Analysts</td>
<td>81</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$91,995/yr</td>
<td>$104,936/yr</td>
<td>29%</td>
<td>2,744</td>
<td>Bachelor's degree</td>
<td>Short term on the job training</td>
</tr>
<tr>
<td>151241</td>
<td>Computer Network Architects</td>
<td>282</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$104,633/yr</td>
<td>$110,074/yr</td>
<td>2.8%</td>
<td>1,696</td>
<td>Bachelor's degree</td>
<td>Short term on the job training</td>
</tr>
<tr>
<td>151244</td>
<td>Network and Computer Systems Analysts</td>
<td>42</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$77,870/yr</td>
<td>$90,468/yr</td>
<td>3.1%</td>
<td>4,687</td>
<td>Bachelor's degree</td>
<td>Long term on the job training</td>
</tr>
<tr>
<td>151245</td>
<td>Database Administrators and Architects</td>
<td>237</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$90,214/yr</td>
<td>$110,500/yr</td>
<td>3.3%</td>
<td>2,410</td>
<td>Bachelor's degree</td>
<td>Unavailable</td>
</tr>
<tr>
<td>151251</td>
<td>Computer Programmers</td>
<td>243</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$69,971/yr</td>
<td>$90,020/yr</td>
<td>14%</td>
<td>1,876</td>
<td>Bachelor's degree</td>
<td>Short term on the job training</td>
</tr>
<tr>
<td>151256</td>
<td>Software Developers and Software Quality Assurance Analysts and Testers</td>
<td>79</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$89,990/yr</td>
<td>$102,672/yr</td>
<td>23.2%</td>
<td>34,630</td>
<td>Bachelor's degree</td>
<td>Unavailable</td>
</tr>
<tr>
<td>152011</td>
<td>Actuaries</td>
<td>461</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$99,298/yr</td>
<td>$113,969/yr</td>
<td>NA</td>
<td>NA</td>
<td>Bachelor's degree</td>
<td>Long term on the job training</td>
</tr>
<tr>
<td>152031</td>
<td>Operations Research Analysts</td>
<td>242</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$65,206/yr</td>
<td>$83,107/yr</td>
<td>24.3%</td>
<td>3,010</td>
<td>Bachelor's degree</td>
<td>Short term on the job training</td>
</tr>
<tr>
<td>152088</td>
<td>Data Scientists and Mathematical Scientists: All Other</td>
<td>458</td>
<td>🌟🌟🌟🌟🌟🌟</td>
<td>$83,035/yr</td>
<td>$104,694/yr</td>
<td>25.9%</td>
<td>1,080</td>
<td>Bachelor's degree</td>
<td>Unavailable</td>
</tr>
</tbody>
</table>
Specialized and unique learning spaces

The three departments require specialized and unique learning environments that are not duplicated elsewhere on campus. Likewise, these learning experiences cannot be provided with online coursework.

Art courses such as painting and sculpting require physical manipulation of objects and specialized ventilation and lighting to create a safe learning environment. Design courses require specialized equipment such as 3D printers and laser cutters. Studio spaces are needed for both in-class and out-of-class work on projects and coursework.

Computer science students require labs where they learn to build hardware and assemble network wiring. Their work requires specialty software not available on their personal computers. Cybersecurity courses need electronically shielded rooms that simulate real-world security environments. Lab spaces are needed for both in-class and out-of-class work on projects and coursework.

PROGRAMS IMPACTED

Gildemeister Hall is currently home to the Mathematics & Statistics Departments. Watkins Hall is currently home to the Art & Design and Computer Science Departments.

The new building is being designed to be a flexible and adaptable campus-wide resource. The program as designed contains 750 learning space seats. At 85% room utilization and 75% seat fill, 500 to 600 students will use the building for course credit each semester. The building will also be utilized for casual and group study, collaboration with local and regional business partners, student and faculty research and other campus and community events.

Gildemeister and Watkins currently contain 61 offices; the new building is programmed for 50 faculty and staff office spaces. Art & Design, Computer Science, Mathematics & Statistics, and Student Support Services currently have 41 faculty and staff located in these buildings. These faculty and staff can be temporarily located in unused residence hall rooms in Prentiss-Lucas Hall or Sheehan Hall. No currently utilized beds will be taken off-line. Costs for temporary relocation will include moving, technology, and rent paid to Residence Life. Academic programs displaced during construction will be temporarily relocated to existing available space through expansion of class scheduling hours. Note that Watkins Hall will remain in operation during construction of the new building so the specialty Art & Design and Computer Science studios and labs will not need to be relocated during construction.

RELEVANCE TO LAIRD NORTON

The Laird Norton project will complement the interdisciplinary spirit of the CICEL program and is awaiting completion of a private fundraising campaign. While the Laird Norton program has been considered in the project planning, this project is not dependent on the Laird Norton timeline.

The Laird Norton Building will be programmed with a similar interdisciplinary spirit as the CICEL. Laird Norton is planned to house WSU’s new I-Design Major, and its program is designed to support that interdisciplinary major. The Laird Norton Center for Art and Design will build bridges between education, industry and community development. The Center’s I-Design program will broaden the scope of design study at WSU by practicing interdisciplinary learning, collaborative problem-solving, and integrative thinking about art and technology. Two galleries complement these principles.

The Contemporary Art Gallery will be a catalyst for students, artists, and community members to engage with diverse art practices and innovative design concepts. The Foundation Art Gallery will celebrate WSU’s rich culture, history, and global connections through objects and images from the permanent collection.

A business incubator space will allow start-up companies to launch projects, prototype and share resources. Located between downtown Winona and the WSU campus, the Center for Art and Design will develop an energetic, dynamic culture that connects WSU with the community along Winona’s downtown arts corridor.

Together, the Center for Interdisciplinary Collaboration, Engagement and Learning and Laird Norton will establish WSU as a regional leader in interdisciplinary learning and engagement.
4. SPACE UTILIZATION AND SCHEDULING

EXISTING SEAT FILL AND UTILIZATION

Both Gildemeister and Watkins Halls have a mismatch between section sizes and room sizes and teaching/learning styles and room capabilities; this results in low seat fills and underutilization as illustrated in Figures 1 and 2. In addition, in the studio and lab spaces standard utilization measures do not fairly represent the space usage. These spaces are used extensively for out-of-class project work and often contain in-progress projects such as sculptures or computer hardware builds that limit shared use of the spaces.

Generally, the rooms are overcrowded which inhibits active learning pedagogy, limits accessibility, and creates safety hazards and studios and labs, Figures 3 and 4.

Compared to competing institutions, inadequate and deteriorating facilities make it difficult to attract prospective students. Right-sizing spaces with adequate storage for the current class sizes, and offering essential safety ventilation and hygiene for these disciplines will further position WSU as a leading institution. More sections could be offered if these spaces met the needs of modern educational facilities and could remain adaptable as desired requirements evolve.
Figures 5 and 6 show the mismatch among the current seating capacity, the recommended seating capacity, and the current class section size.
PROPOSED CHANGES TO SEAT FILL AND UTILIZATION

The Center for Interdisciplinary Collaboration, Engagement & Learning and Education Village are WSU’s first steps toward a campus-wide update of our Learning Spaces to support current and future learning needs that include Active Learning, Project-Based Learning and Simulation-Based Learning.

Using the Educause Learning Space Toolkit as a framework, WSU has completed a review of campus learning spaces and developed a plan to revitalize and expand the portfolio of campus learning spaces. The review identified numerous classrooms, labs and studios that were overcrowded, lacked suitable furnishings and technology and did not suit the teaching and learning styles of our faculty and students. Our plan for providing quality learning spaces can be partially realized by upgrading and reconfiguring existing spaces; but to complete our portfolio of learning spaces, new spaces like those in the Center for Interdisciplinary Collaboration, Engagement & Learning will be needed.

Updating the current learning spaces – independent of proposed and current work at Education Village and CICEL - will have a significant impact on overall seat count and room count. Increasing the square foot per seat to meet our target standards will decrease existing campus seat count by 30% (1,900 learning space seats) and decrease existing campus room count by 25% (45 learning spaces).

When the Center for Interdisciplinary Collaboration, Engagement and Learning is complete, the result will be a 1,400-seat reduction in total campus seat count and a reduction of 23 rooms. However, by increasing the quality of the classrooms, right-sizing the rooms for active learning, and improving seat density according to average class size, we will improve our overall campus utilization to help achieve our goal of 85% utilization.

<table>
<thead>
<tr>
<th>Campus Learning Space Design Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Space</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>110 Classroom</td>
</tr>
<tr>
<td>111 Active Learning</td>
</tr>
<tr>
<td>112 Seminar/Conference</td>
</tr>
<tr>
<td>113 Auditorium</td>
</tr>
<tr>
<td>210 Laboratory</td>
</tr>
<tr>
<td>211 Technology Enriched</td>
</tr>
<tr>
<td>212 Biological Science</td>
</tr>
<tr>
<td>213 Physical Science/Engineering</td>
</tr>
<tr>
<td>214 Health Professions</td>
</tr>
<tr>
<td>215 Studio Arts</td>
</tr>
</tbody>
</table>
CURRENT AND PROPOSED CLASSROOM SCHEDULING POLICY

In conjunction with updating classroom spaces on campus, the process of scheduling rooms to increase classroom utilization is also being revised, as follows.

Current Process for Assigning Learning Spaces
1. Schedule rolls term to term.
2. Term Course Forms (TCF) are submitted to secure priority space for those departments that have priority space. Consideration is given to course enrollment and capacity of classroom.
3. Once the TCF deadline is past, the rest of the campus schedule is placed.
4. All courses without assigned rooms begin to backfill available space.
5. Consideration given to building and Campus, West Campus, and lastly by modifying class times to fit availability. This is done with each department individually.
6. Final changes and TCFs are processed before registration.

Target Process for Assigning Learning Spaces
1. Term Course Forms (TCF) are submitted by semester deadline date.
2. EMS software is used to optimize room/course schedule based on total campus learning space portfolio. Consideration is given to match learning activities to room attributes.
3. Optimized room/course schedule is reviewed at College and Department level to resolve conflicts and errors.
4. Room/course schedule is reviewed after student registration deadline. Room assignments may be adjusted to resolve overfilled or underfilled courses.
5. Final changes and TCFs are processed by start of semester classes.

Note: This process is in-progress and will be reviewed, adjusted, and approved through campus Meet & Confer prior to being finalized.
5. EXISTING CAMPUS FACILITIES AND INFRASTRUCTURE

Both Watkins and Gildemeister Halls have significantly high Facility Condition Indices (FCI), of 0.41 and 0.31, respectively. The current replacement values of each Hall are as indicated below.

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>CRV</th>
<th>GSF</th>
<th>YEAR BUILT</th>
<th>FCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gildemeister Hall</td>
<td>$16,516,000</td>
<td>37,699</td>
<td>1964</td>
<td>0.30</td>
</tr>
<tr>
<td>Watkins Hall</td>
<td>$15,687,000</td>
<td>35,805</td>
<td>1964</td>
<td>0.41</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$32,203,000</strong></td>
<td><strong>73,504</strong></td>
<td></td>
<td><strong>0.35</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUBSYSTEM COSTS</th>
<th>Watkins</th>
<th>Gildemeister</th>
<th>2022 Backlog</th>
<th>10-Yr Backlog</th>
</tr>
</thead>
<tbody>
<tr>
<td>B20 - Exterior Enclosure</td>
<td>$438,000</td>
<td>$415,000</td>
<td>$853,000</td>
<td>$899,000</td>
</tr>
<tr>
<td>B30 - Roofing</td>
<td>$1,257,000</td>
<td>$0</td>
<td>$1,257,000</td>
<td>$1,257,000</td>
</tr>
<tr>
<td>C30 - Interior Finishes</td>
<td>$481,000</td>
<td>$444,000</td>
<td>$925,000</td>
<td>$1,236,000</td>
</tr>
<tr>
<td>D10 - Conveying</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>D20 - Plumbing System</td>
<td>$784,000</td>
<td>$826,000</td>
<td>$1,610,000</td>
<td>$1,610,000</td>
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<tr>
<td>D30 - HVAC System</td>
<td>$2,141,000</td>
<td>$2,103,000</td>
<td>$4,244,000</td>
<td>$4,426,000</td>
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<tr>
<td>D50 - Electrical System</td>
<td>$967,000</td>
<td>$826,000</td>
<td>$1,793,000</td>
<td>$1,985,000</td>
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<tr>
<td>E - Equipment and Furnishings</td>
<td>$347,000</td>
<td>$328,000</td>
<td>$675,000</td>
<td>$675,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$6,415,000</strong></td>
<td><strong>$4,941,000</strong></td>
<td><strong>$11,356,000</strong></td>
<td><strong>$12,088,000</strong></td>
</tr>
</tbody>
</table>

**GILDEMEISTER AND WATKINS HALLS – EXISTING CONDITION**

With most of their interiors remaining from the time of original construction in 1964, the suitability of Gildemeister and Watkins Halls to continue as buildings that support active and experiential learning is limited. There are current accessibility issues, technology limitations, lack of flexibility and a limited floor-to-floor height, which restricts plenum space for current HVAC requirements and limits ceiling heights for classroom space. The MEP systems serving each building are at the end of their useful life and need complete replacement.

Architecturally, the buildings are characteristic of the time in which they were constructed, and neither is historically significant on campus. The primary structure of both buildings is a cast in place concrete column frame. Columns in the corridors and classrooms limit flexibility to reconfigure the spaces. An interior corridor in both buildings is efficient but limits space for collaboration. It also prevents daylight from getting to the centers of each building.

The exterior envelopes of the existing buildings are a masonry shell original to the 1964 buildings. The exterior walls are composed primarily of masonry sandwich infill. They include eight-inch nominal no-load bearing concrete block that makes up the interior surface. There is little to no cavity for ventilation and moisture removal. Within the exterior wall system there is little to no insulation or R-value, although Watkins Hall does contain a layer of 2” expanded polystyrene insulation.

Clearly, it would be challenging to renovate Gildemeister and Watkins Halls and create a flexible, multidisciplinary campus academic resource and meet net zero energy goals. Limitations include rigid, inflexible structural frames; low floor to floor heights; fixed massing and orientations sub-par exterior envelopes; and the need for complete mechanical and electrical infrastructure replacement.
EXISTING FLOOR PLANS - GILDEMEISTER HALL

Existing floor plans for Gildemeister are shown on the following pages.

GILDEMEISTER BASEMENT DEPARTMENT PLAN
GILDEMEISTER THIRD LEVEL DEPARTMENT PLAN
### Gildemeister Hall

#### Code Information

<table>
<thead>
<tr>
<th>Code Information</th>
<th>Group B: Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy group(s) [existing]:</td>
<td>Group B: Business</td>
</tr>
<tr>
<td>Occupancy group(s) [proposed]:</td>
<td>None: To be demolished</td>
</tr>
<tr>
<td>Primary space types (office, classroom, etc.):</td>
<td>Classroom and office</td>
</tr>
<tr>
<td>Type of construction (per current MN Building Code):</td>
<td>Type II B, non-sprinklered</td>
</tr>
<tr>
<td>Building Size (GSF):</td>
<td>Allowable height: 55 feet, 3 stories</td>
</tr>
<tr>
<td></td>
<td>Allowable area/floor: 23,000 SF</td>
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<tr>
<td></td>
<td>Actual height: 35 feet, 3 stories</td>
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<tr>
<td></td>
<td>Actual area/floor: 16,250 SF</td>
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<td>Total building area: 37,699</td>
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<td></td>
<td>Space efficiency (%) (Usable vs. Total Building Area): 59%</td>
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</table>

#### Existing Building Systems (describe type of system and current condition)

<table>
<thead>
<tr>
<th>Existing Building Systems (describe type of system and current condition)</th>
<th>MNSCU Std. 4-ply Asphalt installed 1995, good condition</th>
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</thead>
<tbody>
<tr>
<td>Roofing type(s):</td>
<td>MNSCU Std. 4-ply Asphalt installed 1995, good condition</td>
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<tr>
<td>Structural system type(s):</td>
<td>CIP Concrete built 1964, good condition</td>
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<tr>
<td>Mechanical system type(s):</td>
<td>Constant volume AHU, perimeter hot water radiation, connected to central chilled water and steam installed 1964, end of useful life</td>
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<tr>
<td>Electrical system type(s):</td>
<td>800A, 208/120V installed in 1964, end of useful life</td>
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<td>Fire protection type(s):</td>
<td>No fire sprinkler system</td>
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<tr>
<td>Exterior wall type(s):</td>
<td>CMU w/ bonded brick veneer, no insulation, built in 1964, end of useful life</td>
</tr>
<tr>
<td>Interior wall type(s):</td>
<td>CMU, built in 1964, fair condition</td>
</tr>
<tr>
<td>Conveying system(s):</td>
<td>Hydraulic elevator installed in 2010, good condition</td>
</tr>
<tr>
<td>Technology systems:</td>
<td>Campus standard, fair condition</td>
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<tr>
<td>Sustainability/alternative energy systems:</td>
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</tr>
<tr>
<td>Notes on existing FF&amp;E:</td>
<td>Building contains an inconsistent mix of furnishings, fair condition</td>
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#### Metrics

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Current backlog ($)</th>
<th>Current 10-year renewal ($)</th>
<th>Proposed FCI</th>
<th>$418,637</th>
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<tbody>
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<td>Current 10-year renewal ($)</td>
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<td>Current FCI</td>
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<td>Proposed FCI</td>
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<td>Current CRV</td>
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Note: Predesigns may use this template but its use is not required. All information noted above must be included for each affected building in the predesign.

Form updated 03/31/22
STRUCTURAL
The existing building structural systems and materials as described below are based solely on the existing building structural drawings for Classroom Building for Winona State College by Lang Raugland and Brunet, Inc. dated July 7th, 1963, for Gildemeister Hall.

The foundation system supporting Gildemeister Hall are spread footings ranging in size from 4’ x 4’ x 12” deep up to 12’ x 12’ x 24” deep with 2500 psf allowable bearing pressure.

There are two wings to the building one to the Northwest, which is a 1 story building, and one to the Southeast which is a 3-story building with a roof connected by a 1 story low roof link. There appears as if there is an expansion joint between the face of the link and the Southeast wing.

The link roof is approximately 10’-7” above grade with a constant structural depth of 11 ½”. The link roof structure is supported by pipe columns and wide flange beams.

The Northwest wing consists of a concrete slab on grade with one level of elevated structural steel comprised of open web joist framing in the east west direction supported on structural steel wide flange beams spanning in the north south direction to steel pipe columns. Overall structural depth varies based on bay location in the building. Bay spacing within the Northwest wing varies. The western most bay is on average 24’-4” x 15’ while the eastern most bay is on average 21’-9” x 15’-0”. The clear distance between the slab on grade to the underside of structure for the western bay is 9’-4” and 10’ for the eastern bay. The Northwest wing tops out at an elevation of about 12’-2” above adjacent grade with a clear space between slab on grade and the underside of structure of 12’-1 ½”.

The Southeast wing has a partial basement, two-tiered concrete classroom on the first level and three upper levels of pan joist framing. Joists span in the north-south direction while wider girders span in the east west direction. The pan and joist framing has a constant total overall structural depth of 14”. The clear space between floor and underside of structure above is as follows:

| 1st – 2nd | 12’6” |
| 2nd – 3rd | 9’-11 ½” |
| 3rd – Roof | 9’-11 ½” |

Bay spacing in the southeast wing varies. There are two outer bays to the north and south with a central bay down the corridor with column spacing of 29’-11”, 20’-3”, and 9’-5” respectively. Column spacing along the axis of the building is 15’-0”. The Southeast wing roof is approximately 34’-5” above adjacent grade.

In all 3 parts of the building the exterior above grade walls are not load bearing. There are minimal load bearing walls enclosing the partial basement in the Southeast wing.

Gildemeister Hall Limitations:
Northwest wing

- Low floor to underside of structure could cause difficult for mechanical routing
- Locked into column grid spacing which may not be conducive to new program
- Roof load capacity limited
- New hanging loads or rooftop equipment will require retrofit of existing structural steel framing

Southeast wing

- Low floor to underside of structure could cause difficulty for mechanical routing
- Two tiered classrooms on first floor that will require infill if room size and type are not a fit for the new program
- Locked into column and grid spacing which may not be conducive to new program
- Programs requiring a live load of 100 PSF or more may be limited to slab on grade locations

ENVVELOPE
Envelope systems include walls, roofs, and glazing. Exterior wall systems primarily have a face brick exterior with a concrete backup system with no internal insulation. Windows are a mix of operable, awning-type windows with limited openings and single paned windows. A second interior layer of glazing was also observed throughout. Roof systems contain 1-2” of rigid insulation with topping / membrane last replaced approximately 20 years ago.
Envelope Summary Findings

- Wall, roof, glazing and door systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- Exterior walls are a significant energy consumer due to lack of insulation.
- Roof has limited insulation and is a significant energy consumer.
- Windows are original and are showing some sign of age and will need replacement in the future.

ELECTRICAL

Gildemeister Hall

- Currently served by an 800A, 208/120V fused switchboard manufactured by Frank Adams. The switchboard is beyond its serviceable life and parts are no longer available. (fig 1) Replacement is recommended.
- Medium voltage transformer was installed in 1991. It steps down campus loop medium voltage to 120/208V. This type of distribution is not consistent with newer campus buildings. It is recommended the transformer be replaced with a unit supplying 277/480V secondary voltage for building distribution.
- Medium voltage primary disconnect is original and needs servicing. It is fed from the campus medium voltage 12,470V loop. The loop tap feeding Gildemeister is located in the service tunnel. The tap is a G&W oil filled distribution enclosure which is no longer manufactured. (fig 2) Both should be replaced.
- Low-voltage electrical panels are original and beyond their serviceable life and should be replaced and located in dedicated electrical rooms. (fig 3)
- Lighting throughout the building is existing or retrofit fluorescent fixtures. (fig 4) New LED fixtures should be installed for energy savings and maintainability.

Deferred maintenance backlog:
Replacement of entire electrical infrastructure is recommended to alleviate maintenance backlog.

MECHANICAL

HVAC

HVAC systems for Gildemeister Hall are served by a constant volume air handling unit fed with chilled water from the campus chilled water system and hydronic heating water converted from the campus central steam systems. Perimeter hot water fin tube radiation provides perimeter heating needs. Both Gildemeister Hall air handling systems are constant volume with zone level reheat coils and pneumatic controls. Insulation systems were noted to have asbestos.

HVAC System Summary Findings

- HVAC systems are original systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- A central, constant volume air handling unit causes significant challenges for temperature control which are below expectations for any level of teaching environment.

PLUMBING AND FIRE PROTECTION

Plumbing systems are standard domestic water, waste/vent piping and internal stormwater piping. Gildemeister Hall does not have any fire protection sprinkler system.

Plumbing and Fire Protection Summary Findings

- Plumbing system systems are original systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- Modern ADA requirements are not being met with current systems.
- Any significant renovations to the building would require the addition of a code-compliant, fire protection system throughout.
Figure 1: Gildemeister Frank Adams Switchboard

Figure 2: Campus loop tap - oil filled G&W

Figure 3: Outdated panelboards

Figure 4: Typical lighting - retrofitted original fixtures
EXISTING FLOOR PLANS - WATKINS HALL
Existing floor plans for Watkins are shown on the following pages.

WATKINS LOWER LEVEL DEPARTMENT PLAN
WATKINS GROUND LEVEL
DEPARTMENT PLAN
WATKINS SECOND LEVEL DEPARTMENT PLAN

Open to Below

Department
- Art & Design
- Common
- Computer Science
Watkins Hall

<table>
<thead>
<tr>
<th>Code Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupancy group(s) (existing):</strong></td>
<td>Group B: Business</td>
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<tr>
<td><strong>Occupancy group(s) (proposed):</strong></td>
<td>None: To be demolished</td>
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<tr>
<td><strong>Primary space types (office, classroom, etc.):</strong></td>
<td>Classroom and office</td>
</tr>
<tr>
<td><strong>Type of construction (per current MN Building Code):</strong></td>
<td>Type II B, non-sprinklered</td>
</tr>
<tr>
<td><strong>Building Size (GSF):</strong></td>
<td><strong>Allowable height:</strong> 55 feet, 3 stories</td>
</tr>
<tr>
<td></td>
<td><strong>Allowable area/floor:</strong> 23,000 SF</td>
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<tr>
<td></td>
<td><strong>Total building area:</strong> 35,805</td>
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<td><strong>Roofing type(s):</strong></td>
<td>Ballasted EPDM installed 1988, fair condition</td>
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<tr>
<td><strong>Structural system type(s):</strong></td>
<td>CIP Concrete built 1964, good condition</td>
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<td><strong>Mechanical system type(s):</strong></td>
<td>Constant volume AHU, perimeter hot water radiation, connected to central chilled water and steam installed 1964, end of useful life</td>
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<tr>
<td><strong>Electrical system type(s):</strong></td>
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<td><strong>Fire protection type(s):</strong></td>
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<tr>
<td><strong>Exterior wall type(s):</strong></td>
<td>CMU w/ brick veneer, 2” rigid insulation, built in 1964, end of useful life</td>
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<tr>
<td><strong>Interior wall type(s):</strong></td>
<td>CMU, built in 1964, fair condition</td>
</tr>
<tr>
<td><strong>Conveying system(s):</strong></td>
<td>Hydraulic elevator installed in 2011, good condition</td>
</tr>
<tr>
<td><strong>Technology systems:</strong></td>
<td>Campus standard, fair condition</td>
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<td><strong>Sustainability/alternative energy systems:</strong></td>
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</tr>
<tr>
<td><strong>Notes on existing FF&amp;E:</strong></td>
<td>Building contains an inconsistent mix of furnishings, fair to poor condition</td>
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<table>
<thead>
<tr>
<th>Metrics</th>
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<td><strong>Current CRV:</strong></td>
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<td><strong>Current 10-year renewal ($) :</strong></td>
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</tr>
<tr>
<td><strong>Proposed FCI:</strong></td>
<td>0.0 (demolished)</td>
</tr>
</tbody>
</table>
STRUCTURAL

The existing building structural systems and materials as described below are based solely on the existing building structural drawings for Completion of Science Building Industrial Arts Facility for Winona State College by Eckert and Carlson dated November 1962 for Watkins Hall.

The foundation system supporting Watkins Hall are a mixture of square spread footings ranging in size from 4'-8" x 4'-8" x 15" deep up to 7'-6" x 7'-6' x 15" deep and strip footings below load bearing walls. The allowable soil bearing pressure is not indicated on the structural drawings.

Watkins Hall is a 2-story building with a roof. There is a partial basement below the first floor with a possible future tunnel connection to the south. The majority of the first floor is slab on grade except for several concrete structural slab “lids” over portions of the partial basement. The concrete structural slabs vary in depth from 4 ½" up to 7 ½" based on slab spans. The structural slabs bear on both concrete basement walls and concrete masonry load bearing walls in the basement.

The upper levels are pan and joist concrete construction with structural one-way slabs enclosing a square circulation corridor around a center 2 story volume. Joists span from the circulation corridor out to the exterior wall of the building. Girders around the exterior perimeter and around the interior corridor span from concrete column to concrete column. The pan and joist framing has a depth of 15 5/8" with 34 ¼" deep girders along the perimeter wall and up to 29" deep along interior corridor wall. The clear space between floor and underside of structure varies dependent on the location within the building. 10'-0 3/8" is the clear distance between floor and structure above for much of the building. Pinch points exist along the exterior most wall of the south corridor, where the clear distance between floor below to underside of structure above is 8'-11". The roof of Watkins Hall is approximately 24’ above adjacent grade. Bay spacing around the perimeter of the building is 30'-8" x 15'4". The inner square circulation corridor has a clear distance from column line to load bearing wall of 8’-0’. The inner wall of the square circulation corridor appears to be brick and concrete masonry unit composite load bearing wall. The existing drawings do not indicate reinforcing within this wall.

Watkins Hall Limitations:

- The layout of the concrete framing around the inner corridor limits flexibility and prohibits change in program in the corridor
- Inner most corridor walls are load bearing
- There is no reinforcing indicated on plan within this load bearing wall and will require extensive field verification
- Low floor to underside of structure could cause difficulty for mechanical routing
- Programs requiring a live load of 100 PSF or more may be limited to slab on grade locations

ENVELOPE

Envelope systems include walls, roofs, and glazing. Exterior wall systems primarily have a face brick exterior with a concrete backup system with no internal insulation. Windows are a mix of operable, awning-type windows with limited openings and single paned windows. A second interior layer of glazing was also observed throughout. Roof systems contain 1-2" of rigid insulation with topping / membrane last replaced approximately 20 years ago.

Envelope Summary Findings

- Wall, roof, glazing and door systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- Exterior walls are a significant energy consumer due to lack of insulation.
- Roof has limited insulation and is a significant energy consumer.
- Windows are original and are showing some sign of age and will need replacement in the future.
ELECTRICAL
Watkins Hall

• Currently served by a 1200A, 208/120V fused switchboard. Replacement of the switchboard is recommended with a unit that distributes power through breakers. (Fig 5)

• The medium voltage transformer serving Watkins is located in Pasteur Hall. The transformer is original to the building and consists of three (one per phase) PCB filled transformers. These should be replaced. (Fig 7) Ideally, a new substation transformer would be located within the building footprint for ease of maintenance and reduction in feeder lengths.

• The medium voltage primary disconnect is original to the building and located in Pasteur Hall. It is beyond its serviceable life and should be replaced. (Fig 6)

• Low-voltage electrical panels throughout the building are original and should be replaced and located in dedicated electrical rooms. (Fig 8)

• Lighting throughout the building is existing or retrofit fluorescent fixtures. New LED fixtures should be installed for energy savings and maintainability.

Deferred maintenance backlog:
Replacement of entire electrical infrastructure is recommended to alleviate maintenance backlog.
MECHANICAL

HVAC

HVAC systems for Watkins Hall is served by a constant volume air handling unit fed with chilled water from the campus chilled water system and hydronic heating water converted from the campus central steam systems. The Watkins Hall addition also is served by a constant volume air handling unit fed with chilled water from the campus chilled water system with zone level heating needs provided by electric reheat coils. Perimeter hot water fin tube radiation provides perimeter heating needs. Air handling systems are constant volume with zone level reheat coils and pneumatic controls. Process exhaust systems appear to be original and may not meet all Industrial Ventilation and OSHA guidelines for safe arts processes.

HVAC System Summary Findings

- HVAC systems are original systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- A central, constant volume air handling unit causes significant challenges for temperature control which are below expectations for any level of teaching environment.

PLUMBING AND FIRE PROTECTION

Plumbing systems are standard domestic water, waste/vent piping and internal stormwater piping. Watkins Hall does not have any fire protection sprinkler system.

Plumbing and Fire Protection Summary Findings

- Plumbing system systems are original systems that have been well cared for, but are over 50 years old and are past industry expectations for useful life.
- Modern ADA requirements are not being met with current systems.
- Any significant renovations to the building would require the addition of a code-compliant, fire protection system throughout.

ENVIRONMENTAL CONCERNS

A Phase 1 Environmental Site Assessment was completed on September 10, 2018. As summarized in the ESA, the assessment identified no recognized environmental conditions in connection with the site. The assessment identified no controlled recognized environmental conditions in connection with the site.

Historically, residential dwellings and garages were located on the Site. It is unknown if the demolition debris associated with the buildings was buried on the Site or hauled away for disposal. The potential exists that buried materials are present at the Site that require management as solid or hazardous waste. If fill soils, which could include demolition debris and other wastes, are encountered during redevelopment additional evaluation of the fill soils might be required for management and disposal purposes.

Asbestos-containing building materials (ACBM) were labeled with signage in the basement of Gildemeister Hall. The materials appeared to have been encapsulated pipe wrap associated with previous abatement. Only qualified personnel should access areas with identified asbestos materials and in accordance with applicable safety procedures.
PHOTOS OF SITE

The following photos show entry experiences around the perimeter of campus and demonstrate the need for this project to create a sense of gateway and entry to campus, which is currently lacking on campus.

Numbers on the map below correspond to the campus perimeter photos to follow.
• sign expresses gateway to campus
• sign is small in scale - located away from main campus buildings
• pathway to glazing speaks of entry - inviting, transparent
• formal expression of entry not facing community
• parking lot serves as a barrier
• buildings ‘back’ is facing the public roadways
• glazing speaks of entry - presents an inviting, transparent gesture outward
• landscaping frames pathway into site
• colonnade first visually leads visitor to the front door and provides the pathway
• direct from cross street, one is presented with a blank wall

• entry is there, but fairly unassuming and movement down the street is required to notice it
• no feature drawing people into campus from this point
• appears as a continuation of residential neighborhood at the north
• this building has a clearly defined entry on axis with a roadway from the community
• collegiate face as an entry point
• no indication of entry to campus from this vantage point
• Alumni House is a welcoming feature
• Alumni House’s appearance as a residential structure does not inherently express a clear entrance to campus
walkway lines building without apparent entry - ‘back’ of building faces community

no indication of welcoming entry from vantage point - again ‘backs’ of buildings toward the community
• There are no features that indicate entry or welcome
• Roadway rather than pedestrian paving does not invite into campus
• There is a wide path to draw people in
• It is not apparent where the destination might be
• ‘backs’ of building are facing the walkway