COMPREHENSIVE FACILITIES PLAN

MINNESOTA STATE UNIVERSITY MOORHEAD

100% DOCUMENT

9/13/2022

JLG architects

CONTENTS

0.1 COVER LETTER FROM MSUM

MSUM COMPREHENSIVE FACILITIES PLAN

0.2 COVER LETTER FROM JLG ARCHITECTS

Comprehensive Facilities Plan Update for
Minnesota State University Moorhead

Dear President Blackhurst:

We are pleased to submit the 2022 Comprehensive Facilities Plan (CFP) for Minnesota State University Moorhead (MSUM). This new plan charts a clear course and vision to a vibrant future and thriving future of MSUM. There is alignment with concurrent planning work completed recently by the city of Moorhead making this a great time for a forward looking plan. The kick-off for your plan occurred while I was a delegate at COP26. Your goals were included in presentations to global and local inspiring audiences of professionals, students, staff and citizens. We believe your plan will continue to inspire many.

The document, as reviewed and approved by MSUM, meets the requirements of the Minnesota State Colleges and Universities CFP Update Guidelines.

JLG Architects met with the CFP steering committee, student senate, each college user group and held open house meetings. In addition, we engaged additional voices using the JLG Gateway™ Platform virtual town hall forum. In total, about 300 +/- voices were included making this CFP a very inclusive process. Using the Gateway Platform we evaluated existing campus data, enrollment trends and the key influencers of future enrollment, considered learning trends, business case criteria, performed an industry scan and simulated future scenarios. We toured campus buildings and grounds and analyzed information related to facility renewal, space utilization and sustainability efforts.

The Planning Committee created a long range planning vision with short and medium term actions that can be pursued on the way to the long range plan fulfillment.

We provided a plan that has impact and consolidates the campus while improving key characteristics that makes MSUM a unique and a desirable place to be educated.

We have enjoyed our involvement in planning the bright future for your campus, and would like to thank you and the faculty, staff, students and community members who participated. The Plan could not have been completed without everyone's thoughtful input. We are excited for your future and look forward to seeing your plan implemented.

Sincerely,

Patrick Thibaudeau, Principal-in-Charge

James Galloway, Architect of Record, MN License#_____

0.3 EXECUTIVE SUMMARY

This Comprehensive Facilities Plan document is for the 100% required submittal which includes existing conditions with recommended plans for near, mid and long term. Consolidation, renovation and strategic improvements are included. This plan provides an ambitious vision for the future of MSUM with immediate actionable steps that can be taken now to indicate movement on more ambitious action required to fulfill the vision. A variety of funding sources are identified including the sale of under utilized land and reduction of operating expense. This plan provides a road map to four key pillars of the plan:

1. Culture of Connecting, Activate the Quad
2. Best Business Case
3. Carbon Neutral Campus
4. Honoring Heritage, Technology of Tomorrow

The MSUM master plan work is grouped into three key aspects shown in the diagram below.

THE FUTURE OF LEARNING

Trends preceding the pandemic and those induced by, or accelerated by, the pandemic have been examined. Changes in learning modalities and delivery evidenced by precedent studies of K12 facilities in the region such as the Williston academy.

BUSINESS OF EDUCATION

Demographic trends, enrollment current and future, current space utilization, facility condition and deferred maintenance

RESILIENCE OF FACILITIES

The team has documented available information on energy, water, carbon and other resilience criteria focused in the human experience, positive performance and total cost of ownership.

Each of these areas will be considered with social and climate justice considerations allowing MSUM to chart a path to an inclusive learning future.

Downward pressure on enrollment is likely to continue making enrollment growth challenging. Population growth is anticipated to be very minimal in the region. Low facility condition, high deferred maintenance and low utilization are the most prominent trends shown in table 1. Overall the campus is benefiting from a new energy plant making the campus lower energy use, lower carbon footprint and setting the stage for a carbon neutral plan to implement the University President carbon neutral campus goal announced in 2021.

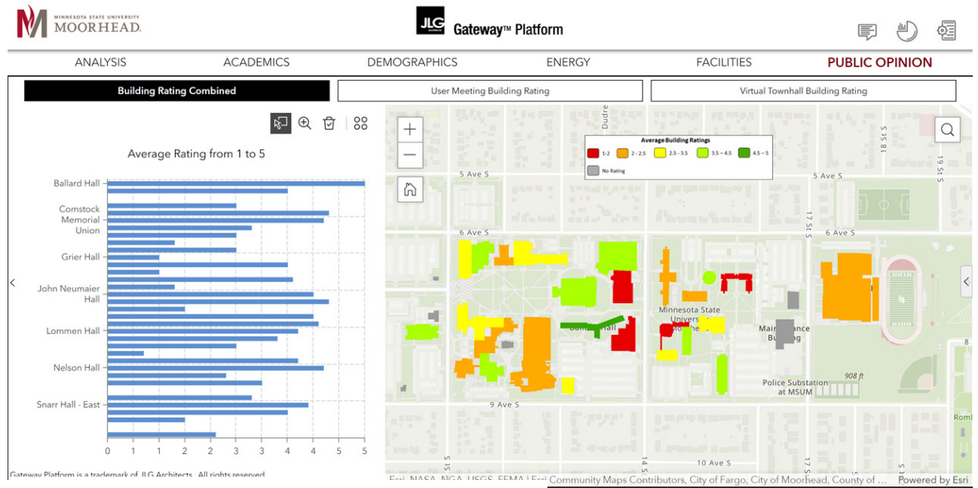
KEY TRENDS AND FINDINGS (see Table 1)

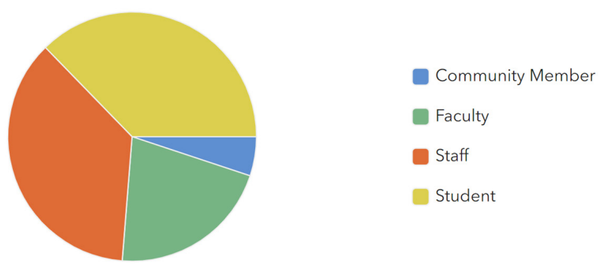
1. Enrollment: Declined 12% since 2016 compared to last master plan projecting 25% growth. Since 2003 enrollment has declined 34% from about 7700 in 2003 to just under 5100 for fall 2022. Since 2016 overall enrollment and undergraduate full time student enrollment has been steadily declining. Graduate student enrollment has been increasing since 2016, however, fall of 2022 graduate student enrollment slightly declined. There is a significant portion of students enrolled part time.

2. Population Trends: Census projections indicate no to low growth in most areas in the 100 mile service radius typical for MSUM. Current higher education market information indicates downward pressure on enrollment is likely.

3. Space Utilization: MSUM classroom utilization is well below MN State standards for all buildings. A few rooms are exceptions to the overall trend. See table 1 for more information.

During the second phase of the plan the team presented at a town hall hosted by MSUM president, met with user groups, presented to student senate, hosted an in person open house and a virtual town hall forum. Below is a summary of the results of the meetings and virtual engagement combined together. See Table 1 for more information.





*The MSUM Student Senate recommended the University make a Sustainable Action Commitment which President Blackhurst signed on behalf of the University in April 2021. Concordia College nearby has signed the University Presidents Climate Commitment. It is recommended the MSUM also join this pledge https://secondnature.org/signatory-handbook/climate-leadership-network-map/

Table 1: Summary of Existing Conditions Compared to Key Criteria
Each building was scored compared to each criteria. Buildings with the name bolded have multiple negative scores. Each criteria is weighted equally for this preliminary comparison. The team will continue to develop this to guide consideration of future options in the next phase and can determine weighting for criteria.

Green = positive compared to criteria
Yellow = mid-range compared to criteria
Red = negative compared to criteria
White = data not provided

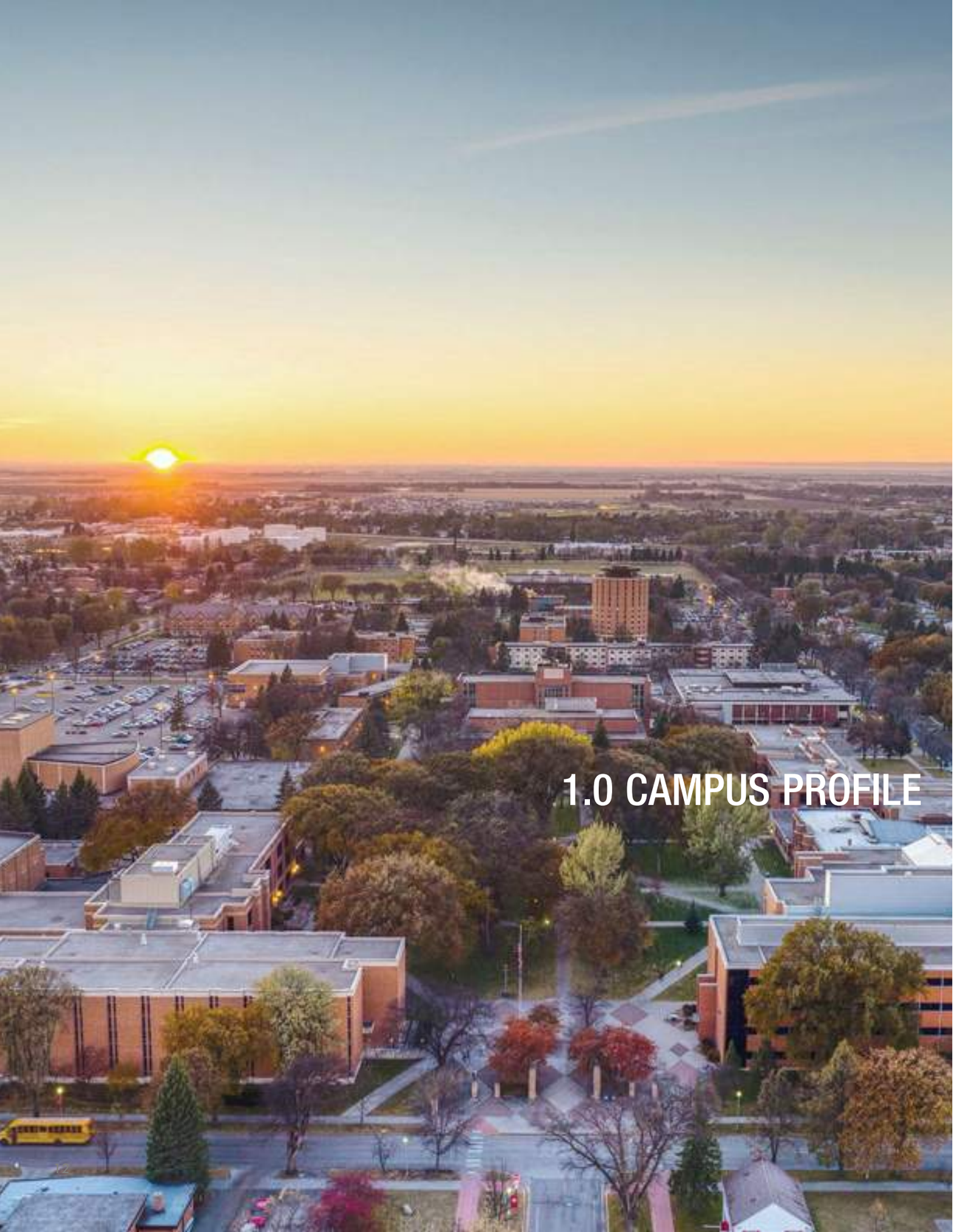
	COMPOSITE SCORE		Age	Emodied Carbon	FCI	$ Maint./Sf	Energy (EUI)	EUI/ B3 Benchmark	Water/SF	Natural Gas	Utilization	Survey
Gerdin Wellness Center	169		2008									
Grantham Hall	170		1965									
Grier Hall	105		1932									
Hagen Hall	197		1963									
Hendrix Center	192		2003									
Heating Plant	169		1959									
Holmquist Hall	104		1969									
John Neumaier Hall	179		2002									
King Hall	123		1970									
Kise Commons	129		1962									
Langseth Hall	177		2004									
Livingston-Lord Library	165		1960									
Lommen Hall	177		1932									
MacLean Hall	161		1932									
Maintenance Building	95		1966									
Murray Hall	101		1970									
Nelson Hall	152		1968									
Nemzek Field House	101		1959									
Nemzek Press Box	122		1959									
Owens Hall	127		1970									
Security Bldg	136		2002									
Snarr Hall - East	195		1964									
Snarr Hall - West	187		1962									
Snarr Hall -South	181		1967									
Weld Hall	101		1914									

Workshop #4 is shown in the photos. The team concluded this day of planning working on the campus map showing options for the future state.

During Workshop #4 one plan was prepare representing each of the four themes. We called them "Extreme Schemes". This process helps isolate the multiple variables in the plan and allows for increased engagement and clearer consideration of options.

Four teams were each assigned one of the themes and then reported back. The four schemes were then merged together into a hybrid using a force ranking method shown in the photo. Finally the team assembled a large campus map and using colored blocks for the buildings merged the four ideas into one. The result is shown in the plan.

MSUM COMPREHENSIVE FACILITIES PLAN
0.0 EXECUTIVE SUMMARY



1.0 CAMPUS PROFILE

1.1 CAMPUS HISTORY AND CHARACTERISTICS

MSUM acknowledges that it occupies the ancestral land of the Anishinaabe (Ojibwe), Dakota (Sisseton, Wahpeton) and Yanktonai Dakota First Nations.

Excerpts taken from Minnesota State University Moorhead's History:
https://www.mnstate.edu/about/history-traditions/history/

Moorhead became the site for a new normal school in Northwestern Minnesota after State Senator Solomon Comstock introduced a bill to the Minnesota State Legislature in 1885, declaring "...it would be a fine thing for the Red River Country and especially for Moorhead."

Comstock then donated six acres of land and the next session of the Legislature appropriated $60,000 for the construction of Main Hall, which included classrooms, administrative offices and a library. At the time, the campus towered on the outskirts of the city.

Old Main expanded in 1908 to provide space for a gymnasium and model school for student teaching. Twelve more acres were purchased for the school's expansion, which included Weld and Comstock Halls, completing the "great circle" now known as the mall. In 1921, the need for high school teachers led the state legislature to authorize to award bachelor's degrees, renaming the school Moorhead State Teachers College.

During the Depression, on Feb. 9, 1930, Old Main Hall burned. Student records were destroyed, 25,000 books turned to ashes and a stark shell was all that remained. But classes resumed the next week in Weld Hall, the dormitory and the Moorhead Armory.

By 1932 a new administration building named in honor of President Ray MacLean was opened with a model school and a gymnasium. From the ashes arose the "birth of the greater Moorhead State Teachers College," and a new symbol for the campus, the fire-breathing Dragon. Enrollment was 652 students.

During WWII, President O.W. Snarr announced that the college had entered into a contract with the Army Air Corps to train aviation students. From March 1943 to June 1944, 1,650 aircrew men were trained at MSTC. With the end of the War, enrollment swelled to more than 700 students and the school diversified and broadened into both a liberal arts and professional curriculum. Because of that diversity, the institutions name was changed to Moorhead State College in 1957.

A vast building program began under President John Neumaier from 1958 to 1968, adding 11 new buildings to campus and by the end of his term, 5,000 students were enrolled in classes here. In 1968, newly sworn-in President Roland Dille initiated Project E-Quality (now the Office of Diversity, Equity, & Inclusion), making the college one of the first in the region to actively seek minority students. The next year, Moorhead State joined a cooperative cross-registration exchange with neighboring Concordia College and North Dakota State University, creating Tri-College University. By 1975, the choice of programs and majors jumped to 90. So the legislature that year permitted the institution to change its name to Moorhead State University.

MSUM COMPREHENSIVE FACILITIES PLAN
1.1 CAMPUS HISTORY AND CHARACTERISTICS

In 1990, Moorhead State University's enrollment reached a record 9,151 and the school's most popular majors became elementary education, business administration, mass communications and accounting. President Roland Dille, the longest serving president in the history of Moorhead State (who oversaw the additions of Owens Hall, Nemzek Fieldhouse and Livingston Lord Library and the Center for Business to the campus), retired in 1994 after 26 years at the helm. He was succeeded in 1994 by Dr. Roland Barden, a McGregor, N.D., native with a PhD. in biochemistry.

Over the next 14 years Pres. Barden led the university in its conversion from quarters to semesters (1995) and was at the helm when Moorhead State University changed its name to Minnesota State University Moorhead (2000) and became one of the first campuses in Minnesota to go smoke free (2008). During his tenure MSUM also took on some major construction projects, including the new John Neumaier Apartments (2002), the new Science Lab Building (Now Langseth Hall - 2004) and the new Gerdin Wellness Center (groundbreaking in 2007) as well as major renovations to Hagen and MacLean Halls.

Edna Mora Szymanski became the 10th president of MSUM in July 2008. During her first year she was confronted with the flood of record for the Red River of the North and she led the campus through a major cut in state support without layoffs. She also saw major renovations of Lommen Hall and Livingston Lord Library.

Current president Anne Blackhurst has overseen a realignment of the academic structure in her first years, which led to the current four colleges: Science, Health and the Environment; Education and Human Services; Arts and Humanities; and Business, Analytics and Communication. Since 2014 when President Blackhurst took office, the University has received several major gifts such as a donation to create The Paseka School of Business. Most recently the MSUM Foundation raised more than $59 million in its Vision 2020 campaign which was used in part to fund the construction of a new Alumni Center which will be completed in the fall of 2023.

1.1.2 PRIOR COMPREHENSIVE FACILITIES PLANS

The previous 2010 and 2016 Master Plans focused on modernization and increasing the quality of space rather than growth, yet left flexibility for a possible return to higher enrollments. They also sought to follow the Minnesota State System Office emphasis to reduce deferred maintenance and reinforce good stewardship by maximizing past investments on campus.

Since 2010 MSUM has seen a reduction in the capital bonding dollars received for renovations. In 2022 Weld Hall was the system's number one capital project request. Unfortunately a capital bonding bill was not passed during the legislative session, so construction funding is still pending. The campus has continued to seek HEAPR projects annually to address campus needs. Other major projects implemented through the use of local and reserve funds in the last 10 years include the following:

Capital Bonding:

2009-2010	Lommen Hall Remodeling
2012-2014	Livingston Lord Library Remodeling
2018	Weld Hall Renovation design funding (construction funding pending)

Local Funds:

2010	Grantham Hall Room Renovations
2014	Ballard Hall Furniture in Student Rooms and Community Spaces
2015	John Neumaier Hall Roof Replacement
2015-2016	Comstock Memorial Union Remodeling and Addition
2019	Former Residential House Demolition
2019	Former Residential House Demolition
2016	Kise Commons Furniture in Dining Room
2016-2017	South Snarr Renovation
2019	Ponderosa Building Demolition (at Regional Science Center)
2018	Holmquist Hall Furniture in Student Rooms and Community Spaces
2020	Holmquist Hall Partial Roof Replacement
2019-2020	Nelson Hall Furniture in Student Rooms and Community Spaces
2022	Newman Center Demolition (with Alumni Center construction)
2022-2023	Alumni Center Built (construction starting Fall of 2022)

Revenue Fund Bonds:

2011-2012	Dahl Hall Renovation
2013-2014	West Snarr Renovation
2017-2018	East Snarr Renovation

MSUM has continued to work to enhance the user experience on campus, including items such as signage, public art, social node development, and pedestrian crossing point signage and traffic signals on the east end of the campus. Additional items accomplished from the past two master plans include demolition and sale of smaller buildings, reducing backlog and maintenance and allowing consolidation of parking lots.

Energy cost savings have been another important effort focused on since 2010 to reduce operation costs, through modifications to energy controls, stronger coordination of building use with controls, and revisions to motors and lighting. The project which modified heating infrastructure to low pressure steam across the campus has reduced energy use for heat. The MSUM President and Student Senate President signed the Sustainable Action Commitment on Earth Day 2021 which had a stated goal to 'make MSUM campus carbon neutral as soon as practically possible.' As such the campus is looking to have a baseline carbon footprint done. During planning it was learned that the City of Moorhead is providing 100% carbon free electricity with 80% of it produced carbon neutral.

Design documents have been funded and are being completed for Weld Hall Renovation with the request for construction funding pending. Predesigns have also been completed for the Center for the Arts, Nemzek Hall, and the Dragon Dome which is an additional indoor turf facility for student recreation and training. The most recent Landscape Master Plan was completed in 2013. Housing & Residential Life have completed most if not all items noted in the 2016 CFP.

1.1.3 ROLE OF CAMPUS WITHIN MINNESOTA STATE SYSTEM

Minnesota State is the third largest system of state collage and universities in the United States with 26 colleges, 7 universities, and 54 campuses. The system serves more than 340,000 students each year. Of Minnesota resident students who are in an undergraduate program 64% are enrolled at a Minnesota State college or university.

> Minnesota State Core Commitments - to ensure access to an extraordinary education for all Minnesotans, be the partner of choice to meet Minnesota's workforce and community needs, and deliver students, employers, communities and taxpayers the highest value/most affordable higher education option.
>
> Minnesota State Core Value – to provide an opportunity for all Minnesotans to create a better future for themselves, for their families, and for their communities.

As part of the Minnesota State system MSUM is a regional public university within the thriving, close-knit community Fargo-Moorhead just off I-94 at the Minnesota – North Dakota border. This dynamic community with eight higher education institutions embraces and supports 29,000+ college students every year. As one of the eight, MSUM stands proudly due to the high quality of education provided which shows in their 97.9% career placement/grad acceptance rate. With eleven Minnesota Professors of the Year, it's easy to see why their students regularly win national awards. Even before the pandemic they were increasing hybrid and online courses and are on U.S. News & World Report Best Online Programs list.

PURPOSE STATEMENT

MSUM's purpose, in its simplist and most idealistic form, is to transform the world by transforming lives.

MISSION STATEMENT

Minnesota State University Moorhead is a caring community promising all students the opportunity to discover their passions, the rigor to develop intellectually and the versitality to shape a changing world.

ABOUT MINNESOTA STATE UNIVERSITY - MOORHEAD

- Total size of 5,547 students, 4,445 Undergraduate students
- 303 Faculty
  - 209 Full Time
  - 94 Part Time
- 76 undergraduate majors and 15 graduate majors
- 1,732,834 gross square feet of campus buildings
- NCAA division II school and a member of the Northern Sun Intercollegiate Conference (NSIC) with 15 varsity sports - 5 men's and 10 women's

1.1.4 CAMPUS PHYSICAL CHARACTERISTICS

MSUM has of many special features located on their campus. A few have been noted below with the additional background information for many of these coming from the MSUM website History & Traditions page.

CAMPUS GATES

Located on the west edge of the academic core quad, this original historic gateway of warm limestone columns and curved ornamental railings is one of the campus' most iconic features. It reinforces a strong campus image and provides a welcoming first impression.

DRAGON STATUE

This two-headed fire breathing Dragon statue is located between the Center for the Arts and Livingston Lord Library. During the 1980's, Frank Lee, owner of the Mandarin Yen in Minneapolis, had a dragon statue in front of his restaurant. Steve Hurvitz, an NSIC football official and friend of Lee's, contacted MSUM Dragons football Coach Ross Fortier in hopes of finding a new home for the statue. A crew of MSUM maintenance workers dismantled the dragon near Minneapolis and reassembled it on the MSUM campus. Thanks to Frank Lee's kind donation, the fire-breathing dragon will always be a point of pride for all Dragons. MSUM lights the dragon statue for Welcome Week, Homecoming, Dragon Frost, and other special events!'

KIVI HALL

As home to local chickadees, Kivi Halls holds the honor of the smallest building on campus, giving the MSUM community the opportunity to relax and watch their feathered friends on campus near the Livingston Lord Library.

LANGSETH FLOOR ART

Langseth Hall is MSUM's dedicated science building and one of the most artistically inspired spots on campus. The building's floors display beautiful artwork honoring the ecology and astronomy studied in the building.'

POLLINATOR GARDEN

The pollinator garden maintained by students in MSUM's biosciences, ecology, and sustainability programs is a piece of nature tucked into the campus south of the Center for the Arts which features flowers and other flora to support natural pollinators such as honeybees, monarch butterflies and hummingbirds. It is watched over by a 15-foot hummingbird sculpture created and installed by art professor Chris Walla and his students.

SOWN SCULPTURE

Located in the center of the quad 'Sown is an artwork gathering space for students to study or relax between classes. The sculpture was state funded for both MacLean and Lommen renovation projects in 2011. Artist Gail Simpson, Aris Georgiades and Dean Proctor were inspired by MSUM as a place for students to thrive and grow. Within and around the circular area, a cluster of cast stone sculptures resembling acorns and spruce cones are set to represent potential. Benches line the north side so students can sit facing the warmth of the sun. Inspirational quotes submitted by the public are engraved along the benches.'

WELD HALL

Located on the north side of the academic core quad. Weld Hall's iconic architectural style set the tone for many other building designs to follow. 'Built in 1915, Weld Hall is the oldest, spookiest building on campus. It's full of mystery and intrigue, with a secret spiral staircase and whispers of a ghost.

KIVI HALL


CAMPUS GATES


"SOWN" SCULPTURE


DRAGON STATUE

1.2 DEMOGRAPHICS - REGIONAL

EIGHT HIGHER EDUCATION INSTITUTIONS

NDSU, MSUM, Concordia, NDSCS Fargo (old Kmart building by FargoDome), Rasmussen College, U of Mary Fargo (Butler Center building by I-29 and 13th Ave S, Westgate area), U of Jamestown Fargo (4190 26th Ave S)

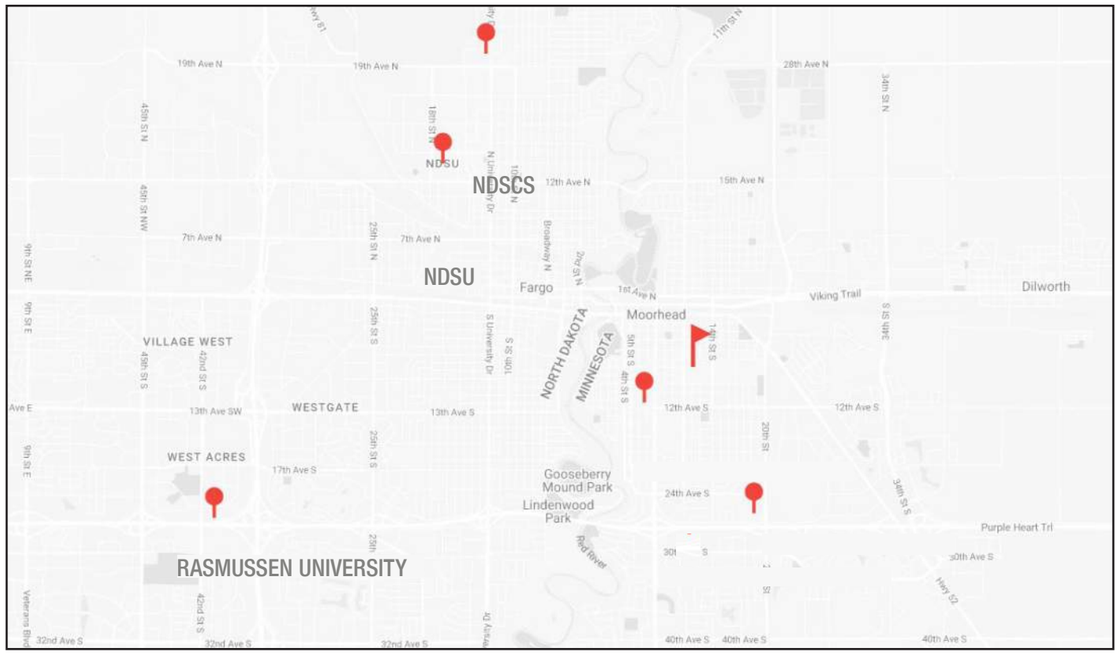
5- to 7-county regional population analysis showing existing and projected population by age group: ages 1-17, 18-24, 25-4, and 46-65:
-Six counties closest to Moorhead and Fargo
-From https://mn.gov/admin/demography

- Clay County, MN- 2019 total population 64,591
- Cass County, ND - 2020 total population 179,937
- Becker, MN – 2019 total population 34,545
- Otter Tail, MN – 2019 total population 58,734
- Norman, MN – 2019 total population 6,367
- Wilken, MN - 2019 total population 6,226

MSUM COMPREHENSIVE FACILITIES PLAN
1.2 DEMOGRAPHICS - REGIONAL

DRIVING DISTANCE FROM MINNESOTA STATE UNIVERSITY MOORHEAD

CONCORDIA COLLEGE	0.2 MILES
MSCTC - MOORHEAD	1.1 MILES
NORTH DAKOTA STATE UNIVERSITY	7.5 MILES
NORTH DAKOTA STATE COLLEGE OF SCIENCE	45 MILES
MSCTC DETRIOT LAKES	48 MILES
MSCTC FERGUS FALLS	61 MILES
UNIVERSITY OF NORTH DAKOTA	72 MILES
NORTHLAND COMMUNITY COLLEGE	81 MILES
ALEXANDRIA TECHNICAL COLLEGE	98 MILES
BEMIDJI STATE	136 MILES
ST. CLOUD STATE UNIVERSITY	157 MILES
ANOKA RAMSEY CC - COON RAPIDS	213 MILES
NORTH HENNEPIN CC	226 MILES
MCTC	230 MILES
CENTURY COLLEGE	240 MILES



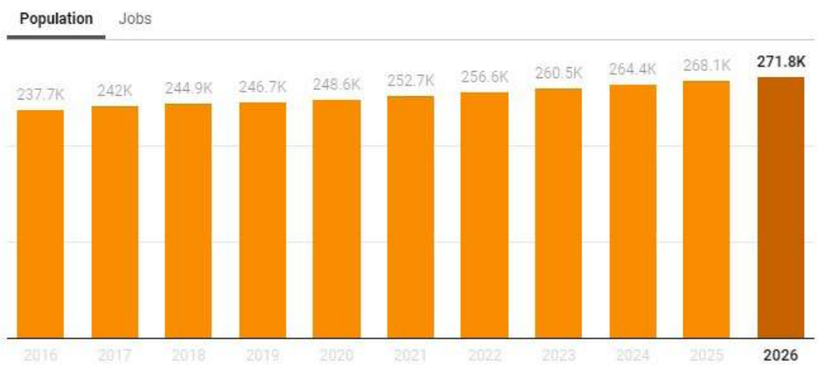
Fargo/Moorhead Higher Education Institutions

REGIONAL POPULATION AND OCCUPATIONAL EMPLOYMENT

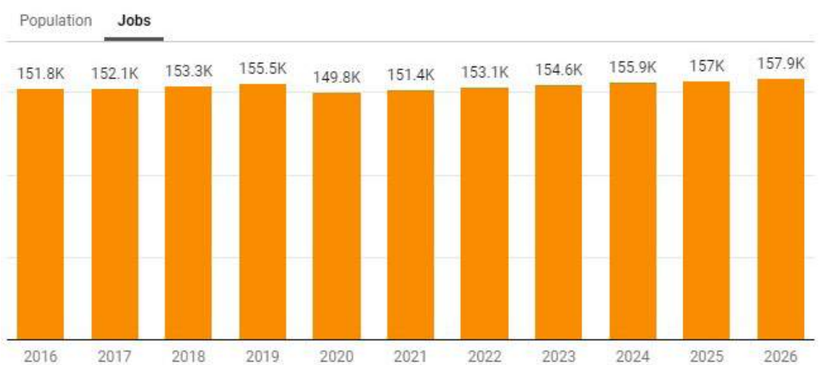
From the Greater Fargo Moorhead Economic Development Corporation:
'The Fargo Moorhead population remains largely Scandinavian and German, an homage to the people who settled the area in the 1870s. Today however, the number of new Americans from India, China, Bosnia, and numerous European and African nations is steadily expanding, drawn by quality employment, education opportunities, and new technology businesses, which make it possible for a variety of cultures and ethnicities to find their niches in Fargo Moorhead.

Fargo Moorhead's population is relatively young, well-educated, and at the peak of their working careers, making the area a prime location for talent in a variety of industries.'

The top three industry employers in the region in 2020 are Healthcare, Restaurants and Retail, and Manufacturing.



As of 2020 the region's population increased by 7.5% since 2015, growing by 17,563. Population is expected to increase by 8.2% between 2020 and 2025.



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MSUM COMPREHENSIVE FACILITIES PLAN
1.2 DEMOGRAPHICS - REGIONAL

Population Growth Comparison

Region	Population (2016)	Population (2021)	Population Change %	Projected Population Change % (2021 - 2026)
Fargo-Moorhead	237,652	252,693	6.3%	7.6%
Minnesota	5,525,360	5,701,301	3.2%	3.4%
North Dakota	756,114	773,347	2.3%	4.3%
United States	323,000,000	332,000,000	2.7%	3.2%

Population Change by Age

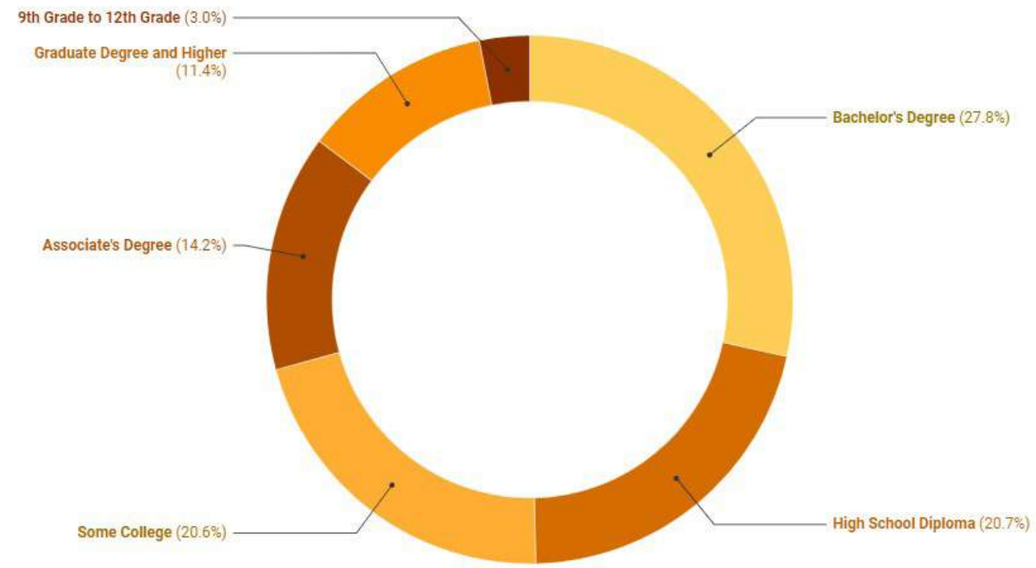
Age Cohort	2016 Population	2021 Population	% Change
Under 5 years	17,163	17,438	2%
5 to 9 years	16,956	17,347	2%
10 to 14 years	15,614	15,839	1%
15 to 19 years	17,393	17,983	3%
20 to 24 years	25,753	25,552	-1%
25 to 29 years	20,508	20,438	0%
30 to 34 years	19,829	20,241	2%
35 to 39 years	18,712	18,937	1%
40 to 44 years	16,153	16,896	5%
45 to 49 years	12,880	13,213	3%
50 to 54 years	12,499	12,611	1%
55 to 59 years	12,481	12,159	-3%
60 to 64 years	12,756	12,743	0%
65 to 69 years	11,375	11,572	2%
70 to 74 years	8,648	8,954	4%
75 to 79 years	5,370	5,895	10%
80 to 84 years	3,753	3,916	4%
85 years and over	4,850	4,905	1%

Industry Employment

Data Sortable by Column (click header)

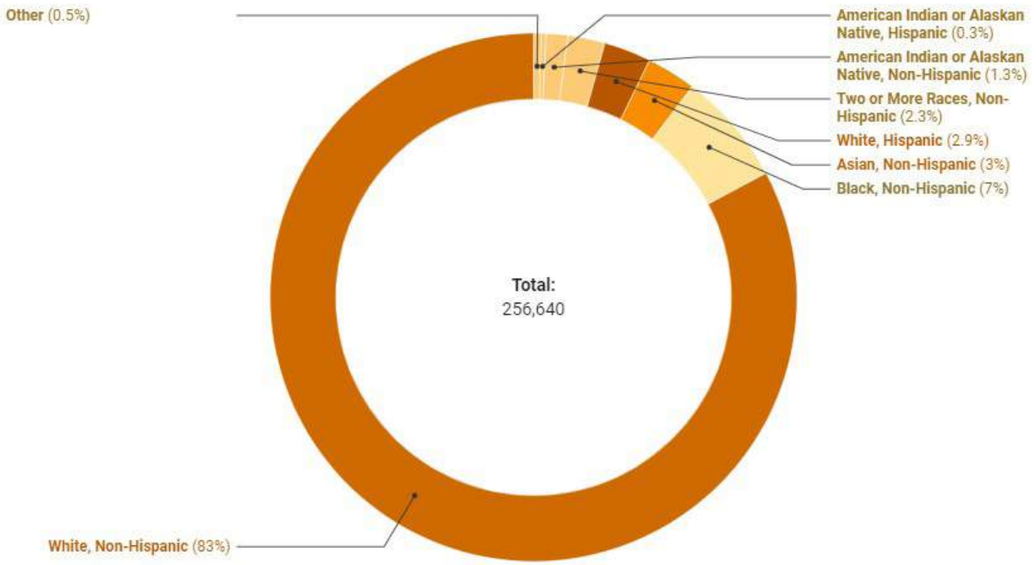
Industry	2021 Jobs	Change in Jobs	% Change in Jobs	2021 LQ	2021 Earnings Per Worker	2021 GRP
Finance and Insurance	9,691	484	5%	2	$90,764	$2.02B
Health Care and Social Assistance	25,850	4,226	20%	1	$69,247	$2.00B
Wholesale Trade	8,859	-239	-3%	2	$89,770	$1.91B
Government	19,411	-590	-3%	1	$73,806	$1.68B
Manufacturing	10,310	579	6%	1	$74,798	$1.56B
Retail Trade	15,6...	-898	-5%	1	$41,787	$1.14B
Construction	9,626	-696	-7%	1	$72,908	$946.59M
Information	3,005	-312	-9%	1	$117,454	$858.03M
Professional, Scientific, and Technical Services	7,776	423	6%	1	$82,876	$830.89M
Real Estate and Rental and Leasing	2,234	37	2%	1	$62,422	$748.57M
Transportation and Warehousing	6,713	1,092	19%	1	$62,918	$557.27M
Accommodation and Food Services	10,207	-2,103	-17%	1	$24,955	$396.47M
Administrative and Support and Waste Management and Remediation Services	5,277	-471	-8%	1	$44,323	$314.62M
Other Services (except Public Administration)	6,619	-995	-13%	1	$36,482	$303.04M
Management of Companies and Enterprises	1,947	-1,558	-44%	1	$119,094	$256.70M
Agriculture, Forestry, Fishing and Hunting	2,635	320	1...	1	$60,137	$200.15M
Utilities	187	17	10%	0	$140,048	$109.71M
Educational Services	3,242	122	4%	1	$28,117	$105.68M
Arts, Entertainment, and Recreation	2,157	205	11%	1	$27,218	$91.52M
Mining, Quarrying, and Oil and Gas Extraction	48	15	45%	0	$77,339	$36.80M

Population by Educational Attainment



27.8% of the selected regions' residents possess a Bachelor's Degree (7.7% above the national average), and 14.2% hold an Associate's Degree (5.6% above the national average).

Population by Race



MINNESOTA COUNTY POPULATION PROJECTION

Key Findings from Minnesota State Demographic Center:
Statewide, Minnesota is anticipated to gain 1.1 million new residents between 2018 and 2070 - compared to 1.2 million in our previous set of projections. This slower rate of growth can be most generally attributed to changing assumptions for the impact of the various components of change—most importantly, declining rates of international migration.

Though births are projected to remain relatively constant throughout this series, as our population ages, increasing numbers of deaths will push Minnesota to a state of natural decrease—where deaths outnumber births—around 2040.

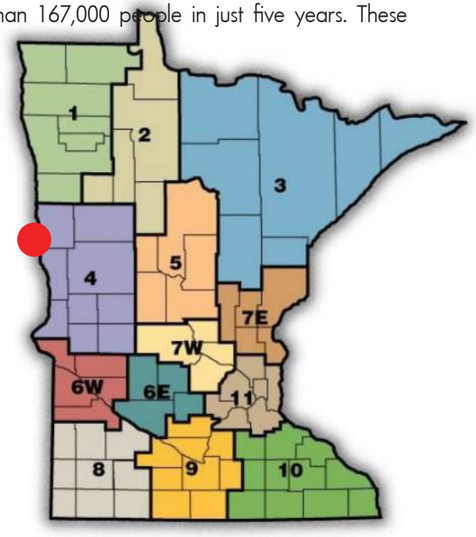
Steady urbanization will lead to a declining population in more than two-thirds of Minnesota's 87 counties.
The five counties with the largest declines in population by 2053 are Saint Louis (-28,238), Winona (-8,960), McLeod (-8,425), Freeborn (-7,078), and Martin (-6,541). Most shrinking counties are clustered in six Economic Development Regions (EDRs). The Arrowhead region (EDR 3) in the Northeast corner of the state will experience the greatest loss at -48,642 residents. It is followed by EDR 6 in central Minnesota (-39,865), EDR 8 in the southwest (-28,955), EDR 9 in the south central (-20,349), EDR 1 in the northwest (-14,701), and EDR 5 in the north central (-7,861). Combined, these Economic Development Regions are projected to lose over 160,000 residents by 2053.

Minnesota's oldest residents—those aged 85 and above—are expected to more than double in the next 35 years—from the current 120,000 to over 270,000.

In just the next decade, children aged 0 to 14 will be outnumbered by retirees aged 65 and above for the first time in Minnesota's history. In total, Minnesotans of retirement age and above numbered 889,511 in 2018—an increase of 136,492 in the short half-decade since 2013. This number is expected to roll over 1.26 million in the next 20 years.

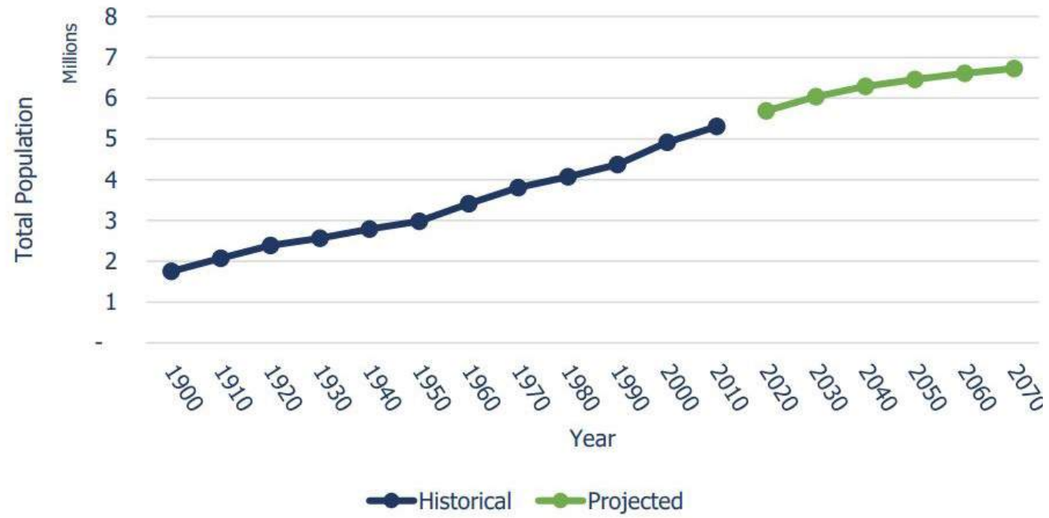
While Minnesota's total population is currently 79 percent non-Hispanic White, the racial and ethnic make-up of our population is changing rapidly. Between 2013 and 2018, the non-Hispanic White population grew by less than one percent, while minority populations grew by 18 percent—adding more than 167,000 people in just five years. These projections indicate that statewide, Minnesota's non-Hispanic White population will begin declining within the next decade. Conversely, populations of Color are expected to swell by more than one million residents between 2018 and 2053—exceeding one-third of the total population.

Communities of Color are driving our state's population growth and, as such, addressing these disparities will become imperative or the prosperity and quality of life for all Minnesotans.



ECONOMIC DEVELOPMENT REGIONS

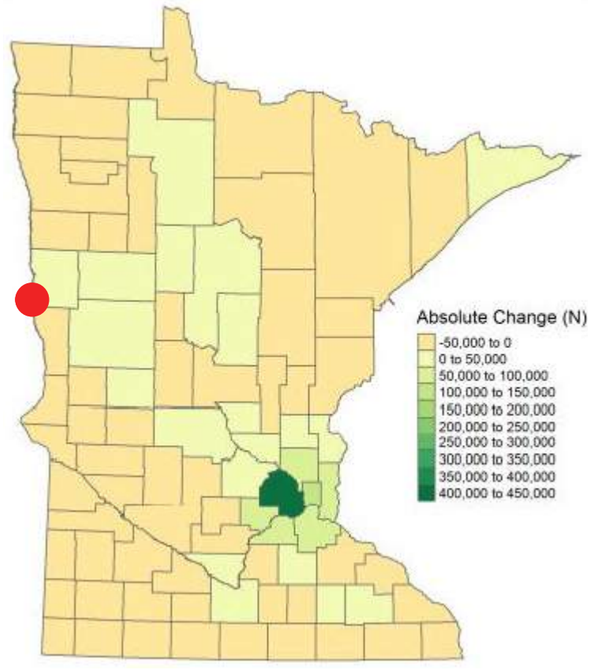
MINNESOTA STATEWIDE POPULATION PROJECTION



Source: U.S. Census Bureau; Minnesota State Demographic Center

POPULATION CHANGE BY COUNTY

Some counties outside the metropolitan area will also see population increases. Specifically, the counties along the Interstate 94 corridor toward the Fargo-Moorhead metropolitan area (Wright, Sherburne, Stearns, Benton, Douglas, Otter Tail, Becker, and Clay Counties) will all grow. Additionally, the counties near Mankato (Nicollet and Blue Earth Counties) and Rochester (Olmsted and Dodge Counties) will increase, possibly due to educational and economic opportunities in those areas. Several other counties in the vicinity of the Twin Cities metro (Rice, Isanti, Chisago Counties) will also increase. Finally, several counties that are rich in natural amenities—like lakes—are projected to grow, including those between Brainerd and Bemidji (Beltrami, Hubbard, Cass, and Crow Wing Counties) and one along the north shore of Lake Superior (Clay County).



MINNESOTA OCCUPATIONS IN DEMAND REQUIRING ASSOCIATE'S DEGREE

SOC Code	SOC Title	Current Demand Rank	Current Demand Indicator	25th Percentile Wage	Median Wage	MN Projected Growth Rate	MN Projected Openings	Education Requirements	On-the-job Training Requirements
291141	Registered Nurses	1	★★★★★	$77,482/yr	$81,947/yr	6.6%	43,201	Associate's degree	Short term on the job training
173026	Industrial Engineering Technologists and Technicians	53	★★★★★	$49,914/yr	$62,895/yr	4.4%	3,764	Associate's degree	Moderate term on the job training
292034	Radiologic Technologists and Technicians	60	★★★★★	$62,750/yr	$74,343/yr	7.1%	3,630	Associate's degree	Unavailable
292010	Clinical Laboratory Technologists and Technicians	98	★★★★★	$48,909/yr	$61,455/yr	6.3%	4,555	Associate's degree	Unavailable
292055	Surgical Technologists	123	★★★★☆	$60,823/yr	$62,968/yr	6.4%	1,854	Associate's degree	Short term on the job training
333051	Police and Sheriff?s Patrol Officers	126	★★★★☆	$67,460/yr	$82,737/yr	5.9%	9,114	Associate's degree	Short term on the job training
291292	Dental Hygienists	129	★★★★☆	$79,875/yr	$80,611/yr	7.3%	3,152	Associate's degree	None
151231	Computer Network Support Specialists	170	★★★★☆	$50,712/yr	$64,708/yr	5%	4,161	Associate's degree	Moderate term on the job training
232011	Paralegals and Legal Assistants	172	★★★★☆	$48,930/yr	$62,159/yr	10.6%	6,746	Associate's degree	Short term on the job training
291126	Respiratory Therapists	180	★★★★☆	$63,869/yr	$77,699/yr	20.5%	1,336	Associate's degree	Short term on the job training
292056	Veterinary Technologists and Technicians	184	★★★★☆	$37,410/yr	$38,580/yr	11.6%	2,795	Associate's degree	Short term on the job training
173023	Electrical and Electronic Engineering Technologists and Technicians	185	★★★★☆	$51,986/yr	$64,252/yr	-1.2%	1,780	Associate's degree	Unavailable
312021	Physical Therapist Assistants	200	★★★★☆	$51,682/yr	$64,347/yr	21.2%	2,253	Associate's degree	Short term on the job training
173022	Civil Engineering Technologists and Technicians	204	★★★★☆	$62,854/yr	$69,929/yr	1.8%	2,480	Associate's degree	Long term on the job training
292032	Diagnostic Medical Sonographers	216	★★★★☆	$80,331/yr	$82,682/yr	17.7%	1,199	Associate's degree	Short term on the job training
292031	Cardiovascular Technologists and Technicians	231	★★★☆☆	$50,411/yr	$77,347/yr	6.7%	1,124	Associate's degree	Short term on the job training

173011	Architectural and Civil Drafters	233	★★★☆☆	$50,453/yr	$62,823/yr	-0.6%	1,705	Associate's degree	Unavailable
319096	Veterinary Assistants and Laboratory Animal Caretakers	252	★★★☆☆	$31,225/yr	$37,994/yr	11.1%	1,775	Associate's degree	Short term on the job training
151257	Web Developers and Digital Interface Designers	258	★★★☆☆	$58,026/yr	$82,455/yr	7.9%	3,568	Associate's degree	Unavailable
499062	Medical Equipment Repairers	272	★★★☆☆	$49,287/yr	$62,378/yr	3.7%	1,531	Associate's degree	Short term on the job training
173013	Mechanical Drafters	275	★★★☆☆	$49,406/yr	$62,522/yr	-4.6%	1,385	Associate's degree	Short term on the job training
292035	Magnetic Resonance Imaging Technologists	280	★★★☆☆	$78,155/yr	$82,019/yr	11.4%	615	Associate's degree	Short term on the job training
211094	Community Health Workers	281	★★★☆☆	$38,684/yr	$48,661/yr	16.4%	1,524	Associate's degree	Short term on the job training
194042	Environmental Science and Protection Technicians, Including Health	286	★★★☆☆	$30,417/yr	$48,661/yr	5.6%	553	Associate's degree	Short term on the job training
173027	Mechanical Engineering Technologists and Technicians	290	★★★☆☆	$50,422/yr	$64,138/yr	4.1%	1,222	Associate's degree	Moderate term on the job training
254031	Library Technicians	308	★★★☆☆	$38,301/yr	$47,966/yr	-4.3%	1,912	Associate's degree	Short term on the job training
173098	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	325	★★★☆☆	$49,008/yr	$63,372/yr	6.9%	1,576	Associate's degree	Unavailable
312011	Occupational Therapy Assistants	326	★★★☆☆	$51,320/yr	$58,121/yr	24.4%	966	Associate's degree	Short term on the job training
194010	Agricultural and Food	329	★★★☆☆	$37,057/yr	$46,521/yr	3.1%	1,463	Associate's degree	Unavailable
194071	Forest and Conservation Technicians	330	★★★☆☆	$40,487/yr	$50,795/yr	2.7%	1,216	Associate's degree	Long term on the job training
291124	Radiation Therapists	336	★★★☆☆	$78,497/yr	$81,947/yr	5.7%	245	Associate's degree	Long term on the job training

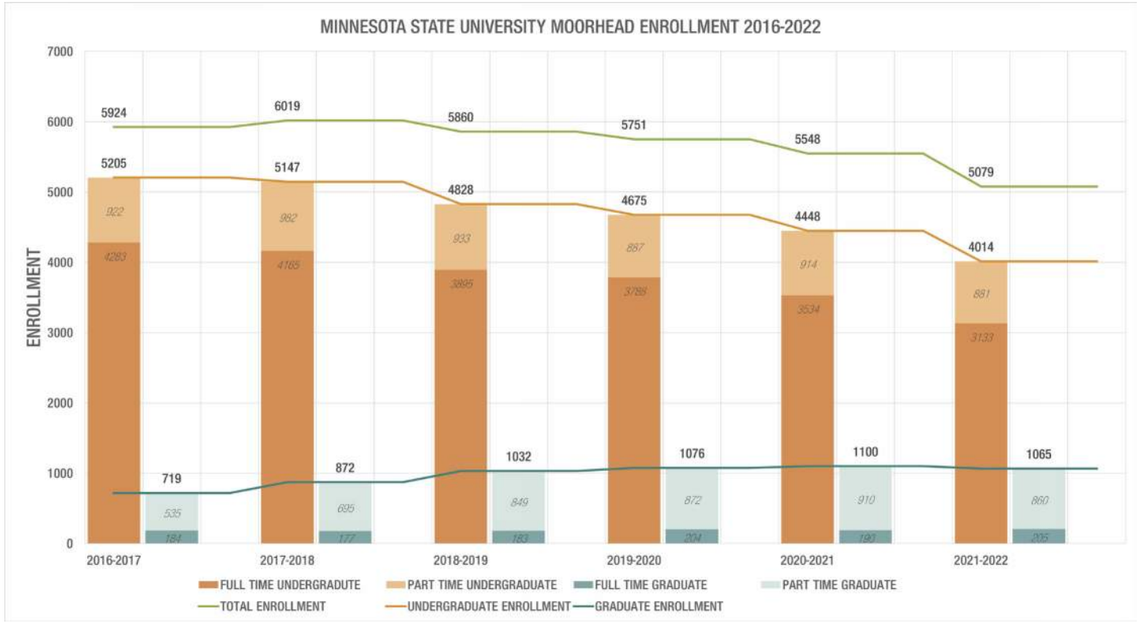
173024	Electro-Mechanical and Mechatronics Technologists and Technicians	362	★★☆☆☆	$50,256/yr	$63,952/yr	-3.5%	393	Associate's degree	Long term on the job training
194021	Biological Technicians	373	★★☆☆☆	$39,181/yr	$48,267/yr	6.7%	967	Associate's degree	Short term on the job training
292033	Nuclear Medicine Technologists	421	★★☆☆☆	$81,553/yr	$95,498/yr	6.4%	233	Associate's degree	Short term on the job training
173025	Environmental Engineering Technologists and Technicians	474	★☆☆☆☆	$54,483/yr	$63,206/yr	3.9%	403	Associate's degree	Short term on the job training
532021	Air Traffic Controllers	480	★☆☆☆☆	$116,982/yr	$160,149/yr	2.2%	619	Associate's degree	Long term on the job training
173012	Electrical and Electronics Drafters	482	★☆☆☆☆	$62,636/yr	$69,546/yr		NA	Associate's degree	Unavailable
439031	Desktop Publishers	499	★☆☆☆☆	$49,130/yr	$50,316/yr	-16.7%	380	Associate's degree	Short term on the job training
173021	Aerospace Engineering and Operations Technologists and Technicians	529	★☆☆☆☆	$59,859/yr	$76,228/yr		NA	Associate's degree	None
452011	Agricultural Inspectors	542	★☆☆☆☆	$36,382/yr	$55,182/yr	2.6%	626	Associate's degree	Short term on the job training
492021	Radio, Cellular, and Tower Equipment Installers and Repairers	554	★☆☆☆☆	$62,585/yr	$69,745/yr	-0.6%	176	Associate's degree	Short term on the job training
332021	Fire Inspectors and Investigators	573	★☆☆☆☆	$82,385/yr	$83,728/yr		NA	Associate's degree	Unavailable

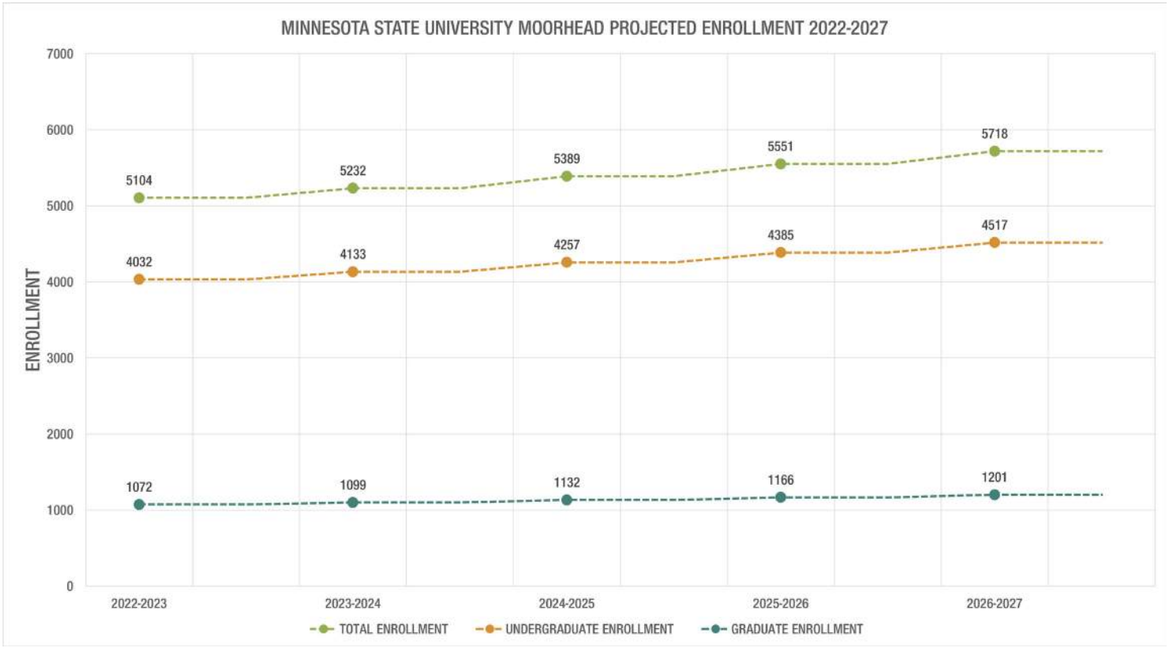
MSUM COMPREHENSIVE FACILITIES PLAN
1.2 DEMOGRAPHICS - REGIONAL

1.3 DEMOGRAPHICS - CAMPUS

ACTUAL AND PROJECTED ENROLLMENT

The gradual enrollment rise anticipated to start in 2017 noted in the 2016 CFP did not occur. Actual enrollment as shown in the graph below shows a slight increase in 2017, but then decreased enrollment through 2022. Minnesota State system data shows an anticipated increase of 0.5% in 2023 and 2.5% in 2024. The slow continued rise in enrollment projected through 2027 is based on Fargo-Moorhead metro area school data showing continued growth of 2.25% each year. Plus the anticipated general population growth in the region as noted by the Minnesota State Demographic Center, as shown in section 1.2.



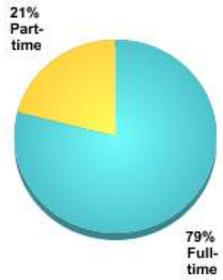


Charts below from College Navigator (National Center for Education Statistics; nces.ed.gov/collegenavigator/) summarize enrollment patterns for Fall 2020, when the total student count was 5,547. These show profile of students: full time/part time; gender; race/ethnicity; age; where students come from; and distance education

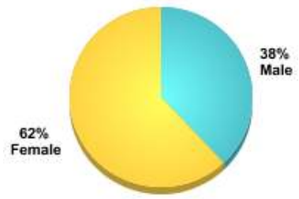
FALL 2020

TOTAL ENROLLMENT	5,547
Undergraduate enrollment	4,445
Undergraduate transfer-in enrollment	425
Graduate enrollment	1,102

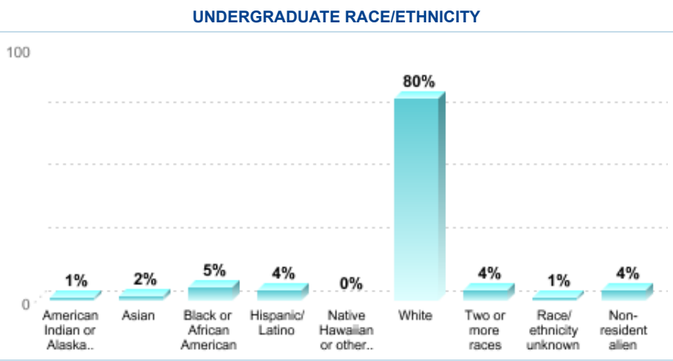
UNDERGRADUATE ATTENDANCE STATUS



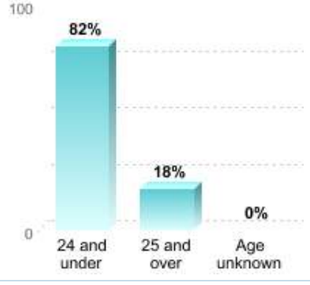
UNDERGRADUATE STUDENT GENDER



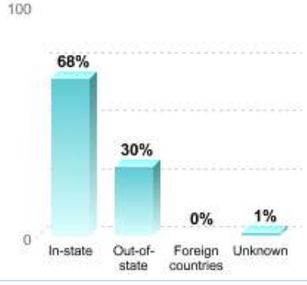
UNDERGRADUATE RACE/ETHNICITY



UNDERGRADUATE STUDENT AGE

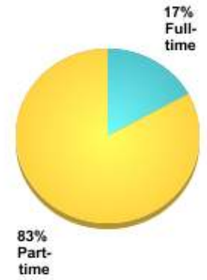


UNDERGRADUATE STUDENT RESIDENCE

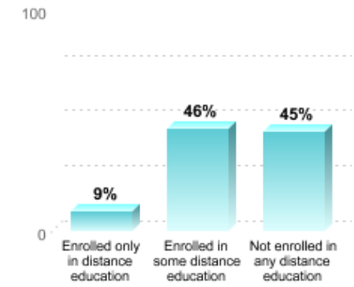


- Age data are reported for Fall 2019.
- Residence data are reported for first-time degree/certificate-seeking undergraduates.

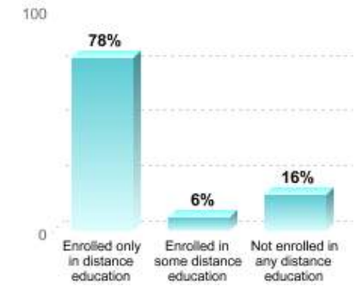
GRADUATE ATTENDANCE STATUS



UNDERGRADUATE DISTANCE EDUCATION STATUS



GRADUATE DISTANCE EDUCATION STATUS



EFFECTS OF PROJECTED ONLINE ENROLLMENT

MSUM has been making an effort to increase its online and hybrid class offerings over the last decade. With the covid pandemic these classes multiplied exponentially. In 2010 4% of classes were online. In 2015 this number had risen to 11% and in 2021 it more than doubled again to 25%. While the campus is resuming more on-campus learning post-pandemic, they continue to offer a high number of online only and hybrid classes and are working to support faculty teaching online.

As online class offerings have increased so has the students taking them. In 2014 7% of undergraduates were online only with an additional 21% taking some online classes. In 2021 undergraduates online only had increased slightly to 9%, but those with some online classes had doubled to 46%. At the same time graduate students online only rose from 53% to 78% and graduate students with some online classes dropped from 13% to 6%. Remote learning is more common at the graduate level and in several of our Focus Group meetings on campus many programs shared their goals of increasing online and hybrid class offerings especially for graduate enrollment.

In the past MSUM has not found online class offerings to decrease on campus students. With the vast majority of undergraduate students still receiving at least some of their instruction in person on campus this is anticipated to continue to be the case.

MSUM COMPREHENSIVE FACILITIES PLAN
1.3 DEMOGRAPHICS - CAMPUS

FACULTY DEMOGRAPHICS

		Full-Time	Part-Time	Total
A	Total number of instructional faculty	209	94	303
B	Total number who are members of minority groups	25	6	31
C	Total number who are women	104	60	164
D	Total number who are men	105	34	139
E	Total number who are nonresident aliens (international)			
F	Total number with doctorate, or other terminal degree	187	30	217
G	Total number whose highest degree is a master's but not a terminal master's	20	43	63
H	Total number whose highest degree is a bachelor's	2	19	21
I	Total number whose highest degree is unknown or other (Note: Items **f**, **g**, **h**, and **i** must sum up to item **a**.)	0	2	2
J	Total number in stand-alone graduate/professional programs in which faculty teach virtually only graduate-level students	0	0	0

1.4 ACADEMIC GOALS

MISSION, VISION & VALUES

Founded as a normal school for teachers, MSUM Moorhead is, and always has been, a place for transforming lives. We exist to help others shape their world. Our mission, vision and values are enduring and unwavering, guiding all that we do.

PURPOSE

Our purpose, in its simplest and most idealistic form, is to transform the world by transforming lives.

MISSION STATEMENT

Minnesota State University Moorhead is a caring community promising all students the opportunity to discover their passions, the rigor to develop intellectually and the versatility to shape a changing world.

CORE VALUES

Grit

- We are "scrappy" and resourceful.
- We have big goals and the tenacity to achieve them.
- We have the courage to do what's right.

Humility

- We're all on the same team and everyone's role is important.
- We seek the best ideas and know they can come from anywhere and anyone in our campus community.
- We don't take ourselves too seriously.

Heart

- We go the extra mile for our students and each other.
- We are passionate about our purpose.
- We are fiercely loyal to MSUM.

MSUM COMPREHENSIVE FACILITIES PLAN
1.4 ACADEMIC GOALS

OUR STRATEGIC ANCHORS

We will achieve our purpose by anchoring our work with three key strategies. While we may prioritize these strategic anchors differently at different times, the anchors themselves will remain constant for the foreseeable future. These are the strategies that will enable us to achieve our purpose of transforming the world by transforming lives:

STRATEGY 1: OUR STUDENTS.

We will focus relentlessly on student achievement and students' return on their investment.

WE WILL

Ensure student learning and achievement are at the center of our work
Assess the effectiveness of our curriculum and pedagogy and make continuous improvement
Engage students with the community in educationally purposeful ways
Celebrate students' outstanding achievement in academics, the arts, athletics, service, and leadership

STRATEGY 2: OUR UNIVERSITY.

We will create a campus community that is diverse, inclusive, globally aware, and just.

WE WILL

Create a campus community that reflects the diversity of society
Ensure MSUM is accessible and welcoming to students and employees who have historically been under-served by higher education
Create a campus culture that values and celebrates diversity of ideas, perspectives, and people
Create a campus community that is just and equitable

STRATEGY 3: OUR WORLD.

We will be indispensable to the social, cultural, and economic advancement of Moorhead and the surrounding communities.

WE WILL

Attract and retain talent to Moorhead and the region
Contribute leadership and expertise to address community issues and economic development
Enrich the community through academic, athletic, arts, service, and leadership opportunities.

STRATEGIC PRIORITIES FRAMEWORK

MSUM's strategic priorities result from campus-wide engagement to identify how we will fulfill our mission, deliver on our vision, and live out our core values. By providing a distinctive student experience focused on these priorities, MSUM will strive to fulfill our purpose of transforming lives.

DISTINCTIVE STUDENT EXPERIENCE

Define, market and deliver a student experience that distinguishes MSUM Rationale: Higher education faces profound demographic, social, economic and political changes. The population of traditional-age high school graduates will continue to shrink overall, with the only projected growth occurring in communities where higher education attainment rates have historically been low. There is an increasing public skepticism about the value of higher education and a corresponding interest in other post-secondary options. More students are choosing community and technical colleges, and many are forgoing higher education altogether. At the same time, public universities are increasingly dependent on tuition revenue. And, nontraditional students—including working adults—demand more flexible and responsive programs and delivery modes. In order to thrive, we will build on our strengths to create a distinctive student experience, inside and outside the classroom, that is designed to meet changing expectations and is perceived as valuable by students and their future employers.

PRIORITIES:

ACADEMIC DISTINCTIVENESS

We will define the distinctive attributes of our academic experience, building on the strengths that differentiate MSUM regardless of a student's academic major. We will also ensure that we offer the optimal mix of programs and delivery modes to achieve our enrollment goals and financial sustainability.

Rationale
The cornerstone of our students' MSUM experience is their experience in their academic programs. Attracting and retaining both traditional and nontraditional students will require articulating and implementing an academic experience with high perceived value—and delivering it to diverse audiences via flexible and responsive learning modes. In addition, in order to meet our enrollment goals, MSUM must offer the optimal mix of programs—one that will serve both current and emerging student populations and their current and future employers.

EQUITY AND INCLUSION

We will continue to build our organizational capacity to achieve equitable educational outcomes for all students, recognizing that achieving equity will require changing our systems, policies, practices, assumptions, and campus climate.

Rationale
Achieving equitable outcomes is first and foremost a moral imperative. Given the profound demographic shifts occurring in our country, it is also a practical imperative. Minnesota has among the largest educational attainment disparities in the nation. These disparities exist at every level of education and widen at each successive level. Both the state legislature and our own state system of colleges and universities have committed to eliminating disparities in higher education attainment within the next 5 to 10 years. Our attainment rates mirror those at the state and system levels and, despite decades of effort, have shown only modest improvement. In order to meet our attainment goals and ensure equity for every student, we will need to build organizational capacity in virtually every area of the university.

MSUM COMPREHENSIVE FACILITIES PLAN
1.4 ACADEMIC GOALS

COMMUNITY ENGAGEMENT

We will build community partnerships that strengthen and sustain our academic programs, enhance students' educational experiences, and meet important community needs.

Rationale
At a time when students, parents, employers, lawmakers, and the public are questioning the value of higher education, it is imperative that an MSUM education prepares students to solve real-world problems at work and in their communities. Furthermore, while community-engaged learning benefits all students, it is especially effective for low-income students and students of color—and is, therefore, essential to meeting MSUM's equity and attainment goals. To be meaningful and sustainable, engagement with the community must be embedded in students' academic and co-curricular experiences and must occur in partnership with businesses and community organizations. Such engagement will be a key differentiator of the student experience at MSUM.

SUMMARY OF STRATEGIC GOALS AND ACADEMIC PLAN

MSUM's strategic priorities framework is to provide each student a 'Distictive Student Experience'. Providing focus for this lofty goal are three supporting priorities – Academic Distinctiveness, Equity and Inclusion, Community Engagement. The campus is currently in the process of updating their Academic Master Plan. Each College is working through their individual Academic Visioning process which will be used to inform the Strategic Visioning Plan (SVP). A draft copy of the SVP document has been included in the appendix.

Based on the focus group meetings held across campus, there is a lot of pride in being a mid-sized regional university that has a high level of engagement with its students. Faculty look to build relationships to better understand how they can help each individual student maximize their MSUM learning experience. This shows in the 2020-2021 Common Data Set in the 18 to 1 student to faculty ratio and in class sizes. 46% of all undergraduate classes have 19 or fewer students and 89% are less than 40.

In 2020-2021 20% of undergraduate classes had 9 or fewer students. While small class sizes promote the personal learning experience desired it can also be concerning from a financial perspective. In the 2016 Academic Master Plan the concern was noted that "we may be spreading resources too thinly over a number of programs that attract relatively fewer students and produce relatively fewer graduates than is ideal: given the size of our institution, we may offer more majors than our current enrollment can sustain." With a budget shortfall forecasted for fiscal year 2022, in April of 2020 the university set a plan in place over the next few years to cut 66.5 positions – 3 administrators, 43 faculty, 20.5 staff. At this time ten academic majors were also closed or suspended which serviced a total of 175 students. It is recommended that MSUM continue to assess its program offerings and how resources are allocated to continue to adjust as needed.

ACADEMICS

MSUM offers 76 undergrad majors, 55 emphases & options, 12 pre-professional studies programs, 14 graduate degrees, 38 graduate and undergraduate certificates and 31 areas of teacher licensures in the following colleges and departments. A complete list undergraduate and graduate programs is available in the appendix.

COLLEGES AND DEPARTMENTS

COLLEGE OF ARTS & HUMANITIES

Department of History, Languages & Humanities
English
School of Art
School of Entertainment Industries & Technology
School of Media Arts & Design
School of Performing Arts

COLLEGE OF BUSINESS, ANALYTICS & COMMUNICATION

Computer Science & Information Systems
Department of Economics, Law & Politics
Mathematics
Paseka School of Business
Professional Management Department
School of Communication & Journalism

COLLEGE OF EDUCATION & HUMAN SERVICES

Department of Leadership & Learning
School of Social Work
School of Teaching & Learning
Sociology & Criminal Justice
Speech, Language, Hearing Sciences

COLLEGE OF SCIENCE, HEALTH & THE ENVIRONMENT

Anthropology & Earth Science
Biosciences
Chemistry & Biochemistry
Health & Human Performance
Physics & Astronomy
Pre-Health
Psychology
School of Nursing & Healthcare Leadership

LARGEST PROGRAM DEPARTMENTS:

Elementary Inclusive Education
Business Administration
Biology
Social Work
Nursing

UNIQUE MAJORS:

Commercial Music
Entertainment Industries & Technology
Film Studies
Geosciences
Medical Physics
Operations Management
Project Management
Speech, Language, Hearing Science
Sustainability

Programs Over 100 Enrollment	Enrollment
Accounting (BS)	225
Biology (BA)	322
Business Administration (BS)	413
Computer Science (BS)	101
Construction Management (BS)	136
Criminal Justice (BS)	225
Early Childhood Education (BS)	158
Elementary Education (BS)	119
Elementary Inclusive Education (BS)	395
English (BA)	115
Exercise Science (BS)	175
Film Studies (BA)	159
Graphic Communications (BS)	141
Mass Communications (BS)	282
Nursing - RN to BSN (BSN)	148
Pre-Social Work (BSW)	162
Project Management (BS)	108
Psychology (BA)	233
Social Studies (BS)	105
Social Work (BSW)	211
Special Education (MS)	100
Speech/Language/Hearing Science (BS)	158
Studio Art (BA)	339

RECRUITMENT STRATEGIES

MSUM still attracts a large number of their typical 18-22 year old undergraduate students from the surrounding region, but have seen numbers decrease as high school numbers have dropped. A small amount of population growth is anticipated in the area counties and metro schools, but increased competition for students and the rising cost of post-secondary education is also impacting enrollment. The campus has seen an increase in part-time students and the changing expectation for technology to facilitate the educational experience. As such the campus is increasing marketing to non-traditional undergraduate students. While they typically have more attendance challenges due to jobs and families, online programs and technology are helping these students succeed.

Graduate enrollment is increasing. This is attributed to an increase in online degree programs, some of which are offered entirely online. MSUM is looking to channel resources to existing graduate programs for growth and to help convert them to online, as well as, seek new prospective online majors.

COURSE DELIVERY

Since the previous CFP the campus has updated numerous classrooms to improve not only finishes, but furniture and technology as well. These were valuable as the campus looked to provide more remote and hybid classes due to the covid pandemic. Course delivery continues to be more active and collaborative throughout campus. Where able the campus is providing flexible furnishings that can be reconfigured during class and increase wireless internet access for the ever growing use of technology in teaching.

MSUM is also working to increase the number of student collaborative areas across campus for group work to not only happen in classrooms or the library. Students are being given the ability to study together in small enclosed rooms or open lounge-like spaces with flexible furniture. Flexibiity in these spaces will continue to be vital for student success. The campus should look to continue to expand and provide them throughout.

MSUM COMPREHENSIVE FACILITIES PLAN
1.4 ACADEMIC GOALS

1.5 TECHNOLOGY PLANNING

TECHNOLOGY MASTER PLAN

MSUM's most recent Information Technology Master Plan was completed in 2022 for 2022-2027. It recognizes that Information and Instructional Technologies are essential to the university's mission. It is important for improving the exchange of information, enhancing teaching and learning, and increasing productivity. The Master Plan was developed to align with the overall university strategic goals and initiatives. The Priorities are as follows:

Priority 1 – Engaging Student Learning Environments:
Develop, support, and foster technology enriched student-learning environments, which inspire and teach learners to acquire, apply and extend knowledge; to think critically; and to solve challenges imaginatively.

Goals and Outcomes

1. Research new and emerging educational technologies (hardware and software).
    a. Formulate best practices for student learning environments and create a uniform learning experience for students.
2. Develop and implement digital literacy competencies training.
3. Enhanced support for the creation and use of accessible course materials.
4. Provide appropriate equipment to faculty and staff.
5. Provide standardized training for faculty in course delivery.
6. Support technology-enhanced department-initiated course redesign.
7. Enhanced the technological support of students to create new forms of communication and feedback in and out of the classroom.

Priority 2 – Reliability:
Services can be counted on for consistent consumption. Services perform at a consistently high level.

Goals and Outcomes

1. Enhance Wi-Fi/Network connectivity and track performance and reliability.
2. Implement and maintain and diversified communication strategy to positively impact and address issues related to all facets of the institution.
3. Develop a plan to ensure equitable access to campus network resources.
4. Maintain Information Technology customer support services and continue improvements and enhancements based on feedback and internal review.

MSUM COMPREHENSIVE FACILITIES PLAN
1.5 TECHNOLOGY PLANNING

Priority 3 – Information Technology:
The University Iinformation Technology Division conducts services and support in a business-like manner that meets the expectations of faculty, staff, and students. Those services are designed to meet at the desired service level of the customer. Students will have the opportunity to engage in real-world Information Technology Business challenges that will help them prepare for their careers.

Goals and Outcomes

1. Ensure professional development resources are available to meet specific university goals and objectives.
    a. Ensure resources are inclusive, equitable, engaging, efficient, and effective.
    b. Ensure technology is supportive and accessible.
2. Use University resources on campus to offer workshops, webinars, and materials to support Information Technology student and staff workers development of customer service skills.
    a. Focusing on service that is inclusive and globally aware.
    b. Designed to enhance the desired service level to the customer.
3. Promote training & information on cybersecurity to university community.

Priority 4 – Sustainability:
Cost Conscious, Resource Allocation/awareness. The services that we engage in will be implemented in a manner that allows the University to benefit from that service for the longest period of time.

Goals and Outcomes

1. Seek and maintain partnerships for the benefit of meeting campus technology needs.
2. Educate and inform the university community of campus core tools.
3. Maintain an equitable balance of support between universal core tools vs. specialized resources and technologies.
4. Continually assess the value of campus systems, services, and resources.
5. Ensure transparency in resource prioritization decision making.

Priority 5 – Emerging Technologies/Development:
We will commit a certain percentage of our resources to development and research into the space of new technologies, so that we continue to remain in line with industry trends and activity. We will promote the research and application of innovative emerging technologies through campus partnerships and community outreach. Pilot projects will have a defined starting and ending point, with the ending point consisting of a decision to halt the project, or to proceed with full/enterprise implementation, including training/development, as well as service and support.

Goals and Outcomes

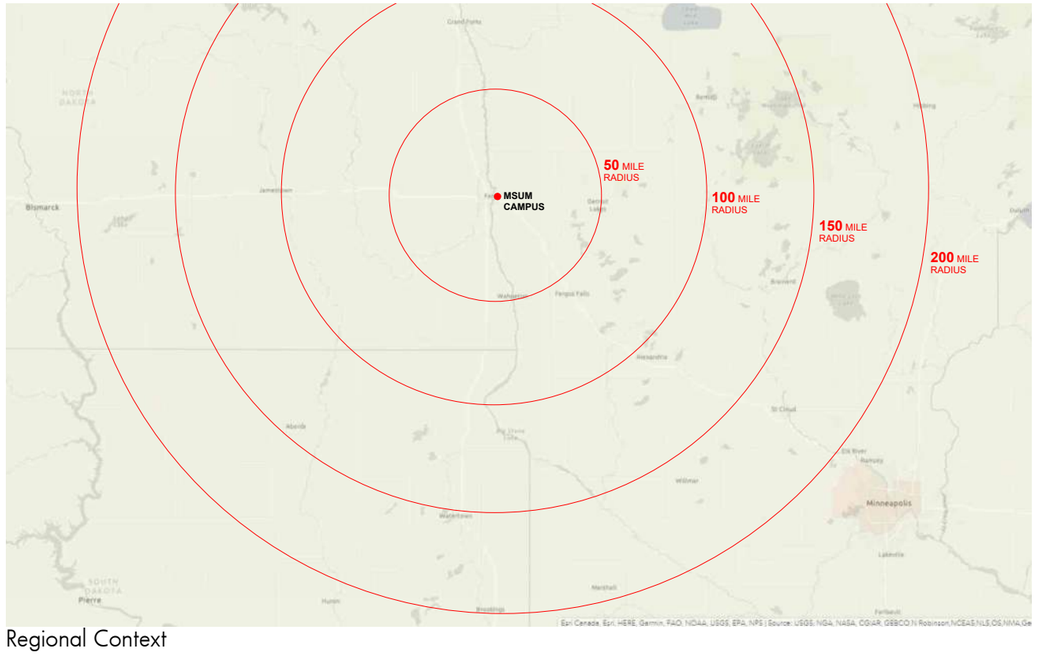
1. Shared responsibility to provide equitable student access to Wi-Fi and personal devices.
2. Support the use of Open Educational Resources in collaboration with other stakeholders.
3. Provide ongoing training and support to students, faculty, & staff on all core tools, including a way to measure progress.
4. Unify resources and efforts toward emerging technologies include, but not limited to, Makerspace(s), Virtual and augmented reality, video & multimedia production, electronic publishing, robotics, and 3D printing.
5. Support research, planning and implementation of digital humanities with relevant departments and/or community outreach.
6. Enhance digital accessibility for available information & academic technologies to achieve maximum compliance with federal regulations and university policies. This includes the use of an accessibility checklist.
7. Provide faculty and staff with options for purchase requests by designing and communicating a clear process for how new technologies are sustainably purchased, funded, and supported.

As part of the planning process a focus group meeting was held with Information Technology. In general the group sees that MSUM was in a good place, but has experienced new challenges with the pandemic as the campus has been 'rethinking why we are together.' With flexible learning environments with high-flex mixing online and in-person instruction they have seen that technology is making it easier for students to engage how they want and where they want. The campus is still using teacher stations, but is starting to see educators with more varied preferences for them. With this diversity the Information Technology group recognizes that not all classrooms need high tech solutions and they are focusing on concentrating their resources and IT development to where they are needed most. With the increase in the general use of technology throughout the campus community it has highlighted a challenge – how to meet each faculty, staff, or student user where they are. The campus has also seen a rise in community engagement with lifelong learning – the '60-year learning plan.'

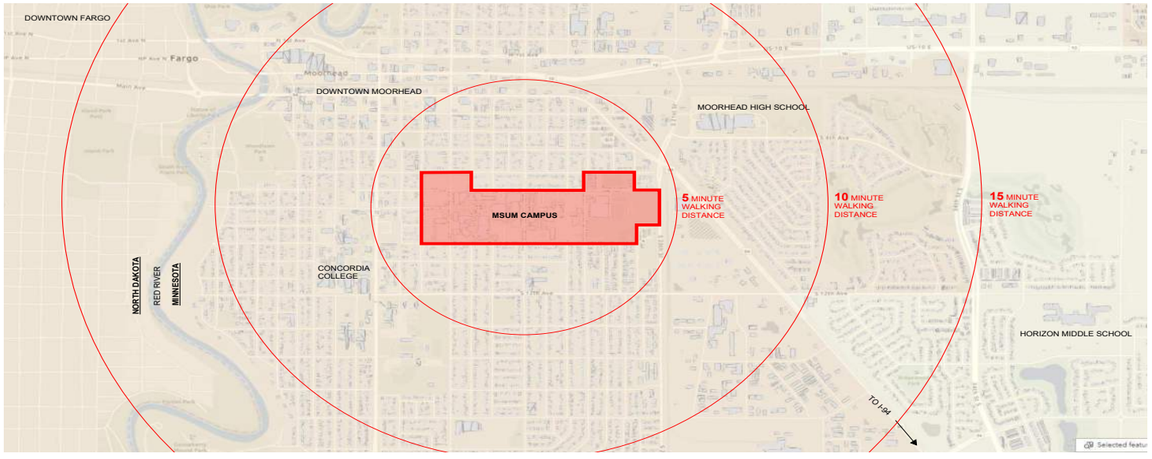
Upcoming physical needs for Information Technology are primarily related to appropriate data closets, climate and power for equipment. They are also working with Facilities to continue to increase the buildings across the campus with electronic access controls.

2.0 EXISTING SITE CONDITIONS

2.1 LAND MANAGEMENT



Regional Context

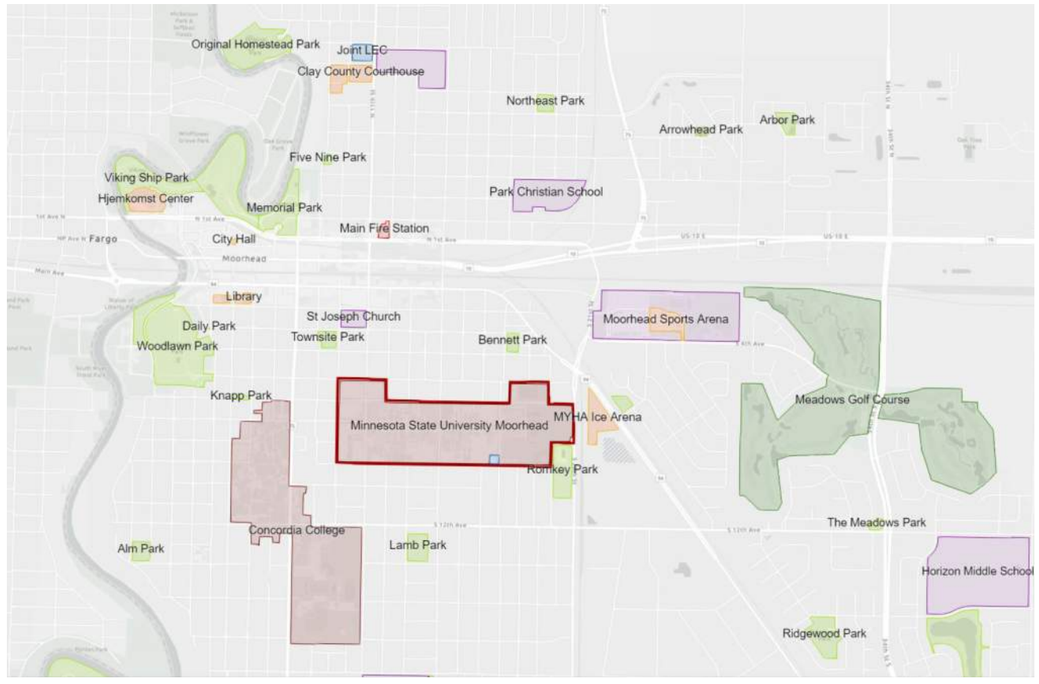


City Context

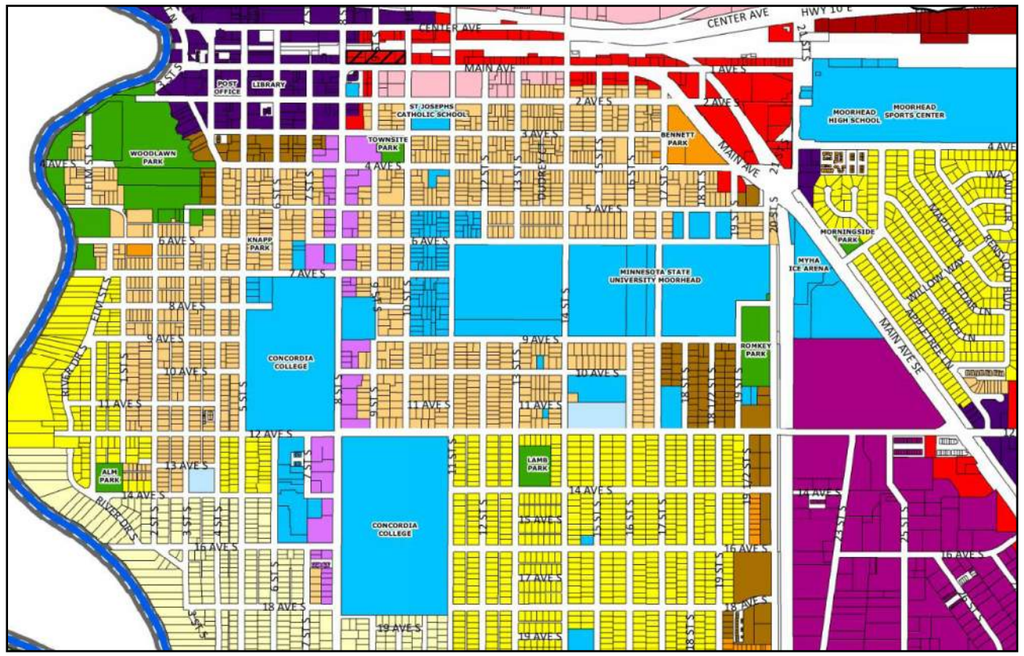
2.1.2 REGIONAL/COMMUNITY RELATIONSHIP

Minnesota State University Moorhead's city context places it near the western edge of Moorhead, mere blocks from the river. Zooming out to a regional view, we see that the school anchors the eastern edge of Fargo/Moorhead metro area. As we look at the neighborhood context, we can see the campus sits five blocks south of Main Avenue - the central spine to Moorhead and the connector to Fargo. Many roads come together near the campus edges, offering excellent access from all points of the compass.

Moorhead has seen increasing rail traffic and a project to improve rail safety was recently completed near campus which included a new underpass configuration of the intersection of Main Avenue SE and 20th/21st Street is proposed, to separate train and road traffic. It is anticipated that this will increase the use of 20th street at the east edge of campus and also make connection to Moorhead High School more efficient.



Neighborhood Context



City of Moorhead Zoning Map Excerpt

Legend

Zoning Classifications

- RLD0a: Residential Low Density 0a
- RLD0b: Residential Low Density 0b
- RLD1: Residential Low Density 1
- RLD2: Residential Low Density 2
- RLD3: Residential Low Density 3
- RMD1: Residential Moderate Density 1
- RMD2: Residential Moderate Density 2
- RHD1: Residential High Density 1
- NC: Neighborhood Commercial
- CC: Community Commercial
- RC: Regional Commercial
- MU1: Downtown Mixed Use
- MU2: Corridor Mixed Use
- MU3: Commercial Mixed Use
- LI: Light Industrial
- HI: Heavy Industrial
- P: Public Open Space
- INS: Institutional
- PUD-LINS: PUD/Light Institutional

House Numbering Sides of Streets

Odds
South and West

Evens
North and East

2.1.3 ZONING AND LAND USE

The local zoning authority is the City of Moorhead. Within the city's zoning code, Minnesota State University Moorhead's zoning designation is INS: Institutional. The INS institutional district is intended to accommodate facilities capable of providing services to large groups in a campus like setting. The district encourages institutions to plan long range for geographical expansion, providing surrounding property owners with information as to those plans.

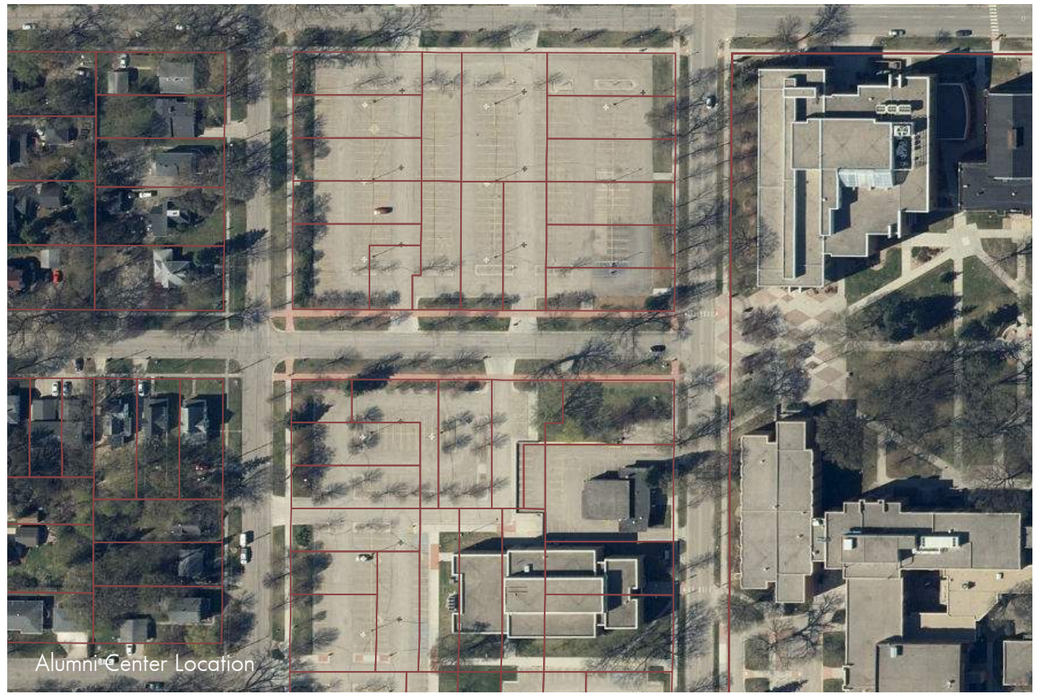
The surrounding neighborhood is predominantly RLD 3: Residential Low Density 3. The RLD-3 district is intended to provide opportunities for a variety of lot sizes, single-family detached and attached dwellings, and limited multi-family dwellings (townhomes, condominiums and small apartment buildings). Maximum height in RLD3 district is 35 feet for dwelling units or principal buildings.

Bed & Breakfasts and Campus Organizations are Conditional Uses in RLD:3. Two dwelling units or three or more attached townhomes are permitted; buildings with 3 to 16 or more units are Provisional Uses.

There are also segments of MU2: Corridor Mixed Use to the west of campus where multi-unit residential with services are permitted uses. Most retail uses are Permitted Uses within this zoning district, except for daycares, which are a Provisional Use.

RMD2: Residential Medium Density 2 are to the northeast and south of campus towards the eastern edge, as well as CC: Community Commercial, and P: Public/Open Space within one to two blocks of campus.

Regional Science Center


Alumni Center Location

2.1.4 LAND LEASES

MSUM leases a 4,800 square foot heated storage space located at 1410 23rd Street South in Moorhead. Heavy equipment owned by the campus is stored there and a sand pile is kept for winter use.

2.1.5 PROPOSED PROPERTY ACQUISITIONS

Since 2016 there have been a couple of property changes as noted below.

1. The MSUM Foundation completed the donation of an 89-acre property adjacent to the Regional Science Center property, which had previously been a golf course.

2. It has been determined that the best location for the new home of the MSUM Alumni Center is adjacent to the Center for Business building. Fundraising has been completed for the project and design is now under way. Previously, MSUM Foundation staff had offices in a former residential property. That property has since been demolished. The Newman Center property was acquired by the University and will be demolished to make way for the new MSUM Alumni Center building project.

MSUM has no prior potential property acquisitions. This Plan encourages the campus to approach the City of Moorhead to add some of the existing City pool land to the southeast corner of the campus.

2.2 LANDSCAPE/CIVIL

2.2.1 CRITICAL ISSUES - CAMPUS AND IMMEDIATE SURROUNDINGS

Taken from the Campus Landscape Masterplan, completed in 2013 by Damon Farber Associates, these analyses do an excellent job of framing the critical issues and strategies affecting the campus at present.

WEST GATEWAY, PARKING, CAMPUS EDGE

Plan

Issues

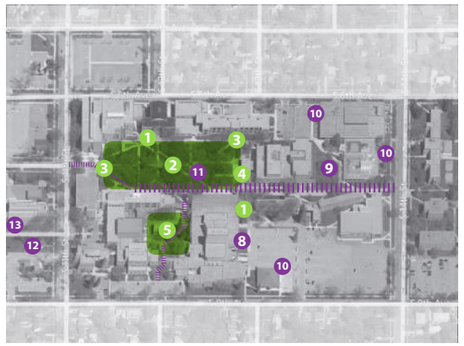
1. 8th Street S. lacks signage/monument for MSUM.
2. Lighting & Banners do not run length of 7th Ave to main campus gates.
3. First impression of campus is open parking lots.
4. 5th Ave S lacks sense of entry to campus heading south.
5. Perimeter landscaping now lacks sufficient screening.
6. Parking lots have limited sustainable features
7. Limited funding for parking lots limits opportunities for enhancements
8. Egress for neighbors at Lot C on 9th Ave and issue
9. Owens and King Hall parking areas are not efficient.
10. Landscape height around some lots has become unsafe
11. Landscape staffing is limited when school is in session.

Strategies

- Work with City of Moorhead to acquire property easements along 7th Ave boulevard to install campus standard light poles and banners.
- Explore additional easements for monument signs at 8th Street campus gateway.
- Budget for additional plant material can be challenging. Cost effective, sustainable plant materials should be used.
- Introduce fencing, and plant material that directs pedestrians to clearly marked crosswalks.
- Explore parking lot entry/egress to improve pedestrian safety.
- Explore additional funding strategies
- Explore grants opportunities to introduction sustainable features
- Establish landscape maintenance guidelines to reduce labor and material costs

ACADEMIC CORE

Plan



Issues

1. Bike Racks are not arranged in defined places.
2. Turf grass in quad is in poor condition.
3. Site furnishings are in poor condition, lack continuity throughout campus.
4. Plaza outside of library offers very little useful space for users.
5. Lack of defined pedestrian space and poor appearance at Grier Hall.
6. Excessive paving & pathways distract.
7. Existing mature trees require pruning.
8. Improve User Experience at the Dille Center Arts Parking lot Drop-off
9. Provide Outdoor eating opportunity at Kise Commons
10. Views into loading docks and dumpster area distract from campus image
11. Lack of a variety of seating opportunities for events, classes, seating
12. R3 parking lot - add more outlets
13. Sidewalk between Center for Business & 9th

Strategies

- Introduce a palette of site furnishings & lighting to organize the district, and reinforce the campus identity.
- Campus trees should be evaluated by arborist who will develop campus wide urban forestry plan.
- Prune & remove unnecessary trees to open up views to the quad, and sustain turf grass.
- Evaluate pedestrian pathways and improve on campus wide system.
- All new buildings shall have internal areas for staging of trash/recycling and all outside storage/loading docks are to be screened through planting, fencing or other effective means

RESIDENTIAL LIFE

Plan

Issues

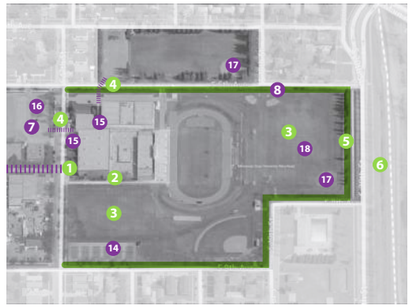
1. Insufficient open green space for a variety of activities
2. Excessive amount of sidewalks, hardscape at Holmquist Hall.
3. Limited seating & gathering space outside of residence halls.
4. Under-utilized courtyard behind Snarr Residence Hall.
5. Lack of defined pedestrian space to Nemzek Hall.
6. Excessive lawn areas lack definition.
7. Parking areas bleed into green space.
8. Enhance Pedestrian spine experience for all modes of travel
9. Lack of amenities that encourage gathering - fire pits, patios, water
10. Existing landscape does not instill a sense of campus pride
11. Relocate Bus stop away from Dorm rooms and Pedestrian Spine to reduce smoke and hanging out conflicts

Strategies

- Introduce a palette of site furnishings & lighting to organize the district, and reinforce the campus identity.
- Create outdoor rooms for large & small gatherings that meet the program needs of residential life.
- Create safe & clear pathways for pedestrian movement.
- Create gathering nodes or rooms along the pedestrian Spine to enhance the experience.
- Define parking rooms with the use of plant material and fencing.
- Create a unique sense of place for the district through the use of building mass, plant materials, lighting, and site furnishings.
- Create a series of distinct gathering nodes along the pedestrian spine to activate the experience. Make the Spine “the Place”

ATHLETIC & RECREATION

Plan

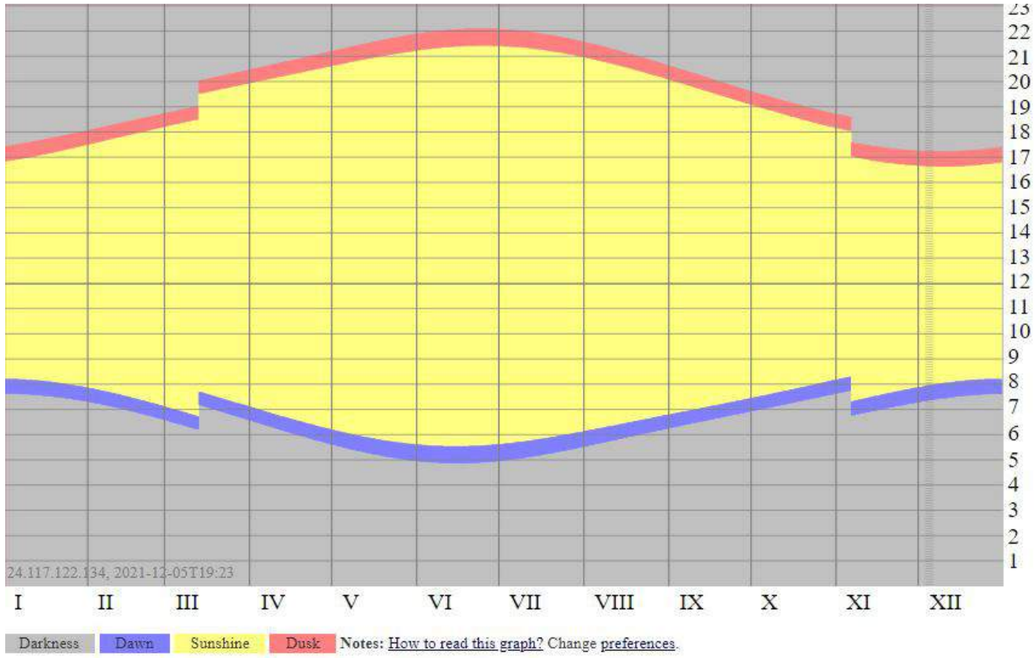


Issues

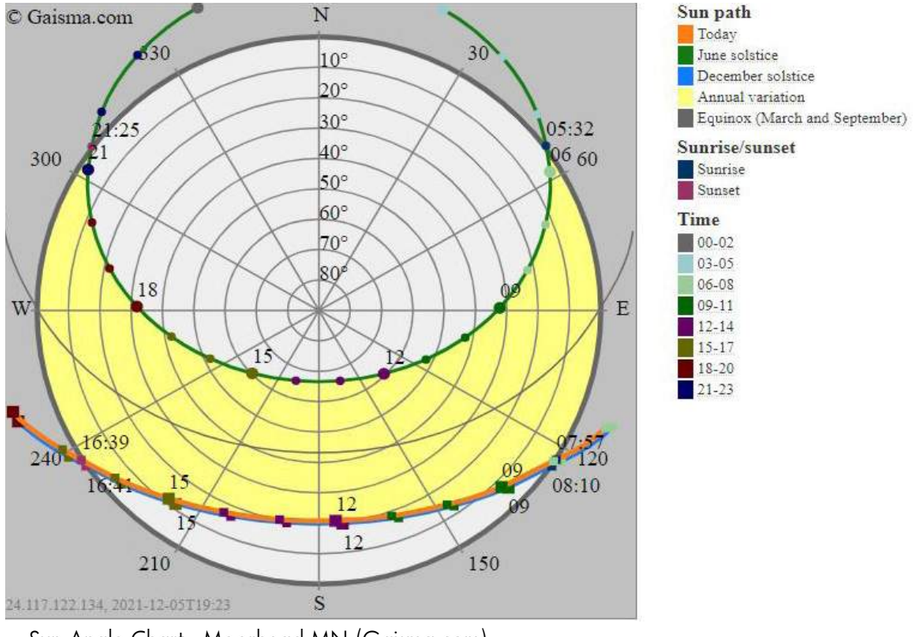
1. Campus spine pathway terminates at Nemzek Hall egress door.
2. Athletic office is not visible from campus spine.
3. Turf grass on playing fields is heavily used, compacted.
4. Pedestrians cross mid-block from parking lots.
5. Poor appearance of campus from 20th Street.
6. Screen view of railroad tracks.
7. Pedestrians cut across N lot
8. Perimeter fence is too low and provides a poor first campus image
9. A turf management plan is needed - lacks irrigation, drainage, good soil profile
10. Overuse of fields degrades quality athletic experience
11. Fields bleed together without visual separation
12. Lack of lights limit night use to extend oppotunities
13. Lack of synthetic turf limits use of football field for other sports
14. Tennis courts require resurfacing
15. Building entrances are unclear and lack interest
16. Gameday tailgating/parking experience could be enhanced
17. Removal of two softball diamonds
18. Need for additional regulation fields

Strategies

- Introduce a palette of site furnishings, materials & lighting to organize the district, and reinforce the campus identity.
- Explore pedestrian crosswalk safety strategies.
- Budget for additional plant material can be challenging. Cost effective, sustainable plant materials should be used.
- Explore short and long term costs associated with replacing grass on athletic fields with synthetic turf to meet the current and future demands.
- Work with City of Moorhead to improve appearance of railroad tracks east of 20th Street.
- Explore building entrance enhancements to improve image and wayfinding
- Develop funding strategies for enhancements
- Entrance to soccer field upgrade to be welcoming

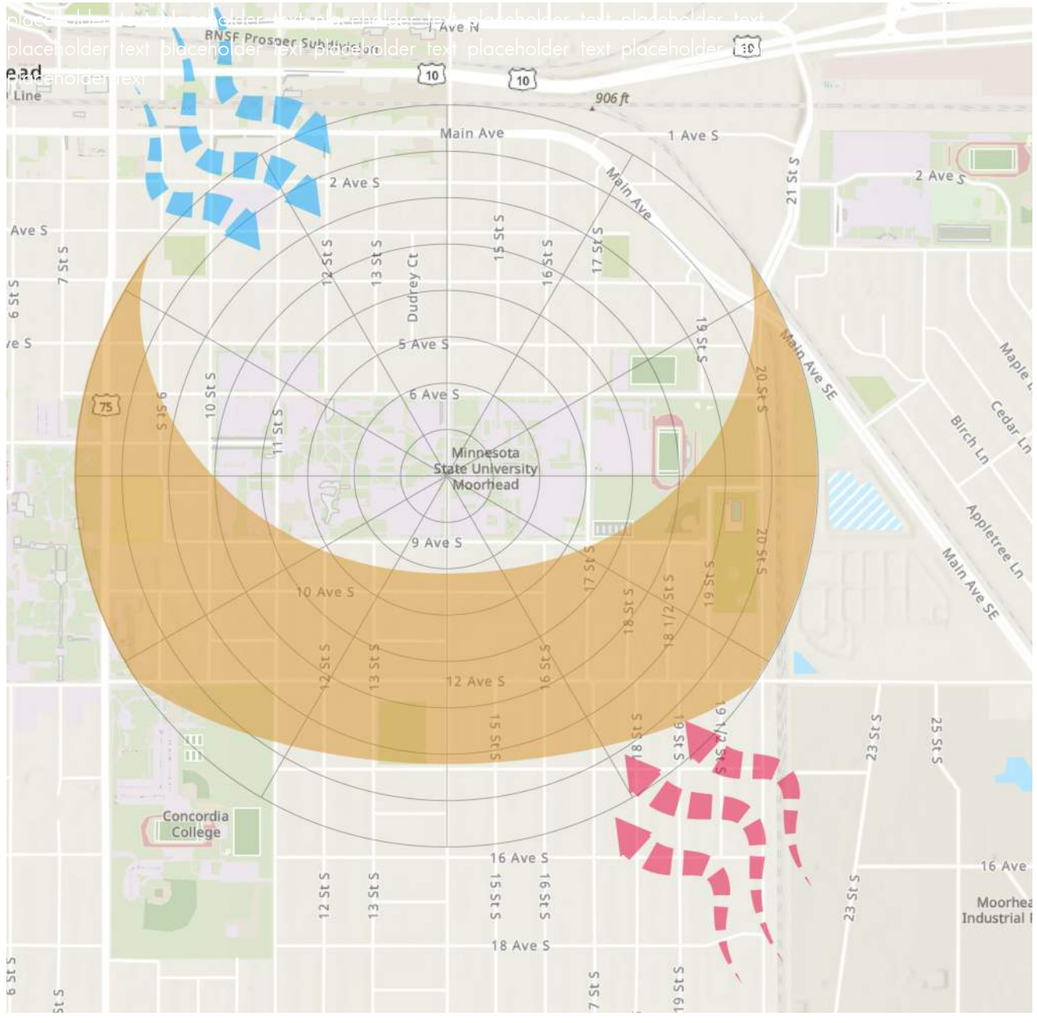


Daylight Graph - Moorhead MN (Gaisma.com)



Sun Angle Chart - Moorhead MN (Gaisma.com)

2.2.2 NATURAL RESOURCES



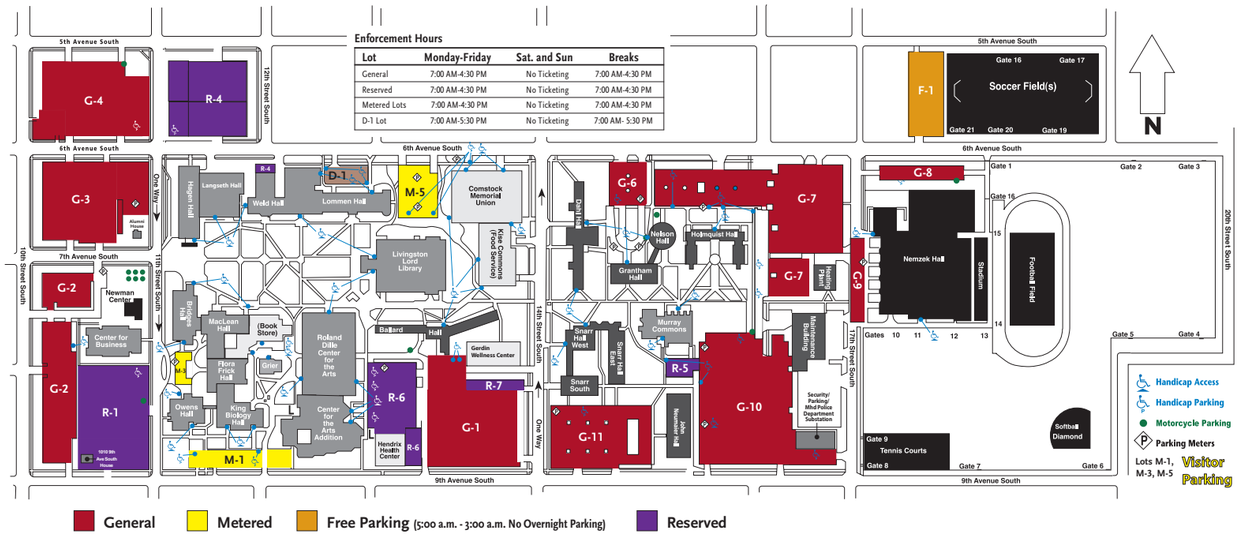
Each of these diagram show sun angles, available daylight and prevailing winds that are considerations for the future plans. These natural resources are a benefit and have impact on human comfort and energy use.

2.2.3 HARDSCAPE

While buildings are often the focus of much discussion on a campus, it is also important to remember the impact the spaces between have on one's campus experience and impression of place. The MSUM academic core quad is a good example of an expression of place with hardscape. The west end is anchored with a gateway to campus, which highlights the campus to 11th Street south. This entry includes a paver patio area with seating. A primary sidewalk spine extends from here to the far east end of campus, taking one through the residential life block to the athletic/recreation area. In the center of the academic core quad there is also a hardscape area that includes an outdoor art installation and built in benches. Throughout the campus a network of 'spaghetti-like' sidewalks connect in every which way to each other, allowing students easy paths to where ever they are going next conveniently.

Parking is the majority of the hardscape on campus. Most parking is located on the outside edges of the campus. There are a few buildings interior to the campus which have frequent deliveries so limited access drive lanes with designated unloading areas are provided. Overall the sidewalks on campus are in good condition. The pavers at the west entry are beginning to shift and will require maintenance to be leveled or replaced in the near future, as they will become a tripping hazard. The condition of the paved parking lots on campus is varied. A schedule of anticipated maintenance and replacement has been included in section 2.3.2 Parking Analysis for additional information. The free parking lot at the northeast corner of campus is the only gravel lot on campus.

MSUM Campus Parking



2.2.5 CAMPUS TOPOGRAPHY

Campus Topography: 1-foot Contour Intervals

West Campus: 10th to 14th Streets

East Campus: 14th to 20th Streets

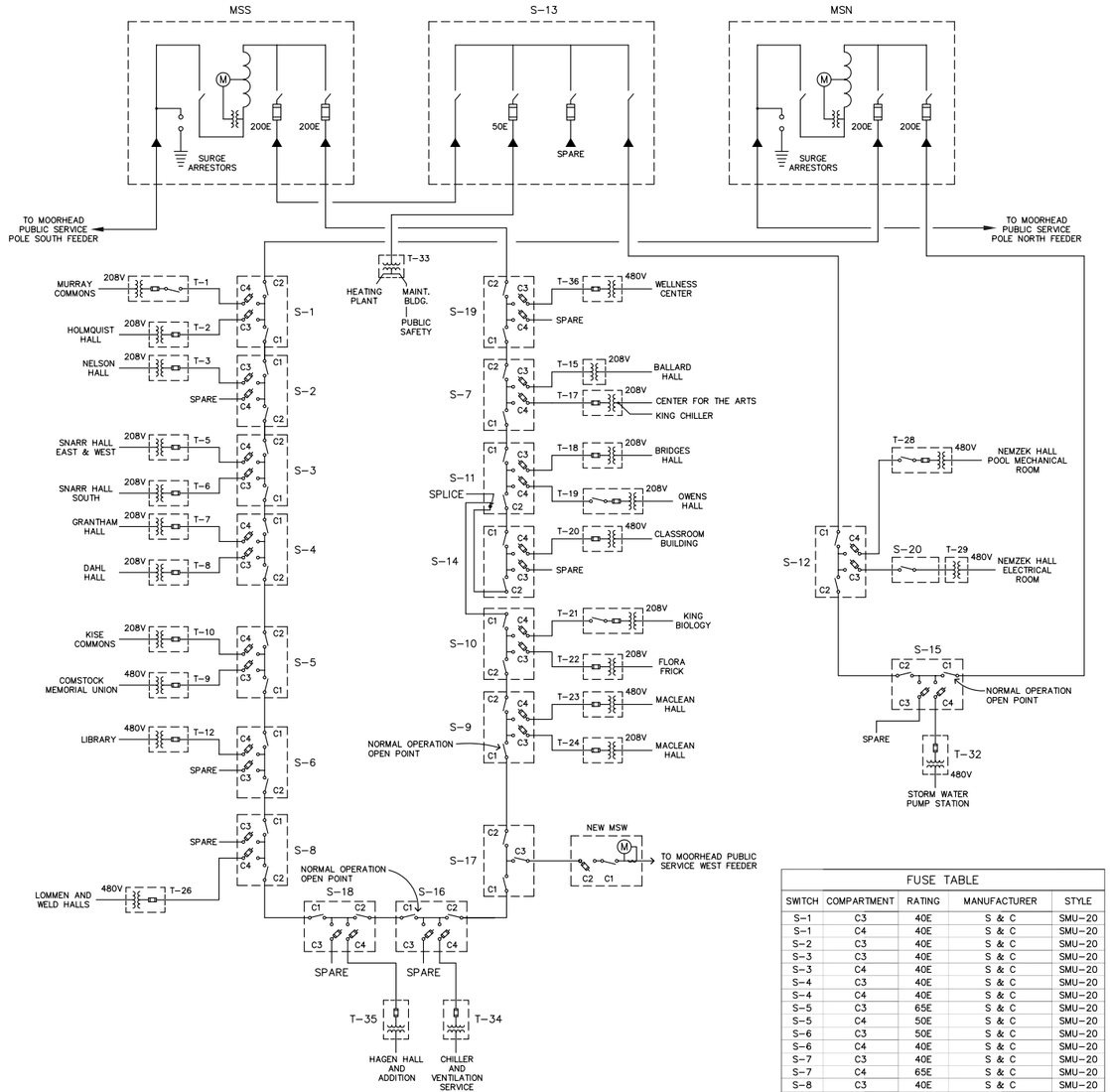
Like most of the Fargo-Moorhead area, the MSUM campus is basically flat. Contours are man-made to promote controlled drainage. There have been many improvements to reduce flooding of the Red River in the Fargo-Moorhead area, and the campus is less likely to be flooded than in the past. In addition, very few buildings have occupied basements space, again to limit the impact of flooding.

2.2.6 HAZARDOUS CONDITIONS

There are no known hazardous conditions on campus at this time.

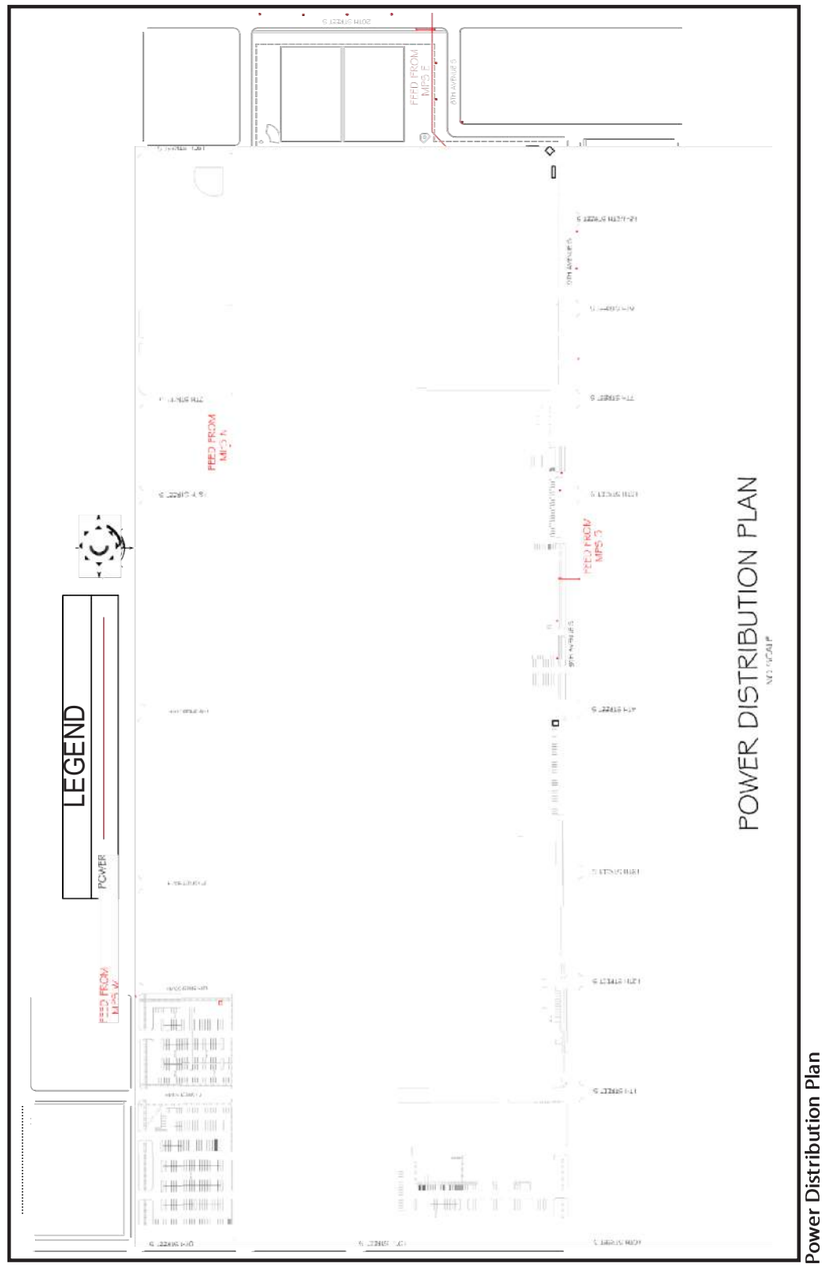
2.2.7 CAMPUS UTILITY INFRASTRUCTURE

MSUM Facilities has a campus wide plan to perform a much needed update to the campus fire alarm system. The system which has been used throughout campus for many years needs to be replaced completely because it is old and parts are no longer available to do service. New building construction and renovation projects have started this transition, but there are still a lot of buildings which require work. Facilities plans to perform the needed upgrade to buildings across campus one-by-one, using salvaged parts to service the remaining old installations. There are concerns that fund limitations will make this too slow a process to address all the buildings in need across the campus and in the future this critical life safety system will begin to fail in outstanding buildings. MSUM will complete a predesign for a fire alarm system upgrade. HEAPR funding will be requested during the 2024 capital budget request process.

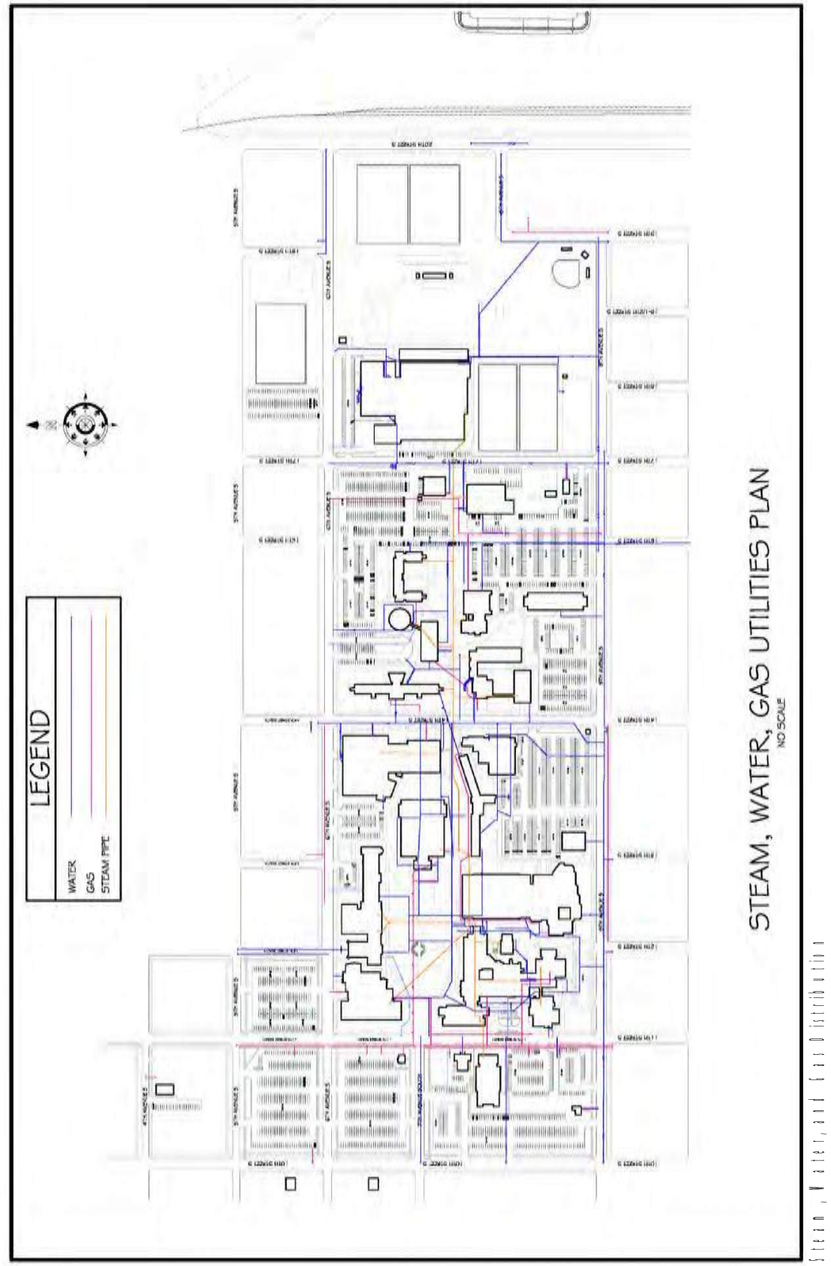


MSUM POWER DISTRIBUTION

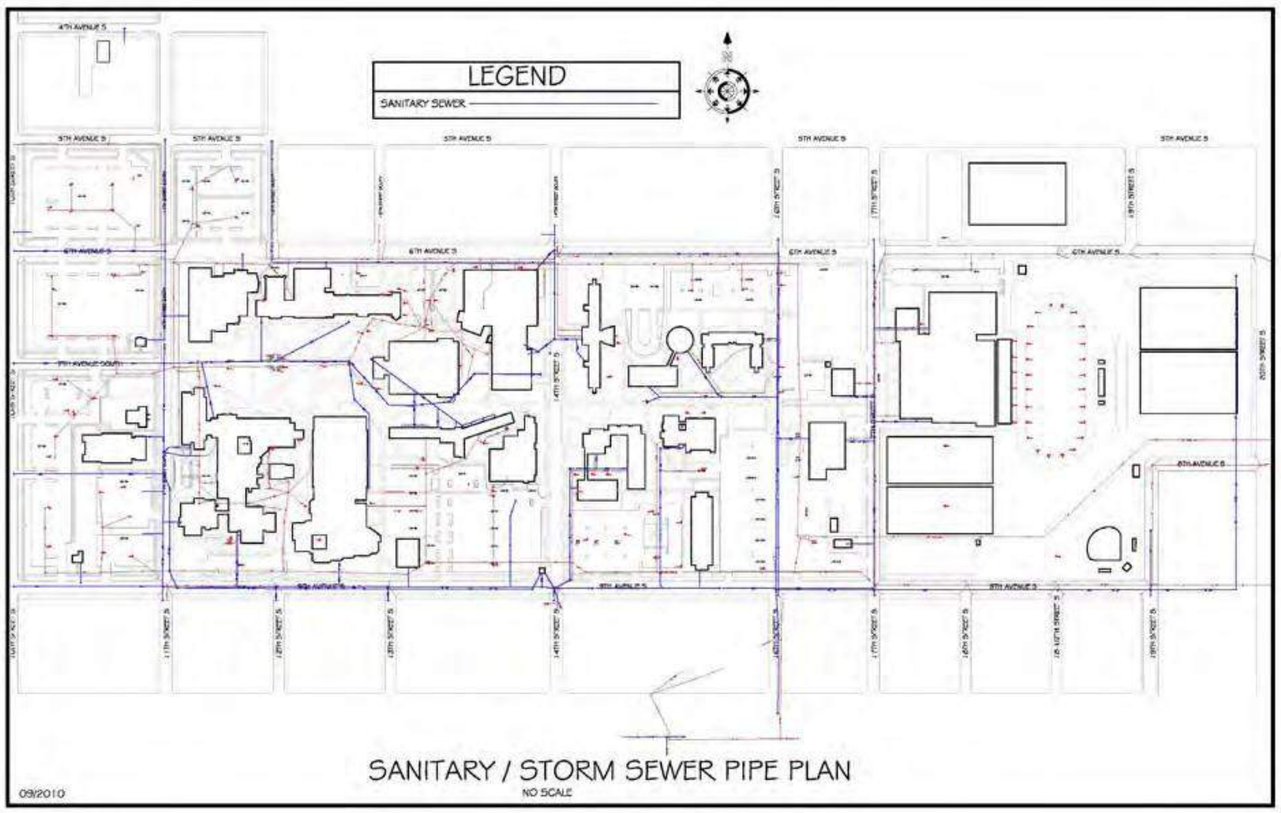
FUSE TABLE				
SWITCH	COMPARTMENT	RATING	MANUFACTURER	STYLE
S-1	C3	40E	S & C	SMU-20
S-1	C4	40E	S & C	SMU-20
S-2	C3	40E	S & C	SMU-20
S-3	C3	40E	S & C	SMU-20
S-3	C4	40E	S & C	SMU-20
S-4	C3	40E	S & C	SMU-20
S-4	C4	40E	S & C	SMU-20
S-5	C3	65E	S & C	SMU-20
S-5	C4	50E	S & C	SMU-20
S-6	C3	50E	S & C	SMU-20
S-6	C4	40E	S & C	SMU-20
S-7	C3	40E	S & C	SMU-20
S-7	C4	65E	S & C	SMU-20
S-8	C3	40E	S & C	SMU-20
S-8	C4	50E	S & C	SMU-20
S-9	C3	40E	S & C	SMU-20
S-9	C4	50E	S & C	SMU-20
S-10	C3	40E	S & C	SMU-20
S-10	C4	40E	S & C	SMU-20
S-11	C3	40E	S & C	SMU-20
S-11	C4	40E	S & C	SMU-20
S-12	C3	65E	S & C	SMU-20
S-12	C4	40E	S & C	SMU-20
S-14	C4	50E	S & C	SMU-20
S-15	C4	40E	S & C	SMU-20
S-16	C4		S & C	SMU-20
S-18	C4		S & C	SMU-20
S-19	C3		S & C	SMU-20



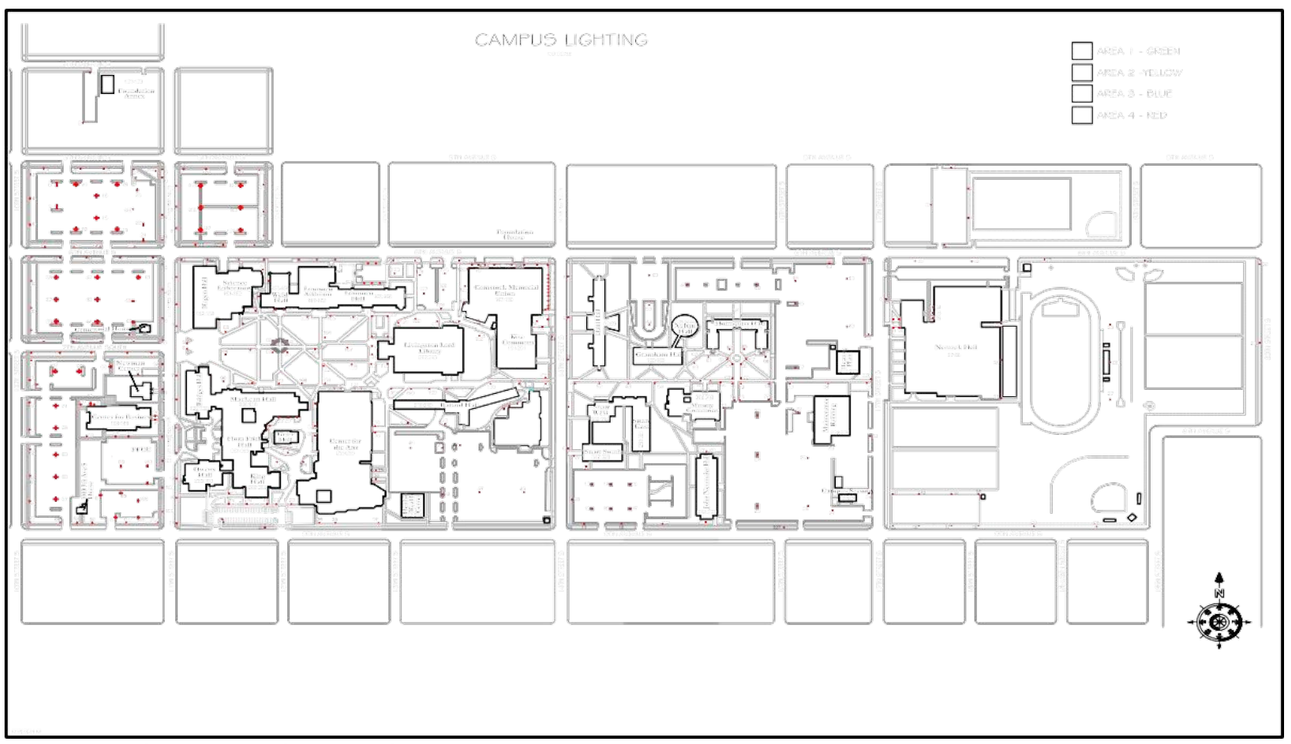
Power Distribution Plan



Steam, Water, and Gas Distribution Plan



Storm + Sanitary Sewer Distribution Plan
Stormwater from campus flows to the east into a large retention basin owned by MSUM.



Campus Lighting Distribution Plan

MSUM COMPREHENSIVE FACILITIES PLAN
2.2 LANDSCAPE/CIVIL

2.3 CAMPUS USE

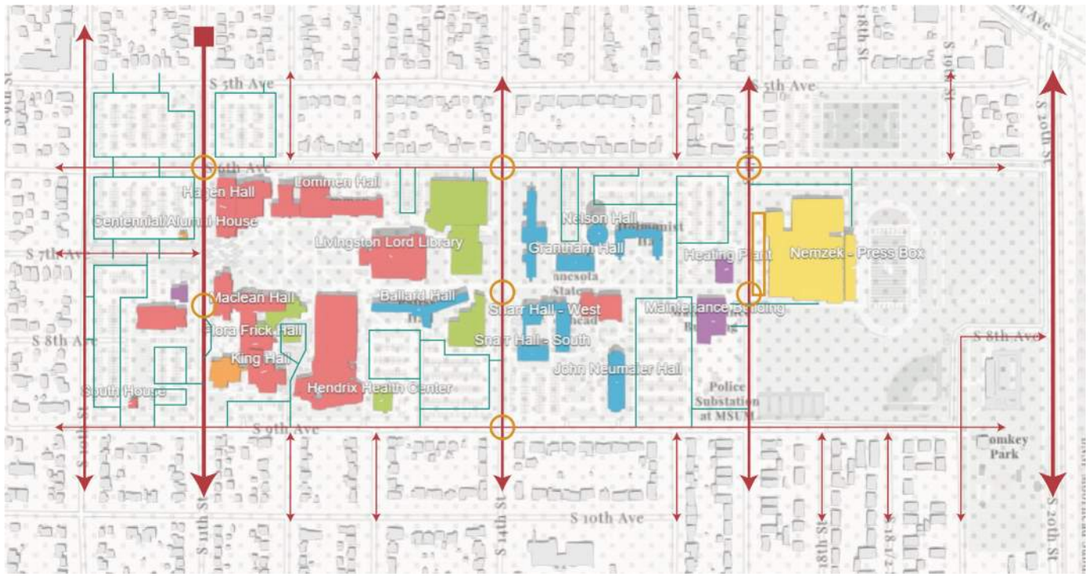
2.3.1 CIRCULATION - PEDESTRIAN AND VEHICULAR

The MSUM campus is organized from west to east in three distinct segments - an academic core, residential life block, and athletic/recreation area. These segments are separated by the north-south City streets of South 11th Street and South 17th Street. With a single academic building, the Center for Business, and new Alumni Center being located further west across South 11th Street. Parking is typically located on the outside edge of campus. Inside the segments, pedestrian and vehicular conflicts are limited to within parking lots and their access points.

Pedestrian flow across campus primarily occurs at a centralized east to west spine which links the segments. This spine crosses South 14th and 17th Streets. To resolve pedestrian and vehicular conflicts on the spine the campus worked with the City and in 2020 pedestrian responsive crosswalk technology was added at 17th and a stop sign with flashing light was installed at 14th. Another non-intersection conflict point occurs on the west end of campus where people look to cross South 11th Street at the Center for Business. This location also has pedestrian responsive technology.

This plan recommends changes to 11th and 14th Streets which have been reviewed with the City of Moorhead. The City has shared that they are open to the changes and are coordinating with Metro COG (Council of Governments) on a potential future study which would include public input and evaluate the proposed changes. It is anticipated that the study would not be completed until the 11th Street underpass at Main has been finished.

With the revitalization of biking in Moorhead, many lanes are now included on main roads and trails in and around the City. Students at MSUM can also take advantage of unlimited free rides on the Fargo-Moorhead MATBUS to get around town, which is a service paid for by students through their student life/activity fees. There is one bus route that comes through campus and another two which come within a block of campus.



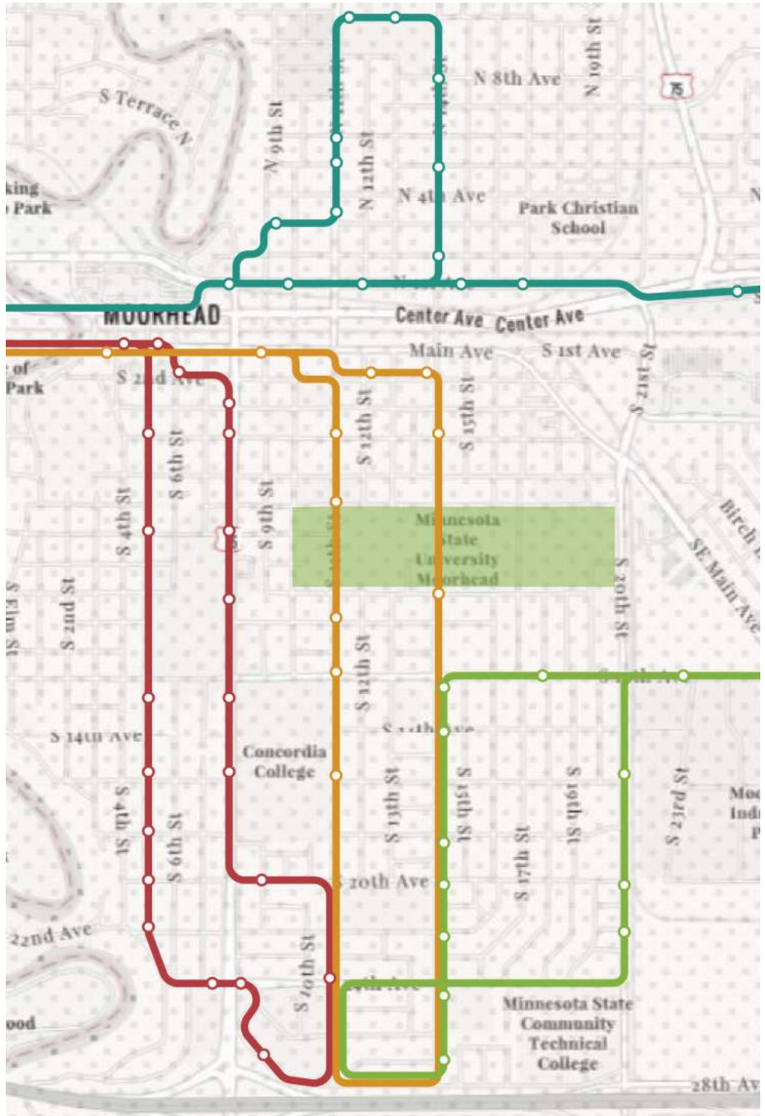
Vehicle circulation - off campus

Vehicle circulation - on campus

Vehicle/pedestrian conflict points

2.3.2 TRANSIT ROUTES AND STOPS

The current Fargo-Moorhead MATBUS schedule notes that all the routes shown below run every 30 minutes with the exception of the orange route, which runs every 15 minutes on the afternoons when MSUM is in session.



2.3.2 PARKING ANALYSIS

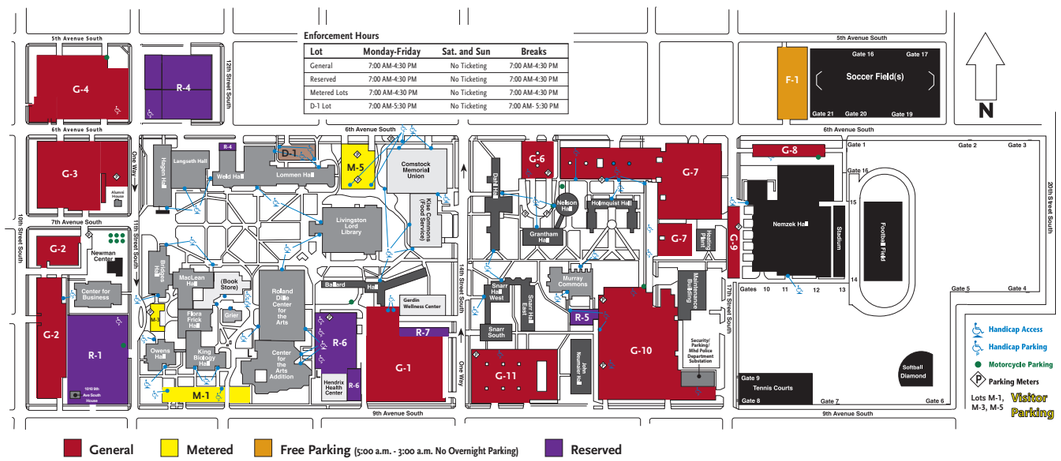
QUANTITY

Parking at the MSUM campus is broken down into three main types. General parking, which is primarily sold to students. These lots surround the campus and allow permit holders to use all General lots interchangeably. Reserved parking is sold to faculty and staff and M lots are metered. Students may be allowed to purchase reserved permits, too, if space is available. In recent years, a few students have purchased All Zone permits allowing them to park anywhere, including metered lots.

Due to the typical use of General permits (for red lots on the MSUM parking map), the campus historically has oversold these permits. This has not been done for FY 2021-22 and is not anticipated to be increases to that point for stand-alone spring sales. Current sales sit at 1,955 and capacity is 2,117 parking stalls. In FY 2019-20 pre-pandemic there were 2,727 General permits sold. The General lots west of 14th Street see the most use, especially between 10am and 2pm. General parking lots near the resident halls are the fullest and see the most consistent parking use, as residents park their vehicles and do not move them sometimes for extended periods of time.

Reserved parking lots (purple on the MSUM parking map) are sold at capacity to guarantee permit holders a space in that lot. Current Reserved sales for FY 2021-22 are at 246 and the campus has 518 total parking stalls available. In FY 2019-20 pre-pandemic there were 342 Reserved permits sold

MSUM Campus Parking



The M-1 and M5 metered pay lots see high use consistently and are close to being full during peaks in the business day. These lots are used primarily by guests to visit the Student Union, Dining Facilities, and Library. Faculty, staff, and students also use them for quick stops due to their convenient central location on campus.

Some areas of lots which are furthest from the campus core are seldom used, but all lots receive some use. MSUM should consider adjusting lot designations based on permit sales, which should free up space for other uses and reduce the maintenance required for parking on campus.

DISTRIBUTION

The distribution of parking generally meets the needs of MSUM's parking customers. There is highest demand for General and Reserved parking on the west side of campus. Commuting students, faculty, and staff prefer to be near the academic core. The campus has more than adequate parking, but it is not in the locations most preferred. As previously suggested, the campus is encouraged to consider adjusting lot designations to align with demand and look to remove parking surfaces where able.

Additional information follows on MSUM's anticipated parking lot repair or reconstruction plan for the continued maintenance of the parking lots currently on in use on campus.

Parking Lot Repair or Reconstruction Plan

FY / Constr Start	Lot Designation	Size SF	Repair	Overlay	Reconstruction	Actual costs / notes
2021	No projects					
2022	M-5	25,205			$272,872	
2023	G-7 West	52,505		$243,471		north of Holmquist
2024	R-4	70,515			$347,421	Partial reconfigure/repair Weld laydown
2025	R-6	50,000			$507,472	
2026	G-10	165,267	$518,307			Possible driving lanes only
2027	M-3	19,678			$211,884	Partial reconstruct
2028	G-1	100,300		$539,179		
2029	G-6	25,205		$139,558		Overlayed in 2008
2030	F-1	36,600			$430,635	should occur after Nemzek project
2031	G-7 East and South	140,200		$823,554		Overlayed in 2013 - ish
2032	G-8	14,208		$85,963		
2033	G-2	107,134		$667,645		
2034	G-3	112,703		$723,421		
2035	G-4	94,332		$623,666		
2036	R-1	51,205		$348,692		Partially reconstructed in 2015
2037	M-1	15,308		$107,371		Reconstructed in 2016
2038	G-11	50,256		$363,072		Reconstructed in 2018
2039	G-11	50,256		$373,964		Reconstructed in 2018
2040	MB front parking lot	14,208		$108,896		Reconstructed in 2020

		2021 costs
Repair	Patching in specific areas	$2.71
Overlay	2" asphalt over existing pavement /	$4.37
Reconstruction	Removal of existing pavement, excavation, compaction of sub-grade, 6" aggregate base, 5" asphalt pavement, lighting / sf	$9.02

2.3.3 WAYFINDING AND SIGNAGE

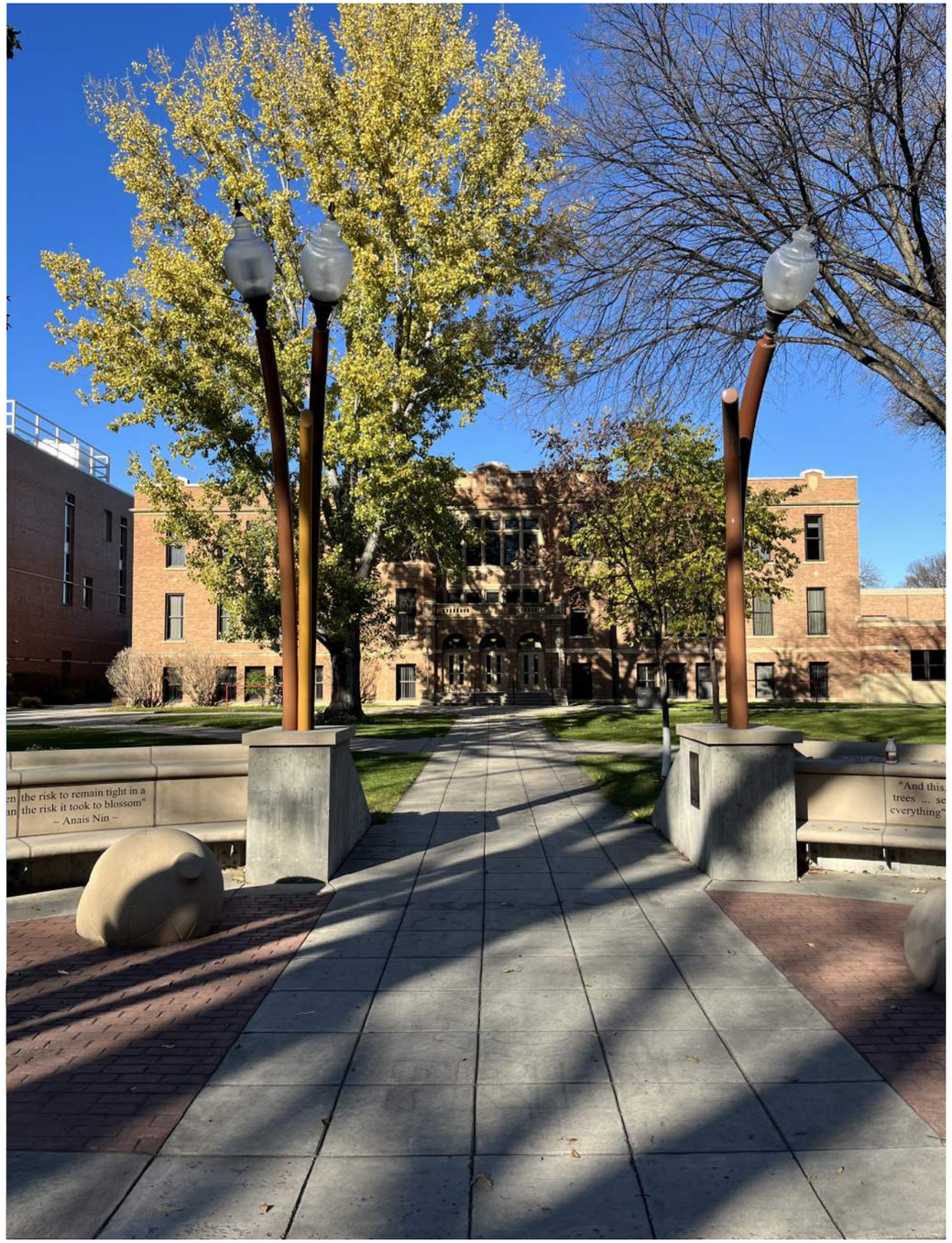
The campus has installed monument signs, banners, and site identification signs as part of its wayfinding. Banners are replaced as needed to keep them looking good and signage continues to be expanded across the campus using the MSUM standards that have been established. The campus is encouraged to continue to maintain what has been done and expand its signage, so all campus entries, edges, and facilities are clearly identified.

2.3.4 CAMPUS WALKABILITY

The MSUM campus is long in its east to west axis, but relatively compact within each of its three primary segments: the academic core, residential life block, and athletic/recreation area. From the residence halls to the Center of Business on the far western edge of campus it is about 2,000 feet, equating to about a 15-minute walk. Similarly, a walk from the center of campus out to the west most parking lots or east to Nemzek Hall is also about a 15-minute walk. This means the campus is comfortably walkable for most. There is a major pedestrian spine which serves this primary east-west circulation movement. In Moorhead's cold climate, providing connections between buildings is desirable. Connections between buildings on the west end of campus continue to be expanded as renovation projects have been completed and most of the buildings on that end of the mall provided interior movement with links to several buildings.

The east half of campus is not as walkable. This is primarily due to the number of pedestrian and vehicle crossing conflicts on this end of campus at 14th Street South and 17th Street South. See the 2.3.1 diagram of these conflict locations. Signage and traffic signals have been added at one of the most heavily used crossing points. The campus is encouraged to continue to increase awareness of the other crossing points in the future.

This plan recommends changes to 11th and 14th Streets which have been reviewed with the City of Moorhead. The City has shared that they are open to the changes and are coordinating with Metro COG (Council of Governments) on a potential future study which would include public input and evaluate the proposed changes. It is anticipated that the study would not be completed until the 11th Street underpass at Main has been finished.



2.3.5 GATEWAYS / ENTRIES

GATEWAYS

A well defined gateway can enhance and reinforce a campus' image and the importance of the gateway to a University campus cannot be overstated. Gateways act as ceremonial entrances, define campus boundaries assist in way-finding and gateways often provide the visitor a first impression. Better defining these gateways to convey a sense of arrival, calm traffic, and provide way-finding is essential. The design of gateways, and their hierarchy, should be both conscious of the image that the property portrays and responsive to the distinct role of the entries at different campus locations.

1. West Gateway
2. Historic Gateway
3. East Gateway
4. Secondary Gateway

3.1 BUILDING ANALYSIS AND SUMMARY

3.1.1 PROJECTS SINCE LAST MASTER PLAN

MAJOR CONSTRUCTION

Weld Hall predesign was completed prior to the 2016 CFP. Funding was sought in 2016 but not received as there was no bonding bill. In 2018 design funding was received and the design is currently near completion. Construction funding requested in 2020 and 2022 was not received. Weld Hall was the 2022 system's #1 capital project request but unfortunately a bonding bill was not passed. Construction funding will be requested again in 2024.

Nemzek Hall predesign has been completed. Design funding will be requested in 2024.

The MSUM Alumni Center is in the design phase. The capital funding campaign is complete and the start of construction is anticipated sprint of 2023.

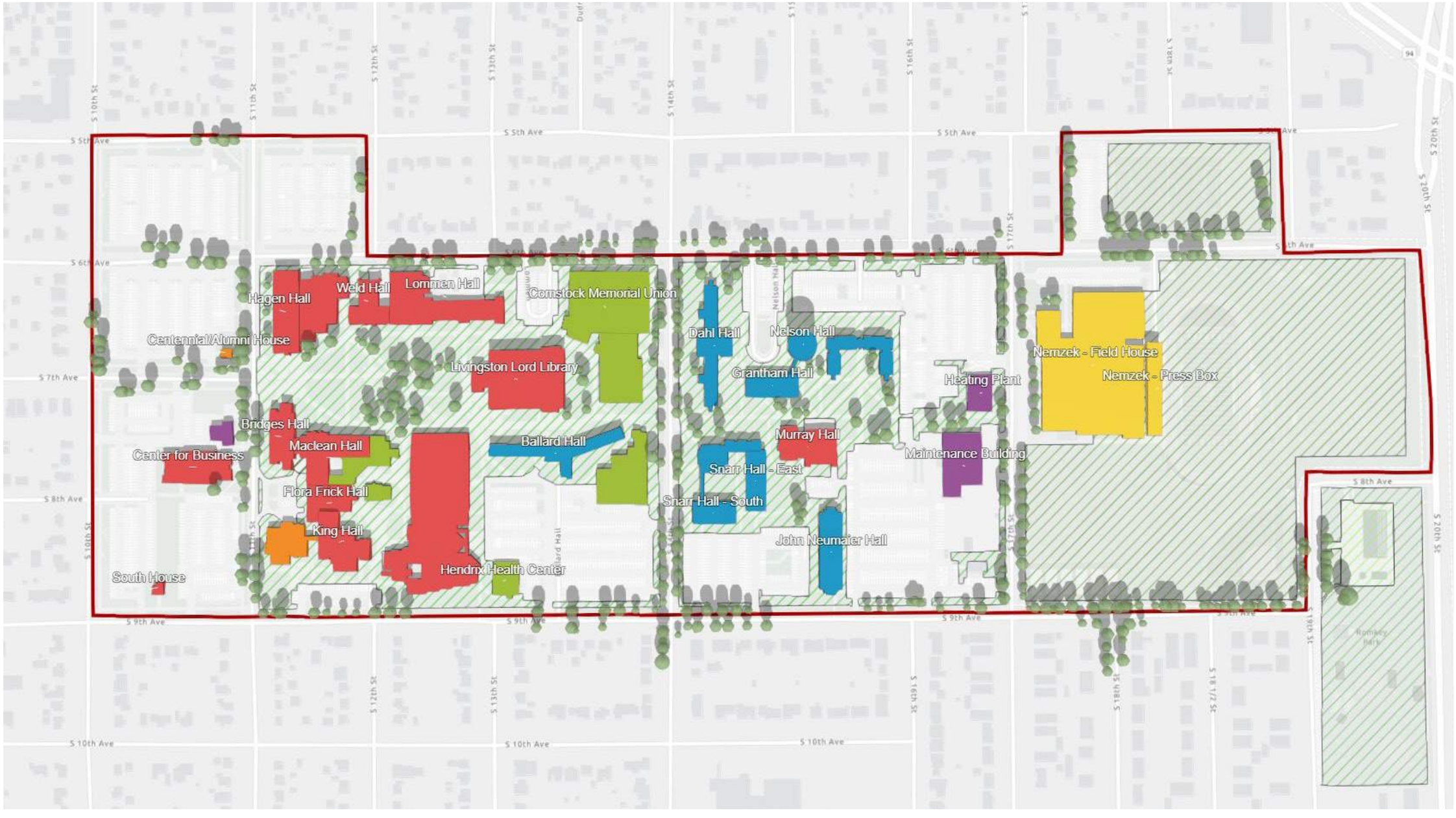
SMALLER PROJECTS

- Former Residential House (Alumni/Centennial House) has been Demolished (2019)
- Former Residential House (South House) has been Demolished (2019) Alumni/Centennial House has been Demolished
- South House has been Demolished
- Newman Center is being demolished prior to the construction of the Alumni Center
- Kise Commons – FFE in Dining Room (2016)
- South Snarr – Building Renovation (2017)
- East Snarr – Building Renovation (2018)
- Ponderosa property acquistion and building demolition to support academic program research (2019)
- Holmquist – FFE in Student Rooms & Community Spaces (2018)
- Holmquist – Partial Roof Replacement (2020)
- Nelson – FFE in Student Rooms & Community Spaces (2019 & 2020)

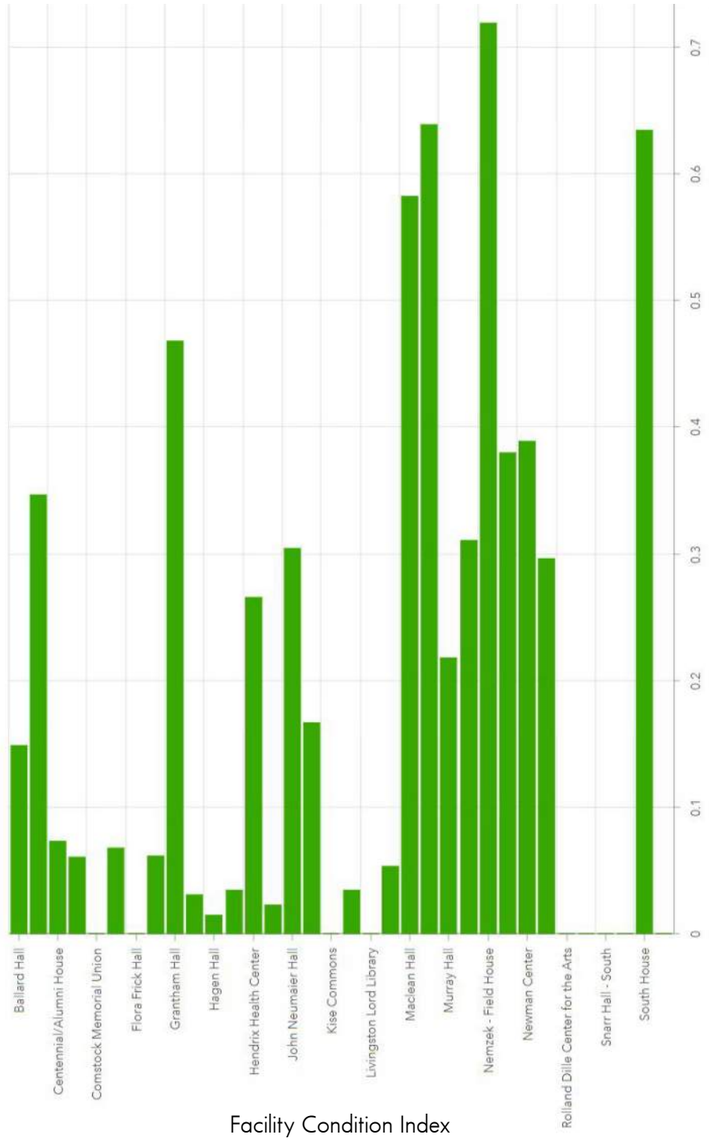
MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY

MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY

3.1.2 EXISTING BUILDING KEY

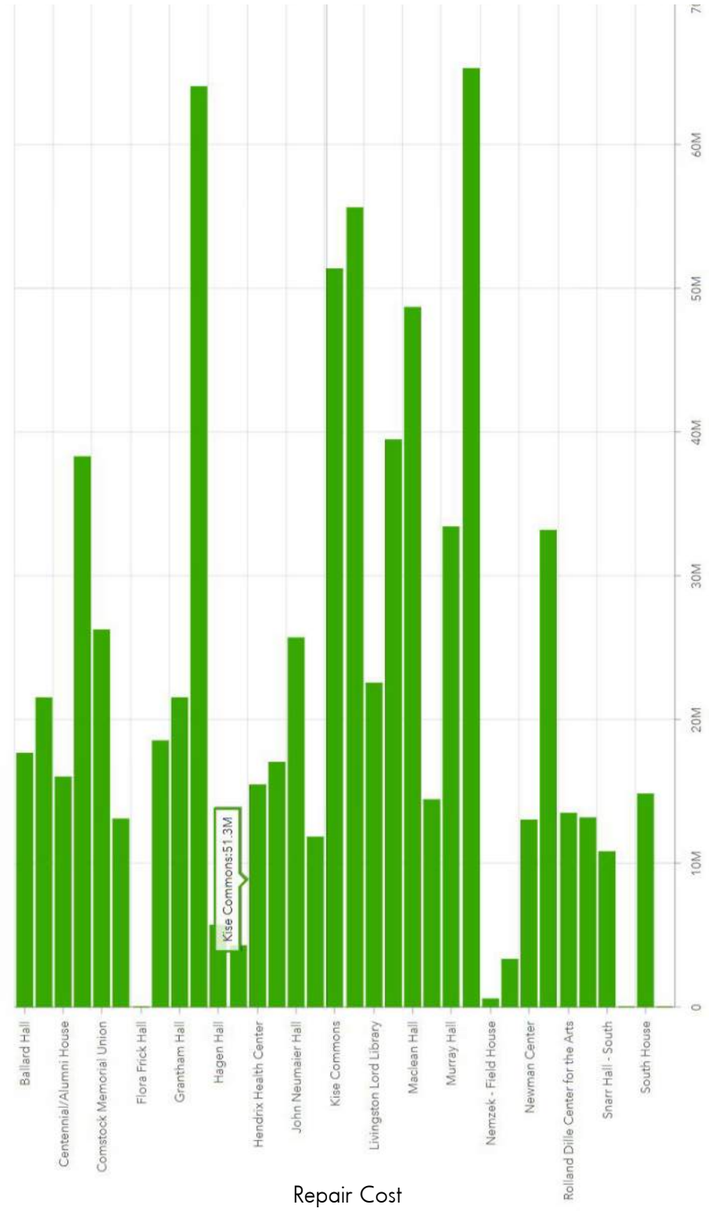


3.1.3 EXISTING BUILDING CONDITIONS FCI



Facility Condition Index

Many of the buildings have a Facility Condition Index below 0.10, showing the progress made in previous renewal projects. Significant need still exists, with 13 buildings having FCIs of 0.2 or higher. Needed maintenance is identified and addressed in the Building Data Pages.



Repair Cost

3.1.4 GENERAL BUILDING TOPICS

PROGRAM NEEDS

In general, the buildings in MSUM's academic core provide good teaching space for the education of students, faculty research, and other associated activities. While there are still older classroom spaces with furniture that does not allow for flexibility in teaching, the campus has continued to renovate complete buildings and smaller areas as they have been able, to increase the number of modern classrooms that provide flexibility for the more collaborative teaching and learning styles of the 21st century. These allow for a variety of experiential, small group discussion, and hybrid online learning. The campus has increased its online class offerings over the last few years and will see that continue in the future. As such, more existing classroom spaces will need be modernized and have technology enhancements made. Of note, an advanced technology listening room is being created in the Roland Dille Center for the Arts.

Predesigns have been completed for Weld Hall and Nemzek which outline the renovation needs of these buildings to support their educational programs and provide solutions to current handicap accessibility shortcomings. The MSUM Alumni Foundation has also completed a predesign to assist with fundraising for the MSUM Alumni Center. They recently announced that they have reached their fundraising goal for the construction of a new building. It will be on the site of the current Neuman Center which is being demolished. Giving them a prime location adjacent to the Center for Business building on the west side of campus.

FEATURES/HALLMARKS

The main quad landscape and surrounding building are the most significant features on the academic core of campus. The buildings are two to four stories tall with similar orange brick and tawny limestone accents at bases, caps, and string coursing. Weld, Frick, MacLean and Lommen, the earlier buildings on campus have additional architectural details that add to their character. Newer campus buildings have continued to use the brick of the same tone with tawny accents, but have used glazing-walls and metal panel for a more modern feel. Continuing to use similar brick and accents will be important in the future to maintain the unified feel of the campus buildings.

SOCIAL / COLLABORATIVE SPACES

MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY

Over that last several years MSUM has made a concerted effort to update and add more social and collaborative areas across the campus. These spaces provide important informal spaces outside of classrooms and offices for the social aspects of learning. They can be found across campus in various locations - in academic buildings such as the Center for Business and Lommen Hall; and in shared support buildings such as, the Comstock Memorial Union, Livingston Lord Library, and the Gerdin Wellness Center. Besides the Comstock Memorial Union, the Dragon Stop Café is a popular location on the west side of campus which includes coffee and food. The Roland Dille Center for Arts combines student social spaces with its areas used by the broader arts community for art gallery spaces, as well as reception spaces for music and theater performances. On the east side of campus, Nemzek Hall provide a social space which highlights student athlete accomplishments. It is anticipated that the current predesign project for Nemzek Hall will further enhance and expand the social and collaborative spaces available on this end of campus for students and the greater MSUM community. It should also be noted that Residential Life has been updating and enhancing the shared student study and social spaces in all the residential halls.

It will be important to continue to update and increase the number of social and collaborative spaces across the campus with the modern needs of 21st century learning.

WAYFINDING

Standard campus signage has been developed which promotes a sense of place and pride in the MSUM brand and unifies signage across the campus. They continue to work on the wayfinding site and building signage on campus, especially where buildings are linked internally.

ACCESSIBILITY

Limited progress has been made in addressing the challenges on campus for those with mobility impairments. The older buildings on campus which have not had recent renovations have the most remaining barriers, such as lack lever door hardware, insufficient clearances at entries, lack of extensions at stair railings, and limited accessible toilet rooms. A predesign has been completed to address the accessibility limitations at Weld Hall. This renovation is pending funding support of the project. The west entry into the Frick-MacLean-Bridges buildings is a key exterior location on campus without an accessible entrance. This is a priority for the campus and they are looking to address it with a future project at the adjacent parking lot.

SECURITY / SAFETY

The campus continues to unify and update their card access system with the goal to increase overall control and ease management of access throughout the MSUM campus.

3.1.5 SUSTAINABILITY AND ENERGY EFFICIENCY

OVERVIEW

On Earth Day 2021, MSUM President Anne Blackhurst and MSUM Student Senate President Nico Arias signed a Sustainable Action Commitment which includes a stated goal to "make MSUM campus carbon neutral as soon as practically possible." internet news articles stated, "The agreement means the university will work to completely offset its carbon footprint to help the planet. The university will form a sustainability action group composed of both students and faculty to develop the plan of how to neutralize its carbon footprint within one academic year."

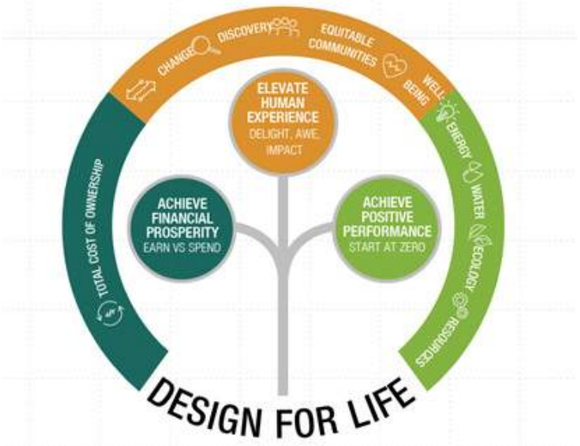
This Comprehensive Facilities Plan helps MSUM respond to that commitment and provides a framework for action toward becoming a carbon neutral campus. Implementing this plan demonstrates potential for achieving a carbon neutral campus and system wide goals. The plan aligns with Minnesota B3 guidelines and provides a path to meeting SB2030 benchmarks for carbon neutral design.

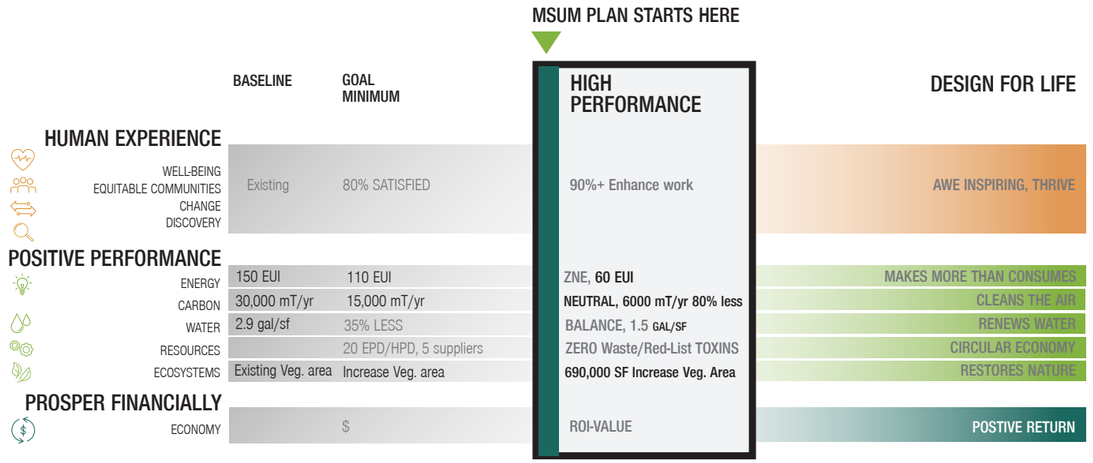
Beginning with ambitions for the future this team has asked insightful new questions like those being asked by the next generation of college students. We need to consider new ways of thinking, new questions which is likely to lead to better outcomes.

When today's freshmen were in kindergarten it was 2010. The world was very different then. Likewise, when this year's kindergarten class are college freshmen in the year 2034. What will be happening then? The comprehensive plan considers this future state and seeks to elevate the human experience rather than simply continue current or past conditions.

This is a transformative time. This MSUM CFP has the opportunity to accelerate the transformation to the clean, carbon neutral, renewable energy future that promotes individual and community health and wellness enhancing the learning experience and resulting in a better business case for MSUM.

The following diagram and chart illustrate a forward thinking approach based on a Design for Life vision and value. This MSUM CFP has the opportunity to accelerate the transformation to the clean, carbon neutral, renewable energy future that promotes individual and community health and wellness enhancing the learning experience and result in a better business case for MSUM.





ELEVATE HUMAN EXPERIENCE

The built environment can greatly impact the health and well-being of those who use it. This CFP considers:

- Awe-inspiring, in a way that creates a culture of connecting
- Supportive of regenerative health, wellness, and resilience
- Interactive learning approaches, new teaching styles, supports learning flexibility
- Typologies based on the site and nearby living organisms and land forms
- Connect people to nature and advance the future of science learning

ACHIEVE POSITIVE PERFORMANCE

The MSUM CFP starts at zero by:

- Produce more than they consume with low EUI and renewable energy
- Clean the air by being carbon positive
- Water systems that renew natural water shed health and achieves water balance
- Waste systems that limited or eliminate waste
- Material approaches that are sourced locally and promote a circular economy
- Healthy natural ecology that is strengthened and invites human connection and learning

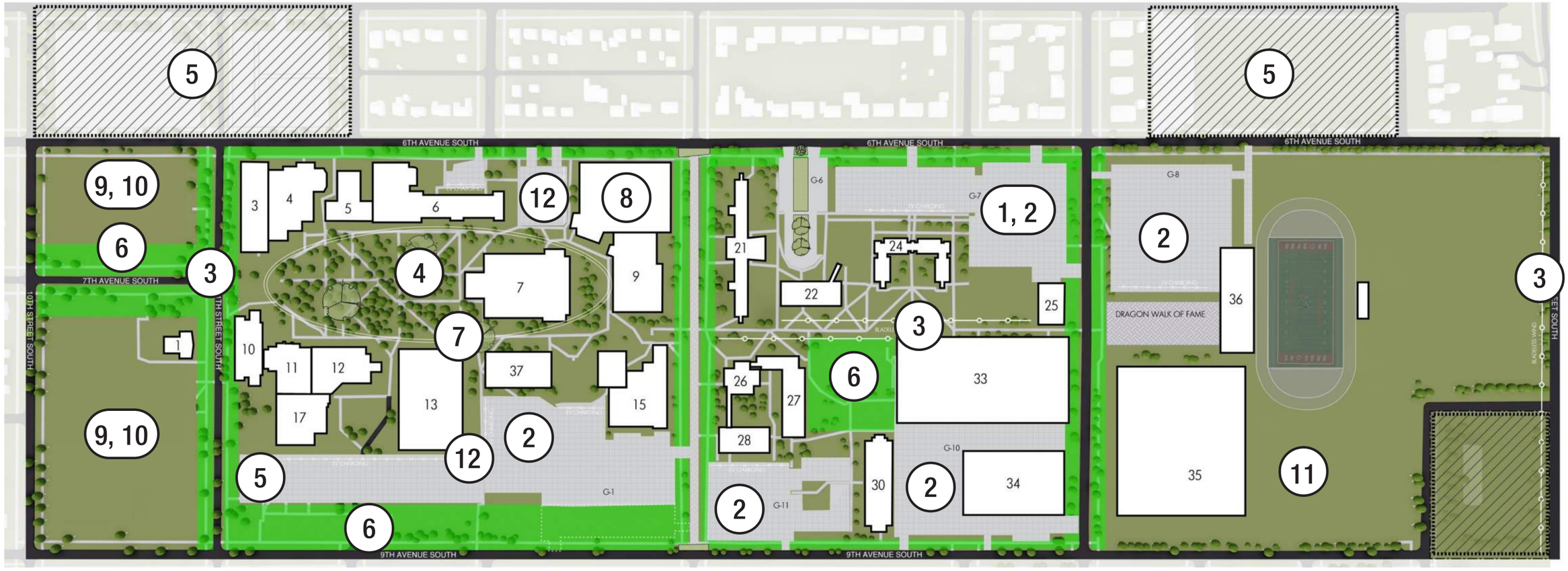
ACHIEVE FINANCIAL PROSPERITY

Financial health is an important piece of total sustainability. For MSUM a thriving business case is

Intertwined in the plan. The best business case for financial well-being has been integrated into the CFP and includes:

- Total cost of ownership that balances first cost and life cycle cost
- Right-sized the plan resulting in a better business case
- Operations considerations
- A plan that seeks to improve MSUM's ability to thrive financially

MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY



1. Ground Source Heat Pump near central plant below parking
2. Solar canopies above each parking area.
3. Bladeless Wind columns
4. Load reduction and energy monitoring
5. Land area and building area reduction
6. 650,000 sf of planted area for carbon sequestration
7. Tree preservation and expansion for carbon sequestration
8. Embodied carbon of existing structures
9. Technology park for incubating carbon reducing technology
10. Science on display and buildings as teaching tools for sustainability
11. Water use reduction throughout campus
12. EV charging stations

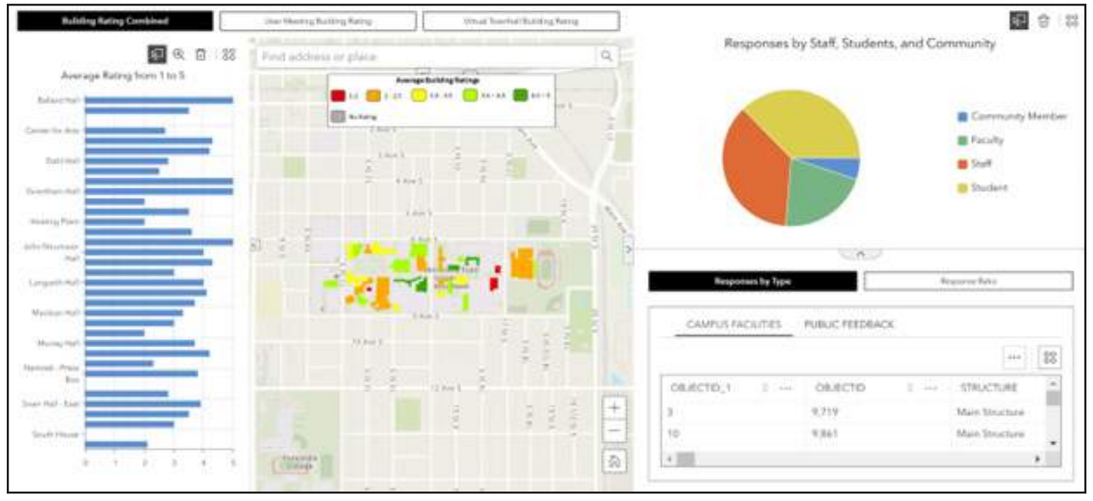
ELEVATE HUMAN EXPERIENCE

Elevating the human experience is central to this CFP. Changes in learning modalities have occurred and will continue. MSUM has already adapted to significant changes in learning experience. There is more to come as technology of tomorrow influences options available for learning.

During the CFP process a virtual town hall using a web-based platform was used. Questions were developed based on UC Berkley Center for the Built Environment occupant satisfaction survey. Respondents were both electronically and during in person engagements provided a more inclusive process and valuable insights. 118 people provided feedback on the virtual town hall in addition to in person engagements at an open house, lunch table at student union, student senate meetings and other user group meetings. Total engagement beyond the CFP steering committee is more than 200 people including students, staff, faculty and community members.

1.Goal: 80 percent of overall satisfaction.

2.Stretch Goal: 90% overall satisfaction, perception of wellness and perception of improvement to learning.



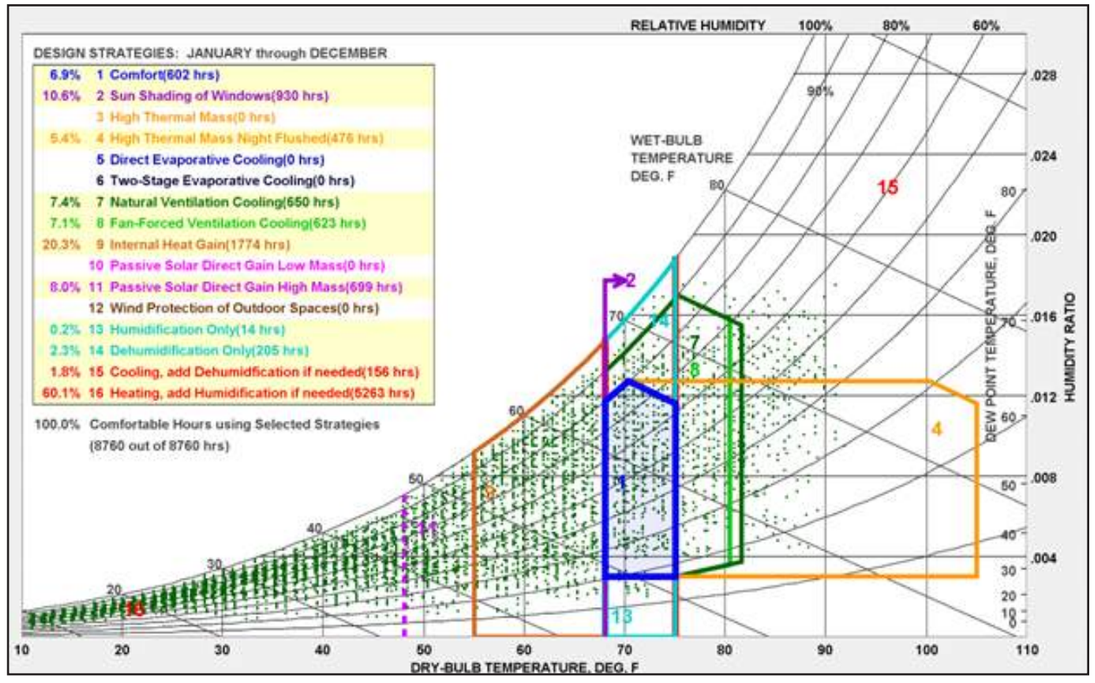
The results of user engagement shown above as colors on the buildings. Users were asked to rate buildings as best and worst. Green represents the buildings most liked and orange to red, least liked. Yellow was neutral.

Spaces should enhance collaboration both among small groups and among people from different disciplines. Provide features to incorporate different types of technical expertise together (e.g. data with design and production). Rooms with views to outside and to landscape helps increase feeling of spaciousness, connections to nature and helps reduce feelings of stress and anxiety.

PSYCHOMETRIC ANALYSIS

This method provides a preliminary conceptual evaluation of the potential to achieve human comfort for each hour of the year using a combination of passive and active strategies. Weather data for the area was used to study human comfort and possible systems.

The chart below uses local area weather files and shows systems and conditions that potentially increase human comfort and optimize energy use.



ACHIEVE POSITIVE PERFORMANCE: ENERGY – MAKE MORE THAN CONSUMED

The project is intended to achieve its goals by:

1. Start at Zero approach to Low EUI design

2. Renewable Energy Production: Onsite (on MSUM land) renewable energy systems.

MSUM participates in the Minnesota B3 program, tracking energy on a campus-wide basis. The heating plant and electricity metering are centralized. The campus has focused on reducing energy use and has achieved reductions since the 2016 plan. B3 data tracked by MSUM includes electricity, gas and water usage.

MSUM Benchmark EUI: 150.3 kBTU/SF/year

MSUM Actual EUI: 123.8 kBTU/SF/year. 17% lower than benchmark but slightly higher than actual EUI reported in the 2016 master plan.

Note: some buildings are not separately metered and reported together in B3.

The darker colors on the map represent higher EUI buildings. Kise Commons is the food service building and is the highest EUI on campus but that is typical of food production buildings.

ZERO NET ENERGY PLAN

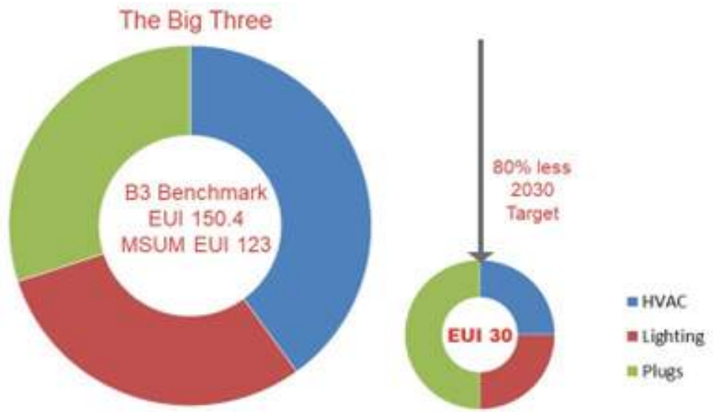
The energy goals for the project are based on benchmarking and early conceptual simulations.

1. MN B3 Benchmark EUI: 150.4

2. 2022 MN B3 Actual EUI: 123

3. MSUM CFP Goal: 45 EUI (Site) The proposed design meets this EUI goal for minimum compliance.

4. Stretch Goal: 30 EUI (Site).



This graphic shows as the building design becomes more energy efficient, reducing energy used for HVAC and Lighting, the percentage of the total energy from plug loads and human activity in the building has a larger percent impact of the reduced total energy. This means the single biggest factor determining if a building design with the potential to be ZNE is how the building is operated and what the people do that occupy the building. Occupant education is needed so these types of buildings perform as intended. Building operator training needs to be more than start-up orientation but rather ongoing technical support for a period of at least 2 years or longer as part of the construction contract.

TENANT OCCUPANT BEHAVIORS REQUIRED TO ACHIEVE EUI GOAL

1. Equipment: Install only energy-efficient equipment: Laptop computers, energy efficient computer monitors, Energy Star office equipment

2. "Normal Off" behaviors – lighting, equipment, etc.

3. Plug Load Reduction: behavior modifications to reduce plug loads. (Plug Loads = equipment plugged into an outlet and consuming energy)

4. Temperature: Consider interior temperatures range of: 68 deg F to 75 deg F.

Solar PV systems, wind and ground source systems are recommended. Feasibility studies with power purchase agreement providers should be explored. It is intended the renewable systems will be connected to a local utility system using a net metering approach. Consider an area in the building to be reserved for battery storage as part of the resiliency and ZNE plan for the building.

BEST PRACTICES FOR LOW EUI

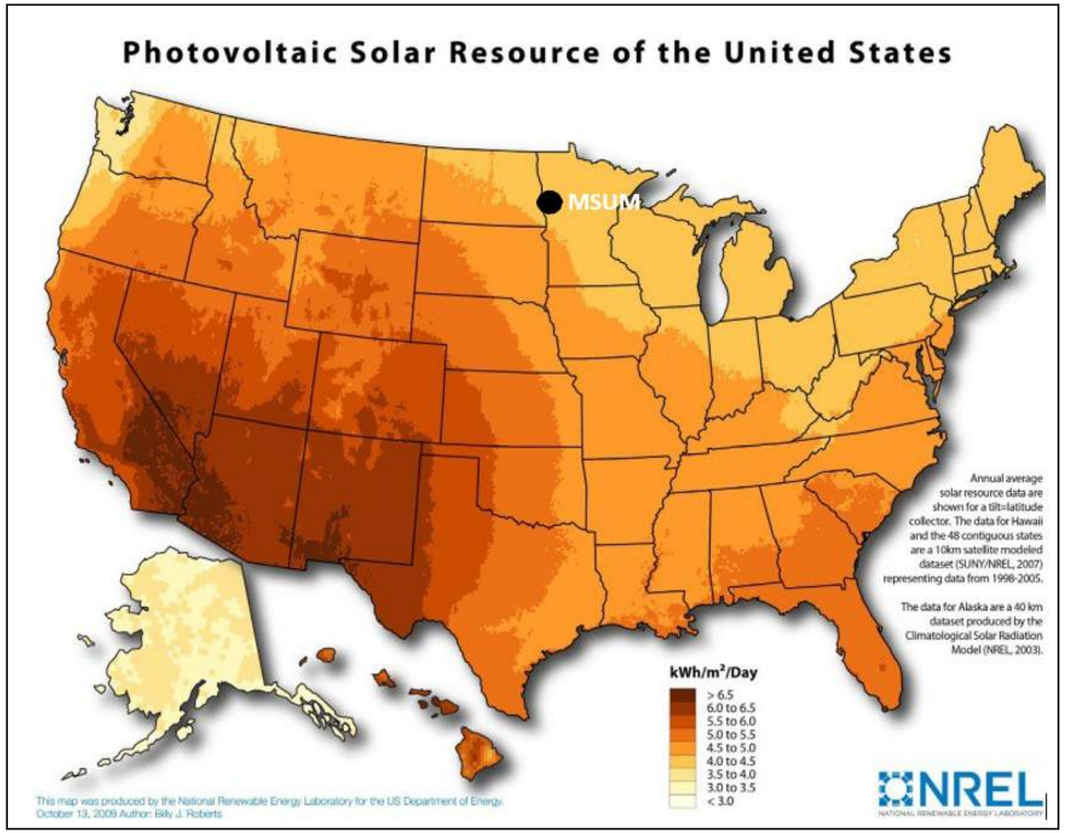
Above are examples of the systems intended to support the ZNE design. An integrated approach involving building massing and orientation, envelope design, window to wall ratio and product performance, lighting and controls, efficient plug loads and management, metering and monitoring with verification of performance, user education and behavior change, efficient heating and cooling systems including radiant systems with underfloor systems for outside air distribution. As an example daylighting design was maximized. After that efficient lighting was provided using LED lighting. Instead of the assumed default of lights on the new assumed default is "lights are off" whenever possible during the day. An action is needed to turn the lights on and then after use the lights automatically default to off.

RESOURCE ANALYSIS

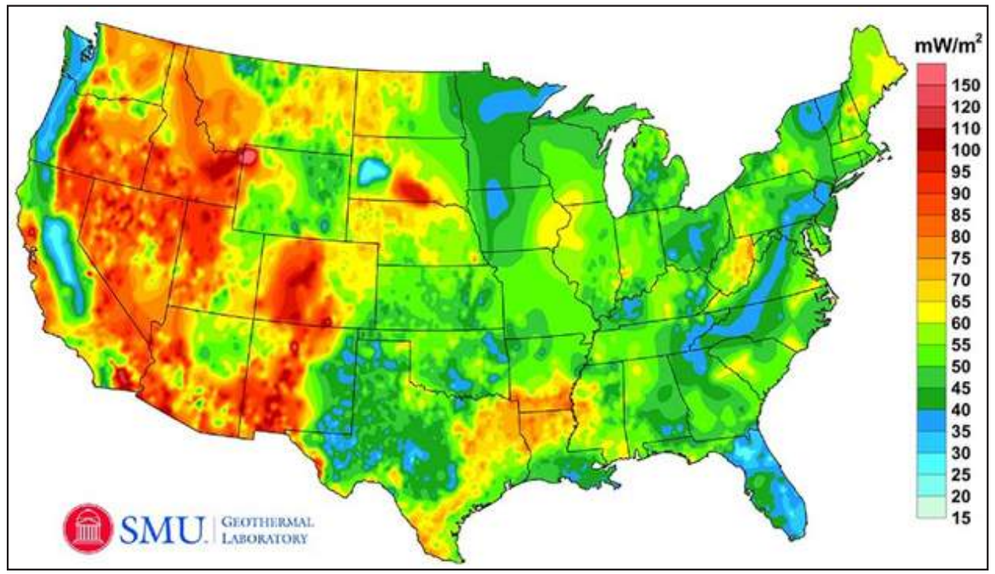
The project site has abundant natural resources. Information is included here about sun, wind and water.

SUN

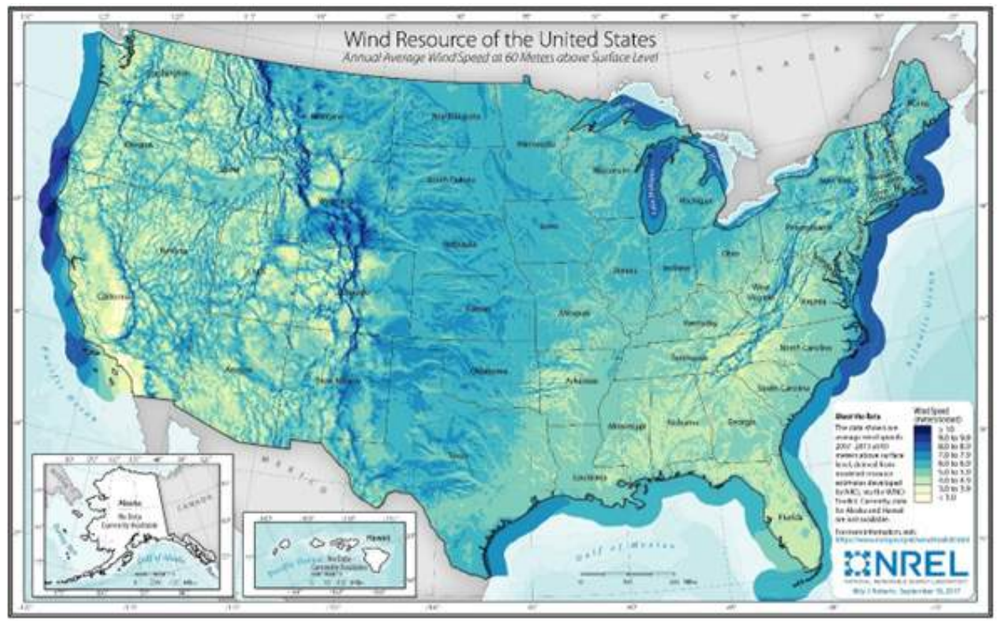
The sun provides an abundant resource for solar PV electricity generation. In addition, the sun provides outside daylight of about 5000 foot candles (fc) at the highest during the summer and a low of about 3,000 foot candles during the winter. Building space lighting needs require only about 1% to 2% of this daylight to be harvested and used to daylight spaces at about 30 fc to 80 fc. Proving natural light helps improve user satisfaction and lowers energy use by allowing artificial lights to be off during daylight hours if daylight controls are installed and operated correctly. The buildings should be designed to optimize daylight harvesting with the default for lighting controls to have all lights off unless daylight is inadequate during the day and during night operating hours. Optimizing insulation and glazing helps reduce solar heat gain during the hot summers. Solar electricity generation potential according to NREL maps is 4.0 to 4.5 Kwh/sq m/day.



GROUND SOURCE HEATING AND COOLING



WIND ENERGY POTENTIAL



WIND

The wind offers an opportunity for natural ventilation. Wind electricity generation should be evaluated further and is represented in the plan with bladeless technology that is emerging. U of M Morris campus in the region has installed two large wind generators as part of its strategy to be net zero energy and carbon neutral. This local case example can provide an important reference for implementing this plan.

CODE COMPARISON TO ZNE OPTIONS

	Code Baseline	**ZNE Options**
Walls	• R-11 batt in stud	• Optimize with continuous insulation and whole building R value
Roof	• R-25 Continuous • Cool roof (SRI = 75)	• Optimize Roof Assembly, R40 to 50 • White roof SRI about 100
Windows	• High perf, w/thermal break o U=0.42 (assembly) o SHGC=0.25 (assembly) o VT=0.47 (assembly)	• Viracon VNE1-63 o U=0.63 (assembly) o SHGC=0.29 9 (glass) o VT=0.63 (glass)
Lighting Power Density	• 0.8 to 1.2 w/sf (Whole building average)	• 0.3 to 0.6 w/sf (Whole building average)
Daylight controls	• None in Baseline – exceptions apply to rooms with <24 sf of glazing or <120W installed in daylit area	• Automatic daylight controls • Default off for electric lights, vacancy sensors keep lights off whenever possible.
Occupancy sensors	• Mandatory in Conference Rms, Office spaces <250sf, Multipurpose <1000sf	• Vacancy sensors
Misc Loads	• Plug load management	• Expanded plug load management - CEC study estimates that plug load management can reduce plug load energy by up to 40% in office buildings. Plug load management can be a combination of hardware, software, and occupant behavior measures.

• Measurement & Verification (M&V) will be crucial to maintaining Net Zero Energy operations.

• Detailed occupancy profiles in the energy model are available upon request.

OPERATIONS, MONITORING AND REPORTING

A critical part of achieving net zero energy is ongoing operations. How the people use the building and monitoring the performance of the building are essential in achieving ZNE goals. Design by itself can only give an owner the potential for ZNE. The achievement of the goal comes in operating and human behavior. To accomplish this monitoring systems are needed beyond a simple building energy meter. Each building should be separately metered but within each building major sub systems need to be monitored. At a minimum lights, heating and cooling and plug loads should be separately reported to allow monitoring progress toward ZNE.

RECOMMENDED ZNE VERIFICATION ACTIONS

1. How to calculate
2. When to perform validation?
3. When to perform validating
4. How to validate?
5. Who does the validates?
6. How long to monitor – panel life 25 years?

Panel degradation. 0.45% per year to 0.2% per year.

Verifying actual achievement of ZNE performance has several steps, starting during design and continuing through actual operations:

1. Metrics: Choose a primary metric for measuring energy consumption and production: site kBtu/sf-yr. With energy modeling assistance from this team or a third party both can be tracked.

2. Design: Optimize the design, providing the potential for reduced annual electric (energy) consumption.

3. In addition to the building sub-meter, also separately monitor the plug loads and the HVAC units. Other uses can be subtracted from the total use shown by the sub-meter.

4. Renewable Energy: Provide renewable energy to offset the annual energy consumption. Determine quantity of contingency renewable energy to accommodate variations in annual energy use to assure ZNE performance year to year.

5. M & V: Develop a Measurement and Verification Plan (M&V) during construction documents phase. The M&V Plan identifies the approach and controls for monitoring discrete end uses and total energy relative the energy use predicted during design. It will also identify tasks needed during the first year of operations, when they should be done, and who will be doing which tasks. The plan should be consistent with the International Performance Measurement and Verification Protocol.

6. Commissioning: Include ZNE criteria into the Commissioning Plan. Consider retro commissioning for existing buildings every 5 years to maintain optimal performance.

7. After two months of occupancy, remodel the building with the as-built plans, installed plug loads, updated occupancy profile, and chosen HVAC set-points. Calibrate the model to actual weather. This updated energy model predicts the energy uses for the first year of M&V.

8. Energy Management: identify energy consumption and energy production by whole building and major sub-systems for building operators to manage energy use.

9. Energy Dashboard and Occupant Behavior: Display energy consumption and production for building occupants to see and engage occupants in achieving energy goals.

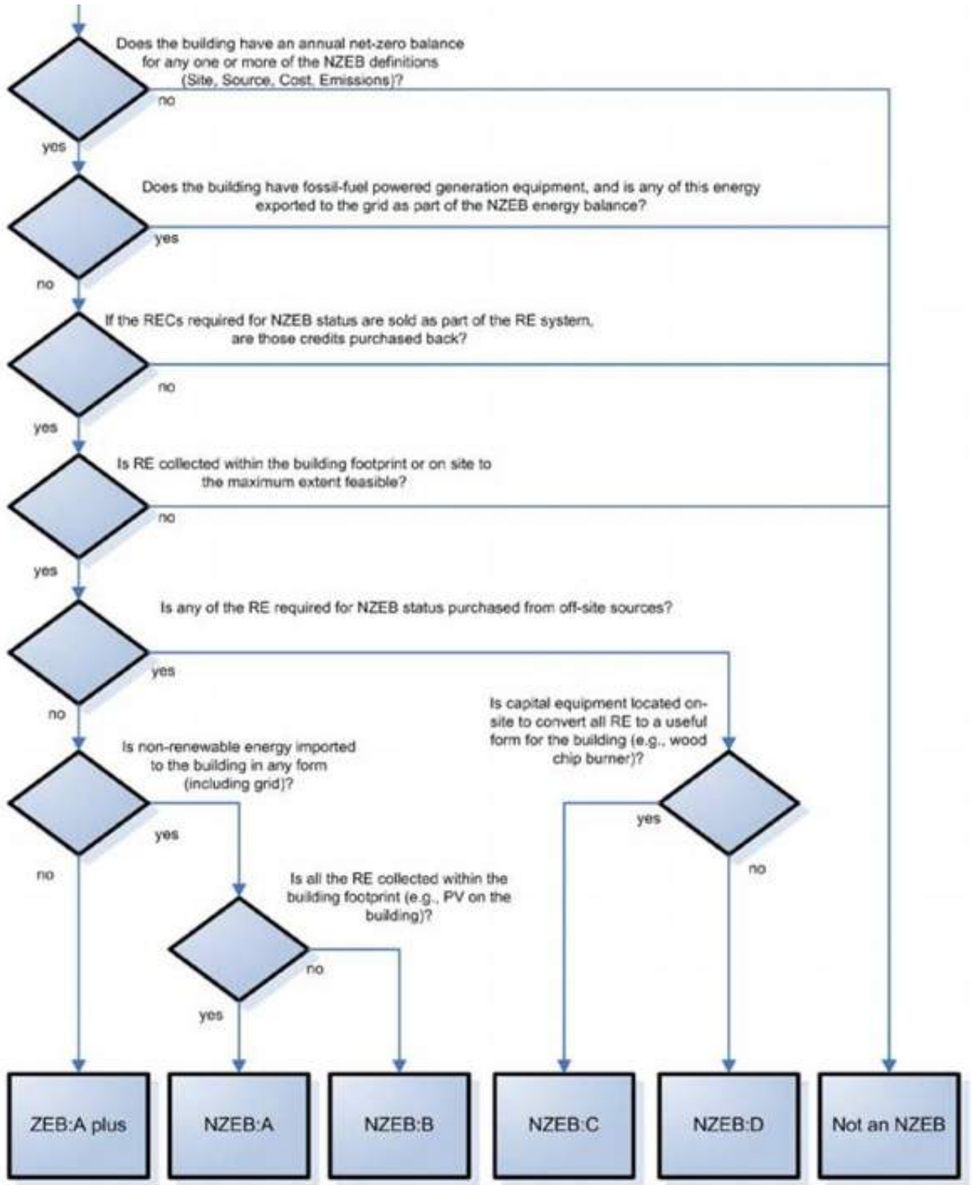
10. First Year of ZNE Operation (usually months 3 through 14): Follow through on monitoring and troubleshooting the project during with special emphasis on the first year start-up and tuning phase. Year one of any building requires some period for adjusting and tuning, learning and understanding the new building. This is especially true for a ZNE building. Allow time for the use of the building to stabilize and for user and operators to understand how to operate the new building.

11. Celebrate: After one continuous year (12 consecutive months) of ZNE operations, celebrate the success achieved!

12. Ongoing Operations: Once you achieve the first 12 months of ZNE it's not over. Continuous operation monitoring and occupant behaviors need to be maintained. Ongoing monitoring and continuing the M&V plan for the life of the project is essential to continued ZNE performance.

NET ZERO ENERGY CLASSIFICATION FLOW CHART

The NREL classification in the table below identifies options for the type of ZNe building.



Source: Net-Zero Energy Buildings: A Classification System Based on Renewable Energy Supply Options, Shanti Pless and Paul Torcellini, National Renewable Energy Laboratory Technical Report, NREL/TP-550-44586, June 2010

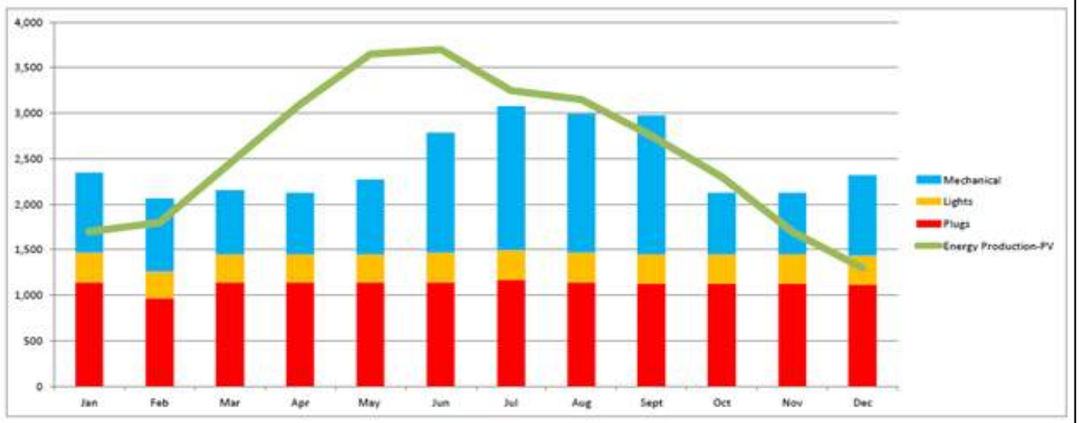
DATA COLLECTION FOR ZNE VERIFICATION

Below is an example of the type of data needed to self-verify ZNE performance.

Below is an example of an energy dash board for building occupants to see the ZNE performance.

Net Zero Energy Verification Kwh

2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Total
Energy Production-PV	1,700	1,800	2,450	3,100	3,650	3,700	3,250	3,150	2,750	2,300	1,700	1,300	30,850
Energy Use													
Plugs	1,144	968	1,144	1,144	1,144	1,144	1,170	1,144	1,129	1,129	1,129	1,114	13,501
Lights	323	293	308	308	308	323	323	323	323	323	323	323	3,798
Mechanical	880	806	704	674	821	1,320	1,584	1,525	1,525	674	674	880	12,067
Total	2,346	2,067	2,155	2,126	2,273	2,786	3,076	2,991	2,977	2,126	2,126	2,317	29,367
NZE Verification	-646	-267	295	974	1,377	914	174	159	-227	174	-426	-1,017	1,483
Energy Use Intensity kbtu/sf/year													36



OCCUPANT BEHAVIOR SUMMARY OVERVIEW

The marketplace expects that high performance buildings will inherently use less energy, be healthier, and create less waste than a standard code-built building, but this expectation overlooks the critical impact that the people who occupy a building have on environmental performance.

Organizations who invest in zero net energy buildings are often surprised when they don't meet their anticipated outcomes, largely because, as actual data indicates, occupancy is a core driver of building performance.

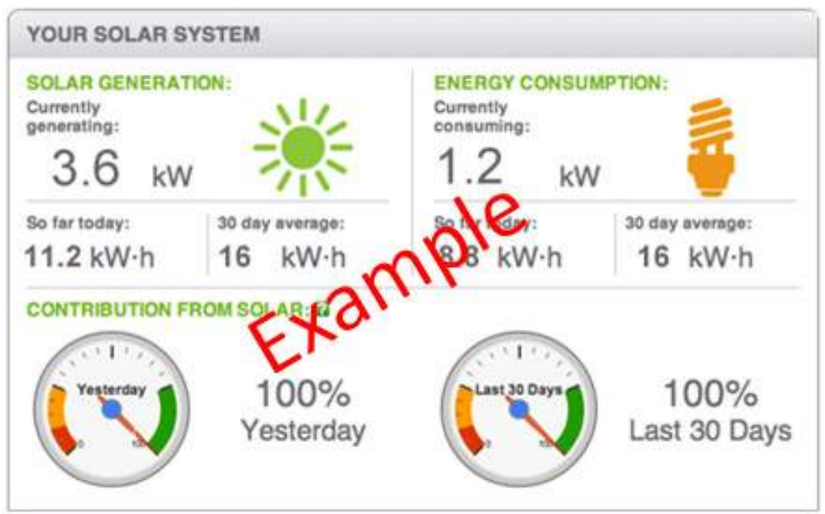
Therefore, occupant engagement strategies around high performance building are a key element in meeting operating goals. Behavior change is the result of many simultaneous efforts that are each individually focused on generating a culture of conservation. While the core value of any high performance project is energy use reduction, experience suggests that this cannot be achieved without consideration for the larger spectrum of sustainability. What's more, individual motivations vary widely. It follows that a well-rounded and complete set of services are required.

Required Services

- Education & awareness delivered in a consistent manner designed for busy people
- Meaningful "calls for action" that deliver the desired outcomes such as lower EUI
- Gamification to incentivize and socialize the user experience
- Measurable Results at utility meters

Delivered on a platform that is accessible on any device, anyplace, at any time

- Cloud-based portals
- Smart Phone Apps



CARBON – CLEAN THE AIR

Many colleges and universities across the country have signed the College President's Climate Commitment. MSUM has published a carbon neutral commitment.

The state of MN SB 2030 law applies to MSUM with a goal for carbon neutrality by 2030. MSUM has published a carbon neutral commitment.

1. Baseline: A separate carbon footprint study is recommended.
2. Goal: Carbon avoided due to energy efficiency and low EUI compared to baseline
3. Stretch Goal: Carbon Neutral.

Moorhead Public Service recently stated in provides electricity to campus that is 80% carbon neutral and they are working to become 100% carbon neutral for electricity they provide to MSUM campus. This help reduce the source carbon from purchased electricity.

This plan recommends a basic framework for becoming carbon neutral. Additional actions are needed including:

1. Carbon Footprint of campus
2. A tracking method
3. Detailed carbon neutral plans

U of M Morris Campus has made significant progress toward the 2030 carbon neutral goal. This is one regional example showing carbon neutral performance is achievable.

A recent report published by the New Buildings Institute shows a significant increase in zero energy buildings around the country.

WATER – RENEW WATER RESOURCES

Achieving a balance between on-site resources and reduction of consumption is a is urgently needed. Conserving water is an important related priority as part of the plan. To achieve water balance, water use should be less than or equal to the average annual rain in gallons that falls on the site area.

Water use reduction is an important issue for the community. The area experience challenges with water supply. Water balance planning is the intent of this goal. The diagram below shows MSUM can reduce total water use and be net positive water compared to annual rainwater that falls on the core campus area.

1. Water Budget: 3.3 gallons per person per day. Calculated based on gallons of annual rain water that falls on the area of the site.

2. Landscape Water Use:

a. Baseline: Calculated

b. Goal: No potable water for irrigation system.

3. Building Water Use:

a. Baseline: Calculated

b. Goal: 30% less building water use.

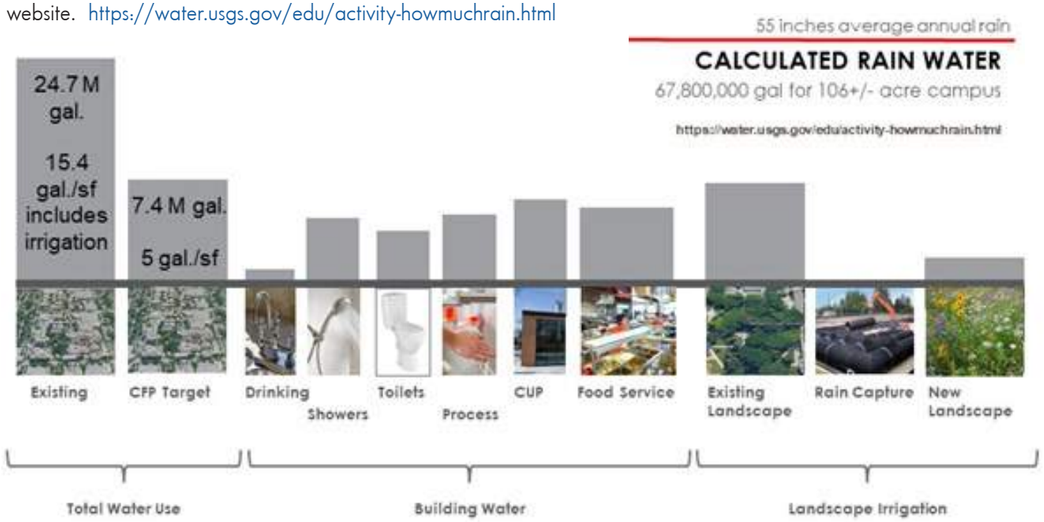
c. Daily allowance: 2 urinals uses/day male x 0.125

d. 1 WC/male, 3 WC/female x 1.28.

e. Drinking - 0.5, Lavatory – 0.3,

f. Stretch Goal: Water balance.

Annual rainwater calculated based on site area. Rain fall in inches was converted to gallons per year using the following website. https://water.usgs.gov/edu/activity-howmuchrain.html



WASTE – ZERO WASTE

Eliminating waste should be the primary goal followed by waste recovery and recycling to divert solid waste from landfill. Developing policies regarding waste are tasks for subsequent phases and implementation by Owner. Significantly reducing solid waste can save money in disposal costs, avoids carbon from hauling and landfill gases generated and land area used for disposal.

1. Construction and Demolition Waste Diversion from Landfill:

    a. Baseline: 75% diversion is the minimum.

    b. Goal: 95% + diversion

    c. Stretch Goal: Zero Waste.

2. Operational Waste Reduction: It is recommended to prepare a separate zero waste plan for MSUM operations.

MATERIALS – CIRCULAR ECONOMY

There are many items that contribute to sustainability with materials and site features

1. Recycled Content

    a. Baseline: 10%

    b. Goal: 20%

    c. Stretch Goal: 30%

2. Local Supply

    a. Baseline: 10%

    b. Goal: 20%

    c. Stretch Goal: 30%

3. Strive to avoid use of products that contain red list chemicals and require submittal of Environmental Product Declarations, Health Product Declarations and establish an embodied carbon standard.

4. FSC Certified wood

5. Cradle to cradle – circular economy

6. Biomimicry based products

The "Red List" is published by International Living Futures Institute. This list includes both chemicals and chemical groups. A detailed list expands chemical groups into the individual chemicals of which they are composed. There are over 815 individual chemicals.

1. Alkylphenols
2. Asbestos
3. Bisphenol A
4. Cadmium
5. Chlorinated polyethylene and chlorosulfonated polyethlene (CSPE); HDPE and LDPE are excluded from the Red List.
6. Chlorofluorocarbons (CFCs)
7. Chlorobenzenes
8. Chloroprene (neoprene)
9. Chromium VI
10. Chlorinated polyvinyl chloride
11. Formaldehyde (added)
12. Halogenated flame retardants (HFRs)
13. Hydrochlorofluorocarbons (HCFCs)
14. Lead (added)
15. Mercury
16. Polychlorinated biphenyls
17. Perfluorinated compound
18. Phthalates
19. Polyvinyl chloride
20. Polyvinylidene chloride
21. Short Chain Chlorinated paraffins
22. Wood treatments containing creosote, arsenic or pentachlorophenol
23. Volatile organic compounds (VOCs) in wet applied products
24. Petrochemical fertilizers and pesticides

MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY

ECOSYSTEMS – RESTORE NATURE

This plan recommends increasing net vegetated area

1. Existing Campus
2. MSUM Plan

a. Increase vegetated area: 690,000 sf including prairie and pollinator planting areas.

b. Vegetated area contributes to carbon absorption.

MSUM COMPREHENSIVE FACILITIES PLAN
3.1 BUILDING ANALYSIS AND SUMMARY

3.1.6 ACADEMIC SPACE UTILIZATION

Current average space utilization for all teaching spaces on campus is 23% of a 32-hour week, significantly below the system target of 85%. Looking at just classrooms, the average utilization increases to 31%, which is still very low. As the data indicates there is more teaching space on campus than needed at the current enrollment. MSUM saw its largest enrollment of just over 9,000 in 1990. Since then enrollment has declined but the campus has added academic space with additions to existing buildings, as well as building new facilities such as the Center for Business and Langseth Hall. Since the last Comprehensive Facilities Plan done in 2016 campus enrollment has decreased from around 6,000 to just over 5,000. MSUM is anticipating low to no growth over the next few years, so teaching space can reduced.

There were questions raised regarding the original space utilization report received. The campus was concerned that there were some spaces included which are used for research or other campus support functions and some departmentally scheduled use that was missed. These items were reviewed and an updated space utilization report provided. There may be a few non-typical uses, such as informal student and faculty use or non-academic use by student or community organizations but it appears to be minimal.

In summary, overall campus utilization falls short of the system target of 85%. MSUM must look to decrease the amount of academic space currently in service on campus to right-size for its enrollment and reduce operating cost.

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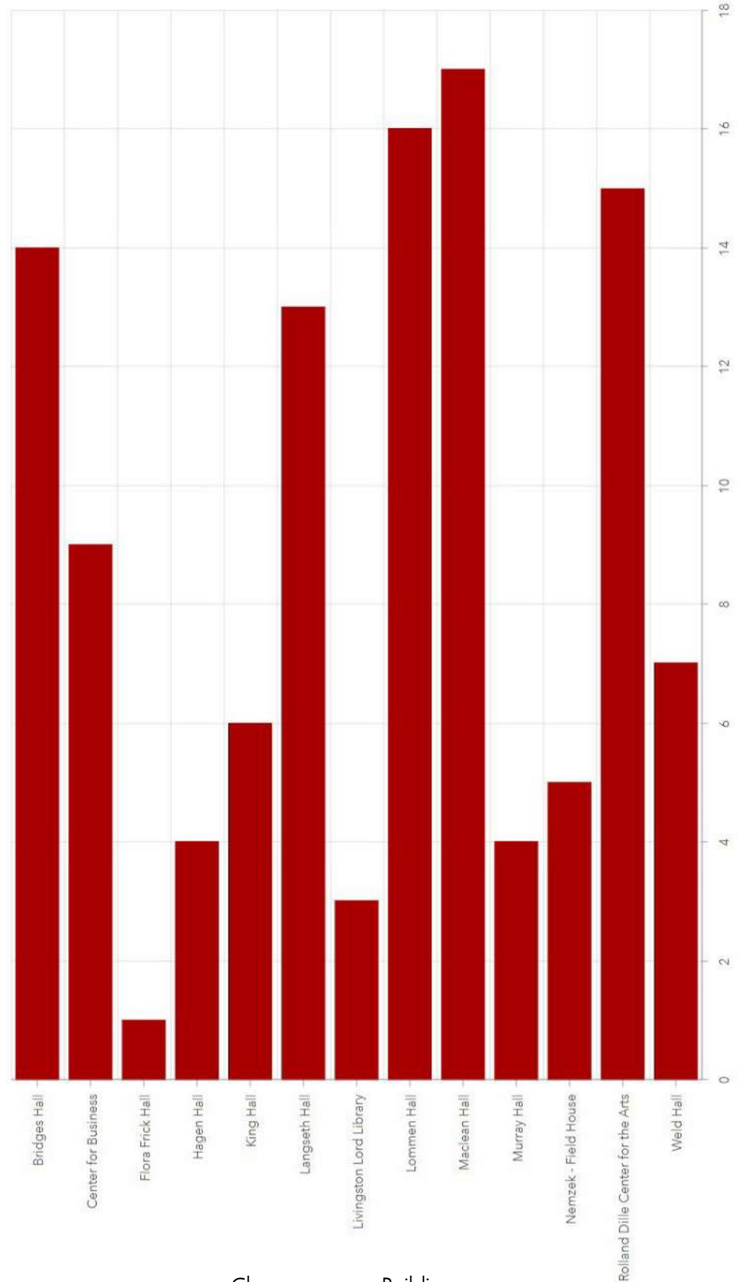
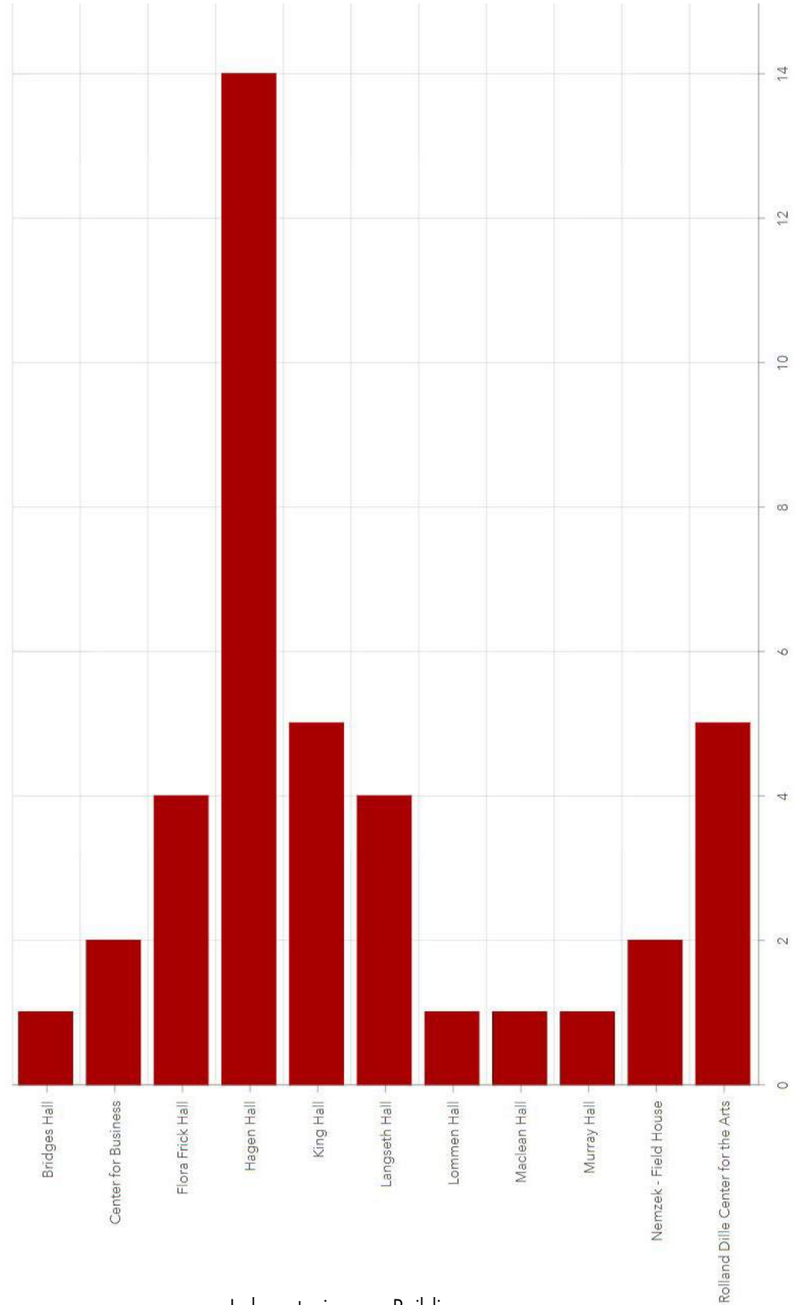


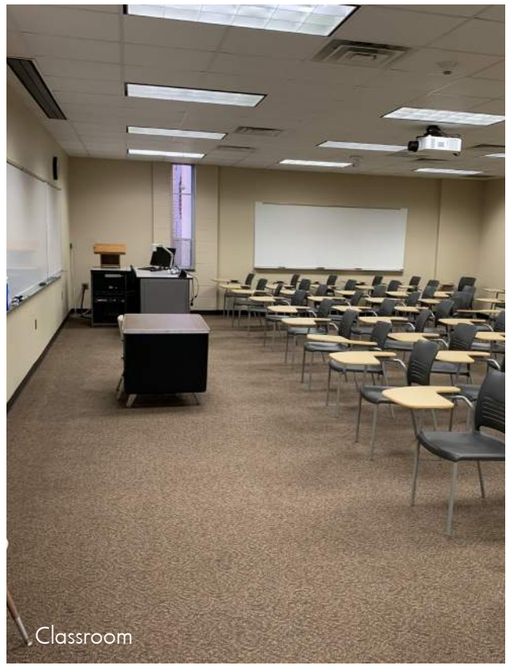
Classrooms per Building



Laboratories per Building

3.2 BUILDING DATA SHEETS

CONTENTS


Classroom


Classroom

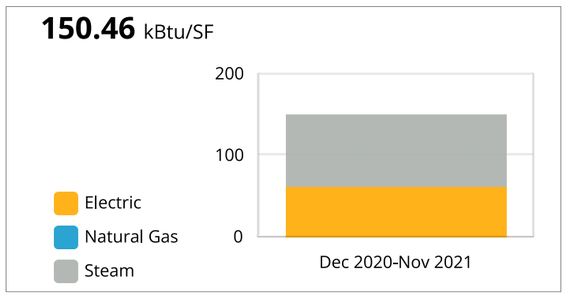

Planetarium

BRIDGES HALL

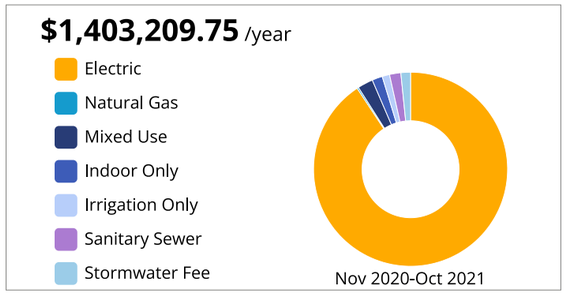
Built in 1967, this facility is used for Academic purposes. The total usable building area is approx. 50,880 SF.

Bridges Hall houses Computer Science and Information Systems, the Planitarium, the Rainbow Dragon Center, and the Women's Center on the first floor, and the Dean for the College of Arts & Humanities on the second floor, and Psychology on the third floor.

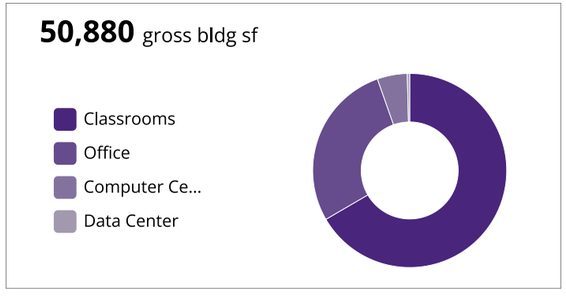
Area	50,880 gsf
Year(s) Built	1967
Stories	3
FCI/5-year FCI	0.3/NA
Replacement Value	$21.5M
Building Repair Backlog	$7.4M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick



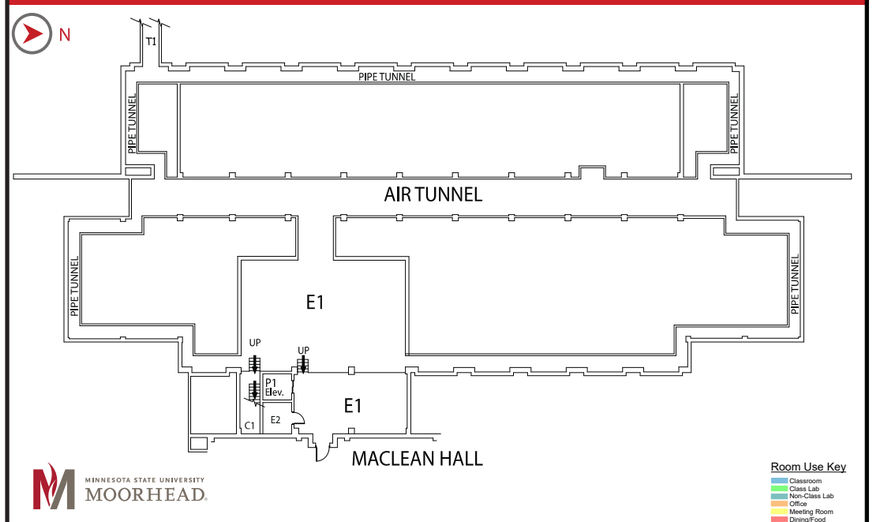
*Energy use figures represent entire Main Campus metering group.



NA

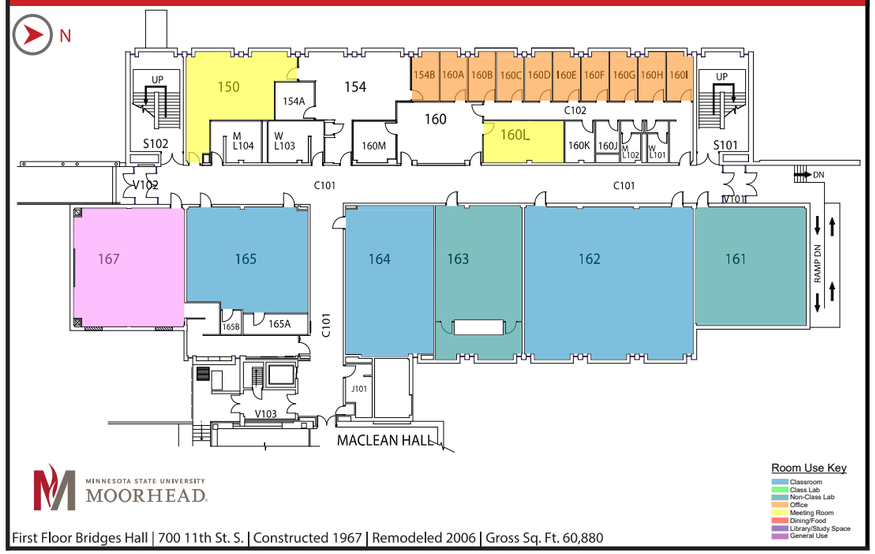


Bridges Hall - Basement



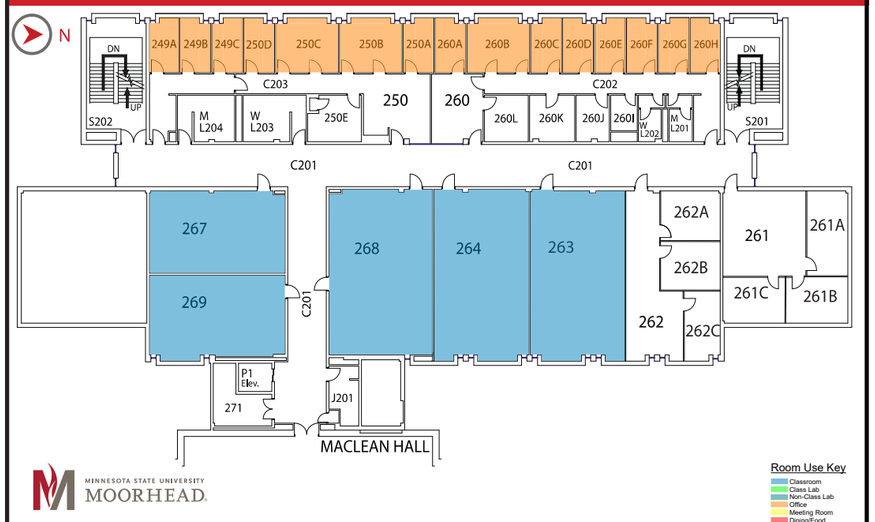
Basement Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

Bridges Hall - First Floor



First Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

Bridges Hall - Second Floor

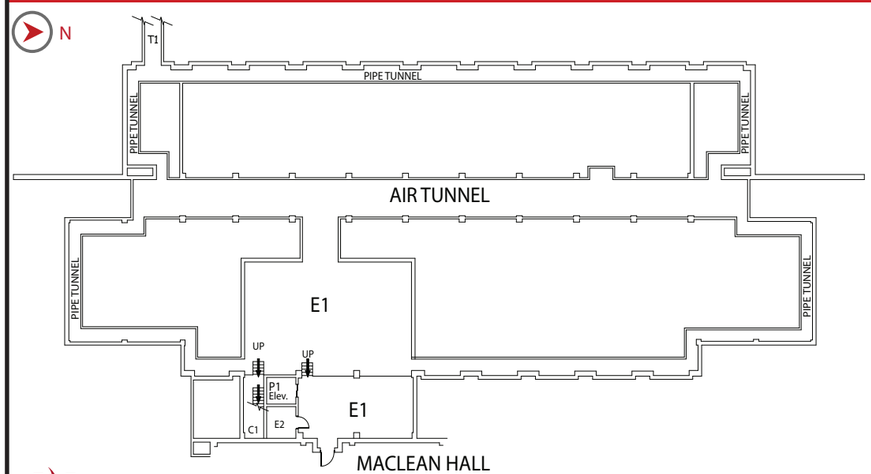


Second Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

Bridges Hall - Third Floor

Third Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

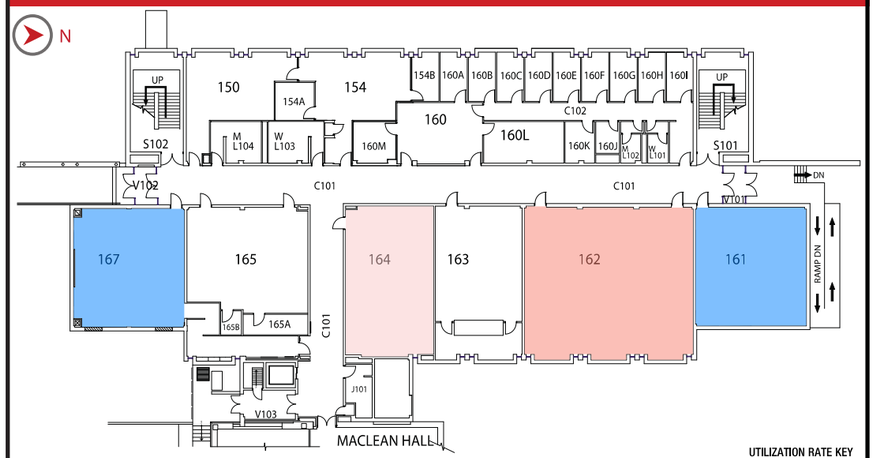
Bridges Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

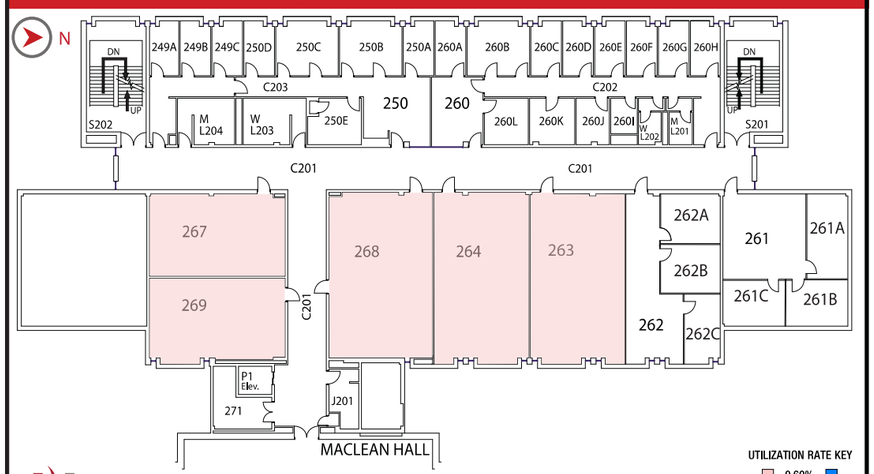
Bridges Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

Bridges Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

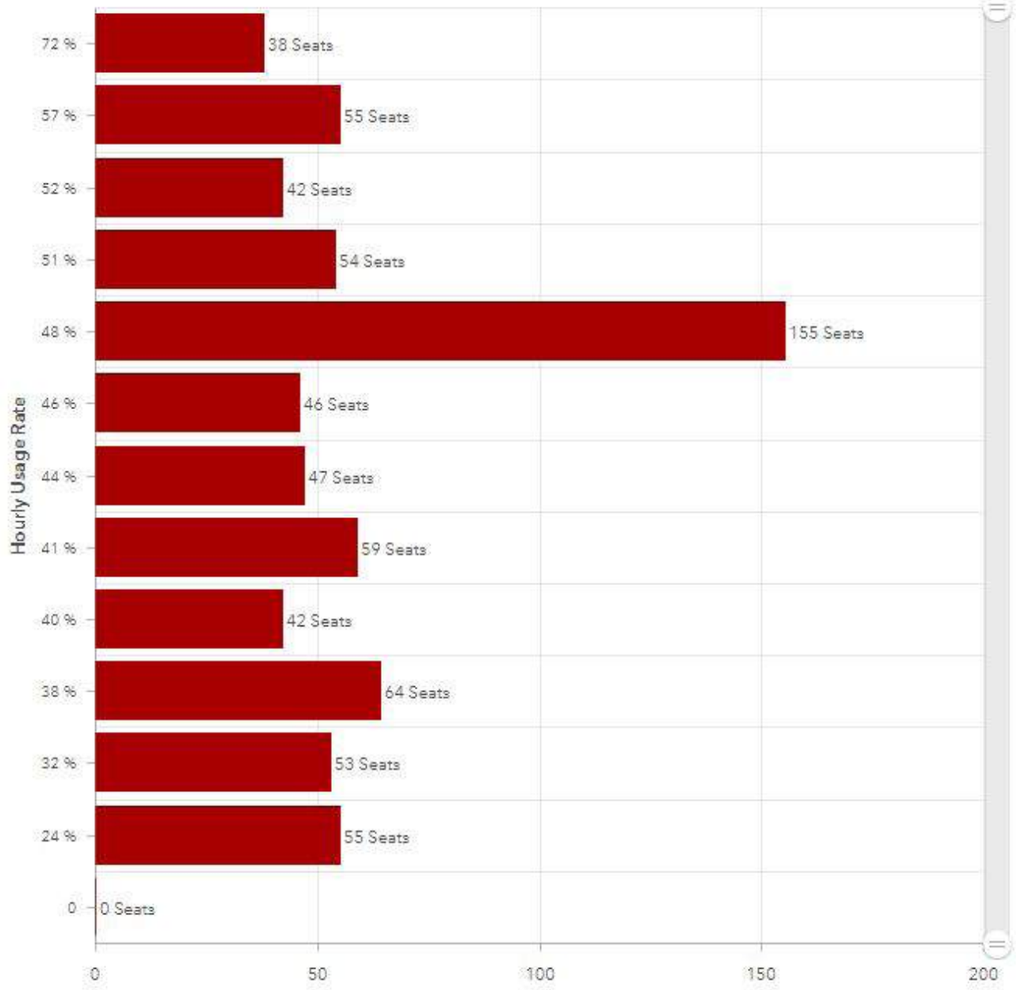
Second Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

Bridges Hall - Third Floor

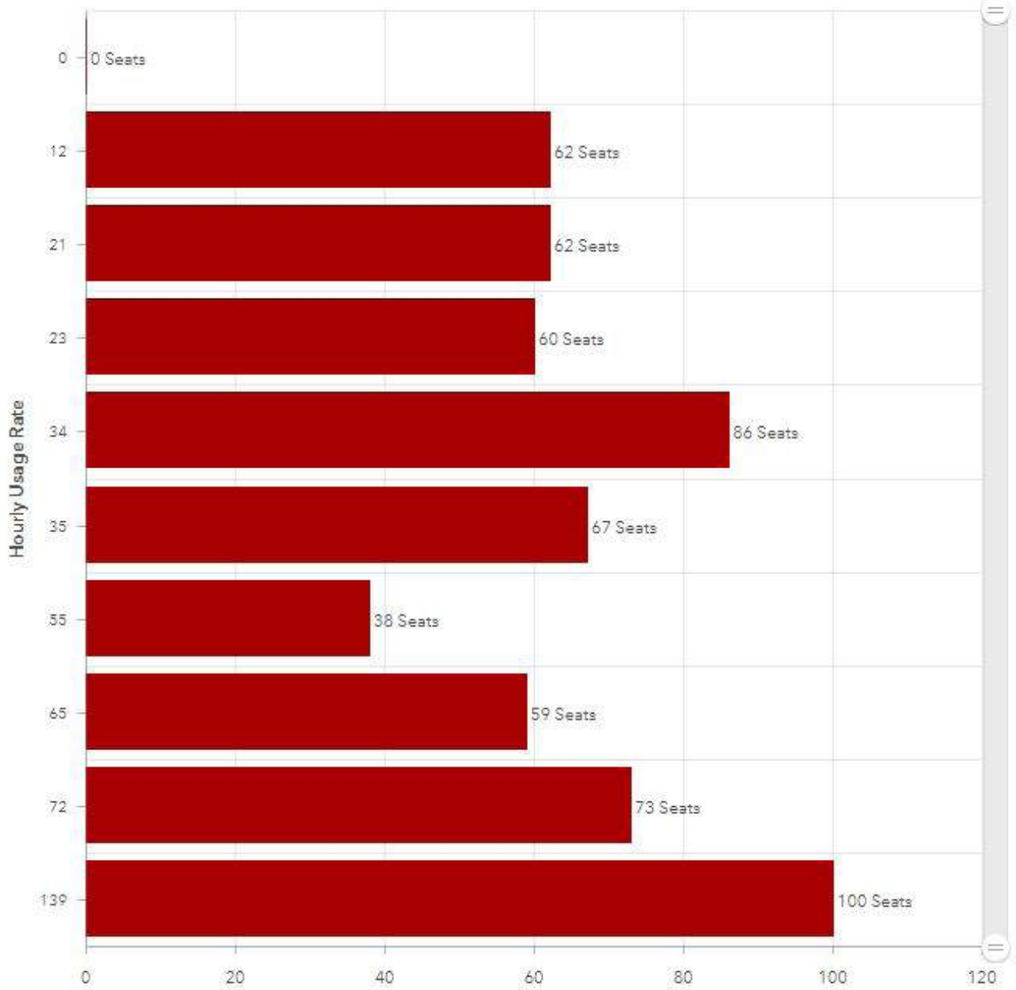
MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Bridges Hall | 700 11th St. S. | Constructed 1967 | Remodeled 2006 | Gross Sq. Ft. 60,880

CLASSROOMS



LABORATORIES



Theater Shop

Hyflex Sound Studio

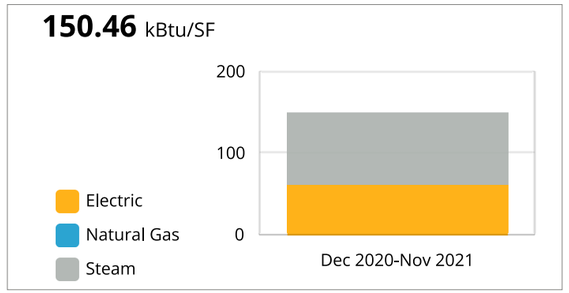
Fox Stage

Classroom

ROLAND DILLE CENTER FOR THE ARTS

Academic Building housing the School of Art, the School of Performing Arts, the School of Media Arts & Design, and the Entertainment Industries & Technology department.

Area	130,465 gsf
Year(s) Built	1966
Stories	2
FCI/5-year FCI	0.3/ NA
Replacement Value	$33.1M
Building Repair Backlog	$9.8M
5-Year Renewal Forecast	$1.6M



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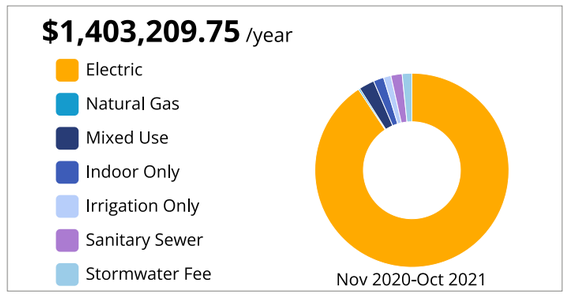
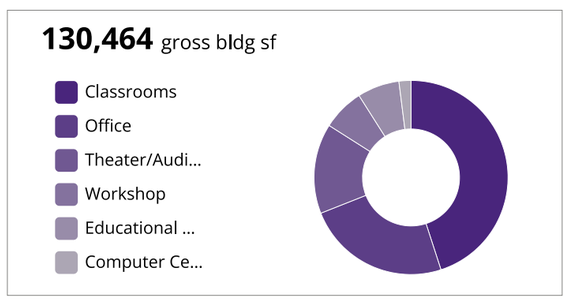
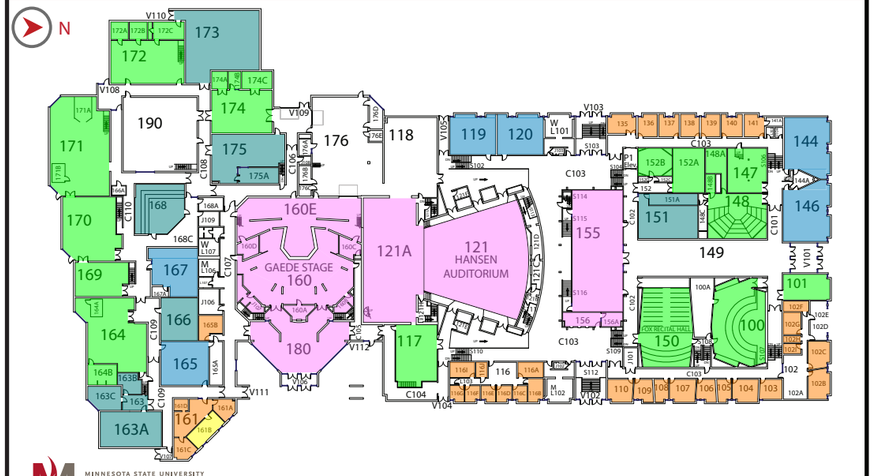




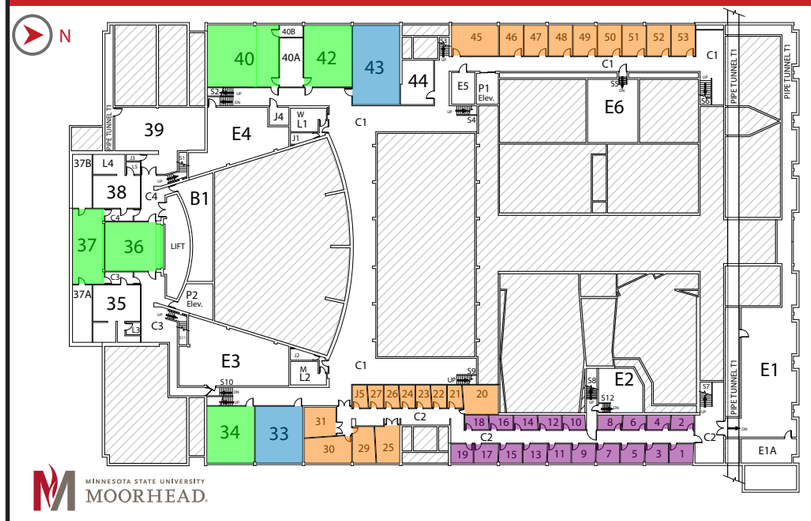
Center for the Arts - First Floor



First Floor Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464

Updated 06/2017

Center for the Arts - Lower Level



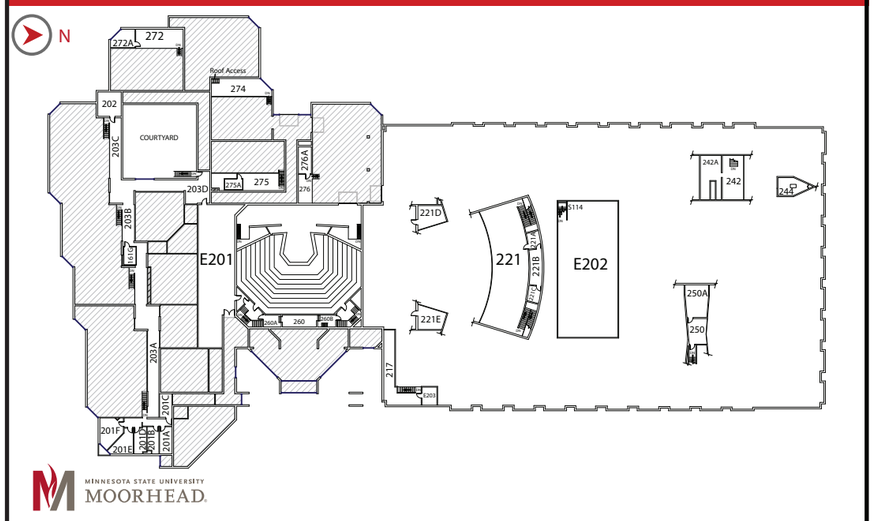
Lower Level Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464

Updated 06/2017

Room Use Key

- Classroom
- Class Lab
- Non-Class Lab
- Office
- Meeting Room
- Dining/Food
- Library/Study Space
- General Use

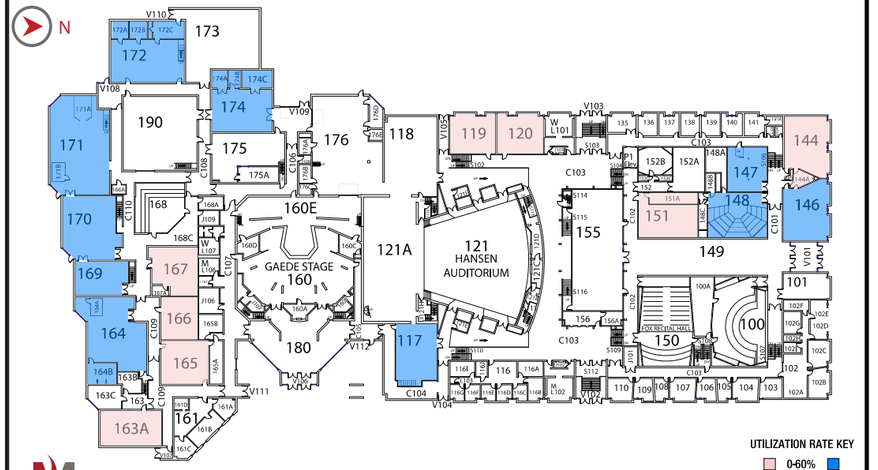
Center for the Arts - Mezzanine



Mezzanine Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464

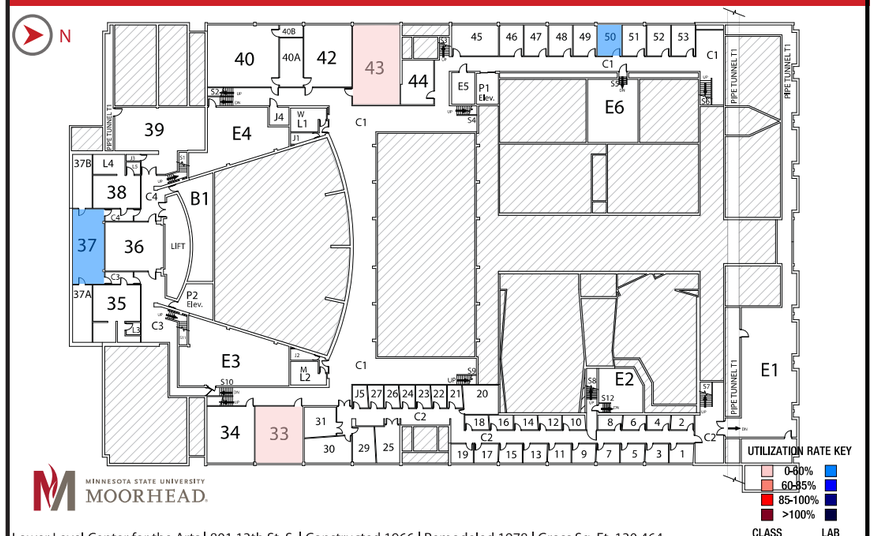
Updated 06/2017

Center for the Arts - First Floor



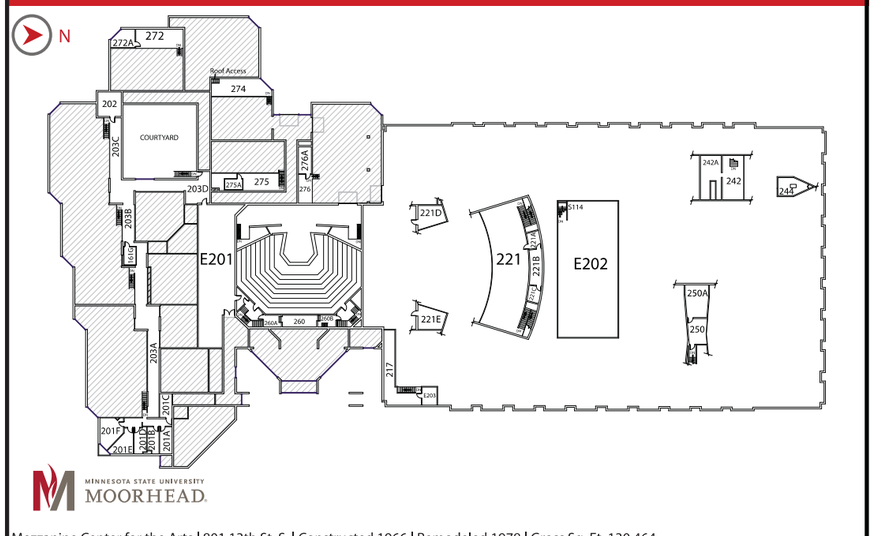
First Floor Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464

Center for the Arts - Lower Level

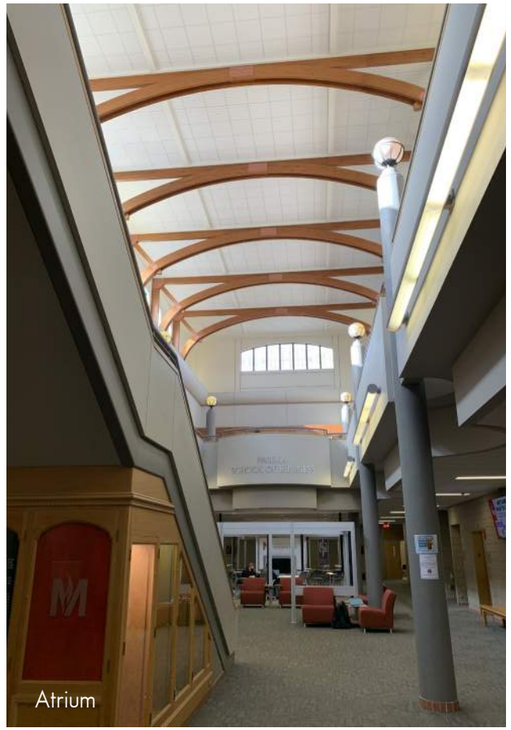


Lower Level Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464

Center for the Arts - Mezzanine



Mezzanine Center for the Arts | 801 13th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 130,464


Atrium

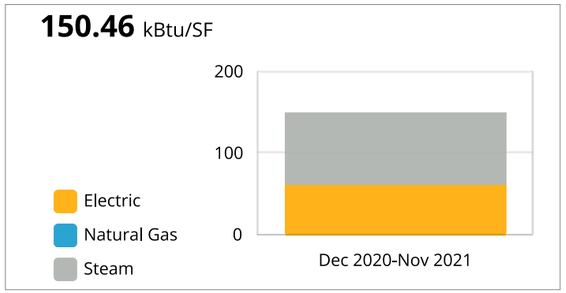
Commons


Auditorium

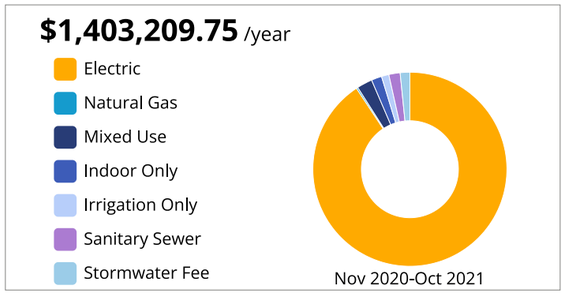
CENTER FOR BUSINESS

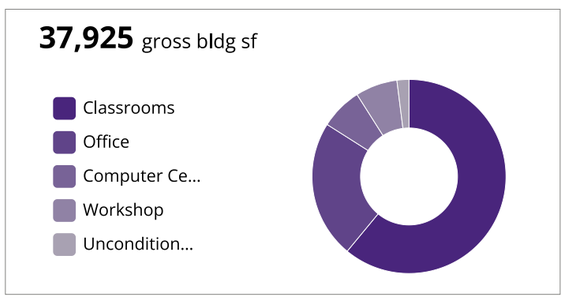
This Academic Building, one of the newer buildings on campus, houses the Professional Management department and the Paseka School of Business with lecture and general classrooms (10), computer labs (2), offices and social space (atrium). This building is home to the Dean for the College of Business, Analytics, and Communication and the Office of Graduate Studies.

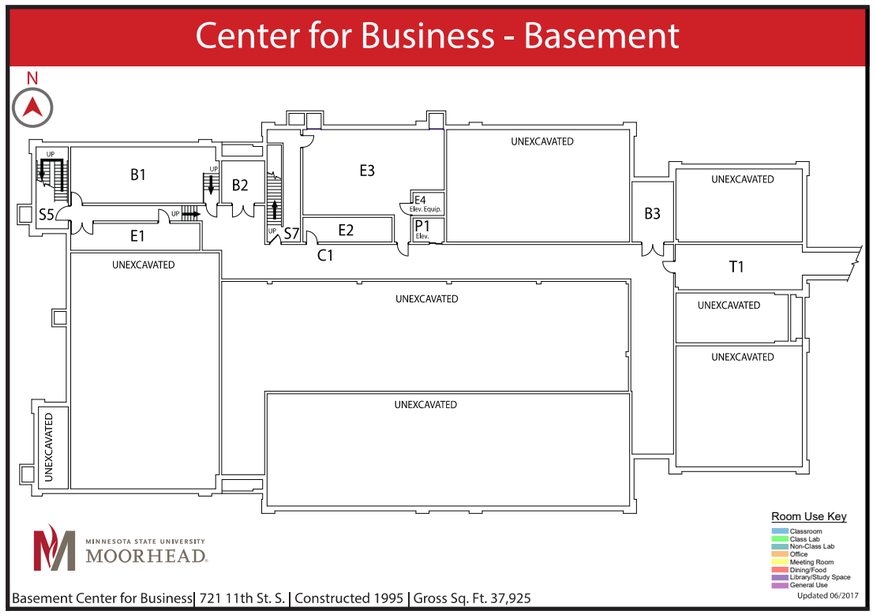
Area	37,925 gsf
Year(s) Built	1995
Stories	2
FCI/5-year FCI	0.07/ NA
Replacement Value	$16M
Building Repair Backlog	$1.17M
5-Year Renewal Forecast	$556,298
Roof/Exterior	BUR/Brick

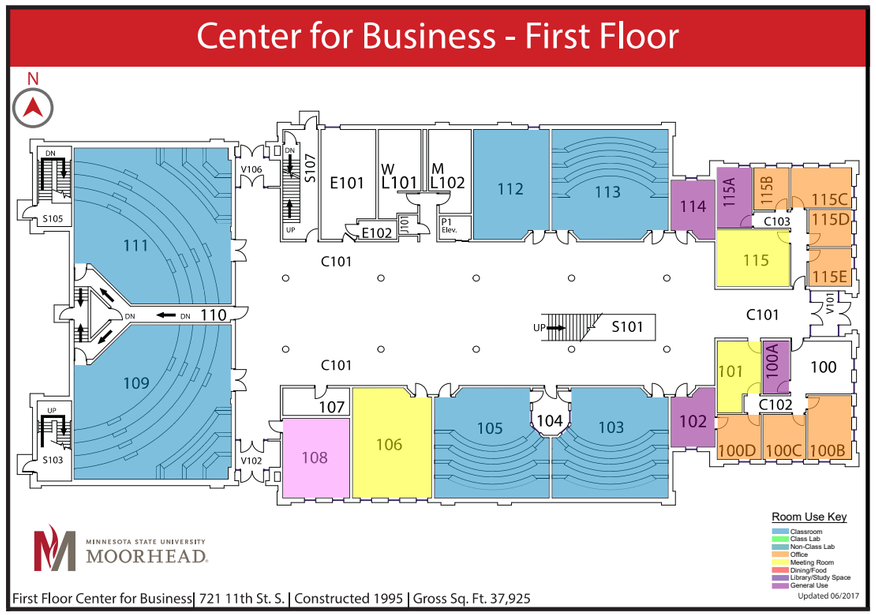


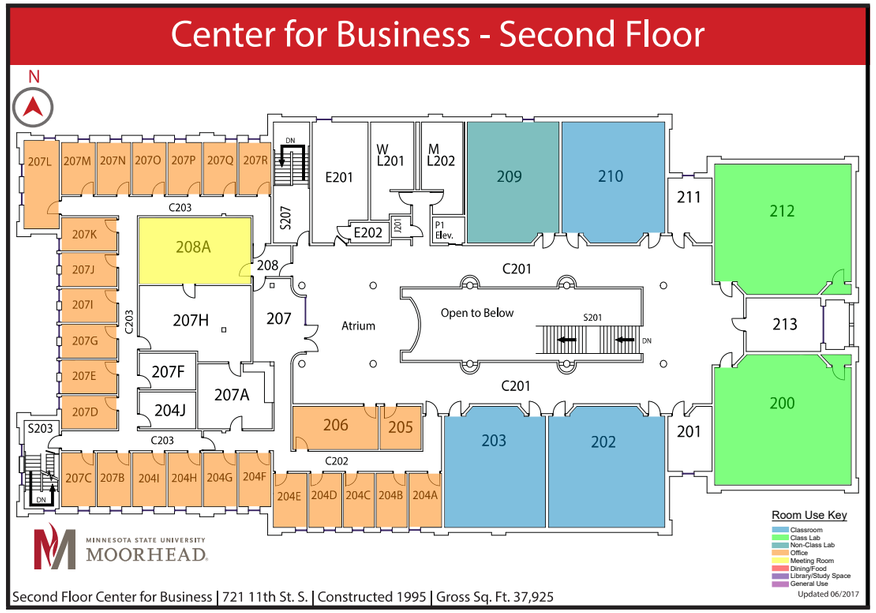
**Energy use figures represent entire Main Campus metering group.*

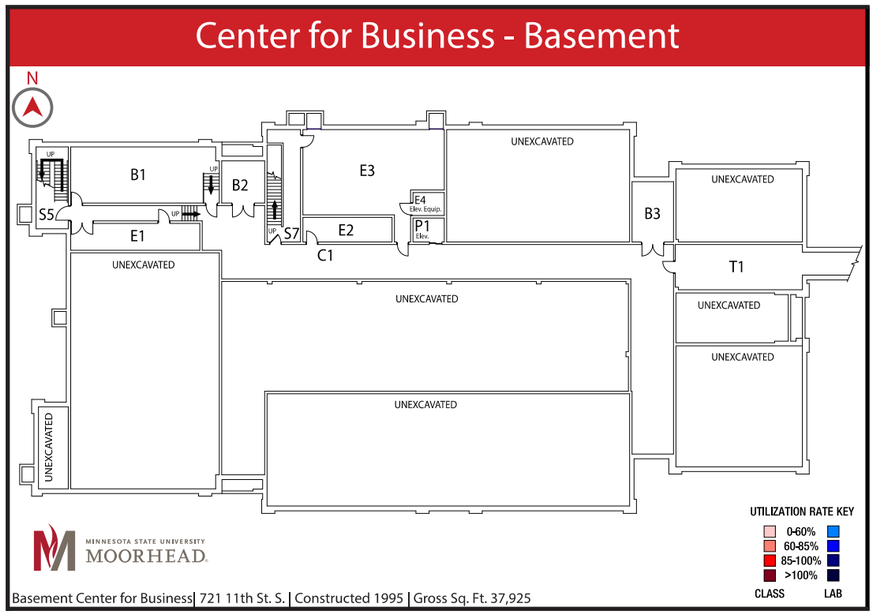


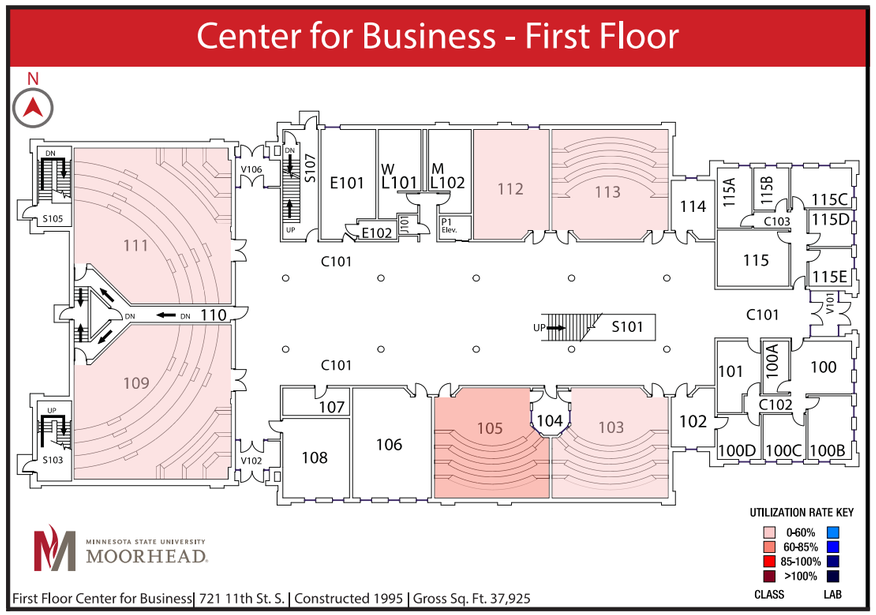


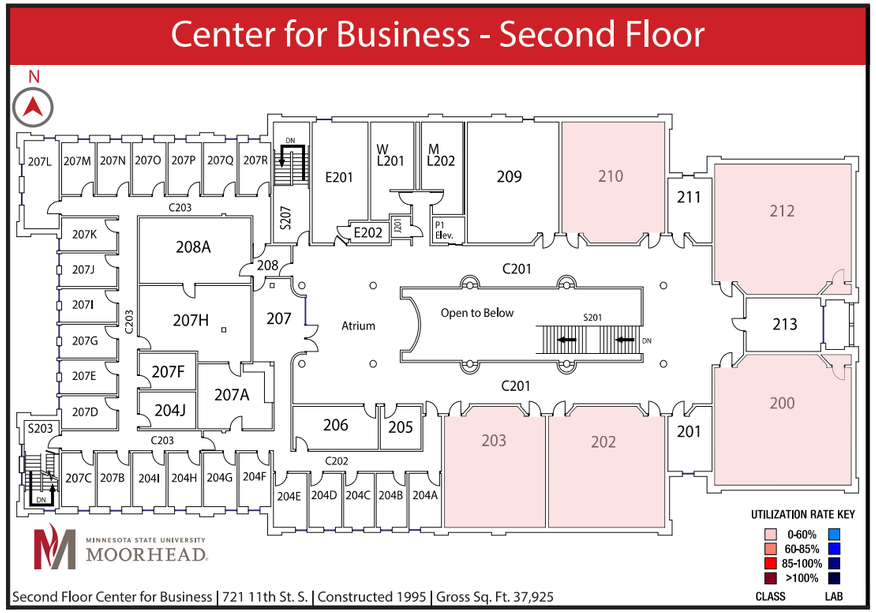













Commons

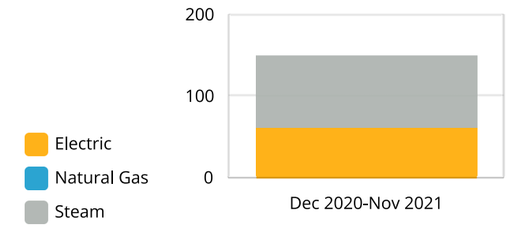

Commons

COMSTOCK MEMORIAL UNION

Built in 1967 with major renovations in 1992, 2003 and 2016, this facility is used for Student Services. It gives students a place to connect and get actively involved through a variety of events, student organizations and programming to make the most of the student-life experience. Retail dining is available and the building is connected to the Kise Commons for residential dining.The total usable building area is approx. 92,851 SF.

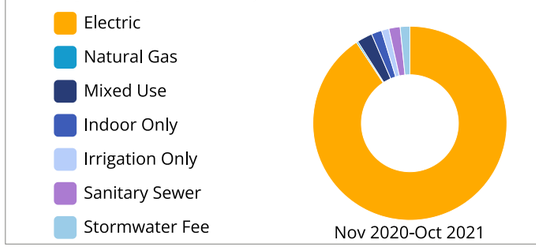
Area	92,851 gsf
Year(s) Built	1967
Stories	3
FCI/5-year FCI	0.06/ NA
Replacement Value	$38.3M
Building Repair Backlog	$2.3M
5-Year Renewal Forecast	$220,288
Roof/Exterior	BUR/Brick

150.46 kBtu/SF



**Energy use figures represent entire Main Campus metering group.*

$1,403,209.75 /year



Square footage not available.

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Comstock Memorial Union - First Floor

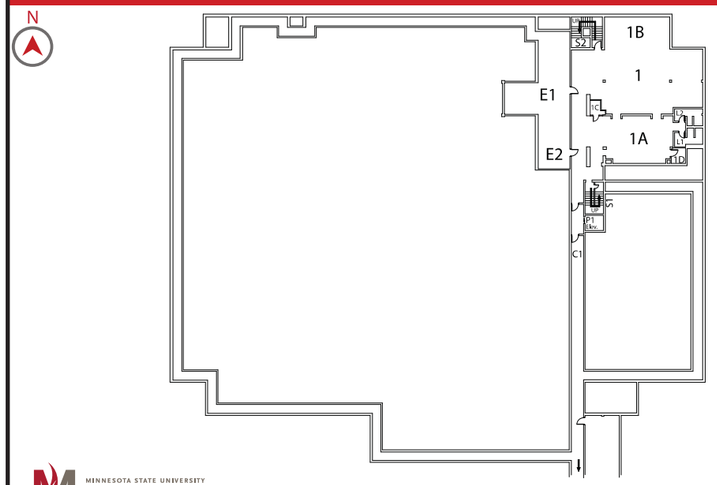
MINNESOTA STATE UNIVERSITY MOORHEAD

Room Use Key
- Classroom
- Class Lab
- Non-Class Lab
- Office
- Meeting Room
- Dining/Food
- Library/Study Space
- General Use

Updated 06/2017

First Floor Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

Comstock Memorial Union - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Room Use Key
- Classroom
- Class Lab
- Non-Class Lab
- Office
- Meeting Room
- Dining/Food
- Library/Study Space
- General Use

Updated 06/2017

Basement Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

Comstock Memorial Union - Second Floor

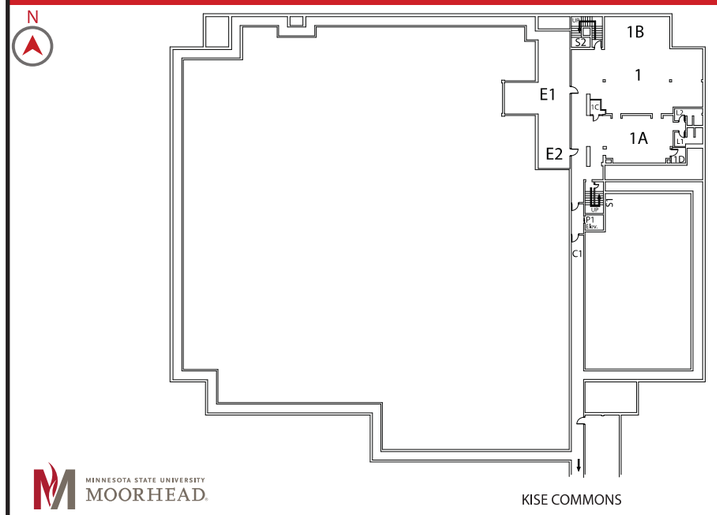
MINNESOTA STATE UNIVERSITY MOORHEAD

Room Use Key
- Classroom
- Class Lab
- Non-Class Lab
- Office
- Meeting Room
- Dining/Food
- Library/Study Space
- General Use

Updated 06/2017

Second Floor Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

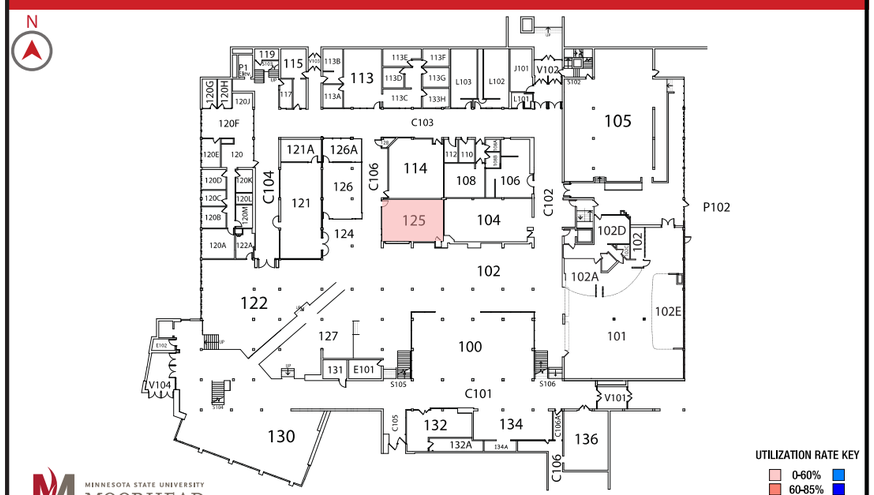
Comstock Memorial Union - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

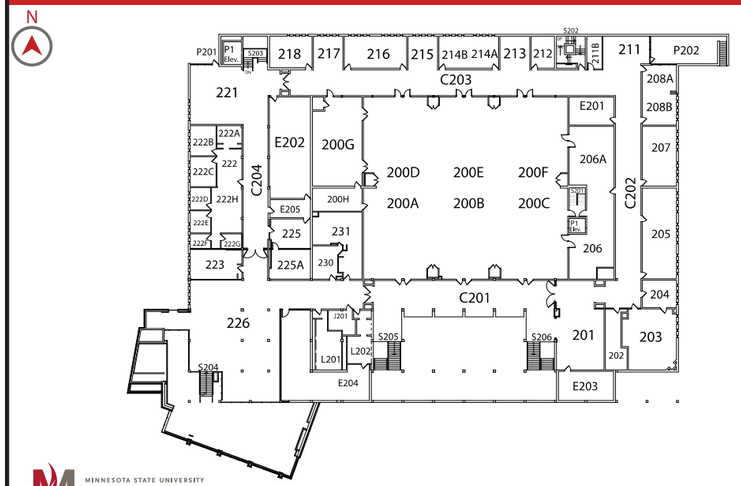
Comstock Memorial Union - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

Comstock Memorial Union - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Comstock Memorial Union | 615 14th St. S. | Constructed 1957 | Remodeled 2017 | Gross Sq. Ft. 89,739

Broadcast Room

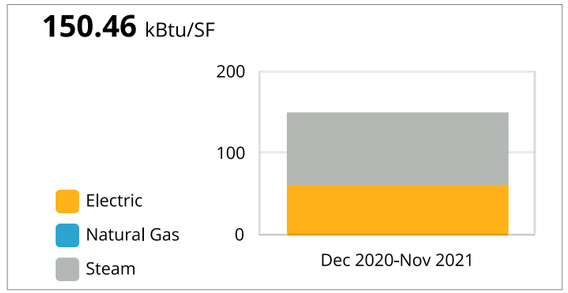
Classroom

FLORA FRICK HALL

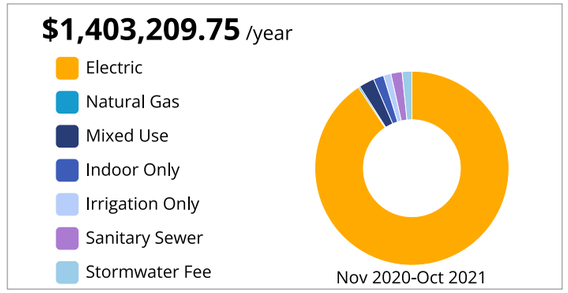
Flora Frick was built in 1932 and is connected to MacLean Hall to the north and King Hall to the south.

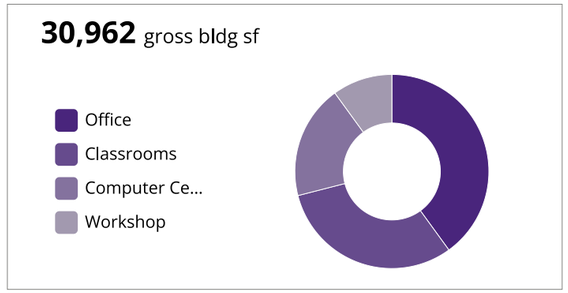
This facility houses classrooms and student support services including: the Dean of Students Office, the Office of Student Conduct & Resolution, Career Development Center, the Academic Success Center and Veteran's services. The total usable building area is appox. 30,962.00SF.

Area	30,962 gsf
Year(s) Built	1932
Stories	2
FCI/5-year FCI	0.07/ NA
Replacement Value	$13.1M
Building Repair Backlog	$883,100
5-Year Renewal Forecast	$342,799
Roof/Exterior	BUR/Brick

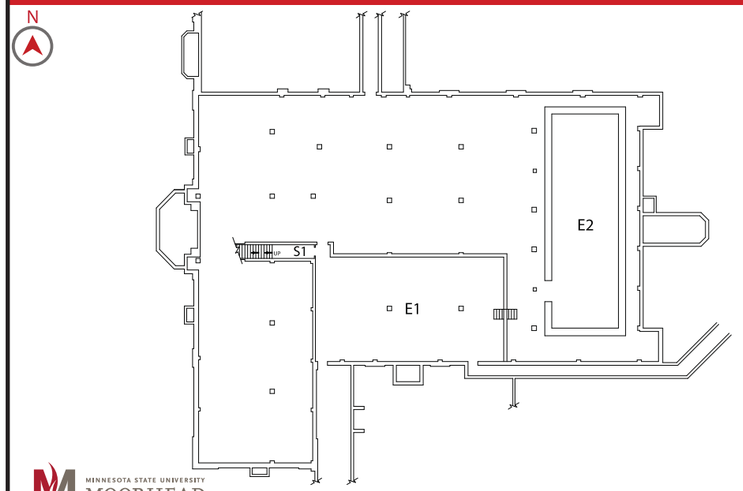


**Energy use figures represent entire Main Campus metering group.*



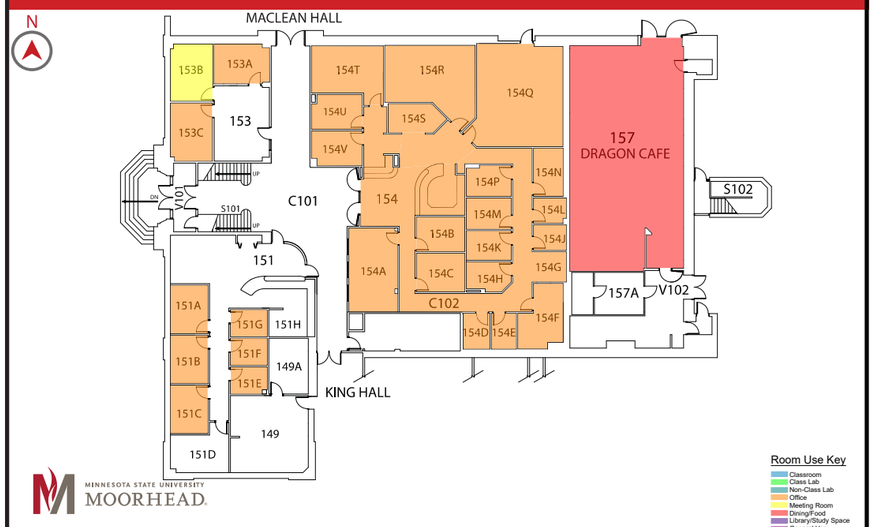


Flora Frick Hall - Basement



Basement Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Flora Frick Hall - First Floor

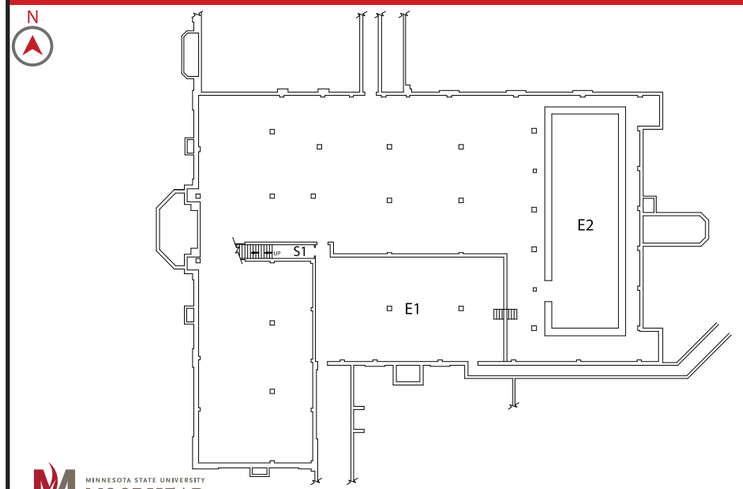


First Floor Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Flora Frick Hall - Second Floor

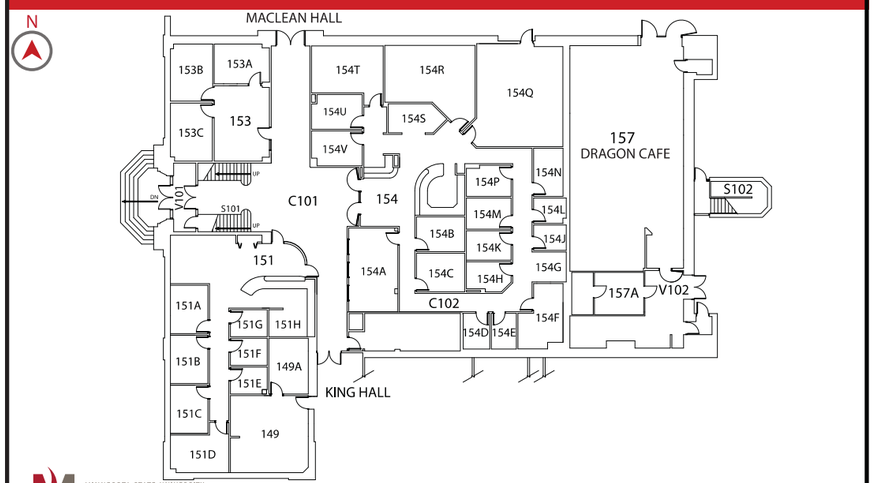
Second Floor Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Flora Frick Hall - Basement



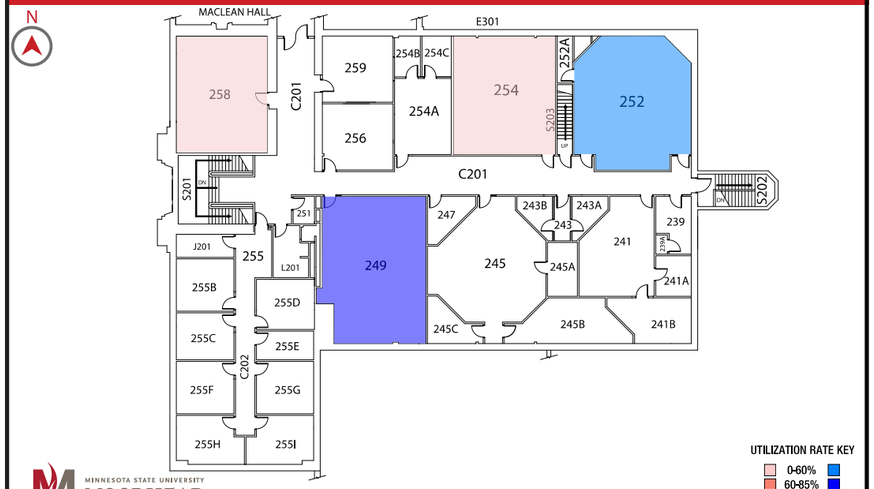
Basement Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Flora Frick Hall - First Floor



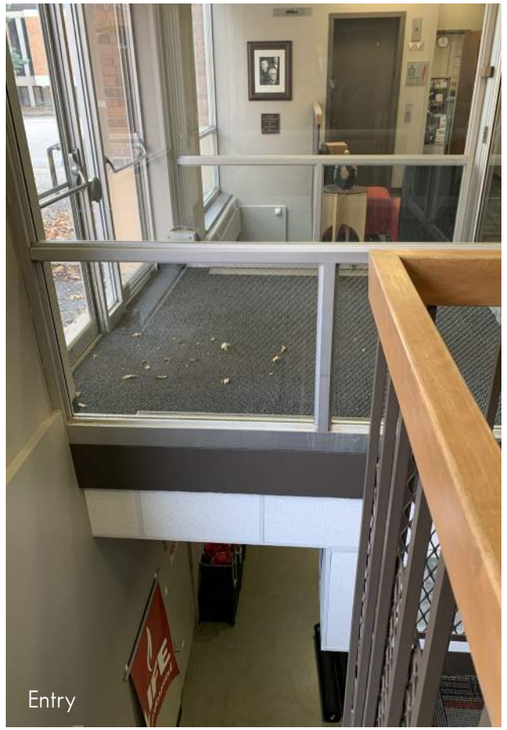
First Floor Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Flora Frick Hall - Second Floor



Second Floor Flora Frick Hall | 800 11th St. S. | Constructed 1932 | Remodeled 1972 | Gross Sq. Ft. 30,962

Exterior


Entry

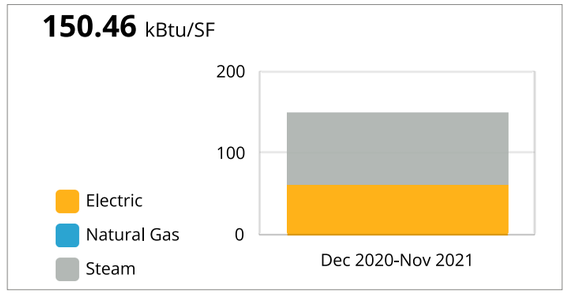

Copy Shop

GRIER HALL

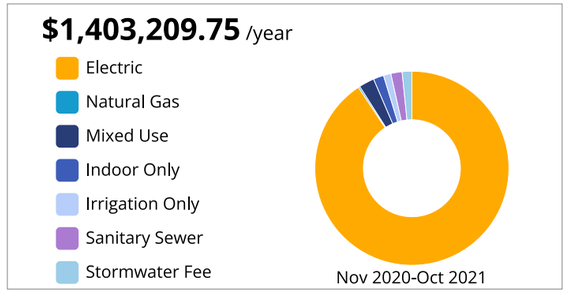
Built in 1932, Grier currently houses University Marketing & Communications and Prroduction Services.

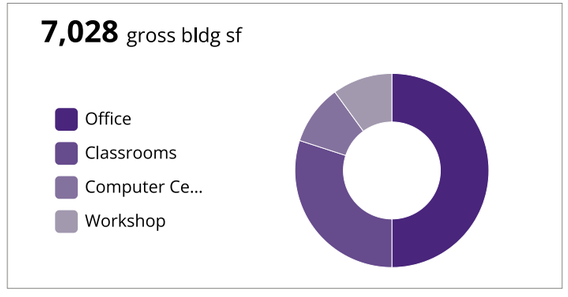
The total usable building area is appox. 7,028.00SF.

Area	7,028 gsf
Year(s) Built	1932
Stories	2
FCI/5-year FCI	0.4/ NA
Replacement Value	$3M
Building Repair Backlog	$1.2M
5-Year Renewal Forecast	$0
Roof/Exterior	BUR/Brick

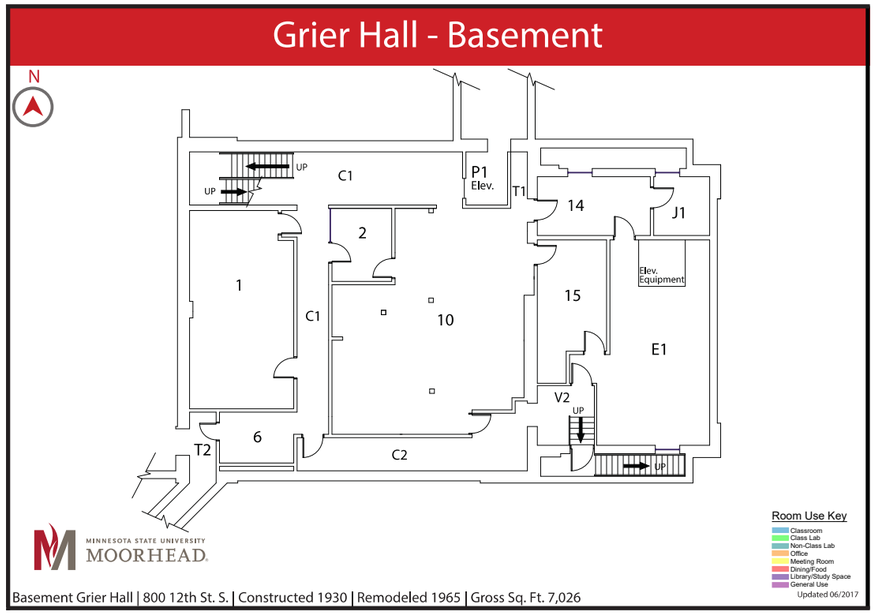


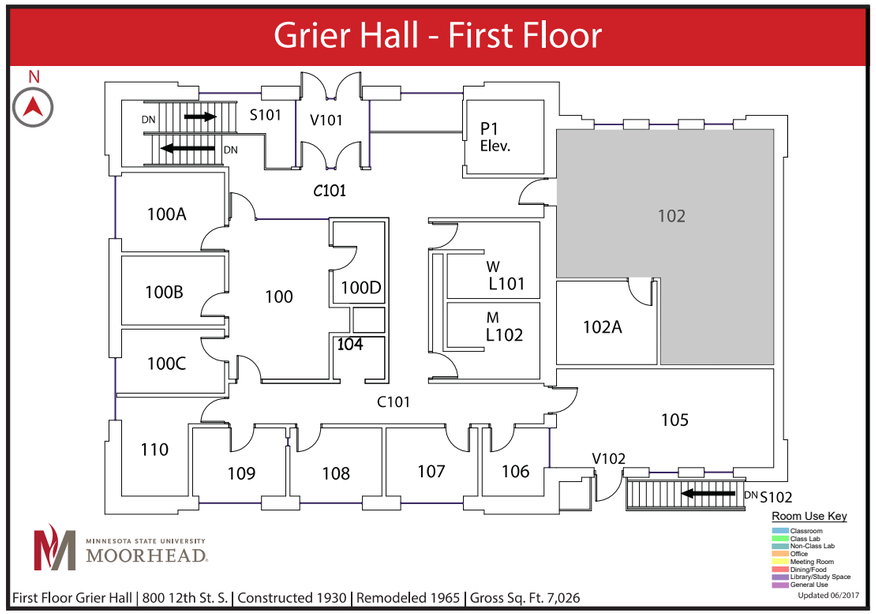
**Energy use figures represent entire Main Campus metering group.*



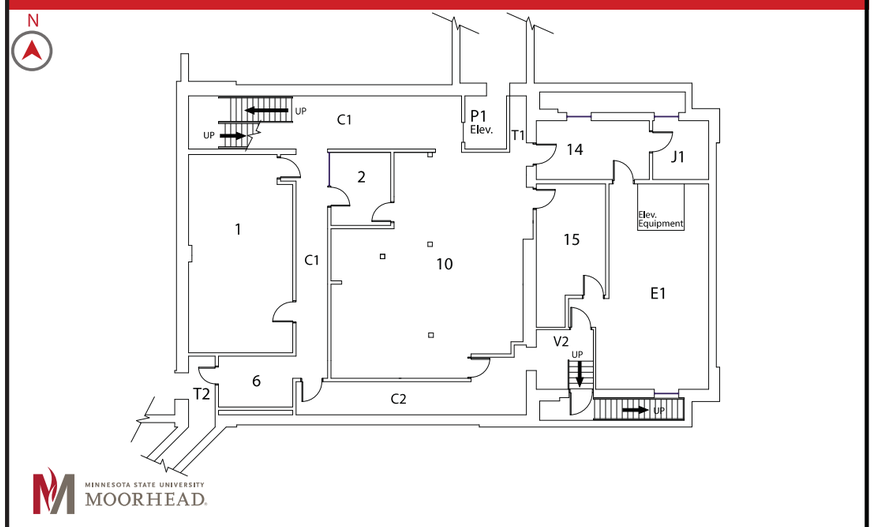


MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS





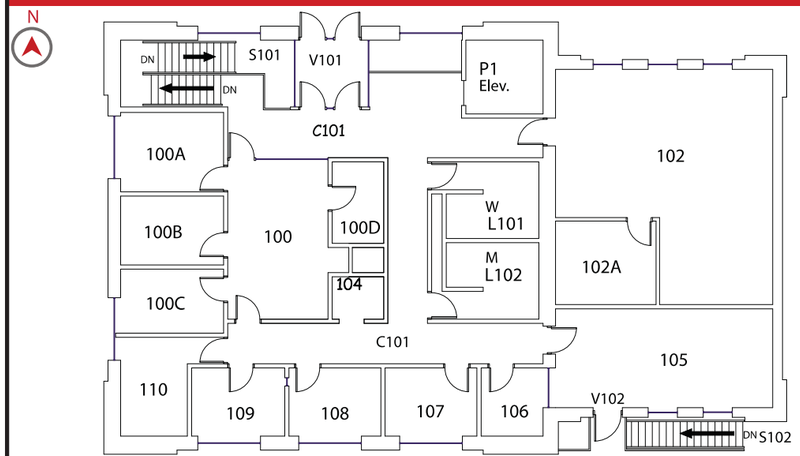
Grier Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Grier Hall | 800 12th St. S. | Constructed 1930 | Remodeled 1965 | Gross Sq. Ft. 7,026

Grier Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Grier Hall | 800 12th St. S. | Constructed 1930 | Remodeled 1965 | Gross Sq. Ft. 7,026

Classroom

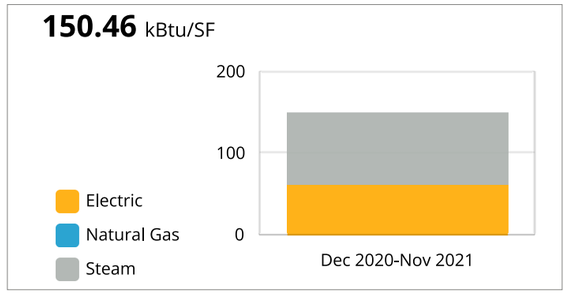
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

HAGEN HALL

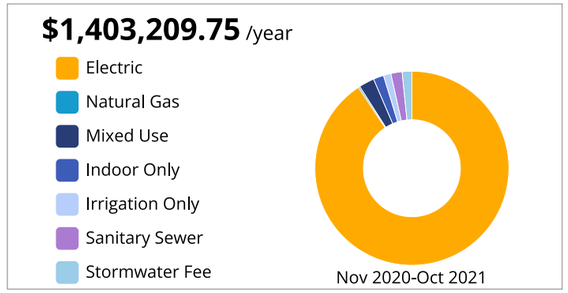
Built in 1963, this facility houses the Dean of the College of Science Health & the Environment, Environmental Health & Safety, School of Nursing & Healthcare Leadership, Biosciences, Physics, & Chemistry. Hagen Hall underwent a major renovation in 2005.

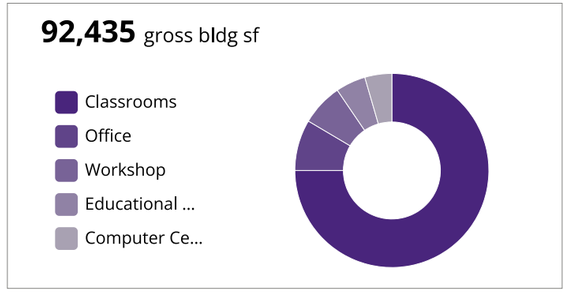
The total usable building area is appox. 92,435.00SF.

Area	92,435 gsf
Year(s) Built	1963
Stories	5
FCI/5-year FCI	0.03/ NA
Replacement Value	$64M
Building Repair Backlog	$2M
5-Year Renewal Forecast	$3.4M
Roof/Exterior	BUR/Brick

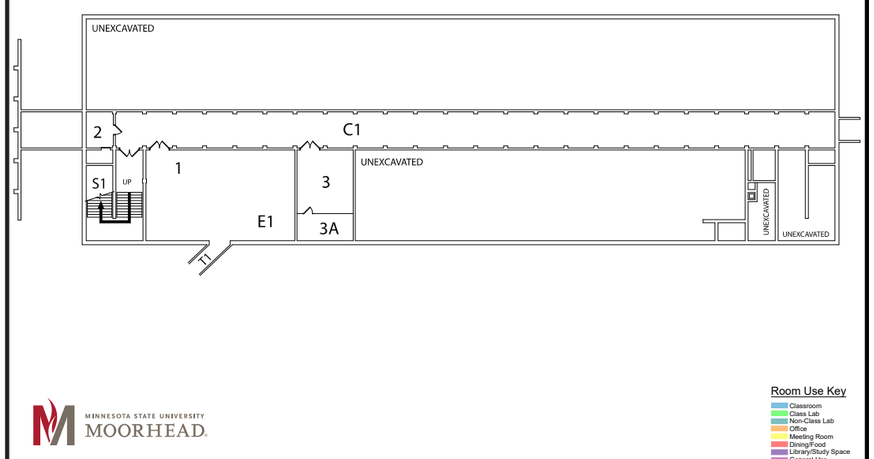


**Energy use figures represent entire Main Campus metering group.*





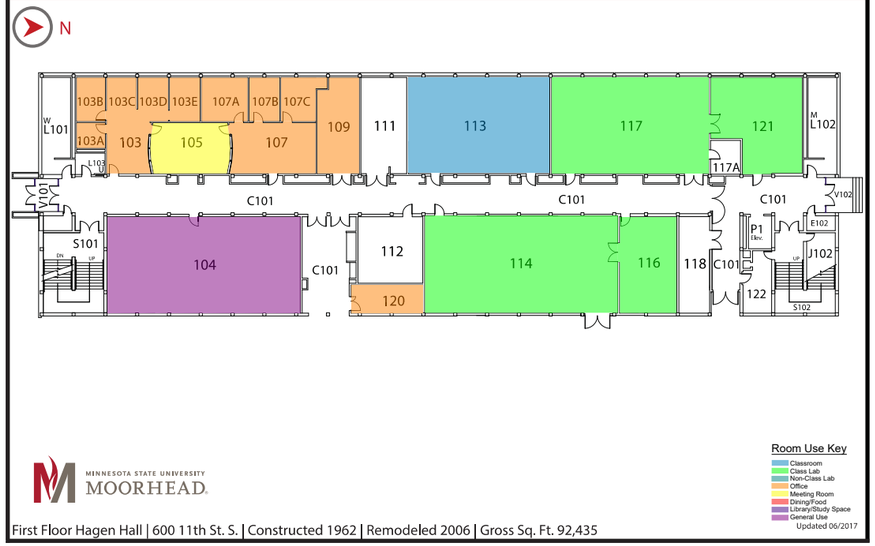
Hagen Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

Hagen Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

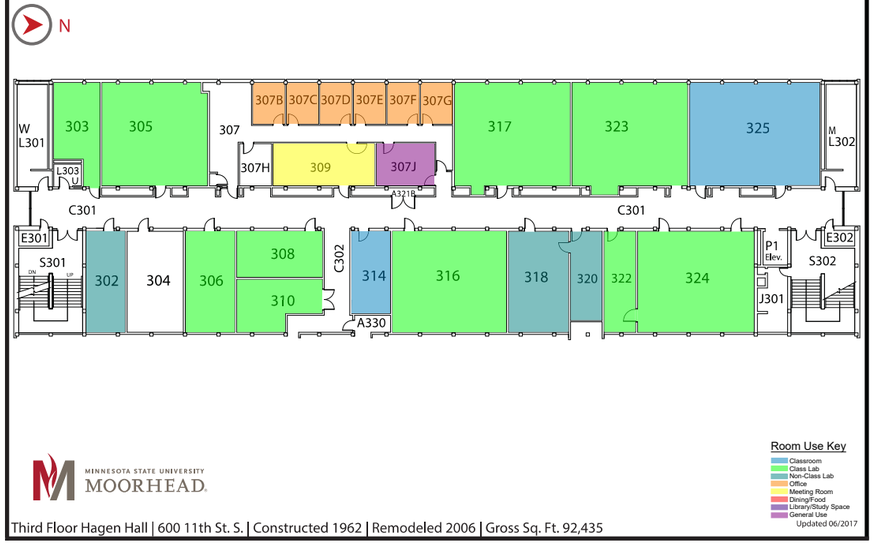
First Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

Hagen Hall - Second Floor

MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006, 2019 | Gross Sq. Ft. 92,435

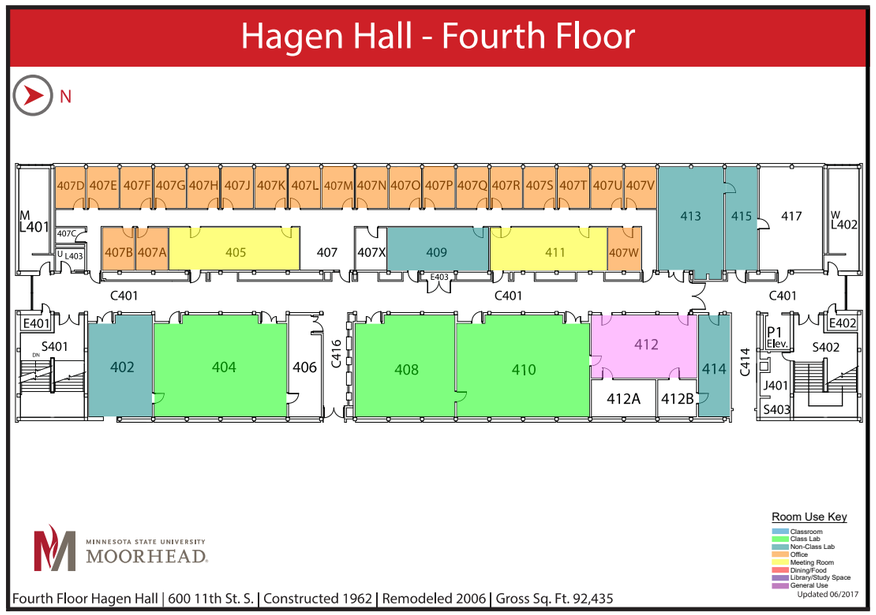
Hagen Hall - Third Floor

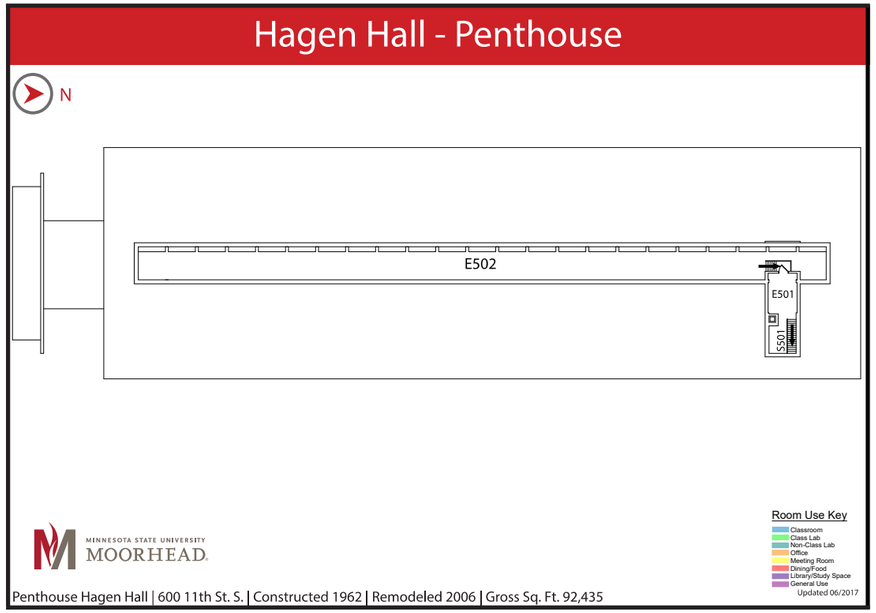


MINNESOTA STATE UNIVERSITY MOORHEAD

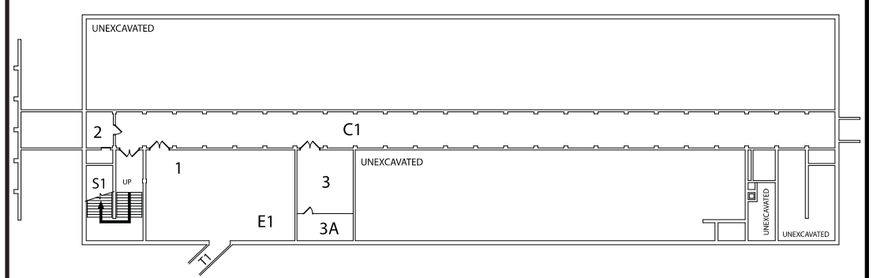
Third Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS





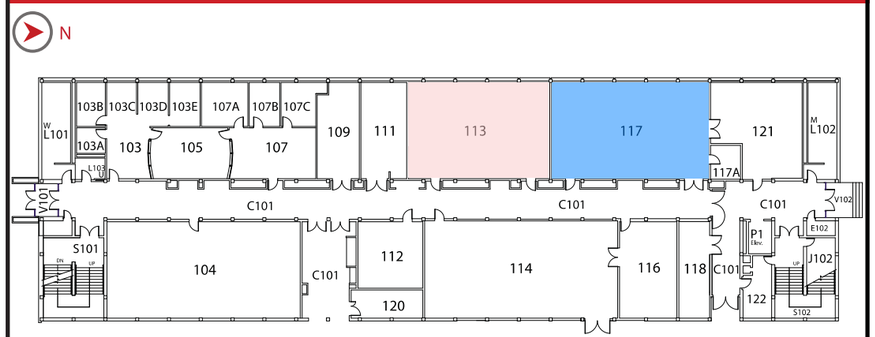
Hagen Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

Hagen Hall - First Floor



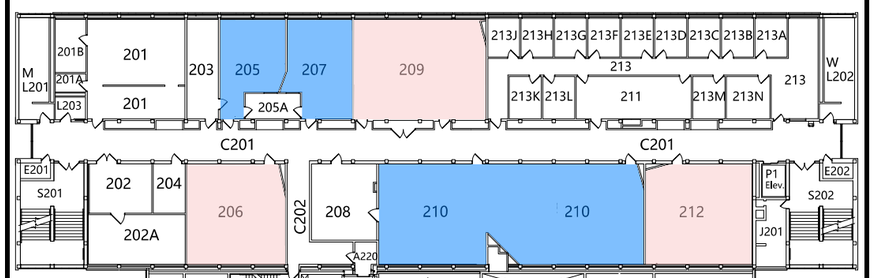
MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

UTILIZATION RATE KEY

	CLASS	LAB
0-60%		
60-85%		
85-100%		
>100%		

Hagen Hall - Second Floor



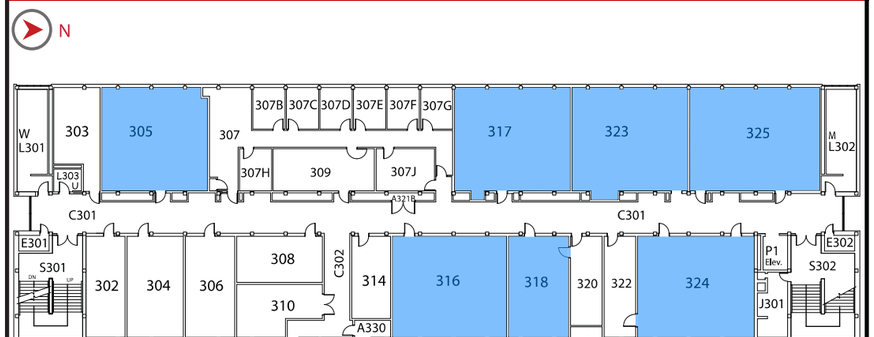
MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006, 2019 | Gross Sq. Ft. 92,435

UTILIZATION RATE KEY

	CLASS	LAB
0-60%		
60-85%		
85-100%		
>100%		

Hagen Hall - Third Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

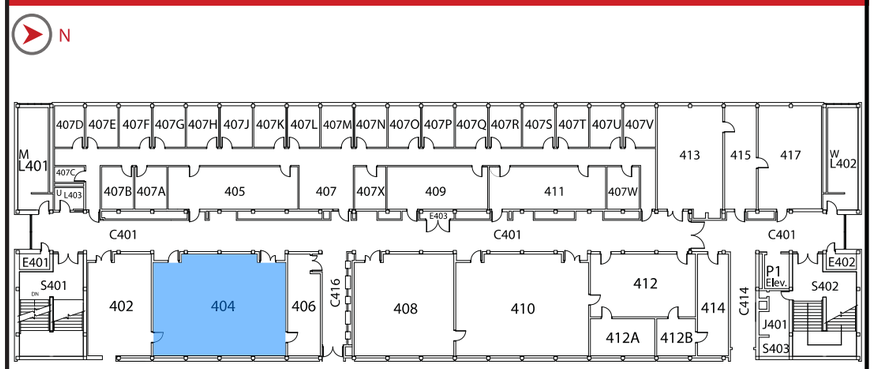
Third Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

UTILIZATION RATE KEY

	CLASS	LAB
0-60%		
60-85%		
85-100%		
>100%		

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

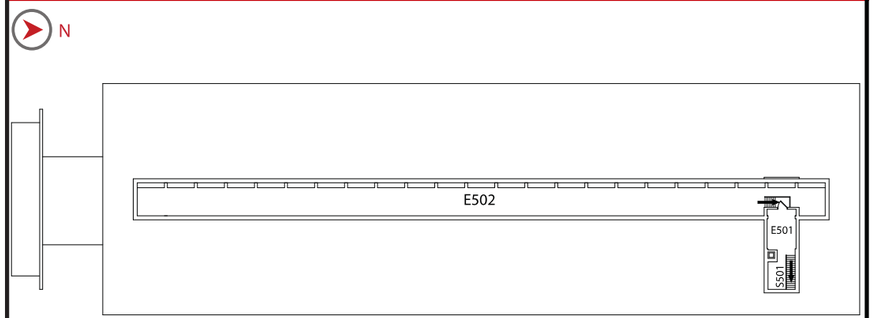
Hagen Hall - Fourth Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Fourth Floor Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

Hagen Hall - Penthouse



MINNESOTA STATE UNIVERSITY MOORHEAD

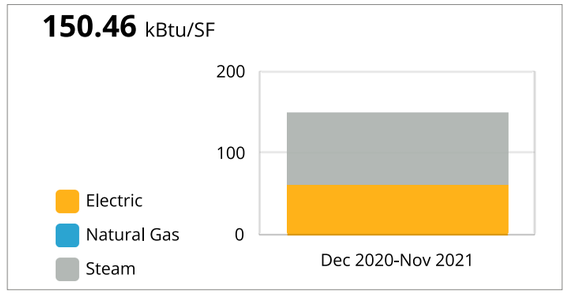
Penthouse Hagen Hall | 600 11th St. S. | Constructed 1962 | Remodeled 2006 | Gross Sq. Ft. 92,435

Heating Plant Interior

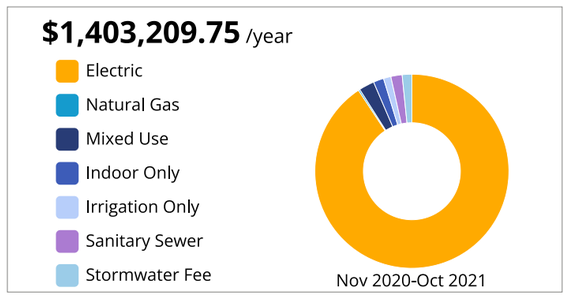
HEATING PLANT

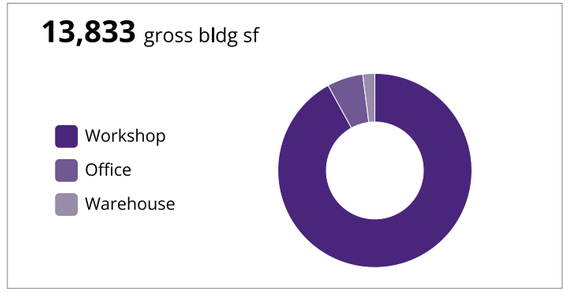
Physical Plant includes campus steam plant and utility drops. Built in 1959 this facility is used for Facilities. An addition was built in 2013. The total usable building area is appox. 13,833.00SF

Area	13,833 gsf
Year(s) Built	1959
Stories	2
FCI/5-year FCI	0.01/ NA
Replacement Value	$5.7M
Building Repair Backlog	$80,900
5-Year Renewal Forecast	$218,791
Roof/Exterior	BUR/Brick



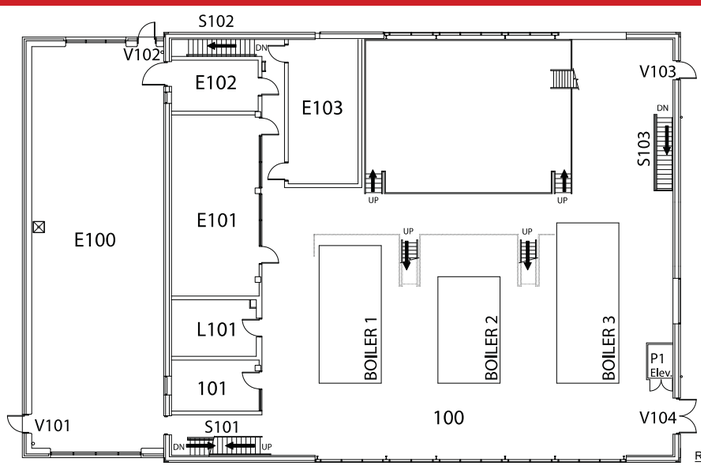
*Energy use figures represent entire Main Campus metering group.





MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

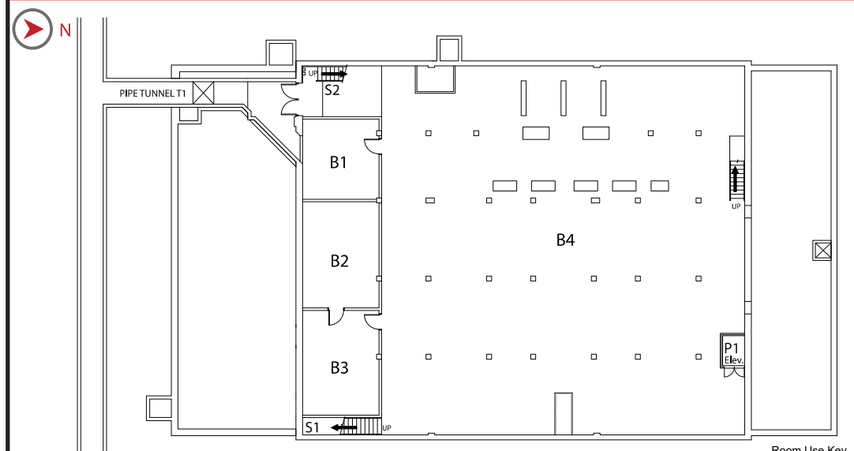
Heating Plant - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

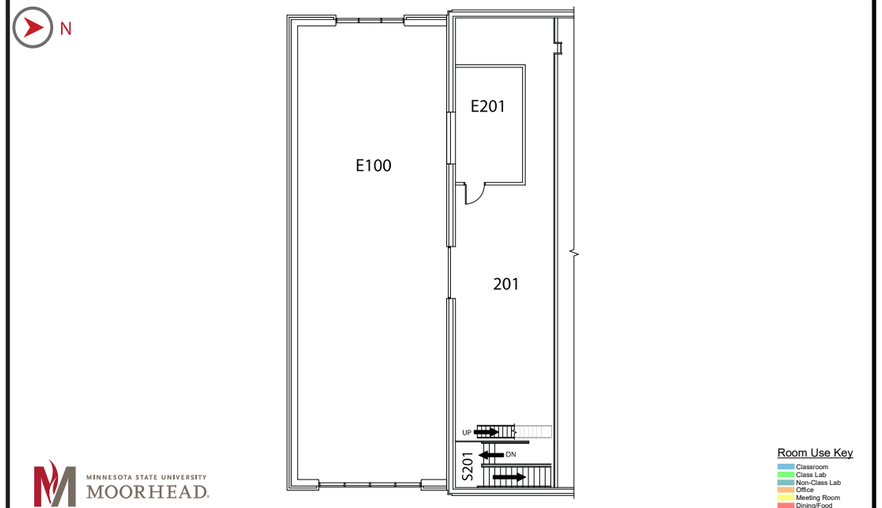
Heating Plant - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

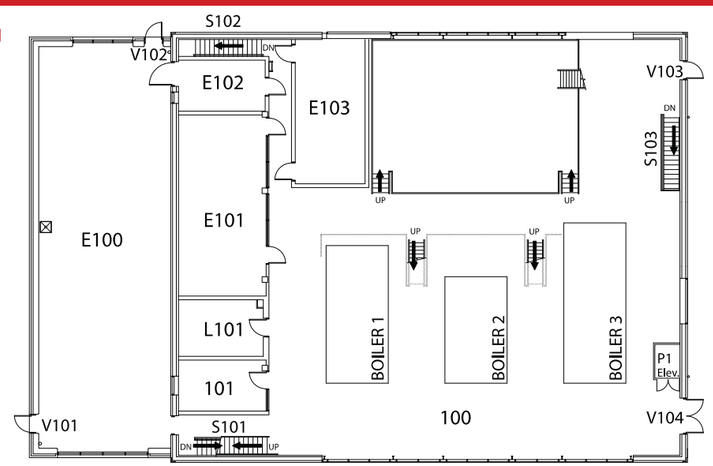
Heating Plant - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

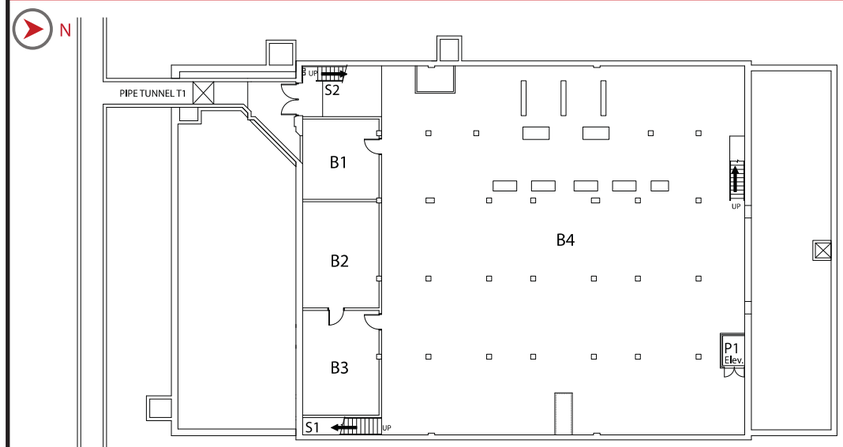
Heating Plant - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

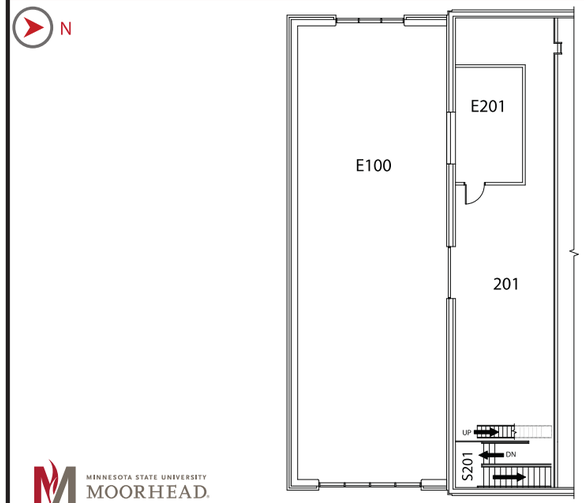
Heating Plant - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

Heating Plant - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

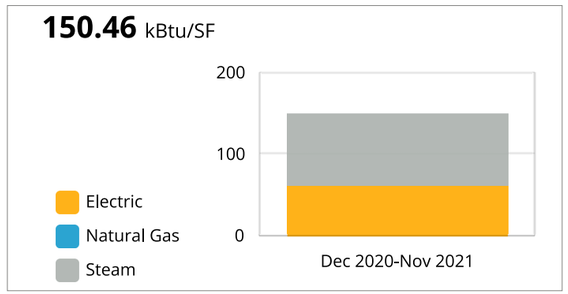
Second Floor Heating Plant | 7030 17th St. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

Hendrix Interior

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

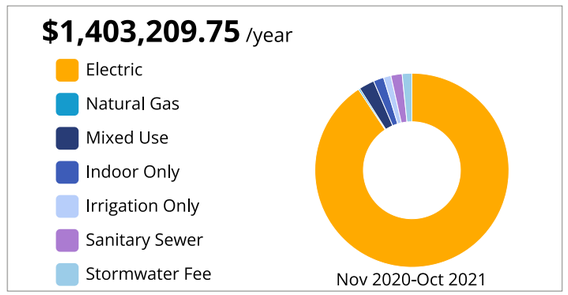
HENDRIX

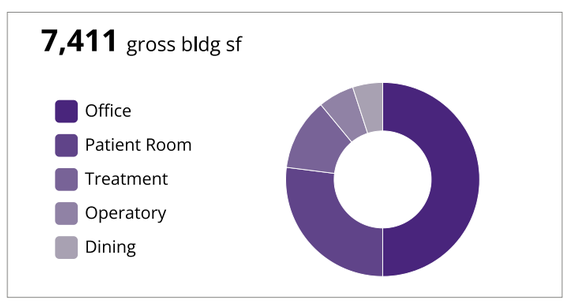
Built in 2003 this facility is used for Student Services. The total usable building area is appox. 7,411.00SF. Houses Counseling Services and Accessibility Resources.



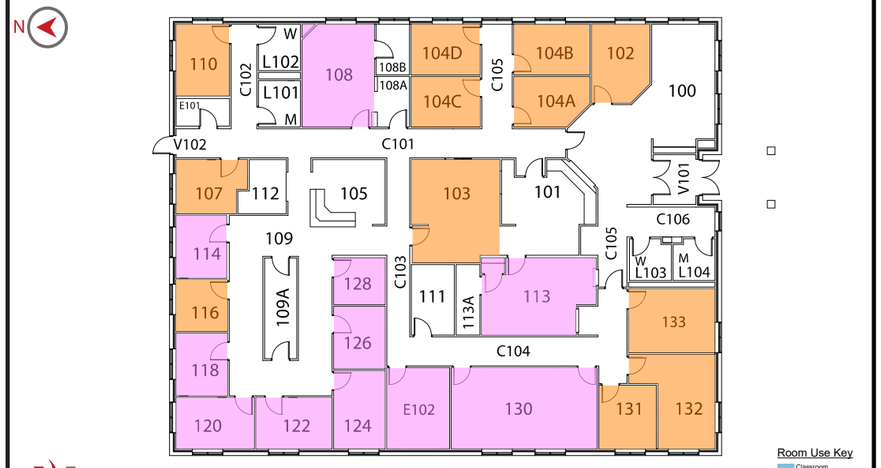
*Energy use figures represent entire Main Campus metering group.

Area	7,411 gsf
Year(s) Built	2003
Stories	1
FCI/5-year FCI	0.3/ NA
Replacement Value	$4.3M
Building Repair Backlog	$400,000
5-Year Renewal Forecast	$0
Roof/Exterior	BUR/Brick



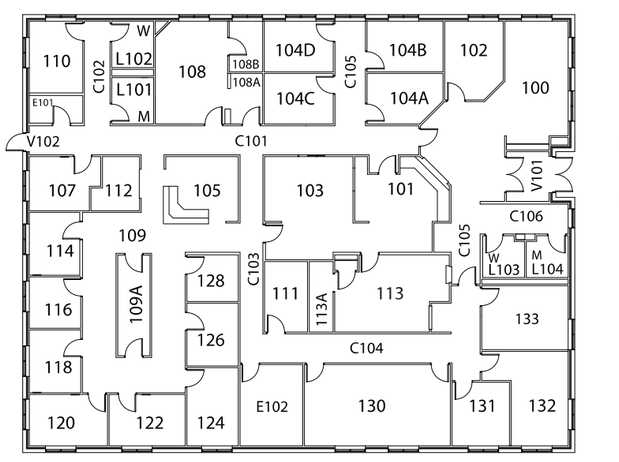


Hendrix Health Center



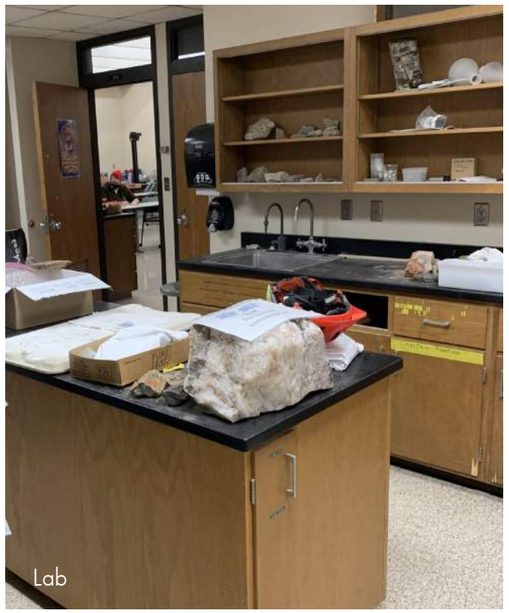
Hendrix Health Center | 1308 9th Ave. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833

Hendrix Health Center



Hendrix Health Center | 1308 9th Ave. S. | Constructed 1959 | Remodeled 1976| Gross Sq. Ft. 13,833


Classroom

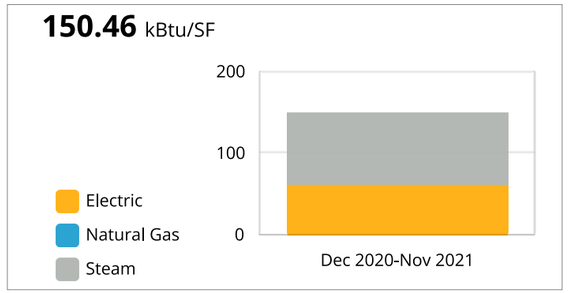

Lab


Corridor

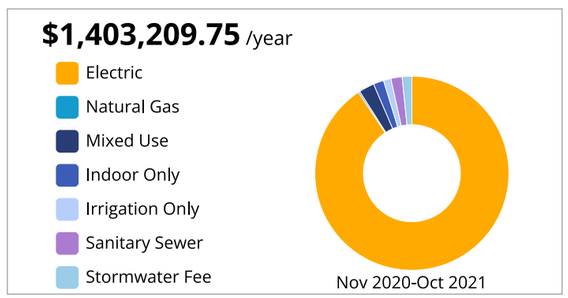
KING HALL

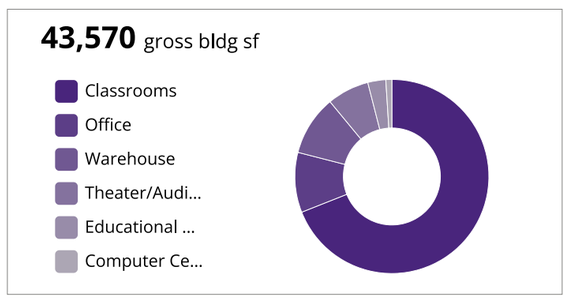
Built in 1970 this facility is used for Academic. The total usable building area is appox. 43,570.00SF. Houses classrooms (3), Geoscience and Art Education labs and Art (Photography & Design) studios (7). Also departmental space for Anthropology and Earth Sciences.

Area	43,570 gsf
Year(s) Built	1970
Stories	3
FCI/5-year FCI	0.3/ NA
Replacement Value	$25.7M
Building Repair Backlog	$7.8M
5-Year Renewal Forecast	$344,564
Roof/Exterior	BUR/Brick

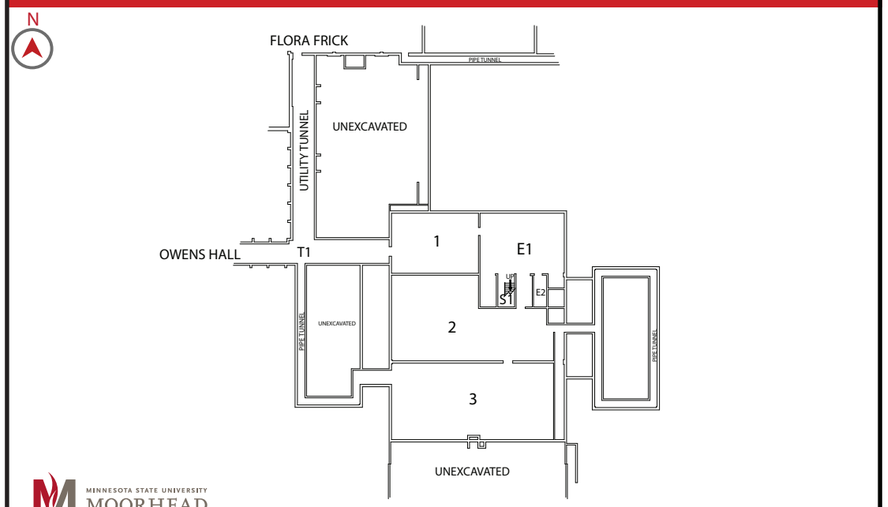


**Energy use figures represent entire Main Campus metering group.*





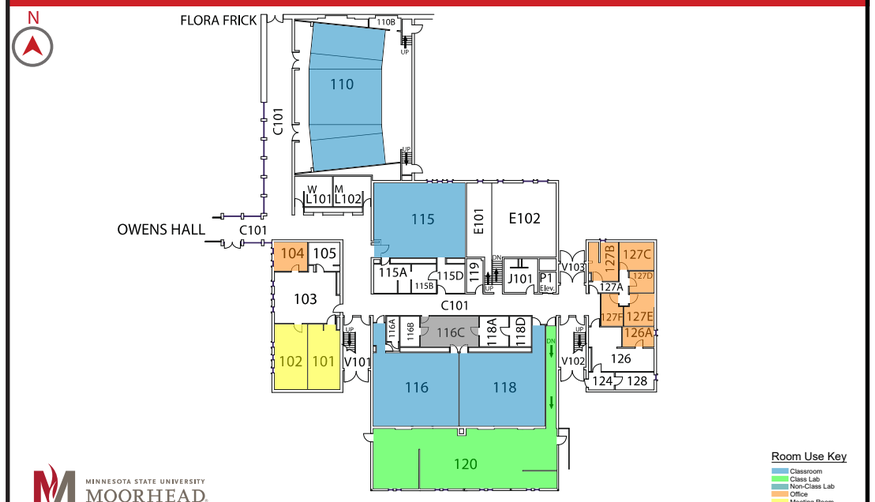
King Hall - Basement



Basement King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

Updated 06/2017

King Hall - First Floor

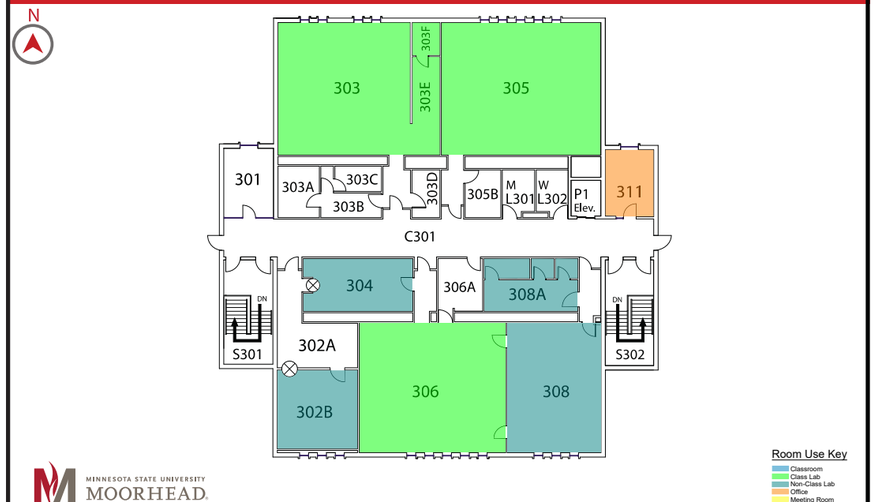


First floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - Second Floor

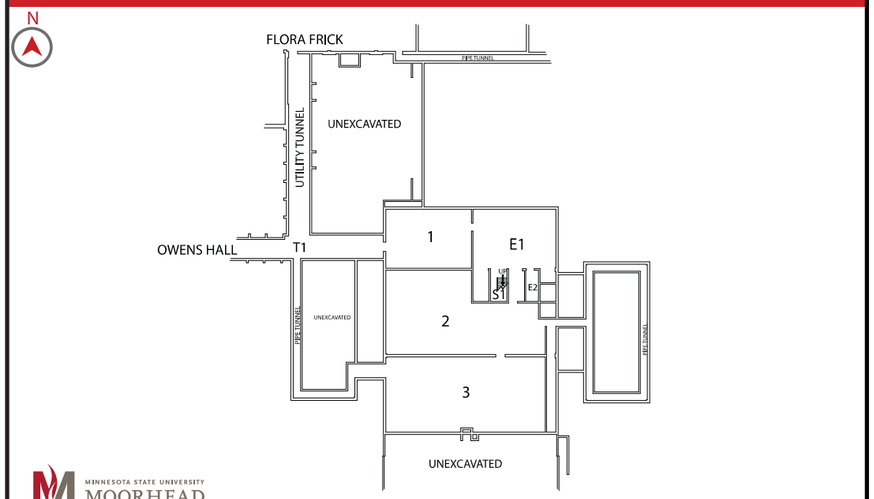
Second floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - Third Floor



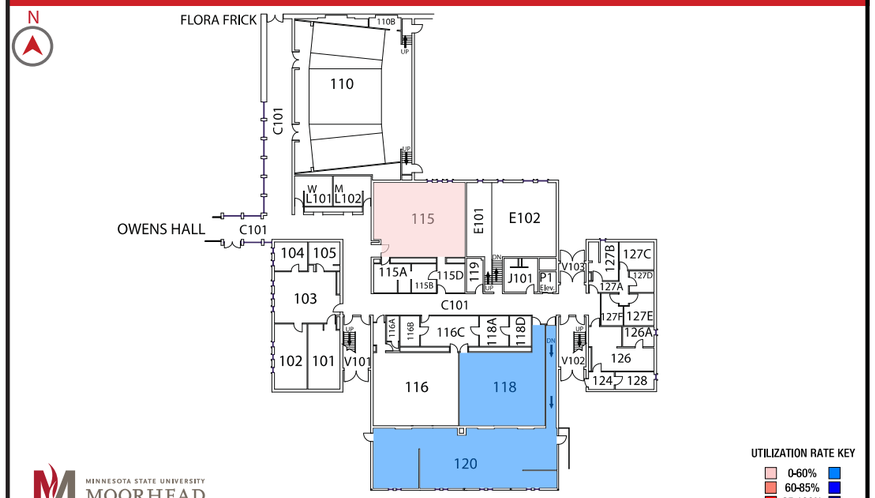
Third floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - Basement



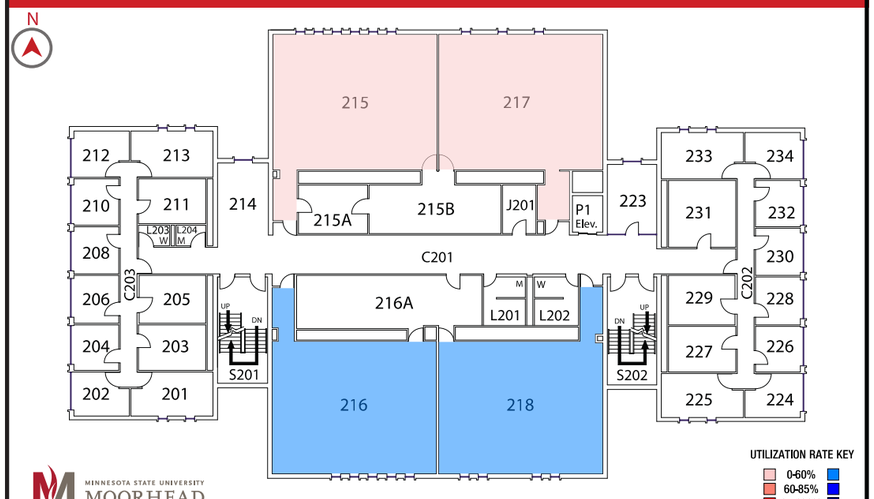
Basement King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - First Floor



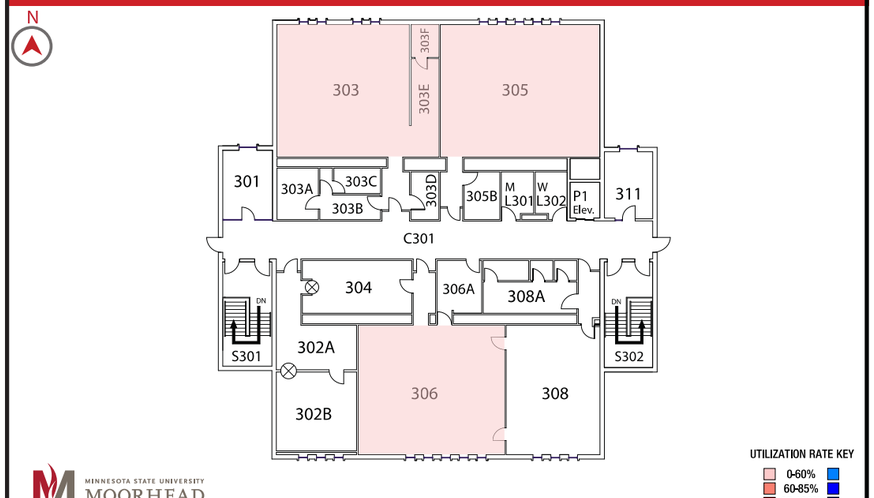
First floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - Second Floor



Second floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

King Hall - Third Floor



Third floor King Hall | 1120 9th Ave. S. | Constructed 1970 | Gross Sq. Ft. 40,874

Food Court

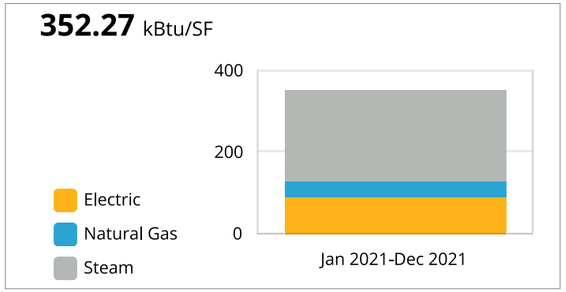
Entry

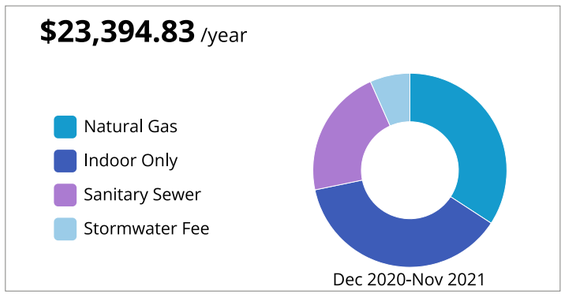
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

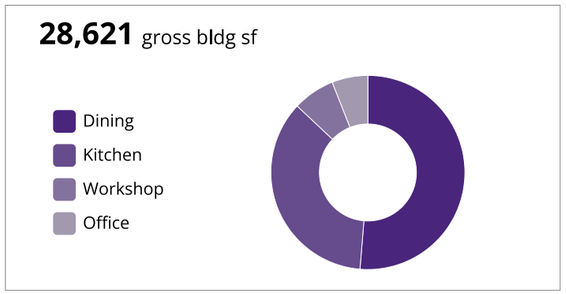
KISE COMMONS

Built in 1962 this facility is used for Residential Dining Services. Kise underwent a major renovation in 2007. The total usable building area is appox. 28,621.00SF. Has a food court which includes Home Line, Deli, Bakery, Dragon Pit, and Salad Bar. Kise also contains the Food Services Office and kitchen.

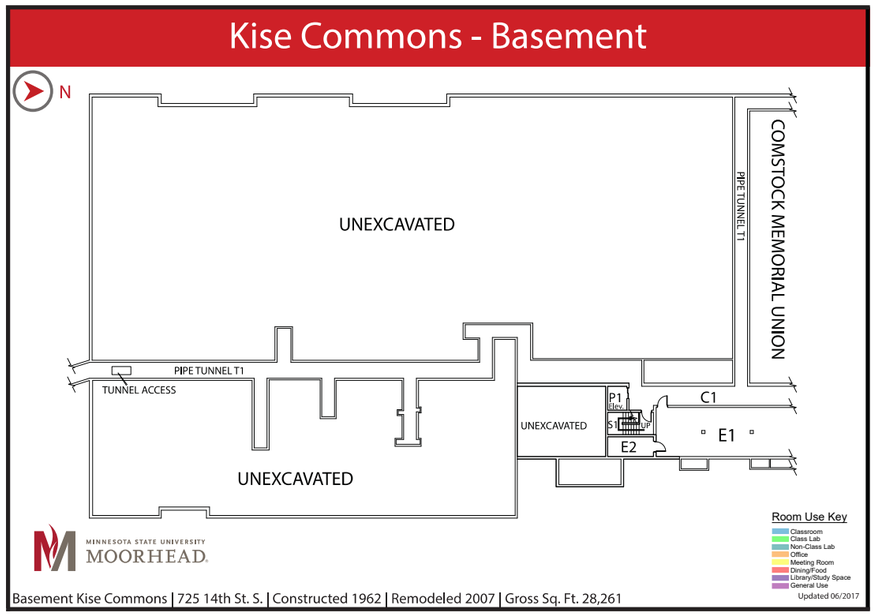
Area	28,621 gsf
Year(s) Built	1962
Stories	1
FCI/5-year FCI	0.2/ NA
Replacement Value	$11.8M
Building Repair Backlog	$2M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick

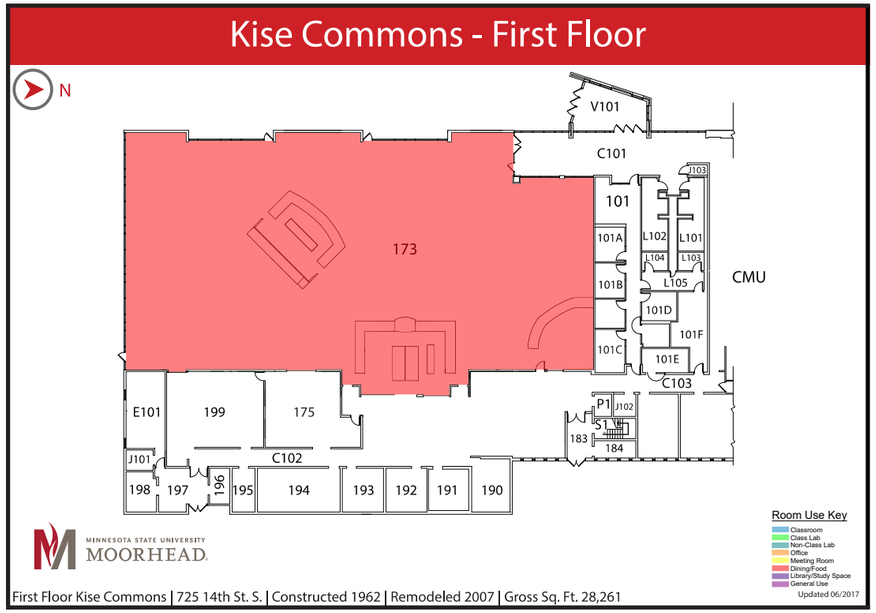






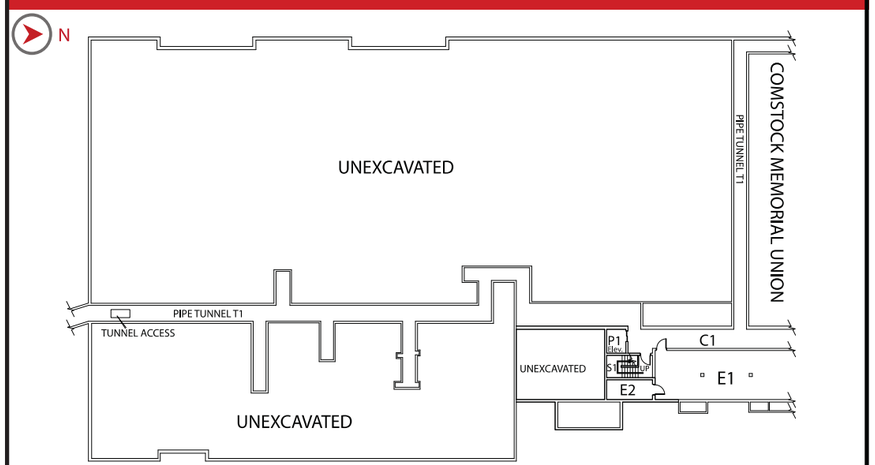
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS





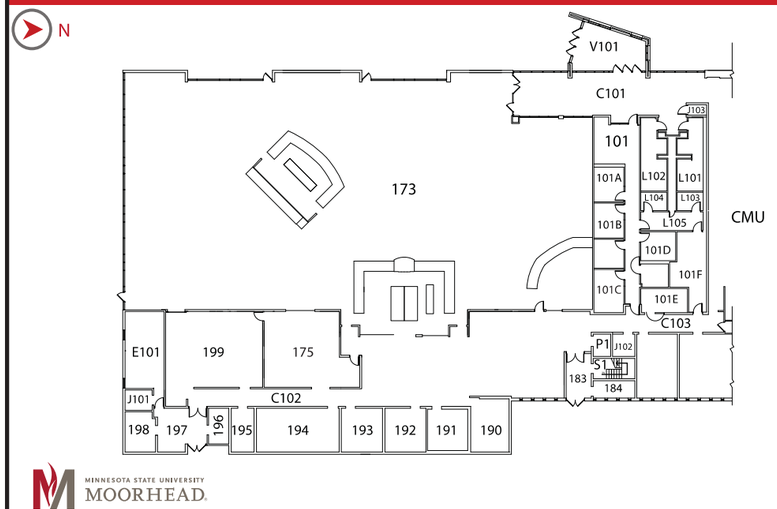
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Kise Commons - Basement



Basement Kise Commons | 725 14th St. S. | Constructed 1962 | Remodeled 2007 | Gross Sq. Ft. 28,261

Kise Commons - First Floor



First Floor Kise Commons | 725 14th St. S. | Constructed 1962 | Remodeled 2007 | Gross Sq. Ft. 28,261

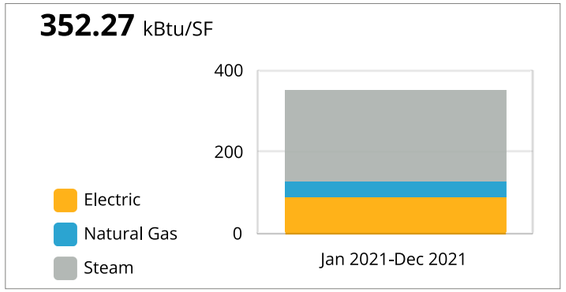
Oceanarium Lab

Lab

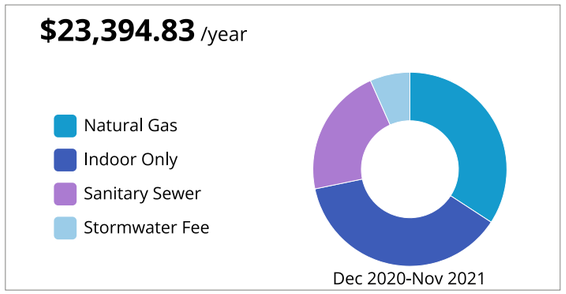
Auditorium

LANGSETH HALL

Langseth was built in 2004 and is connected to Hagen Hall. It houses only science classrooms and lab spaces, including the Oceanarium Lab and a greenhouse. The total usable building area is approx. 87,134 SF.



**Energy use figures represent entire Main Campus metering group.*

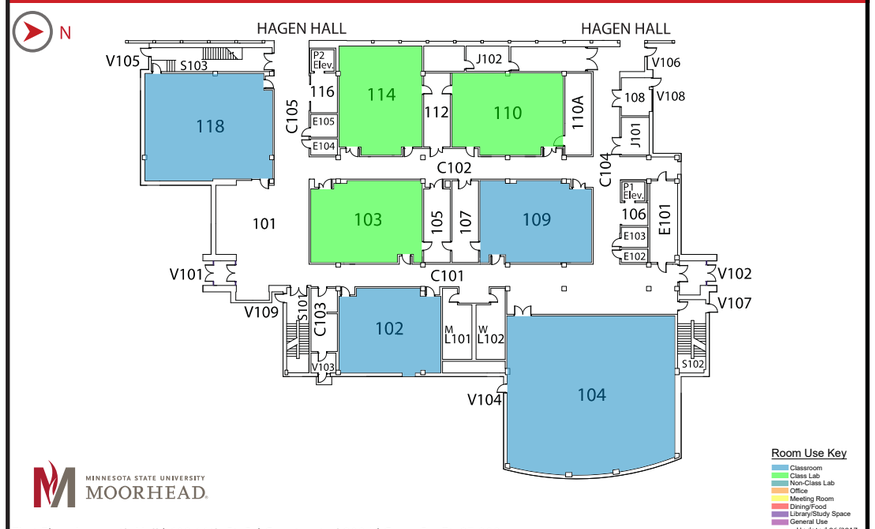


Area	87,134 gsf
Year(s) Built	2004
Stories	3
FCI/5-year FCI	0.2/ NA
Replacement Value	$51.3M
Building Repair Backlog	NA
5-Year Renewal Forecast	$96,471
Roof/Exterior	BUR/Brick

Langseth Hall - Basement

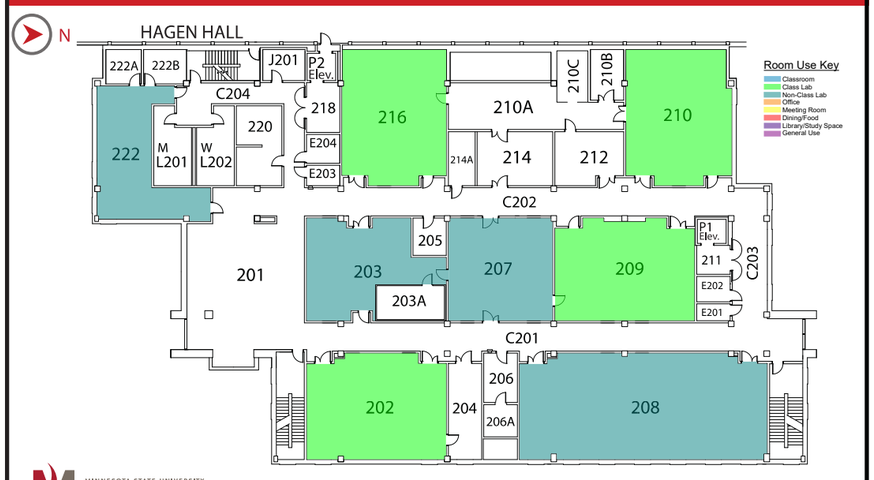
Basement Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

Langseth Hall - First Floor



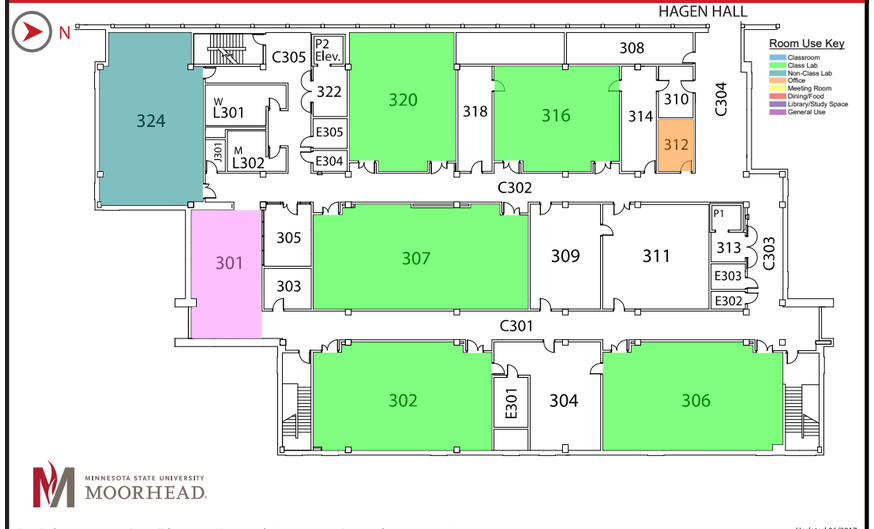
First Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

Langseth Hall - Second Floor



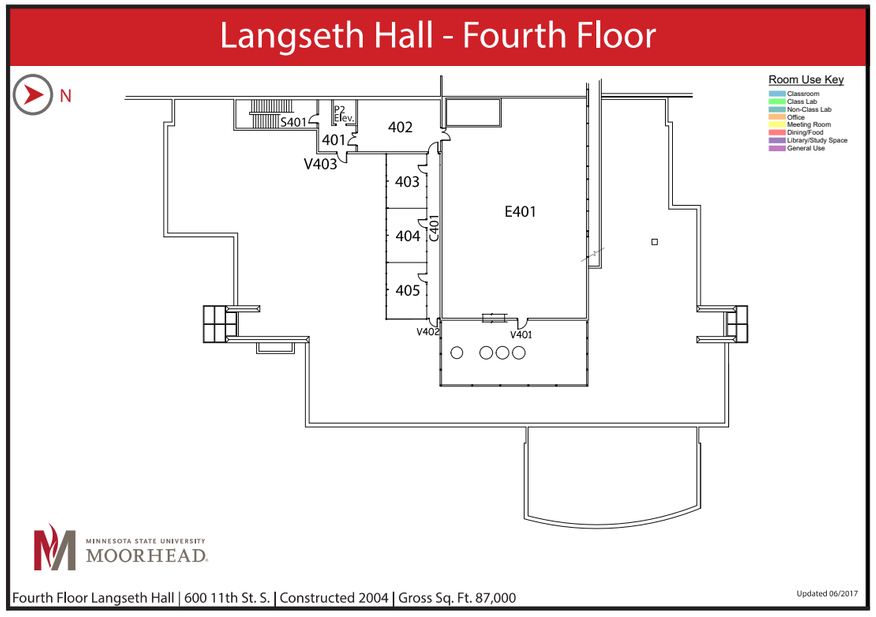
Second Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

Langseth Hall - Third Floor

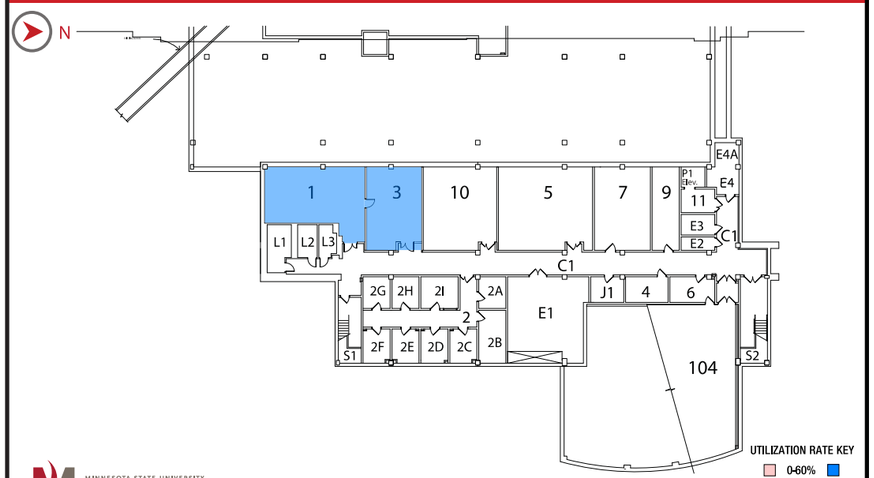


Third Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS



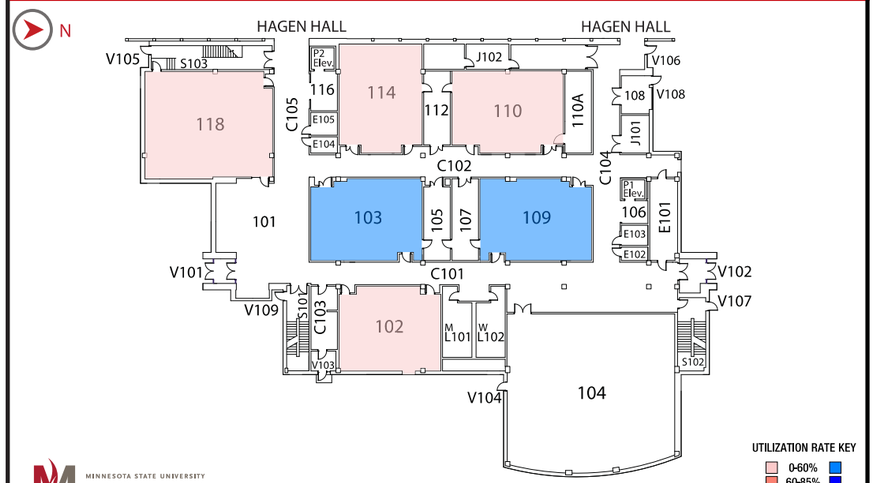
Langseth Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

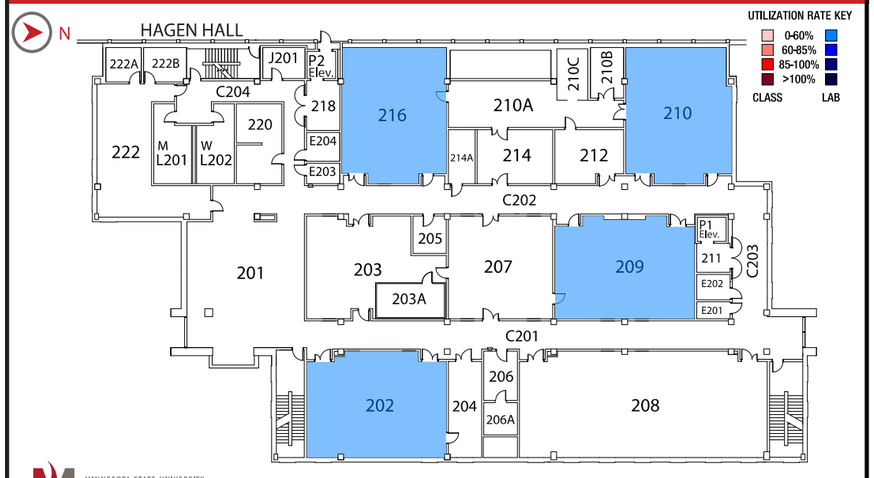
Langseth Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

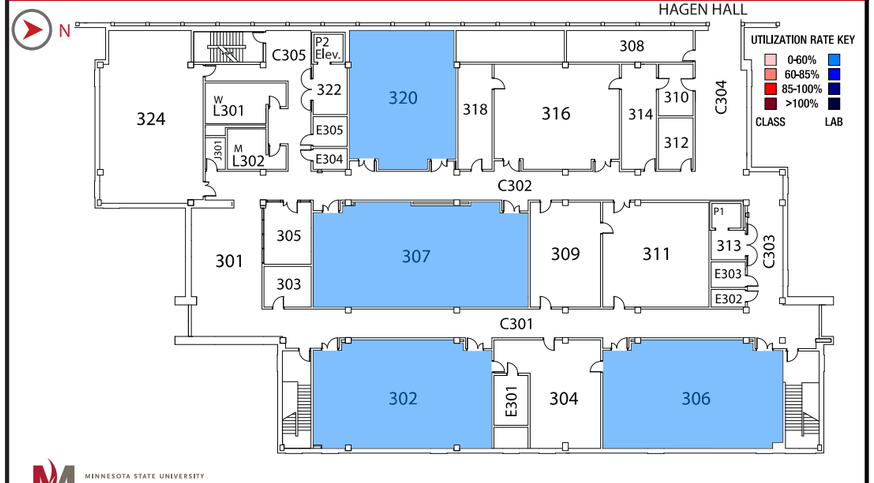
Langseth Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

Langseth Hall - Third Floor

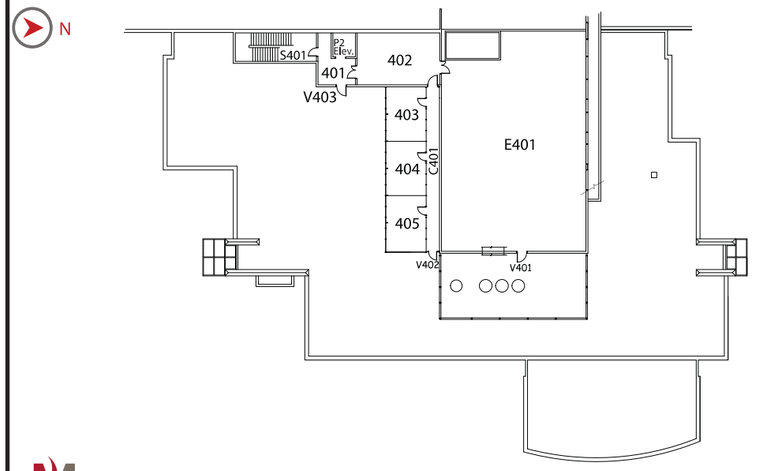


MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000

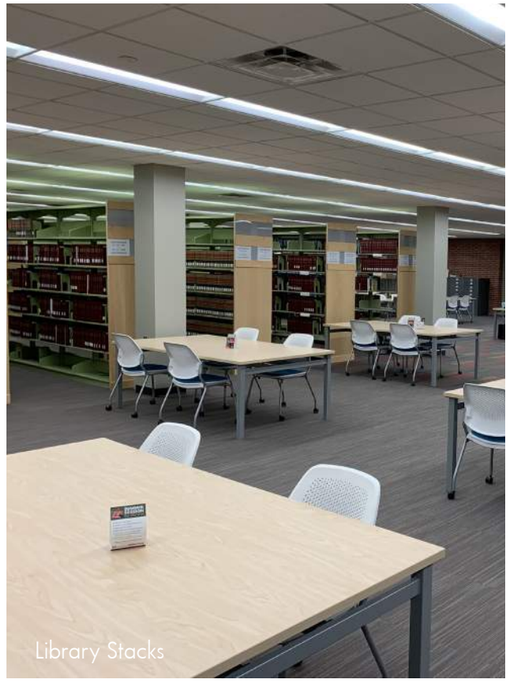
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

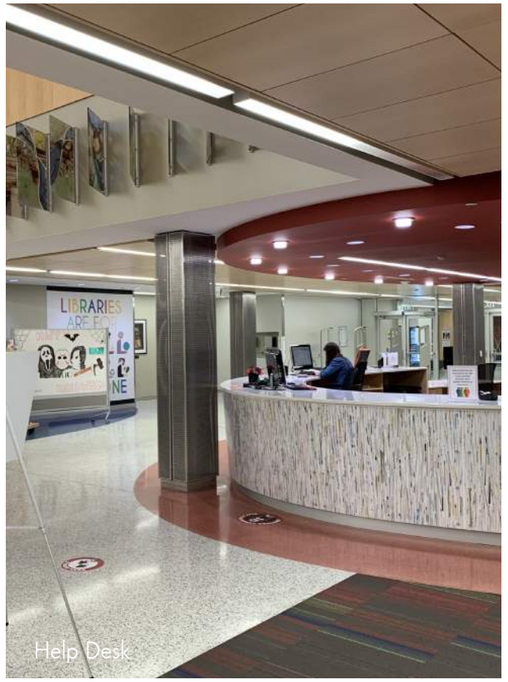
Langseth Hall - Fourth Floor



MINNESOTA STATE UNIVERSITY
MOORHEAD

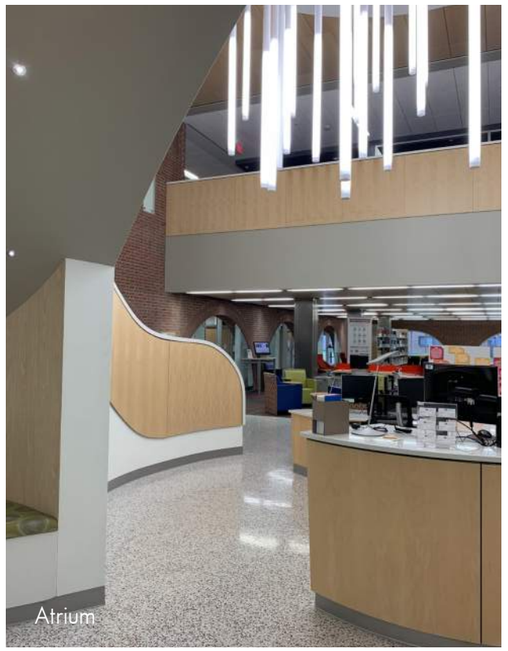
Fourth Floor Langseth Hall | 600 11th St. S. | Constructed 2004 | Gross Sq. Ft. 87,000


Library Stacks



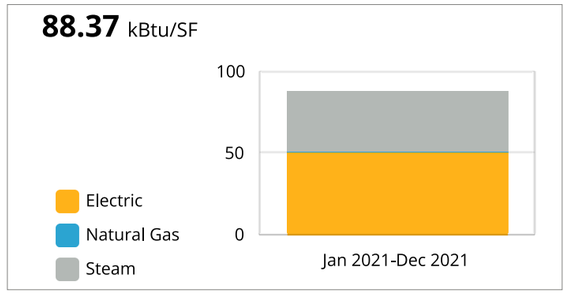
Help Desk


Computer Lab

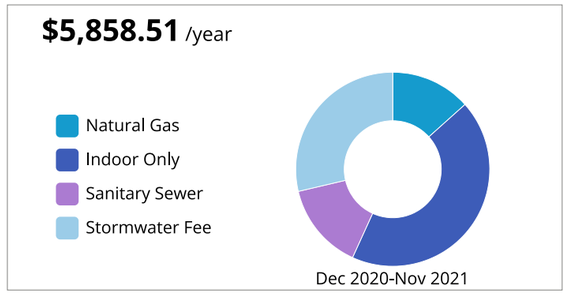

Atrium

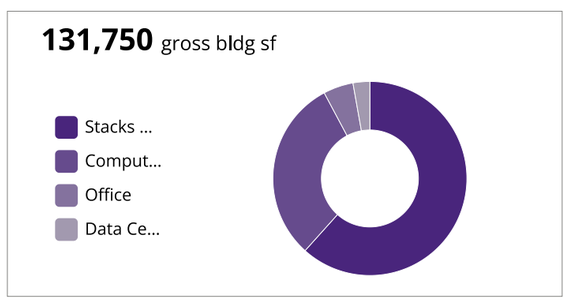
LIVINGSTON LORD LIBRARY

Academic Building, campus' library, renovated/renewed in 2012-14 and previously in 1986. Built in 1960, the total usable building area is approx. 131,750.00SF.

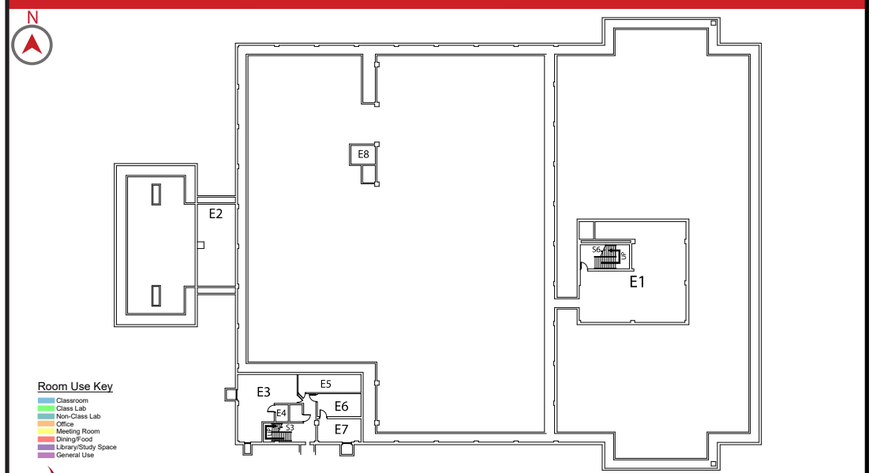


Area	131,750 gsf
Year(s) Built	1960, 2014
Stories	4
FCI/5-year FCI	0.03/ NA
Replacement Value	$55.6M
Building Repair Backlog	$1.9M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick





Livingston Lord Library - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Updated 06/2017

Livingston Lord Library - First Floor

MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Updated 06/2017

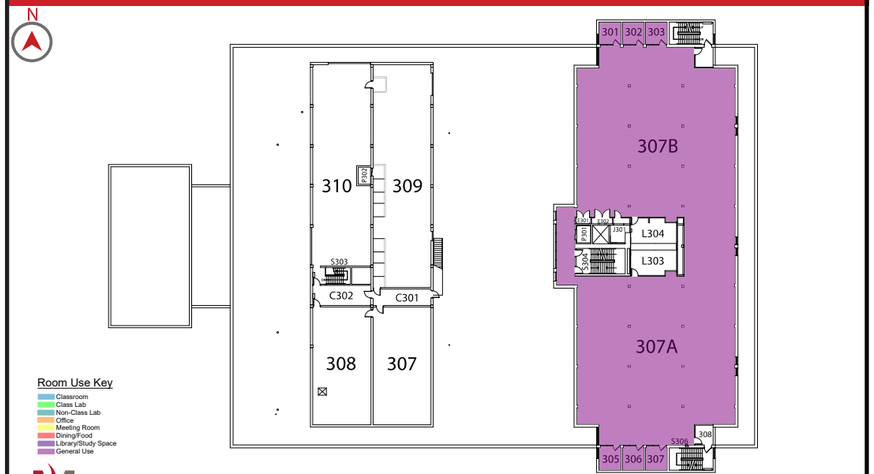
Livingston Lord Library - Second Floor

MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Updated 06/2017

Livingston Lord Library - Third Floor

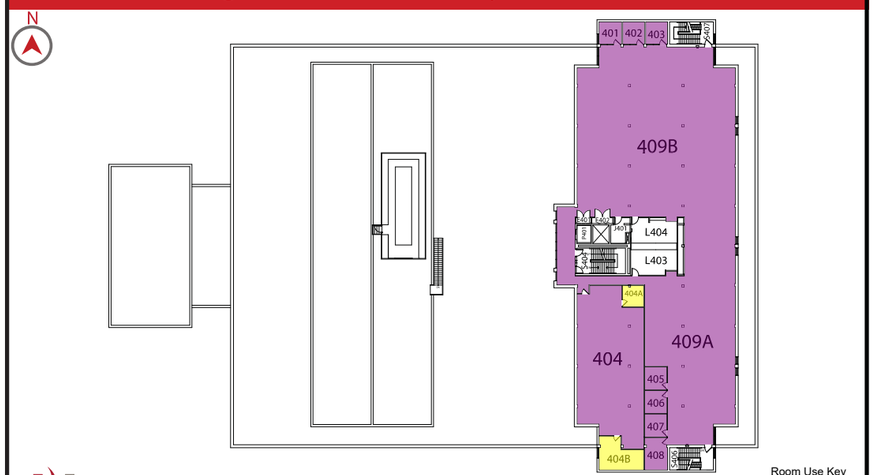


MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

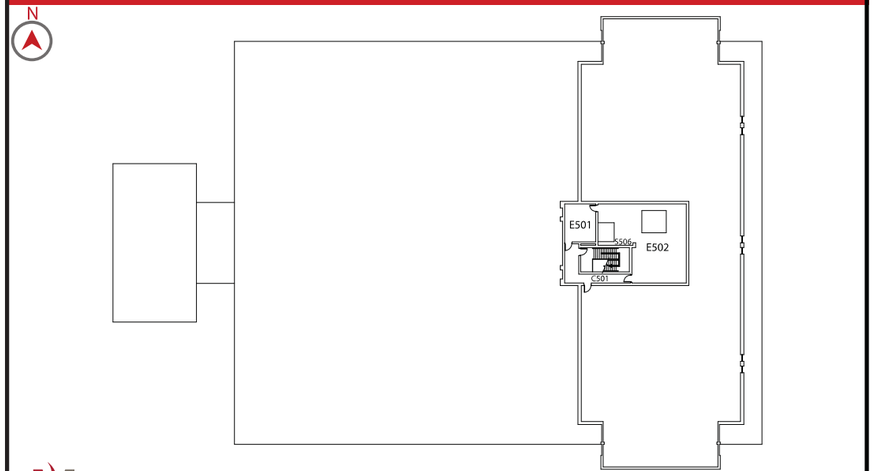
Updated 06/2017

Livingston Lord Library - Fourth Floor



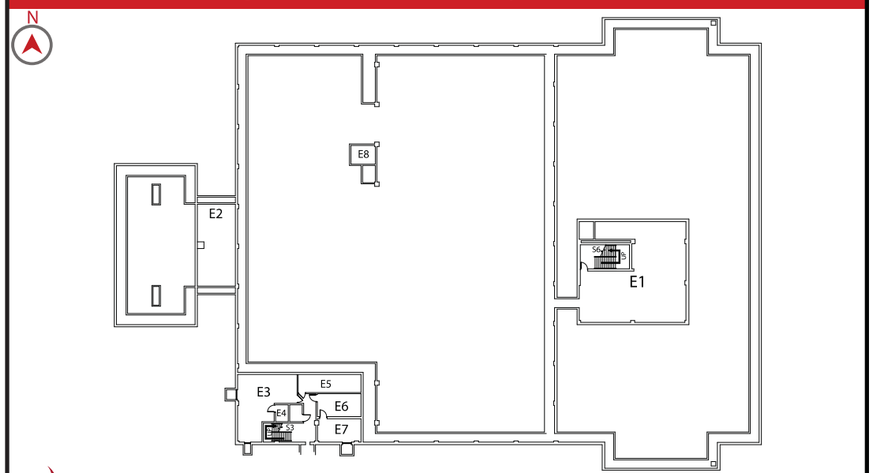
Fourth Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - Fifth Floor



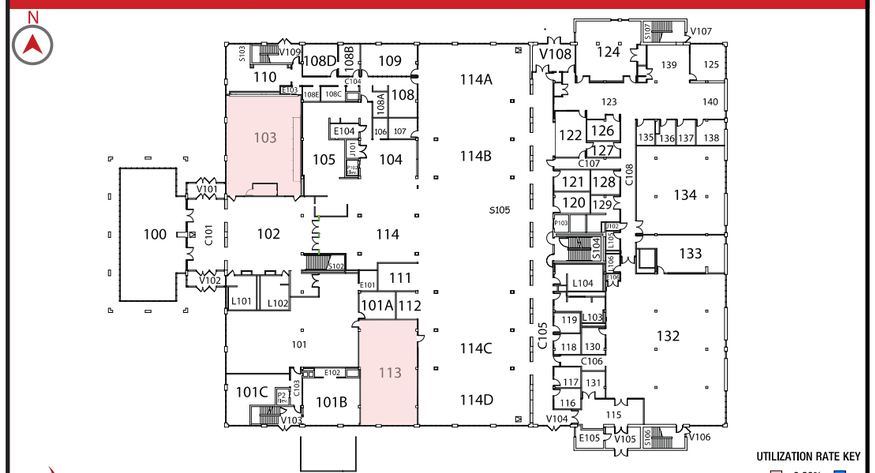
Fifth Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - Basement



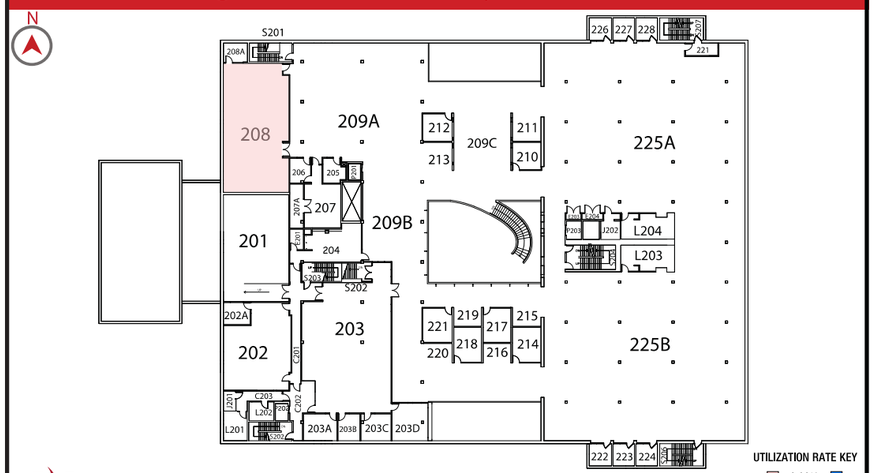
Basement Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - First Floor



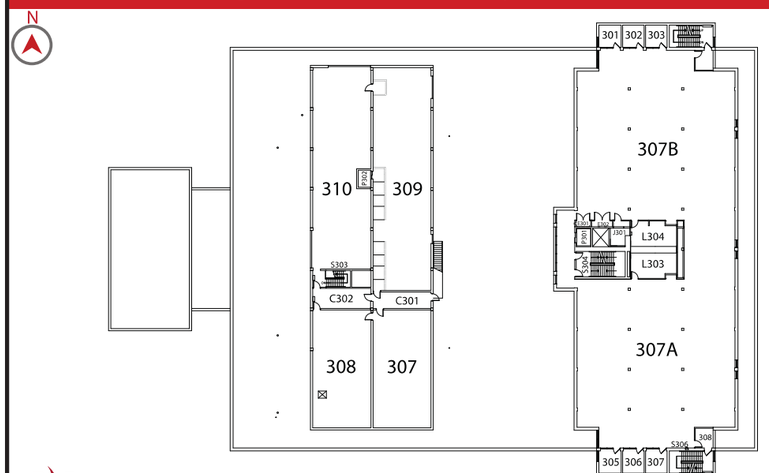
First Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - Second Floor



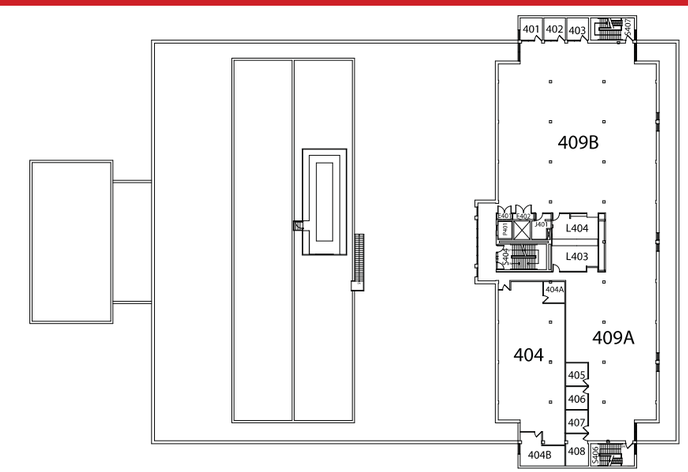
Second Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - Third Floor



Third Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

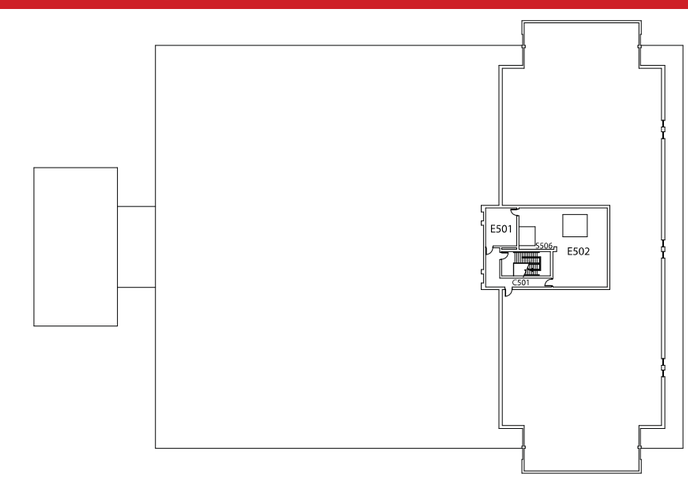
Livingston Lord Library - Fourth Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

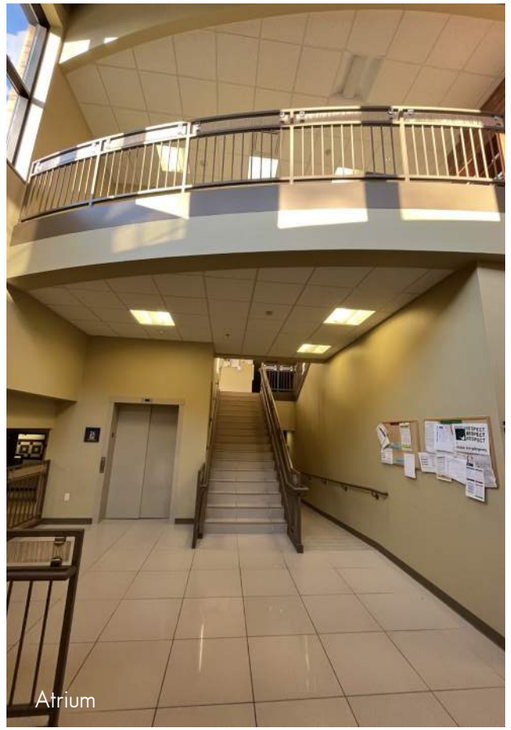
Fourth Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750

Livingston Lord Library - Fifth Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Fifth Floor Livingston Lord Library | 700 13th St. S. | Constructed 1930 | Remodeled 2012 | Gross Sq. Ft. 131,750


Atrium

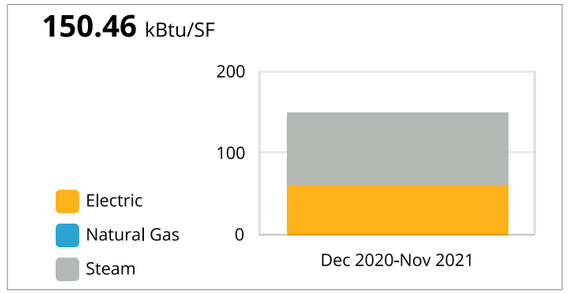

Conference Room

Commons Seating

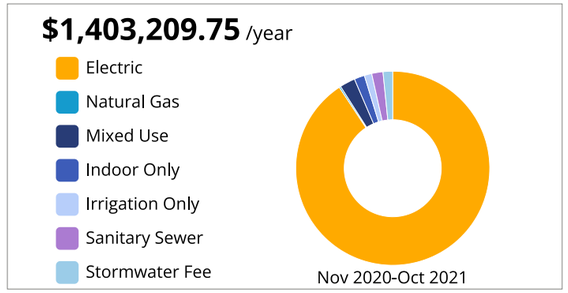
LOMMEN HALL

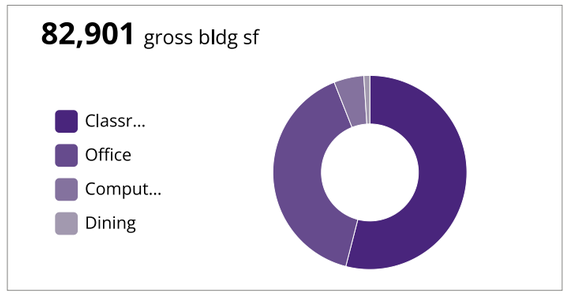
Built in 1932, this facility is used for academic purposes. Lommen Hall went through a major renovation in 2009. It is home to the Dean of Education & Human Services, Early Education Center, School of Teaching & Learning, School of Social Work, Department of Sociology & Criminal Justice, and includes several classrooms. The total usable building area is appox. 82,901 SF.

Area	82,901 gsf
Year(s) Built	1932
Stories	3
FCI/5-year FCI	NA
Replacement Value	$22.5M
Building Repair Backlog	$2.1M
5-Year Renewal Forecast	$1.5M
Roof/Exterior	BUR/Brick



**Energy use figures represent entire Main Campus metering group.*



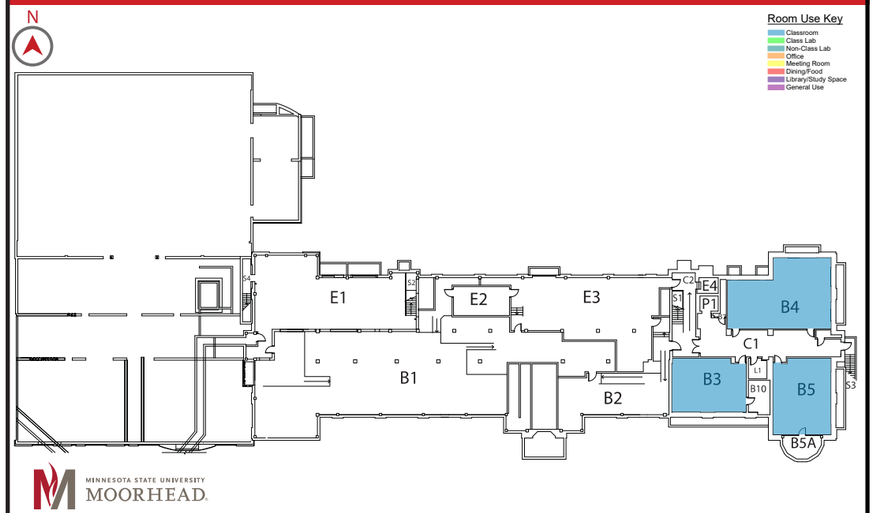


Lommen Hall - First Floor

First Floor Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Updated 06/2017

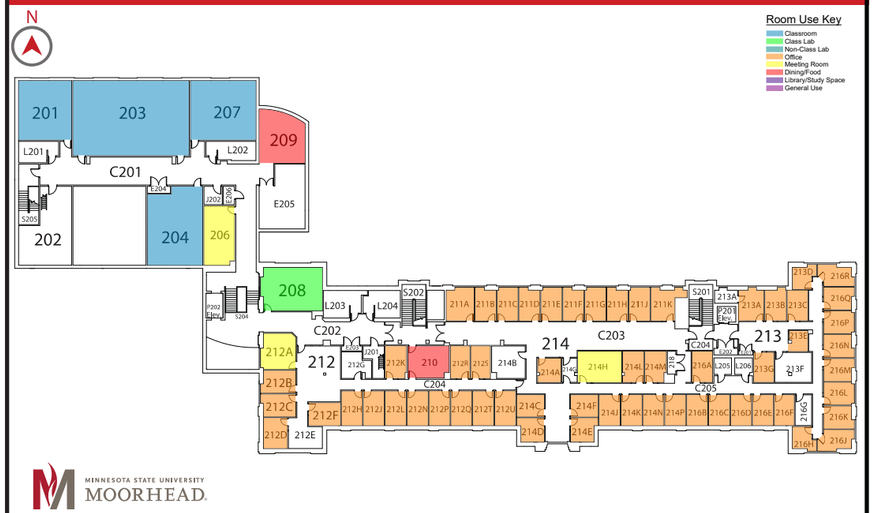
Lommen Hall - Basement



Basement Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Updated 06/2017

Lommen Hall - Second Floor

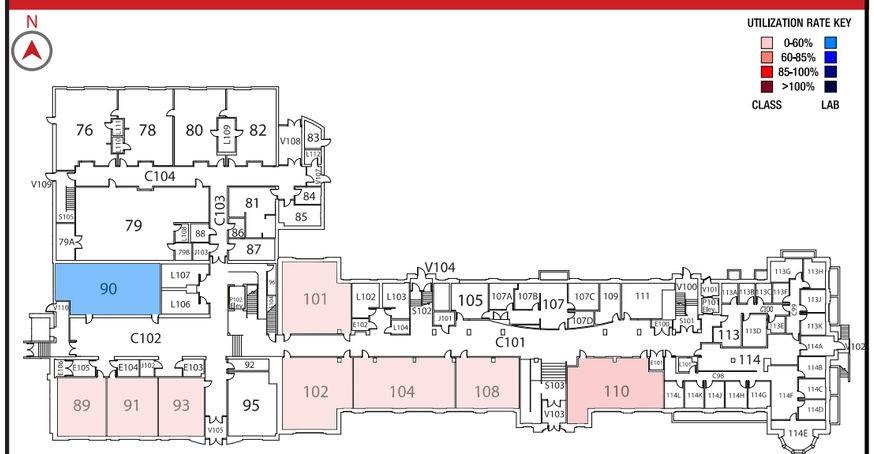


Second Floor Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Updated 06/2017

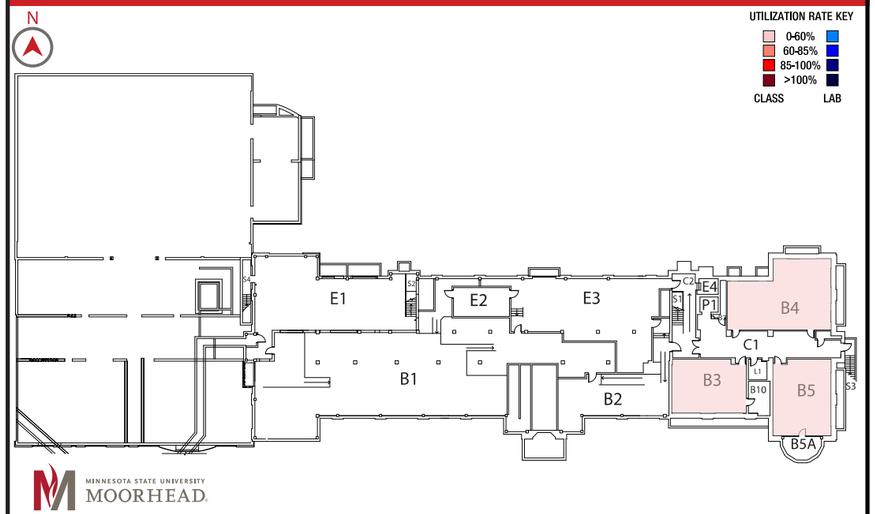
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Lommen Hall - First Floor



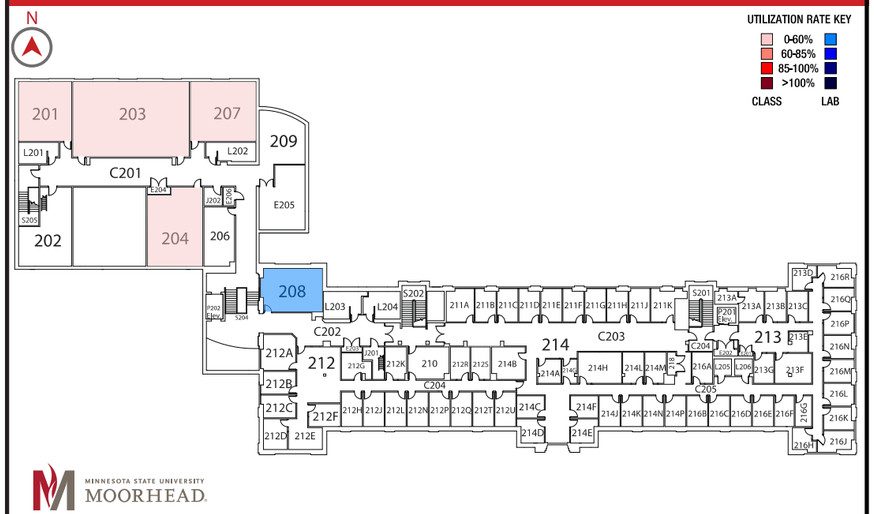
First Floor Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Lommen Hall - Basement



Basement Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Lommen Hall - Second Floor



Second Floor Lommen Hall | 1213 6th Ave. S. | Constructed 1932 | Remodeled 2009 | Gross Sq. Ft. 53,337

Exterior


University Bookstore

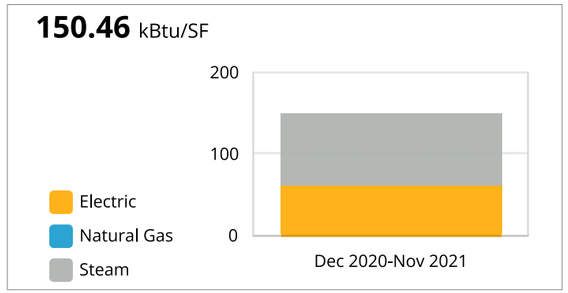
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

MACLEAN HALL

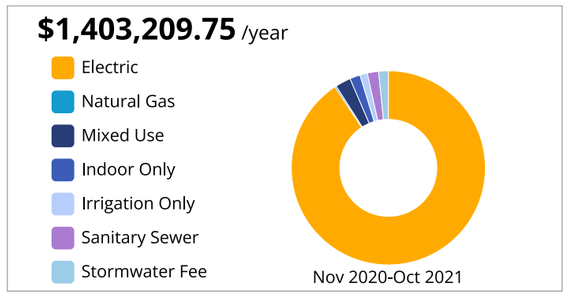
Built in 1932 this facility is used for Academic purposes. MacLean underwent a major renovation in 2007. Departments include Mathematics, the School of Communication & Journalism, Economics, Law & Politics and the Department of History Languages and Humanities. MacLean also houses the University Bookstore and the Post Office.

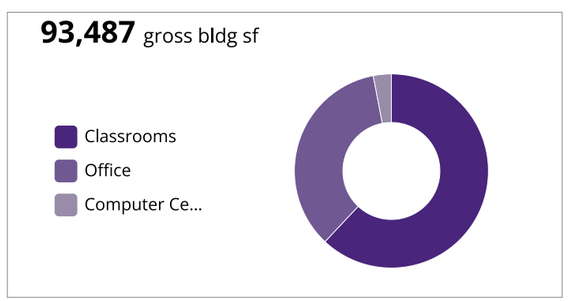
The total usable building area is appox. 93,487.00SF. Connected to Frick and Bridges, houses classrooms (16) and a number of department offices.

Area	93,487 gsf
Year(s) Built	1932
Stories	3
FCI/5-year FCI	0.05/NA
Replacement Value	$39.5M
Building Repair Backlog	$2.1M
5-Year Renewal Forecast	$777,908
Roof/Exterior	BUR/Brick

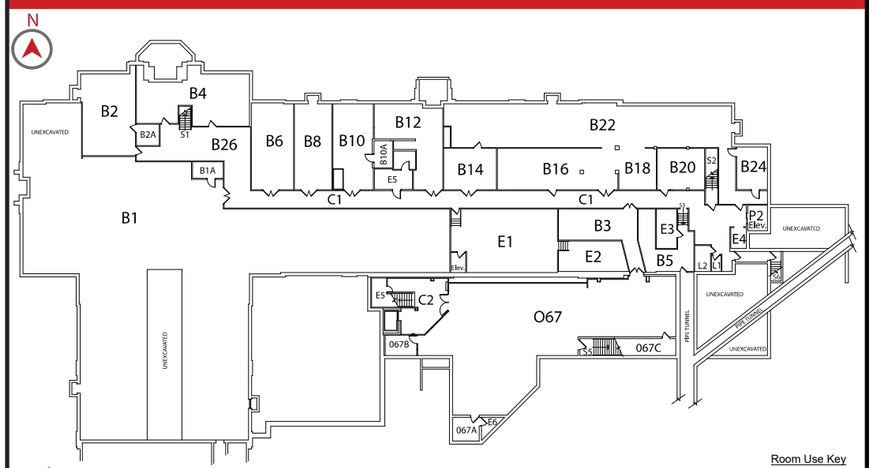


**Energy use figures represent entire Main Campus metering group.*



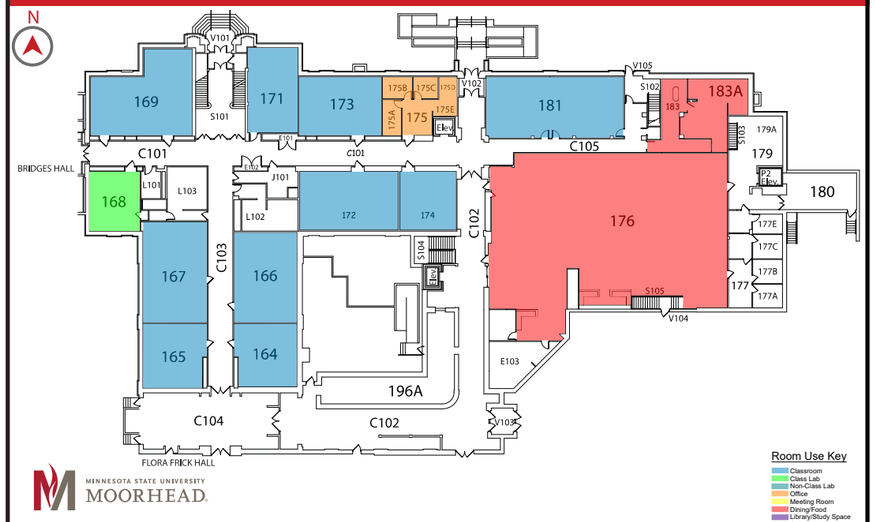


MacLean Hall - Basement



Basement MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - First Floor

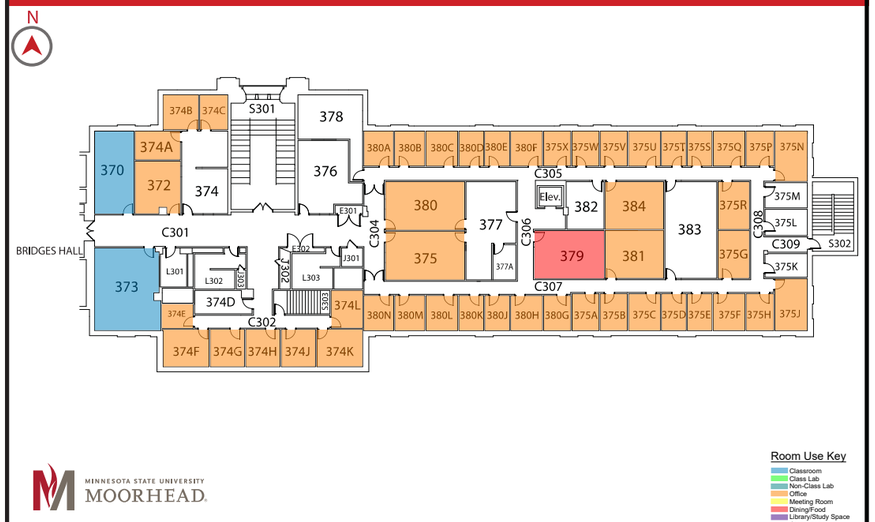


First Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - Second Floor

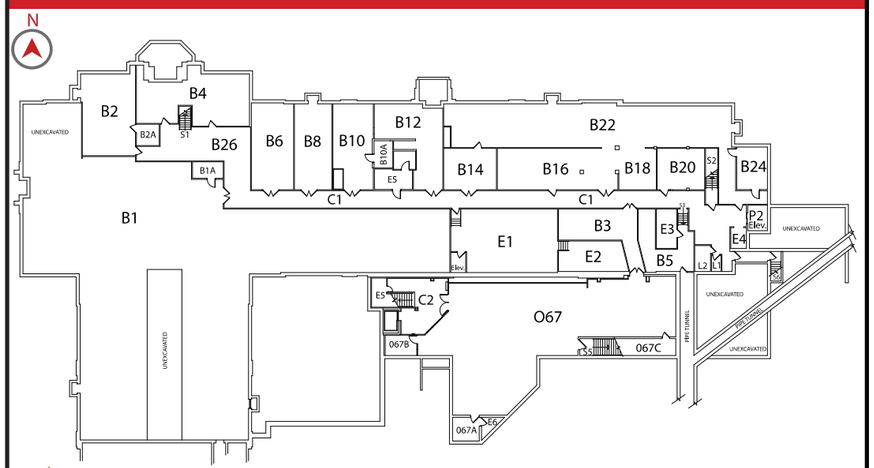
Second Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - Third Floor



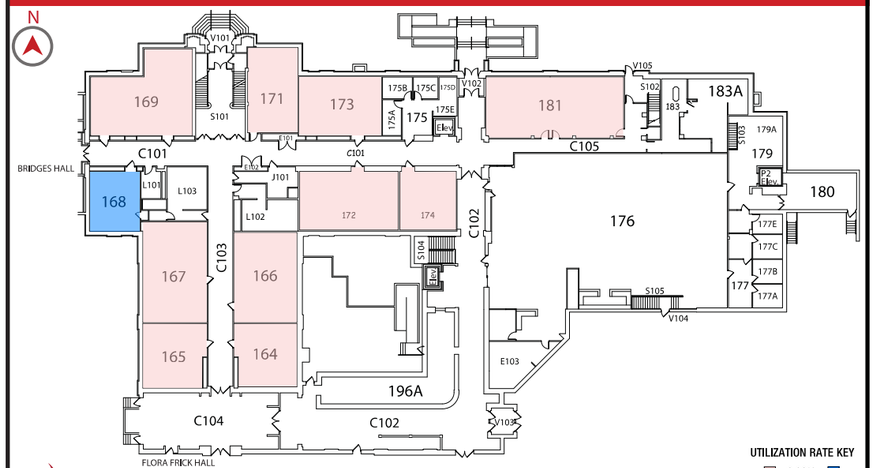
Third Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - Basement



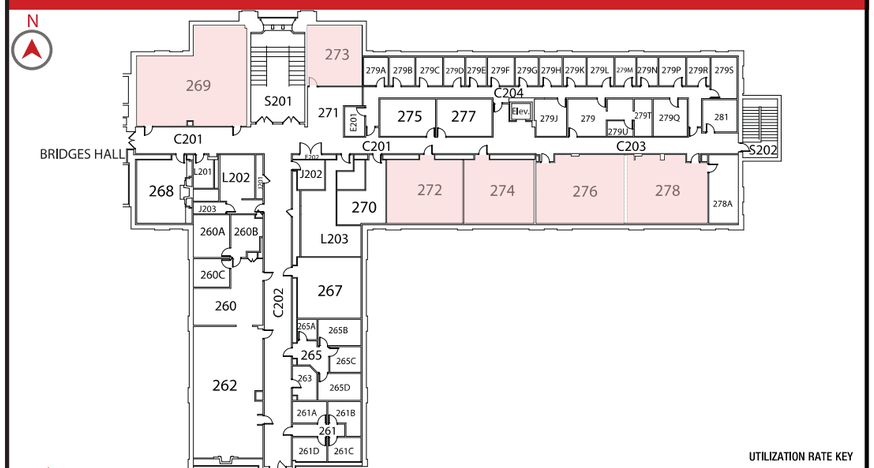
Basement MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - First Floor



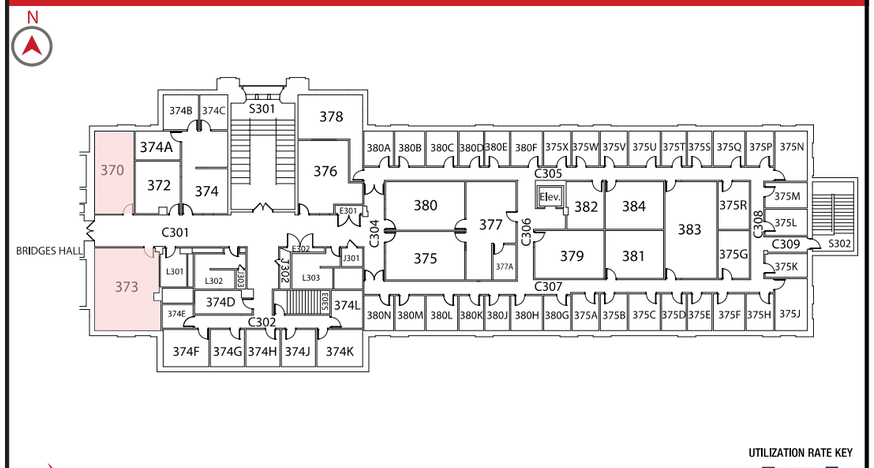
First Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - Second Floor



Second Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MacLean Hall - Third Floor

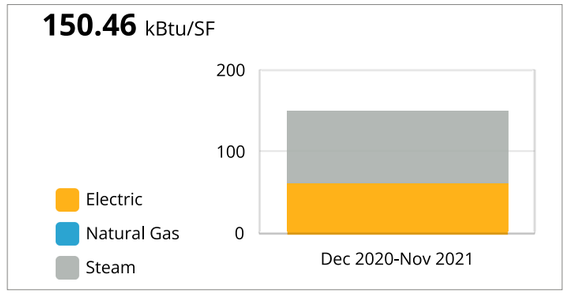


Third Floor MacLean Hall | 1128 8th Ave. S. | Constructed 1932 | Remodeled 2007 | Gross Sq. Ft. 93,407

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

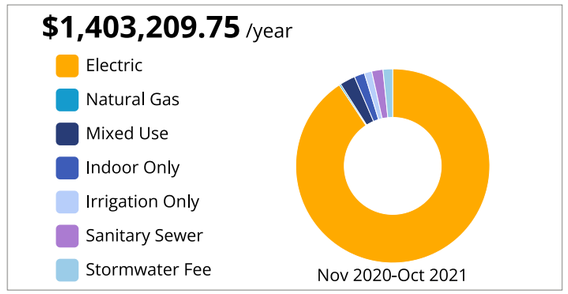
MAINTENANCE BUILDING

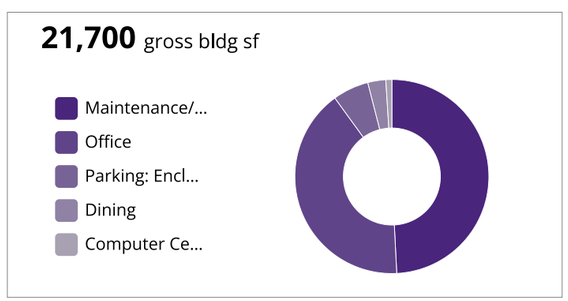
Built in 1966 this facility is used by Facilities Management for their staff offices, shops and vehicle storage. The total usable building area is approx. 21,700 SF.



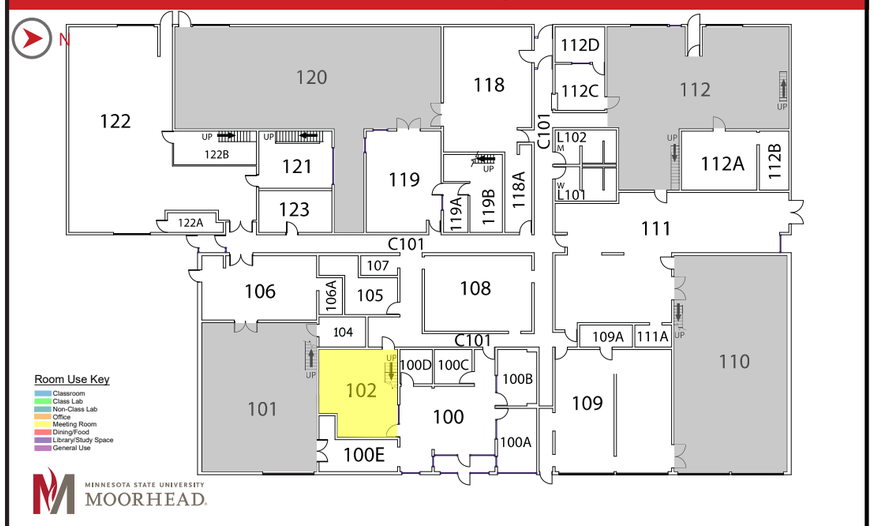
*Energy use figures represent entire Main Campus metering group.

Area	21,700 gsf
Year(s) Built	1966
Stories	1
FCI/5-year FCI	0.5/NA
Replacement Value	$9.2M
Building Repair Backlog	$4.8M
5-Year Renewal Forecast	$104,025
Roof/Exterior	BUR/Brick





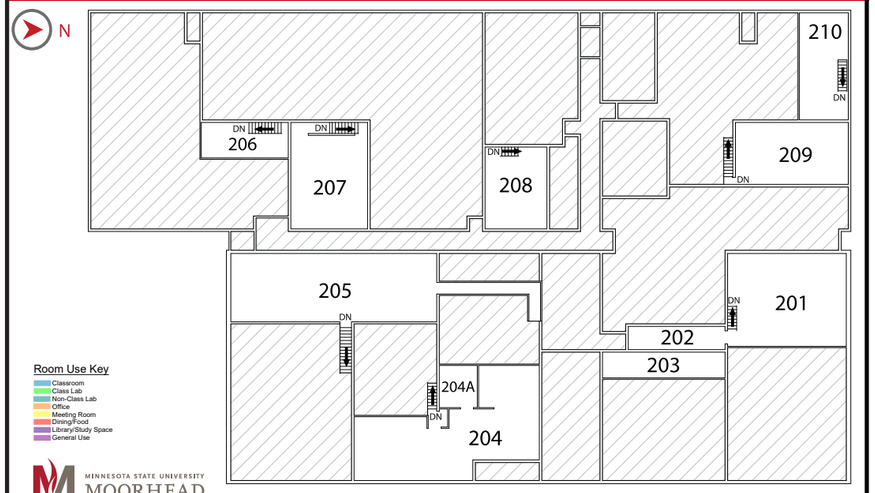
Maintenance Building - First Floor



First Floor Maintenance Building | 107 17th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 21,700

Updated 06/2017

Maintenance Building - Second Floor

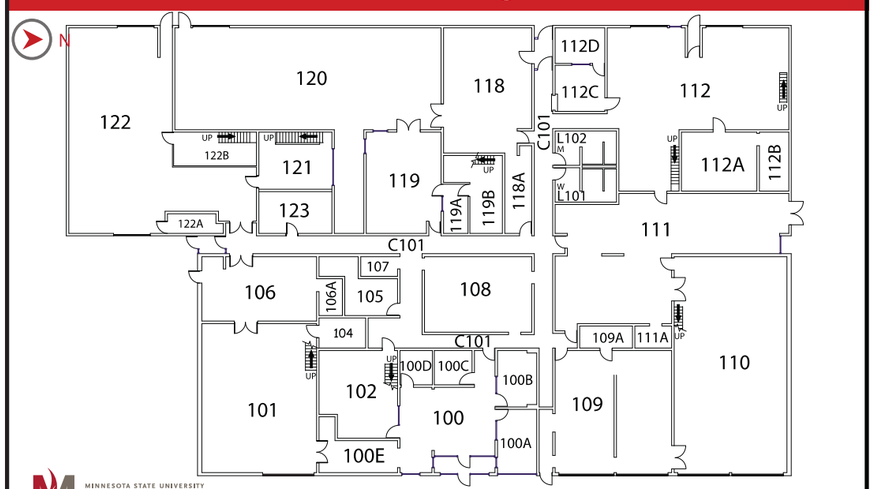


Second Floor Maintenance Building | 107 17th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 21,700

Updated 06/2017

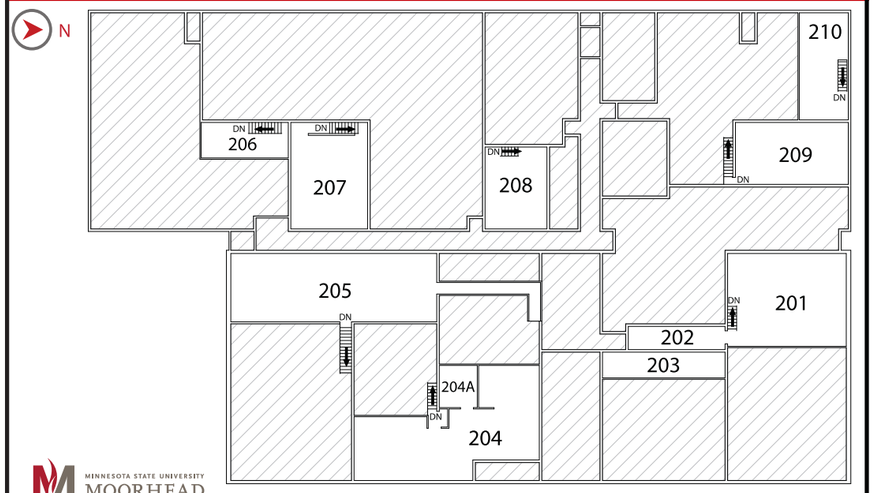
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Maintenance Building - First Floor



First Floor Maintenance Building | 107 17th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 21,700

Maintenance Building - Second Floor



Second Floor Maintenance Building | 107 17th St. S. | Constructed 1966 | Remodeled 1978 | Gross Sq. Ft. 21,700

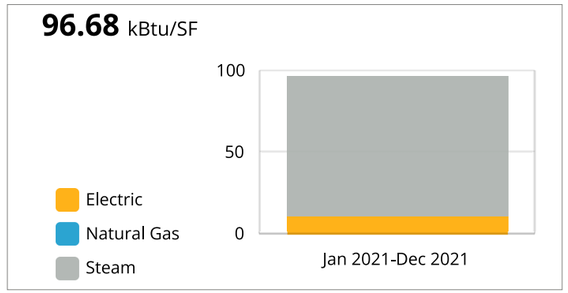

Study Area

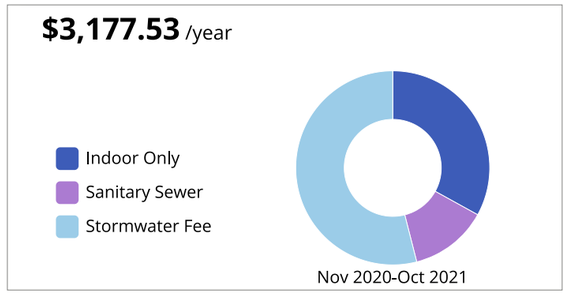

Classroom

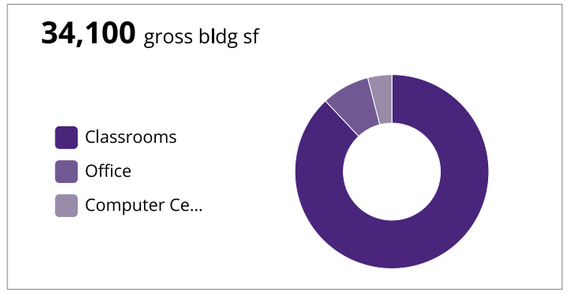
MURRAY HALL

Academic Building, housing Building Services on the lower level; Speech Language Hearing Sciences Department and Clinic, Regional Assistive Technology (RATC) Offices, classrooms and labs on the main floor, and student study areas.

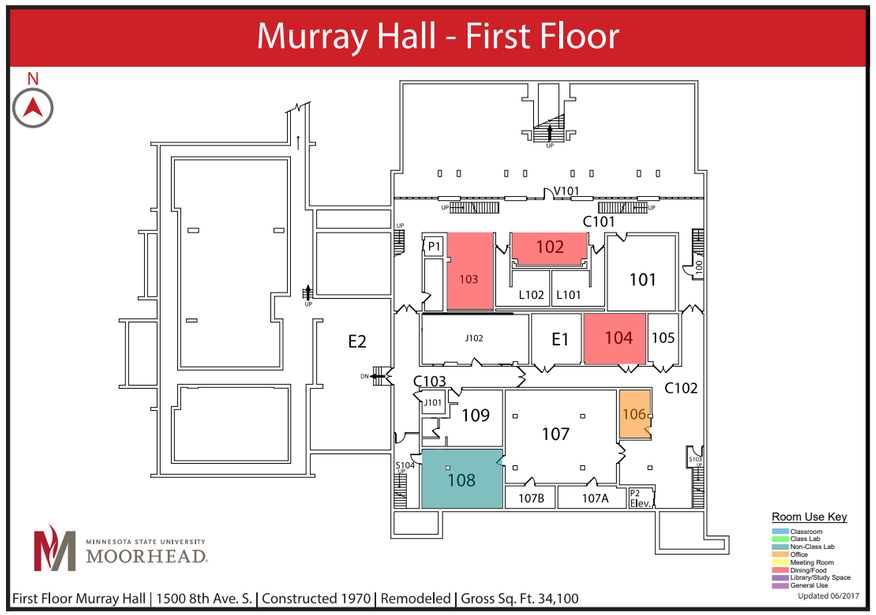
Area	34,100 gsf
Year(s) Built	1970
Stories	2
FCI/5-year FCI	0.6/NA
Replacement Value	$14.4M
Building Repair Backlog	$9.2M
5-Year Renewal Forecast	$962,030
Roof/Exterior	BUR/Brick

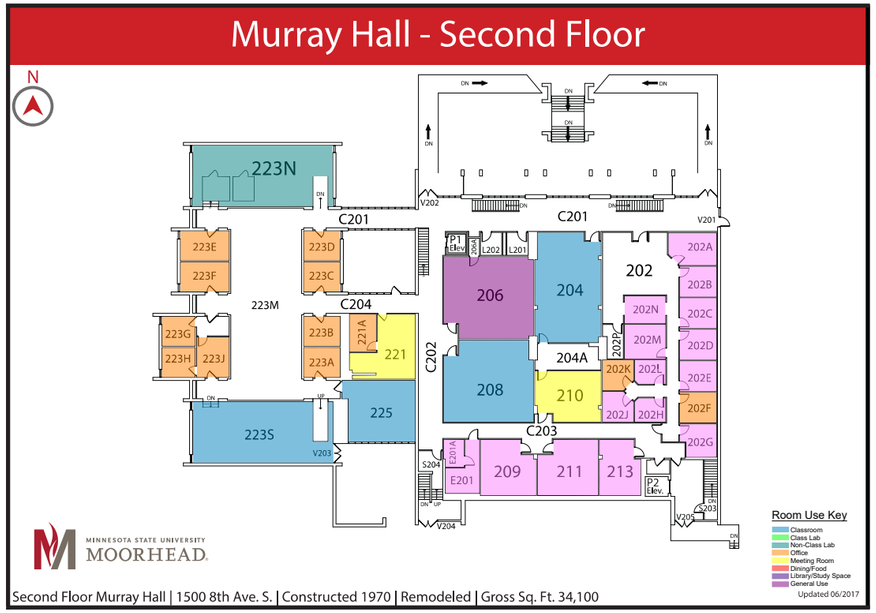






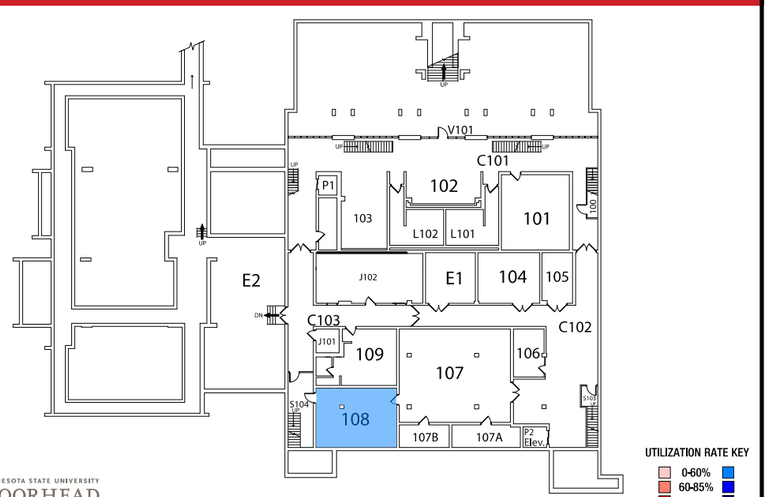
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS





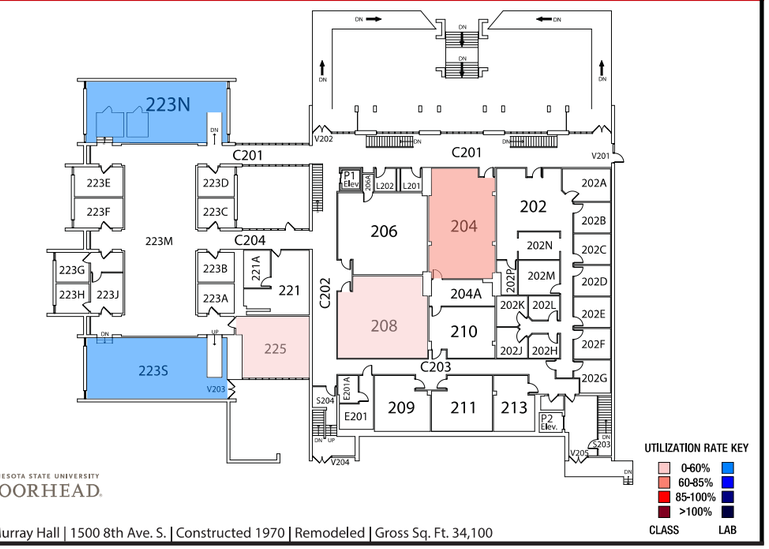
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Murray Hall - First Floor

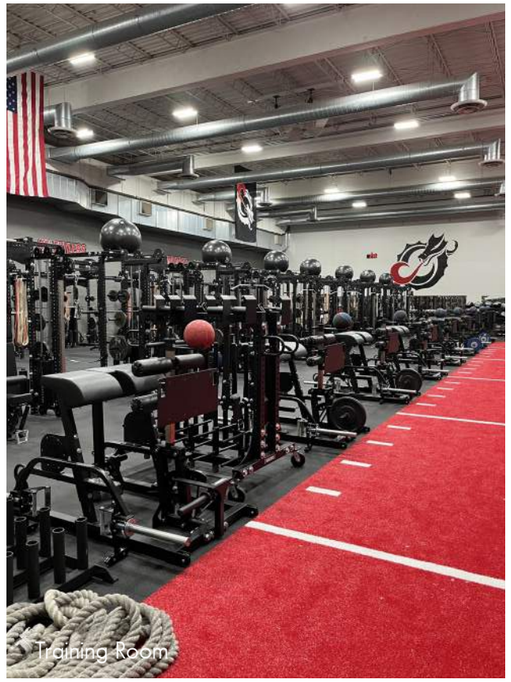


First Floor Murray Hall | 1500 8th Ave. S. | Constructed 1970 | Remodeled | Gross Sq. Ft. 34,100

Murray Hall - Second Floor

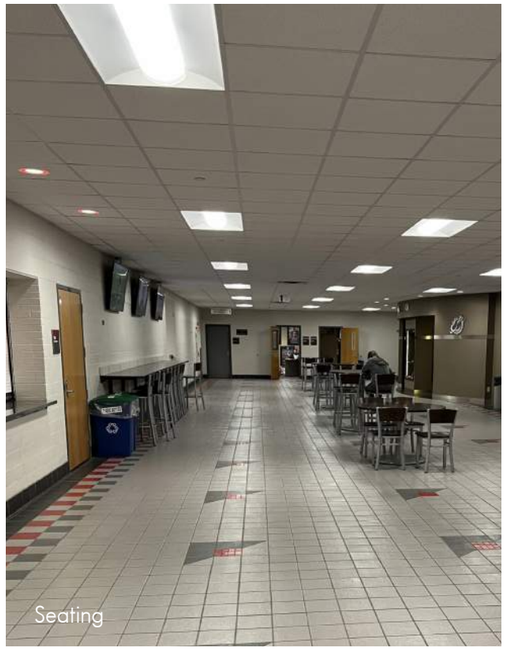


Second Floor Murray Hall | 1500 8th Ave. S. | Constructed 1970 | Remodeled | Gross Sq. Ft. 34,100


Training Room

Entrance


Classroom


Seating

NEMZEK HALL

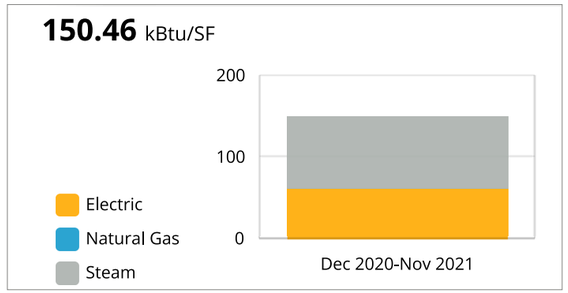
Built in 1959 with major additions in 1970 and 1971, this facility is used for used for Dragon Athletics and the Health & Human Performance department. The total usable building area is appox. 154,686.00SF.

Field house

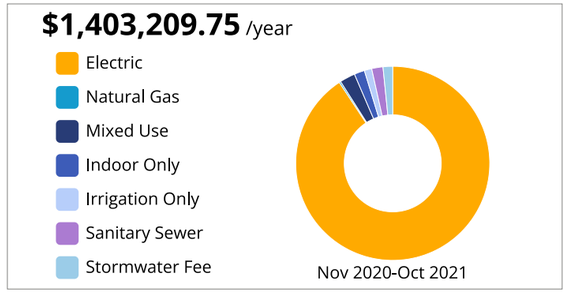
Area	154,686 gsf
Year(s) Built	1959
Stories	1
FCI/5-year FCI	03/NA
Replacement Value	$65.3M
Building Repair Backlog	$20.3M
5-Year Renewal Forecast	$666,105
Roof/Exterior	BUR/Brick

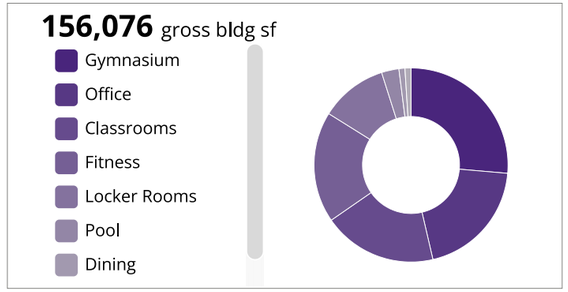
Press box

Area	1,390 gsf
Year(s) Built	1959
Stories	1
FCI/5-year FCI	2.7/ NA
Replacement Value	$586,830
Building Repair Backlog	$1.6M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick

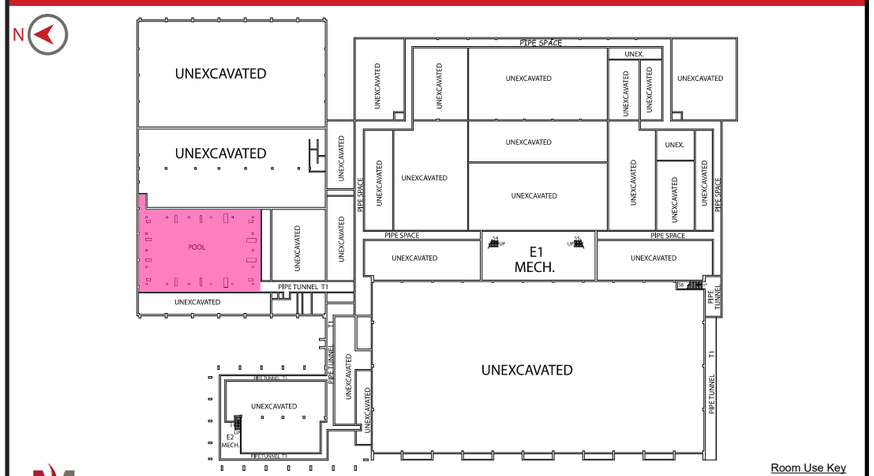


*Energy use figures represent entire Main Campus metering group.





Nemzek Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

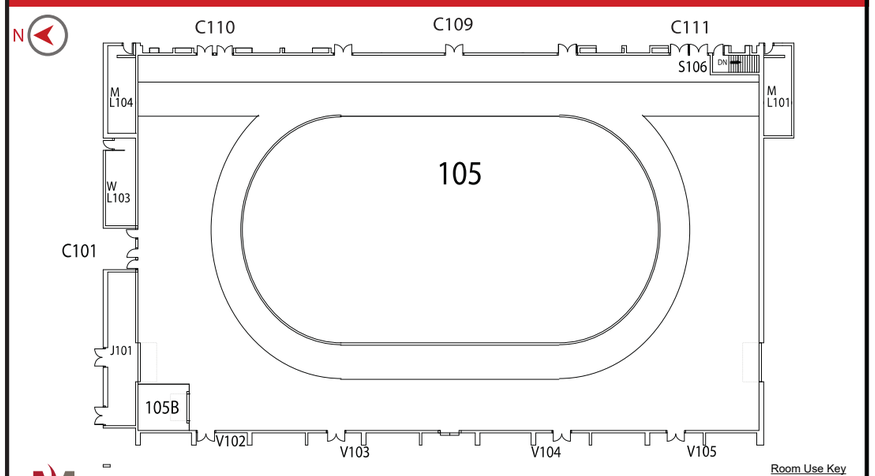
Basement Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

Nemzek Hall - First Floor

MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

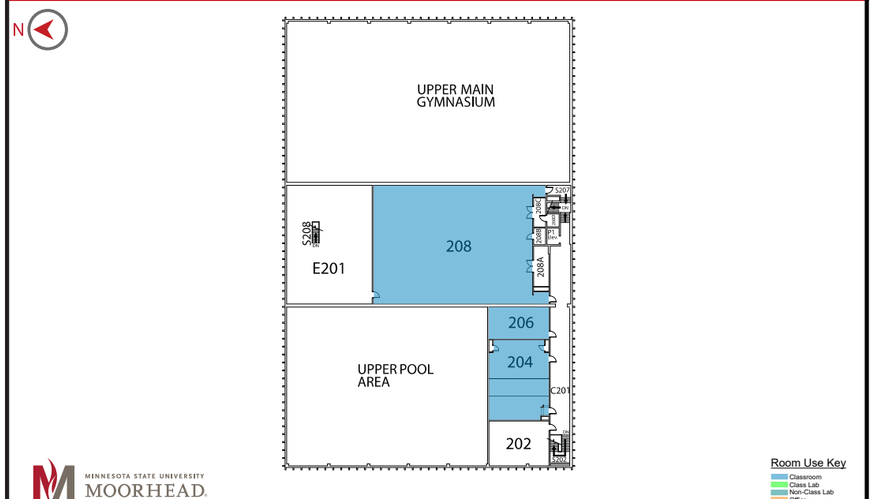
Nemzek Hall - Fieldhouse



MINNESOTA STATE UNIVERSITY MOORHEAD

Fieldhouse Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

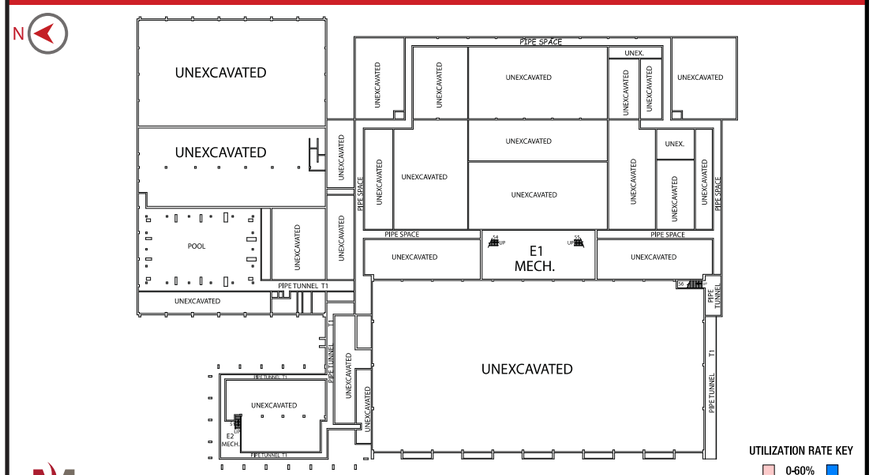
Nemzek Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

Nemzek Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

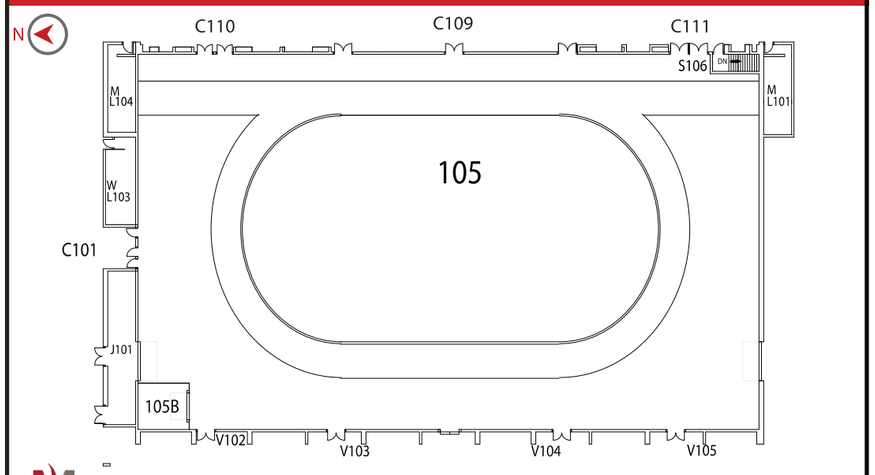
Basement Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

Nemzek Hall - First Floor

MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

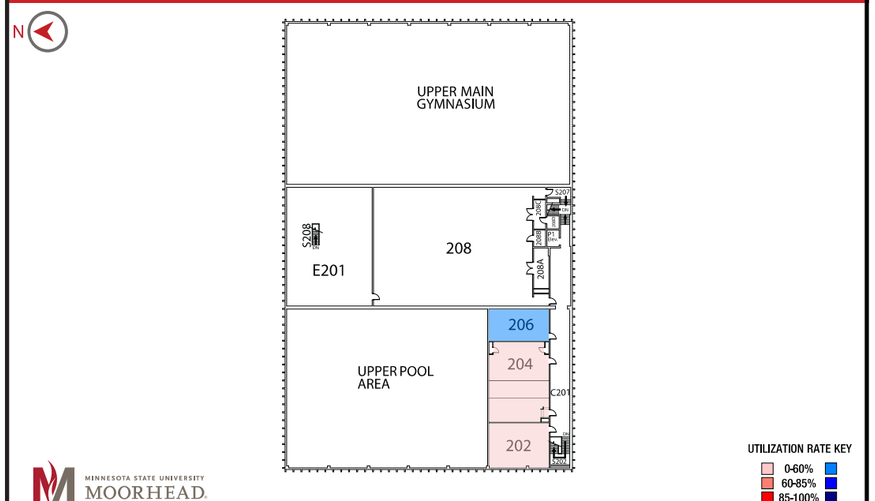
Nemzek Hall - Fieldhouse



MINNESOTA STATE UNIVERSITY MOORHEAD

Fieldhouse Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

Nemzek Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Nemzek Hall | 1711 6th Ave. S. | Constructed 1959 | Remodeled 1987 | Gross Sq. Ft. 157,686

Lounge

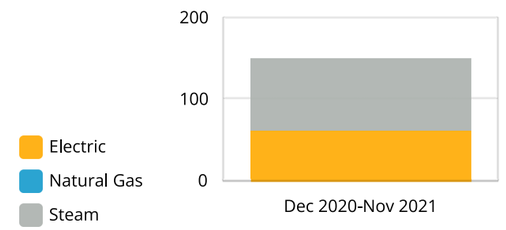
Atrium

OWENS HALL

Administrative Building, houses the majority of the major administrative departments and offices such as: Admissions, Business Services, Financial Aid and Scholarships and Registrar's Office. Owens also houses the office of Human Resources and the President's Office.

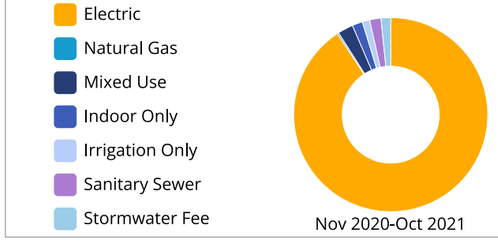
Area	30,810 gsf
Year(s) Built	1966
Stories	2
FCI/5-year FCI	0.3/ NA
Replacement Value	$33.1M
Building Repair Backlog	$9.8M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick

150.46 kBtu/SF



**Energy use figures represent entire Main Campus metering group.*

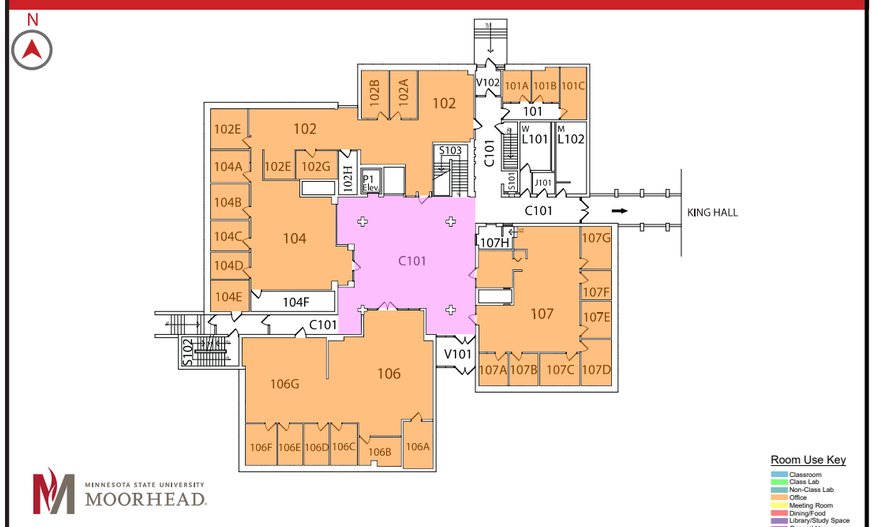
$1,403,209.75 /year



30,810 gross bldg sf

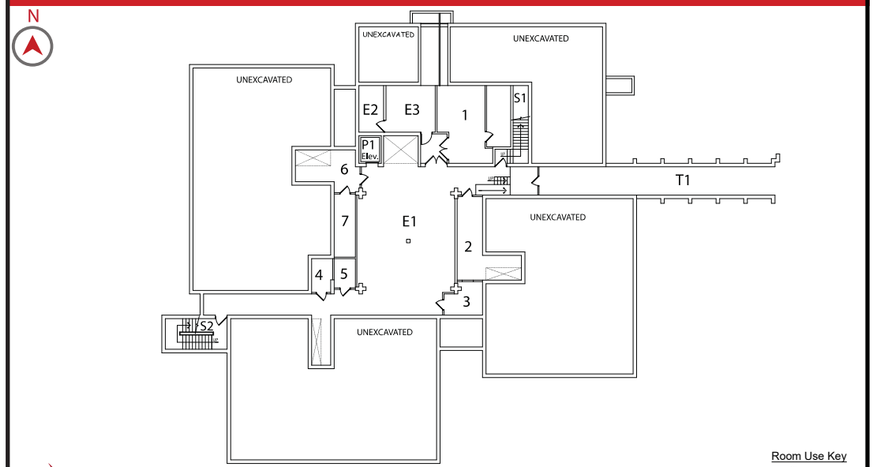
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Owens Hall - First Floor



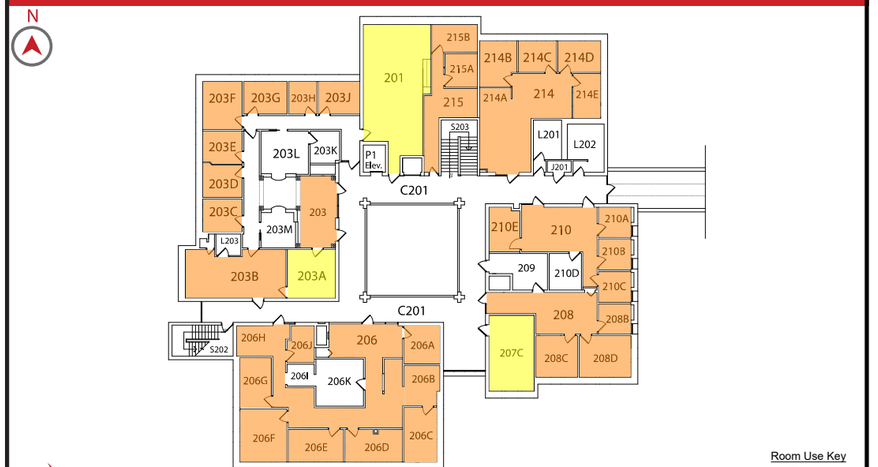
First Floor Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

Owens Hall - Basement



Basement Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

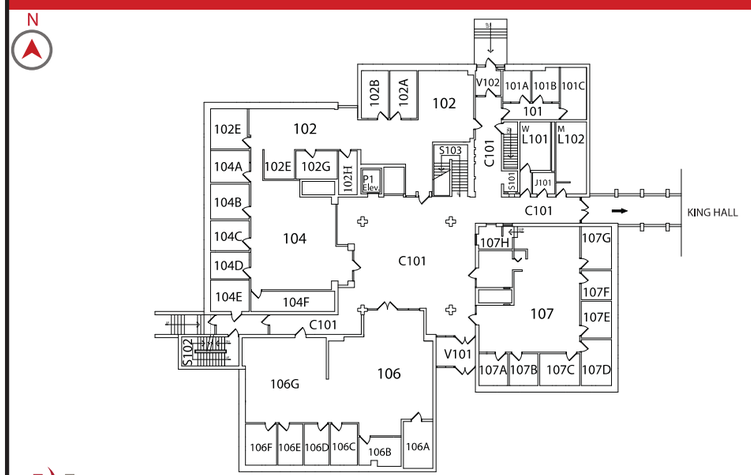
Owens Hall - Second Floor



Second Floor Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

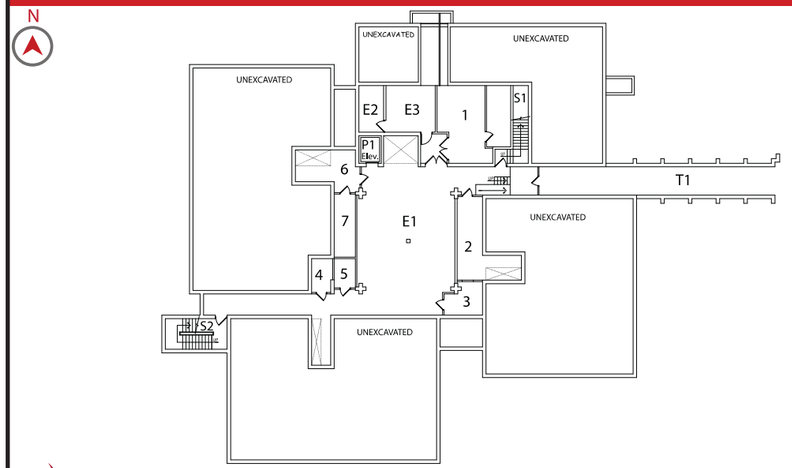
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

Owens Hall - First Floor



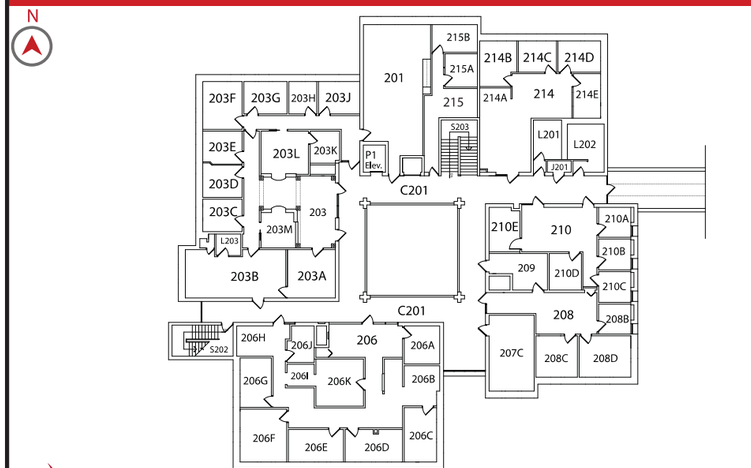
First Floor Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

Owens Hall - Basement



Basement Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

Owens Hall - Second Floor



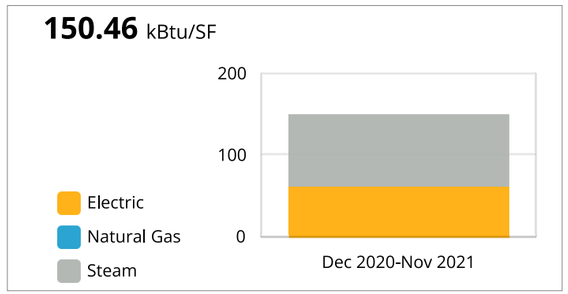
Second Floor Owens Hall | 812 11th St. S. | Constructed 1969 | Remodeled 2003 | Gross Sq. Ft. 30,810

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

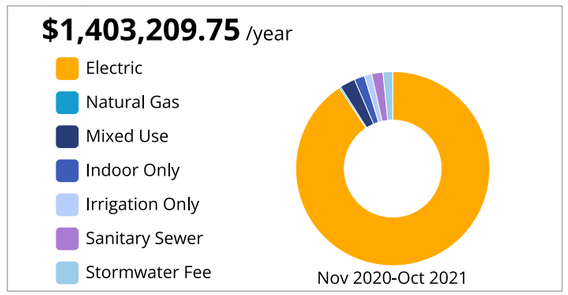
PUBLIC SAFETY BUILDING

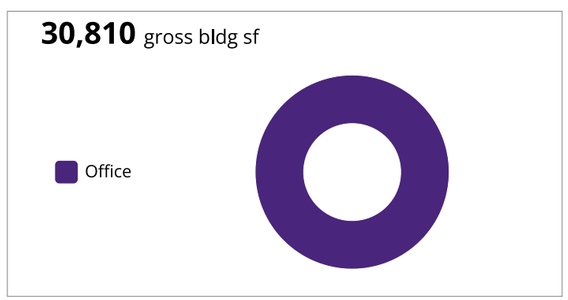
Houses campus security patrol, dispatch, parking, key & card access. Moorhead Police Department has office space in the basement.

Area	3,200 gsf
Year(s) Built	2002
Stories	1
FCI/5-year FCI	0.14/ NA
Replacement Value	$1.4M
Building Repair Backlog	$194,526
5-Year Renewal Forecast	$29,146
Roof/Exterior	BUR/Brick

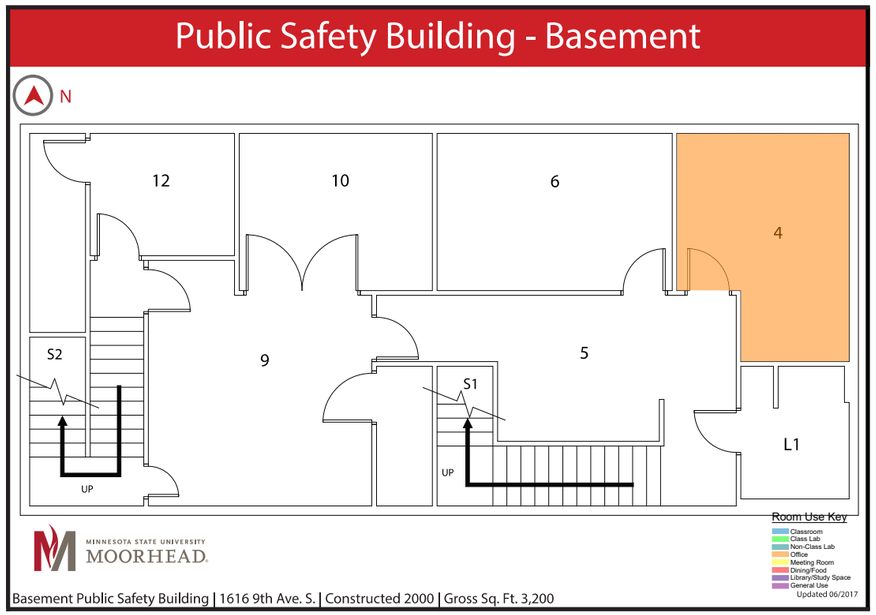


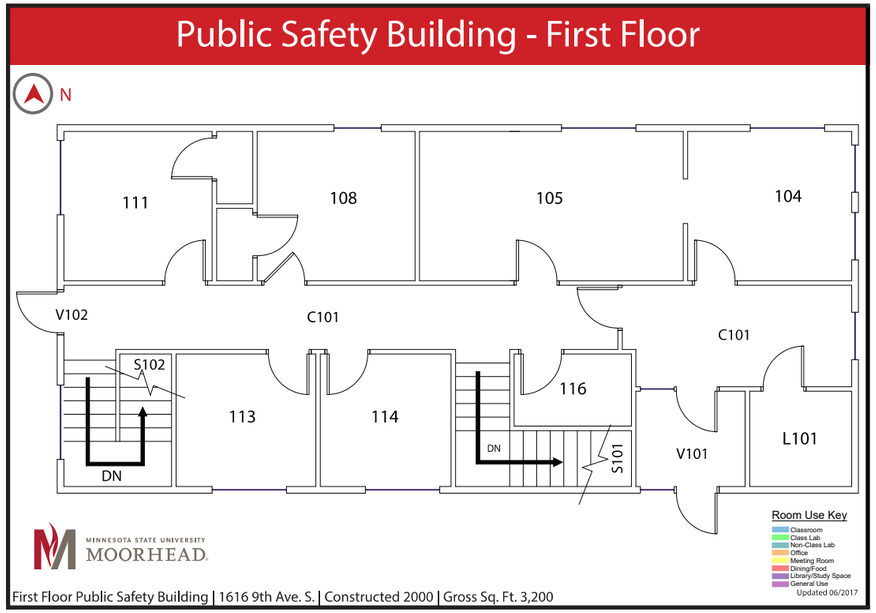
**Energy use figures represent entire Main Campus metering group.*





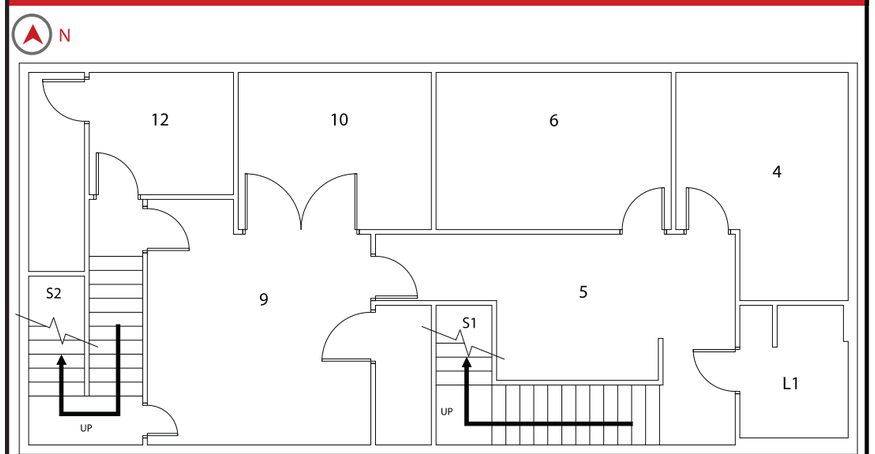
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS





MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

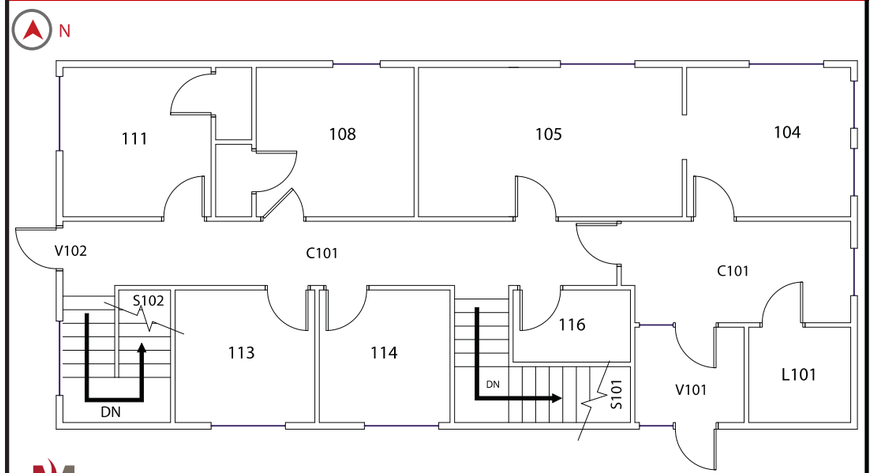
Public Safety Building - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Public Safety Building | 1616 9th Ave. S. | Constructed 2000 | Gross Sq. Ft. 3,200

Public Safety Building - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Public Safety Building | 1616 9th Ave. S. | Constructed 2000 | Gross Sq. Ft. 3,200


Auditorium

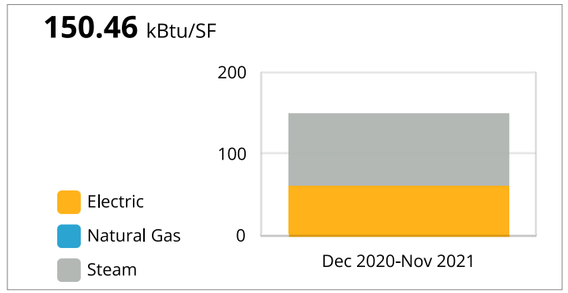
Exterior

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

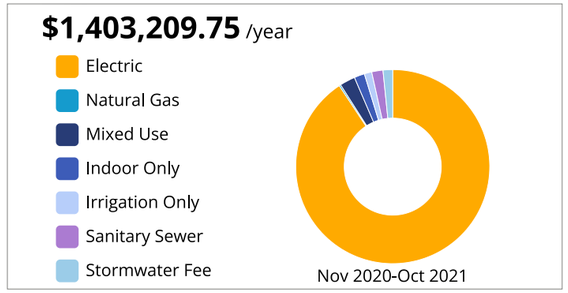
WELD HALL

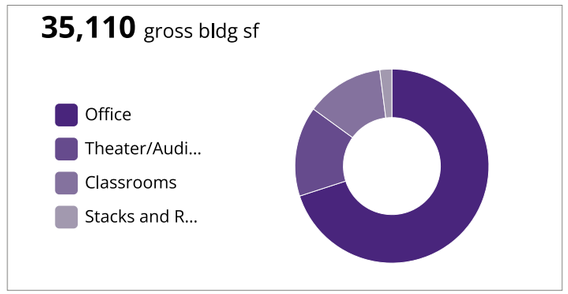
An academic building built in 1914 and remodeled in 1968, Weld is the oldest building on campus. Primarily English department offices and classrooms, it also has a beautiful Auditorium.

Area	35,110 gsf
Year(s) Built	1914
Stories	3
FCI/5-year FCI	0.6/ NA
Replacement Value	$14.8M
Building Repair Backlog	$9.4M
5-Year Renewal Forecast	$993,822
Roof/Exterior	BUR/Brick

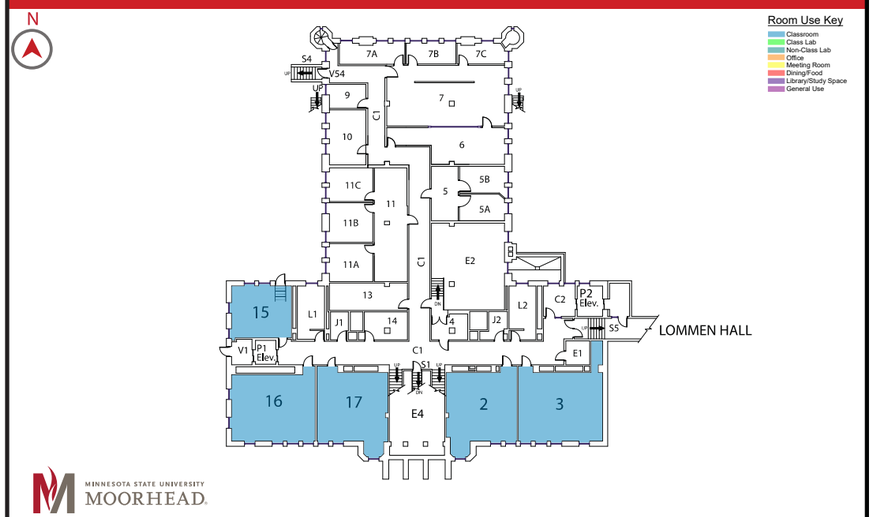


**Energy use figures represent entire Main Campus metering group.*





Weld Hall - Basement

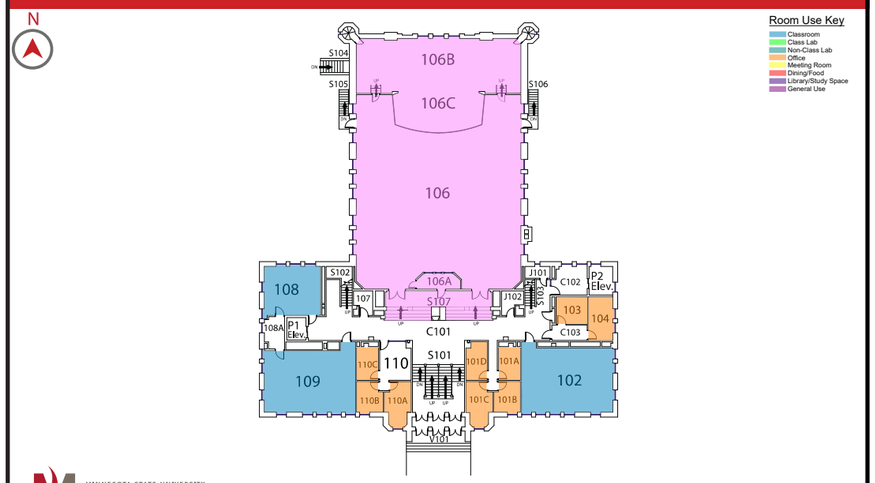


MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Updated 06/2017

Weld Hall - First Floor

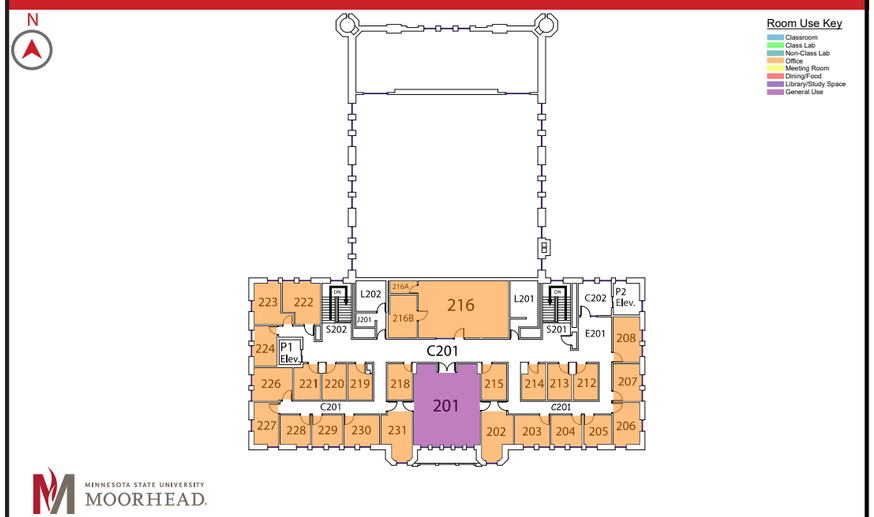


MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Updated 06/2017

Weld Hall - Second Floor

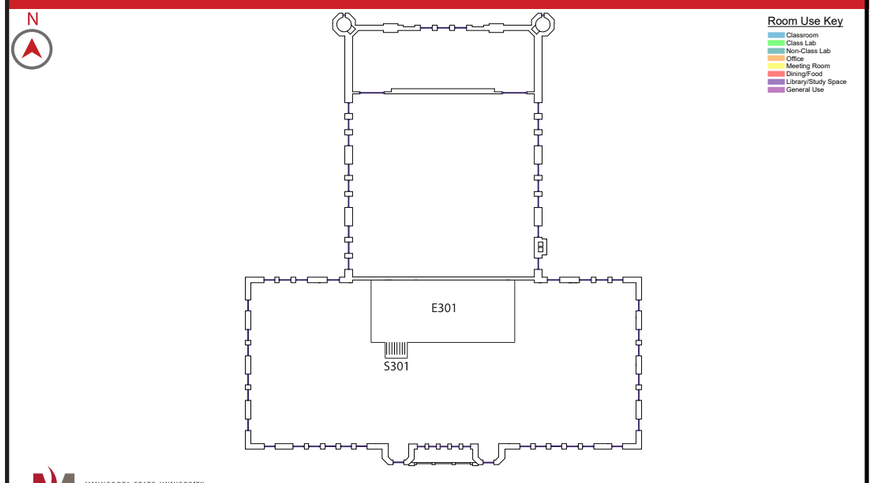


MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Updated 06/2017

Weld Hall - Third Floor

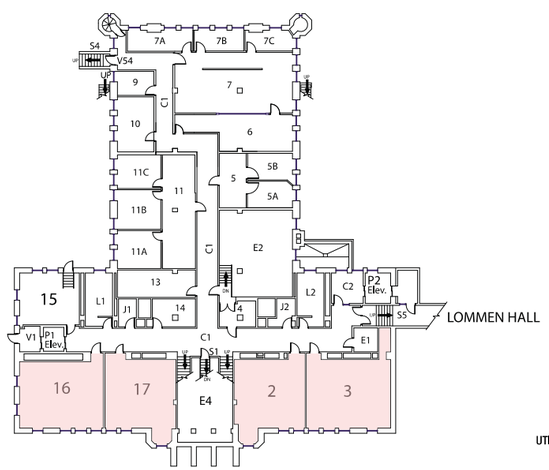


MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Updated 06/2017

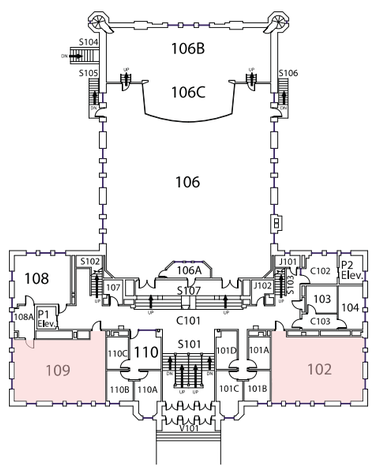
Weld Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

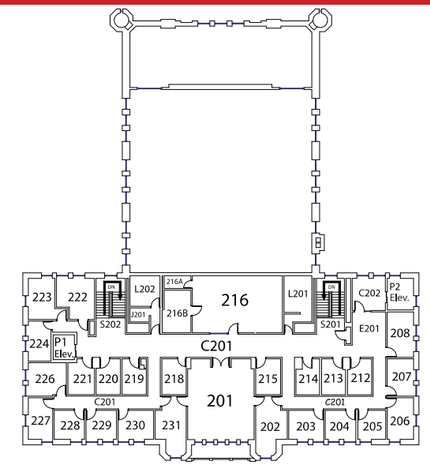
Weld Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

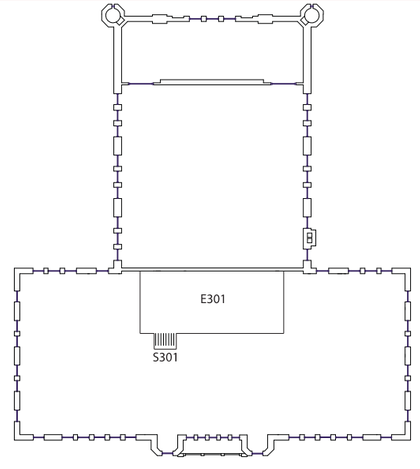
Weld Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Weld Hall - Third Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Weld Hall | 1201 6th Ave. S. | Constructed 1916 | Remodeled 1969 | Gross Sq. Ft. 35,110

Exterior

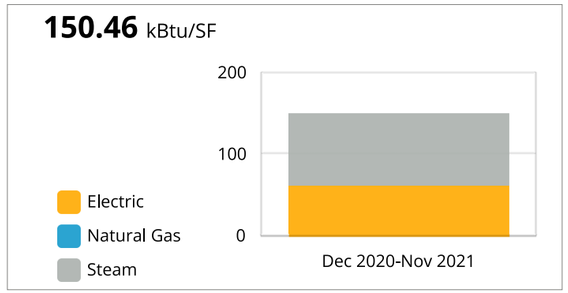

Corridor


E-Sports Room

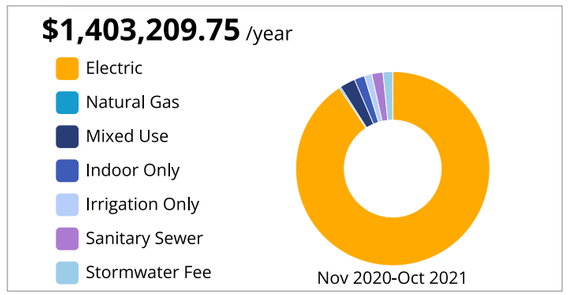
GERDIN WELLNESS CENTER

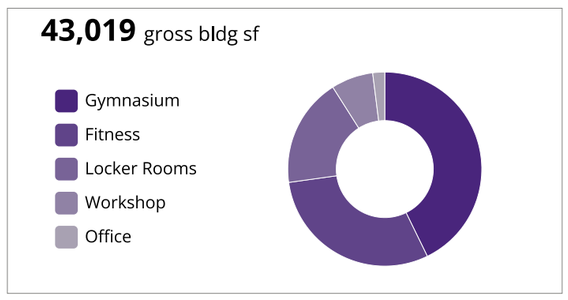
Student Services, the newest building on campus. Contains personal fitness facilities for students, faculty and community members including: gym, fitness equipment, locker rooms and study/lounge areas.

Area	43,019 gsf
Year(s) Built	2008
Stories	2
FCI/5-year FCI	NA
Replacement Value	$18.2M
Building Repair Backlog	$1.1M
5-Year Renewal Forecast	$1M
Roof/Exterior	BUR/Brick

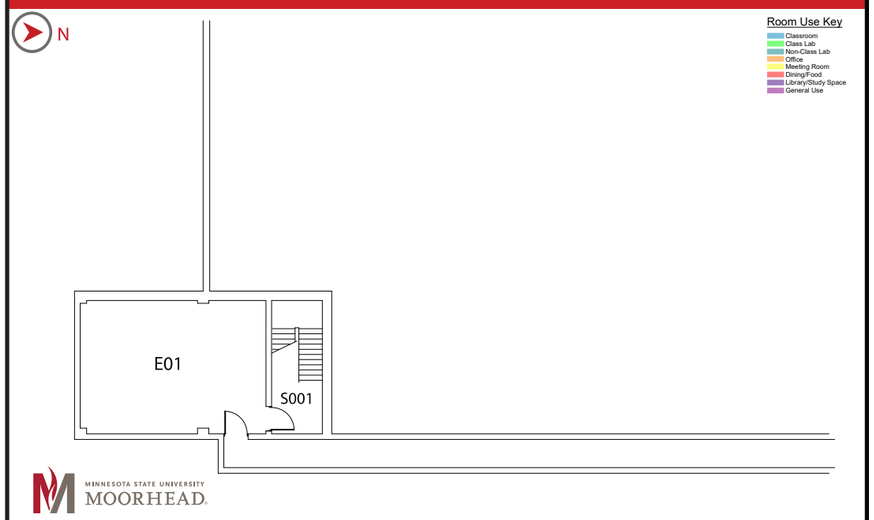


*Energy use figures represent entire Main Campus metering group.





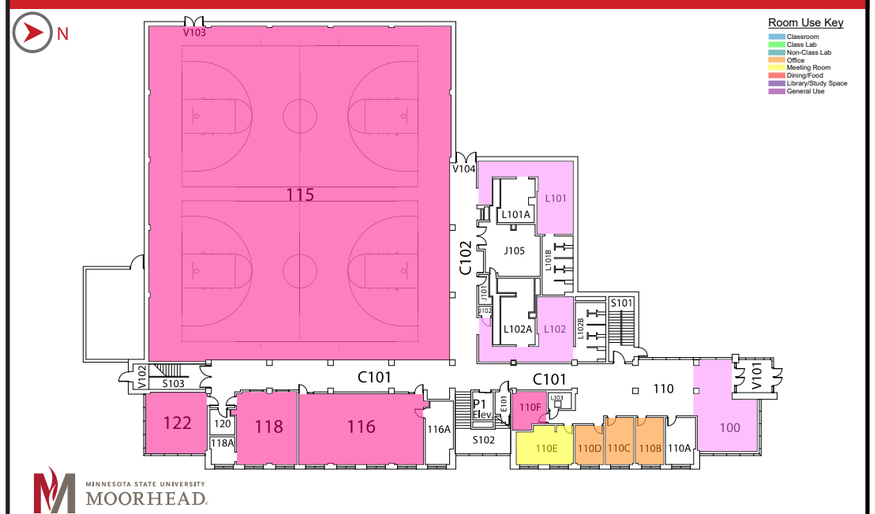
Wellness Center - Basement



Basement Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Updated 06/2017

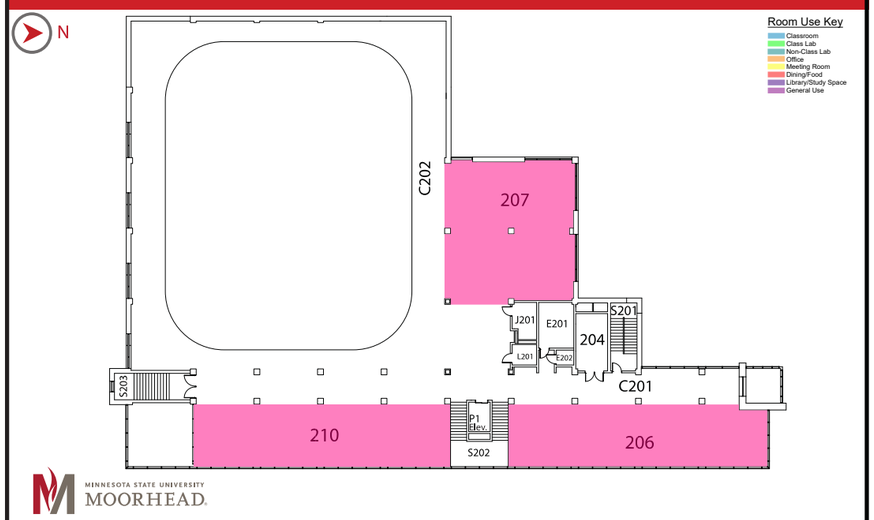
Wellness Center - First Floor



First Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Updated 06/2017

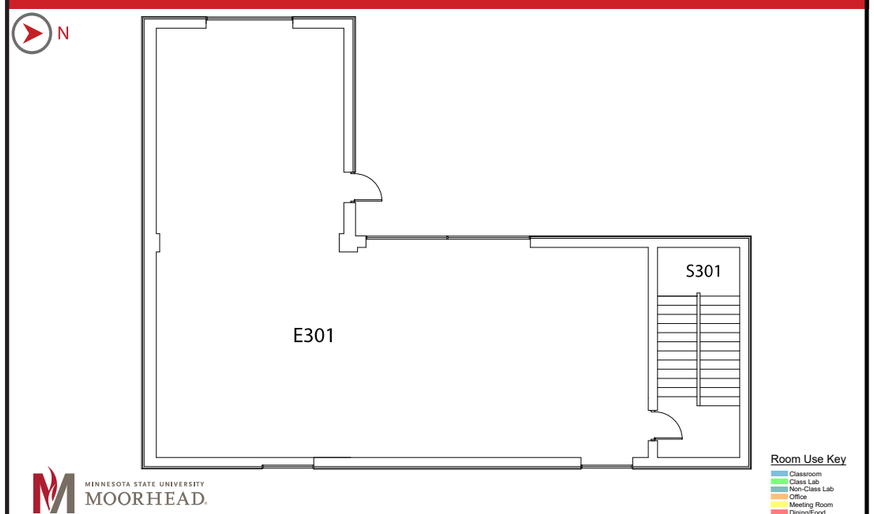
Wellness Center - Second Floor



Second Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

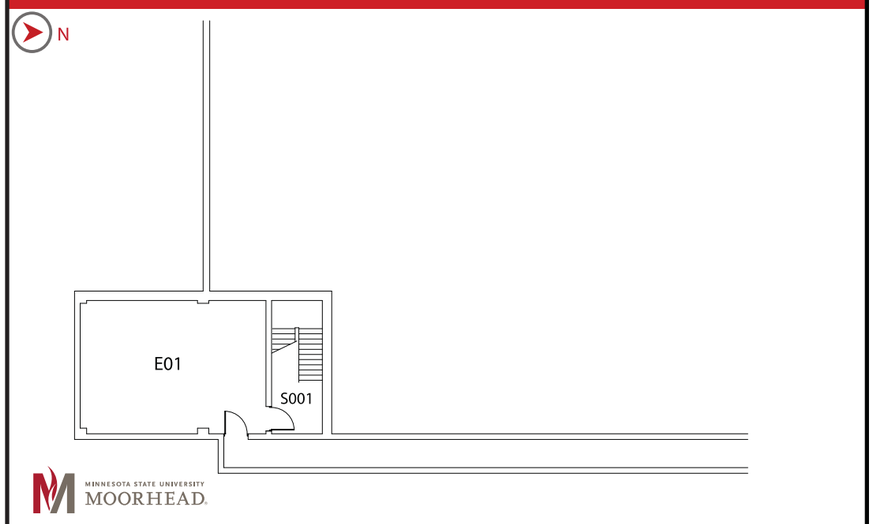
Updated 06/2017

Wellness Center - Third Floor



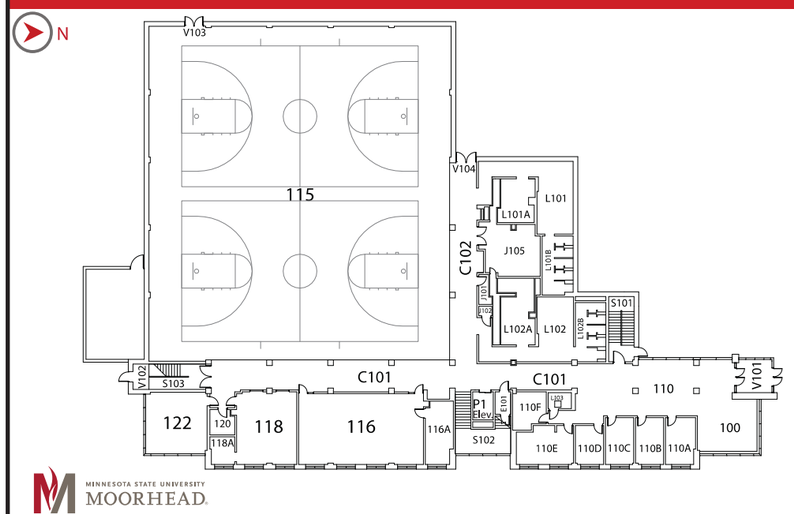
Third Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Wellness Center - Basement



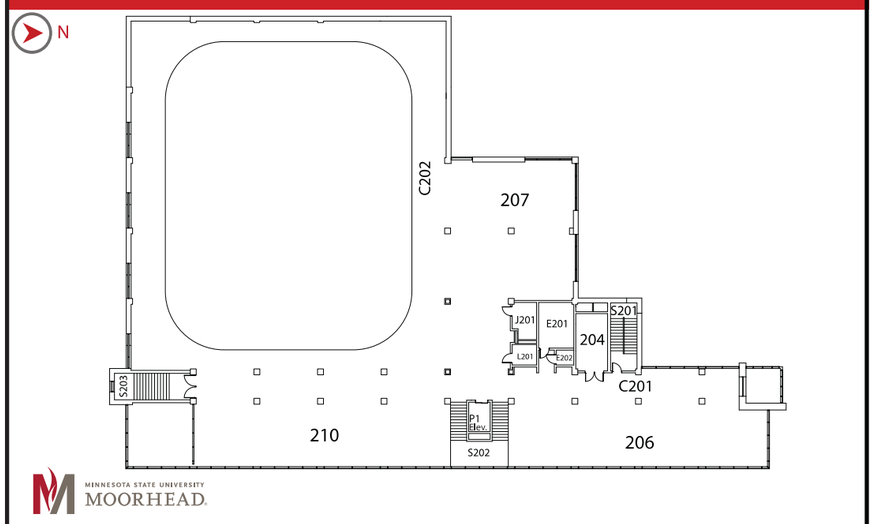
Basement Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Wellness Center - First Floor



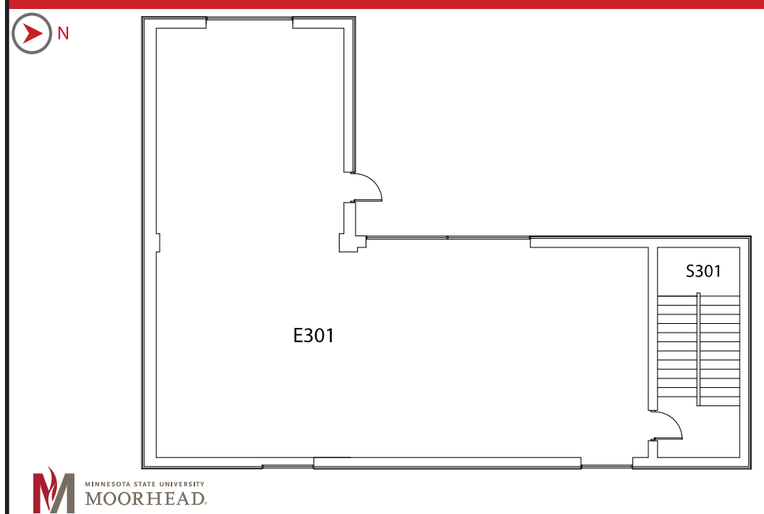
First Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Wellness Center - Second Floor



Second Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

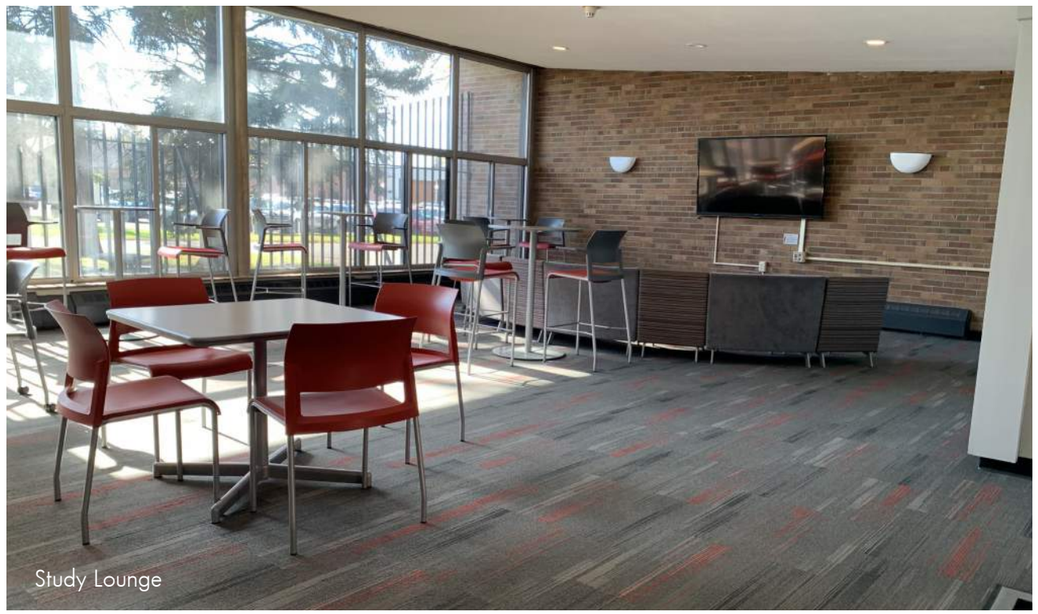
Wellness Center - Third Floor



Third Floor Wellness Center | 805 14th St. S. | Constructed 2007 | Gross Sq. Ft. 53,450

Dorm Room

Study Lounge

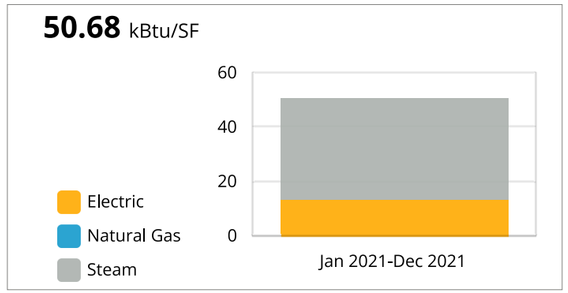


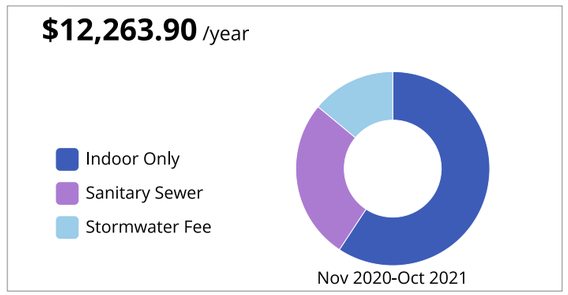
Study Lounge

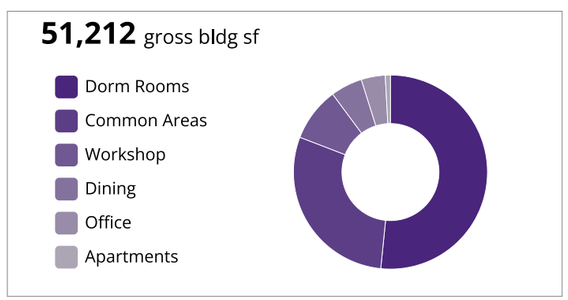
BALLARD HALL

Residence hall located near the academic core of campus, Ballard is popular for its singles and its convenient location.

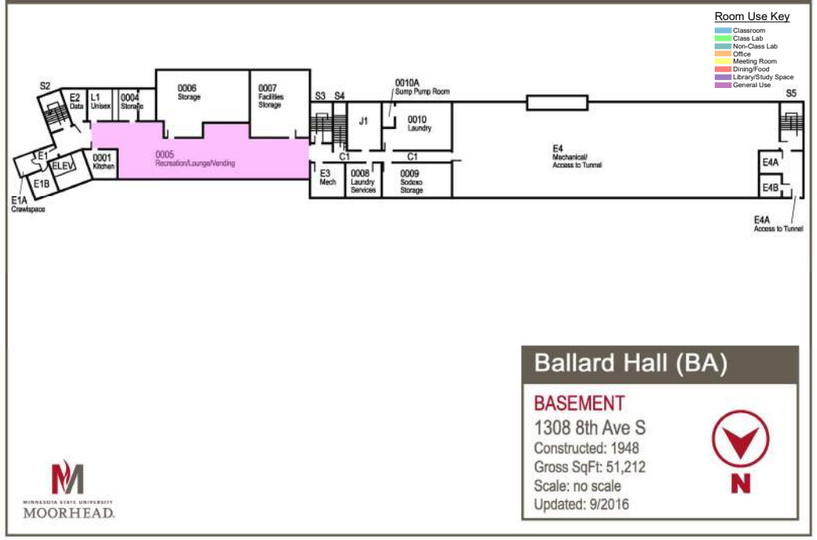
Area	52,212 gsf
Year(s) Built	1948
Stories	4
FCI/5-year FCI	0.15/ NA
Replacement Value	$17.7M
Building Repair Backlog	$2.6M
5-Year Renewal Forecast	$539,968
Roof/Exterior	BUR/Brick







Ballard Hall



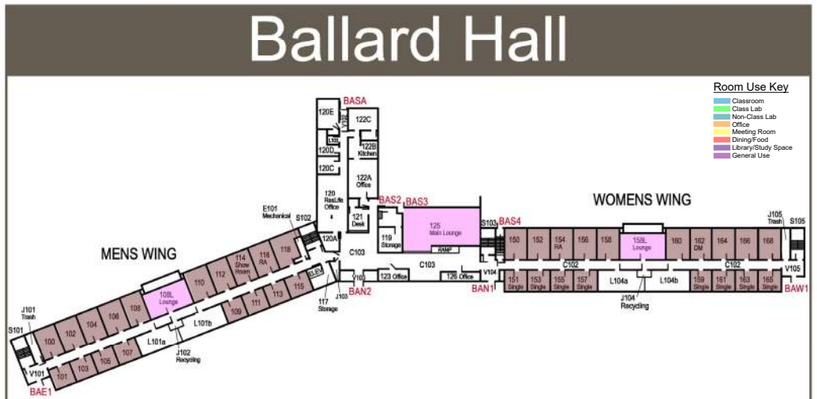
Ballard Hall (BA)

BASEMENT
1308 8th Ave S
Constructed: 1948
Gross SqFt: 51,212
Scale: no scale
Updated: 9/2016

N

MINNESOTA STATE UNIVERSITY MOORHEAD

Ballard Hall



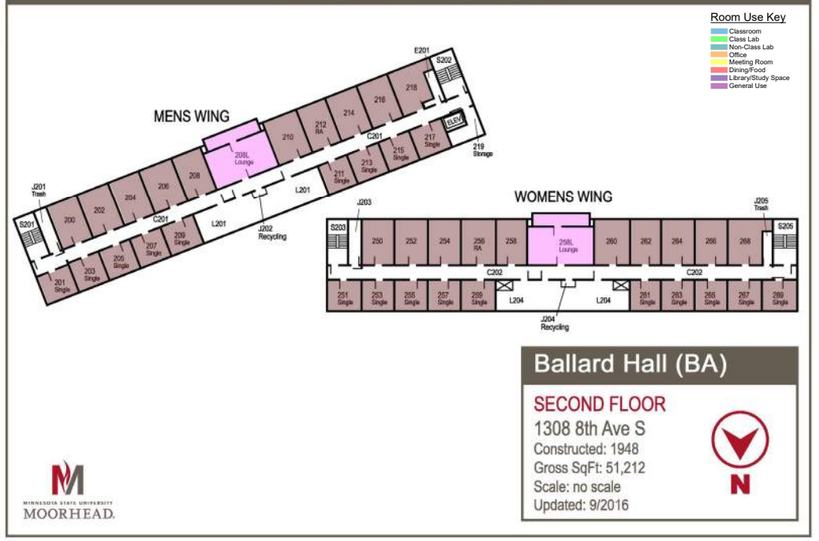
Ballard Hall (BA)

FIRST FLOOR
1308 8th Ave S
Constructed: 1948
Gross SqFt: 51,212
Scale: no scale
Updated: 9/2016

N

MINNESOTA STATE UNIVERSITY MOORHEAD

Ballard Hall



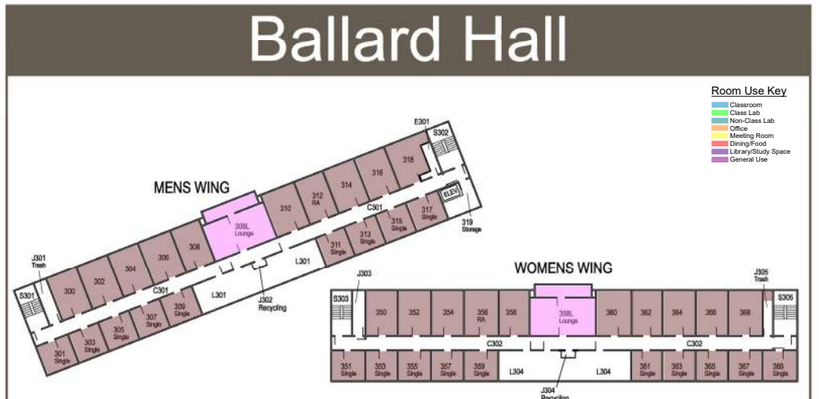
Ballard Hall (BA)

SECOND FLOOR
1308 8th Ave S
Constructed: 1948
Gross SqFt: 51,212
Scale: no scale
Updated: 9/2016

N

MINNESOTA STATE UNIVERSITY MOORHEAD

Ballard Hall



Ballard Hall (BA)

THIRD FLOOR
1308 8th Ave S
Constructed: 1948
Gross SqFt: 51,212
Scale: no scale
Updated: 9/2016

N

MINNESOTA STATE UNIVERSITY MOORHEAD

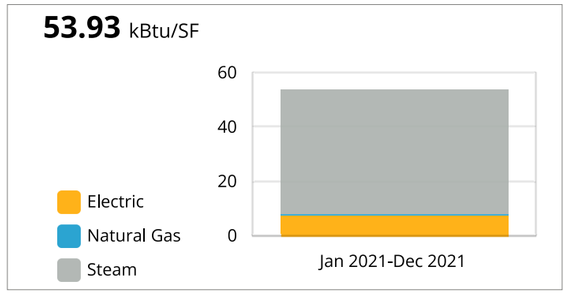

Dorm Room

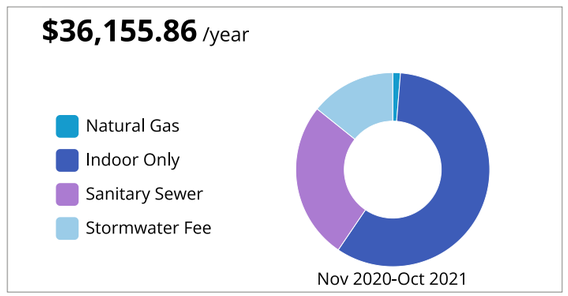

Commons Seating

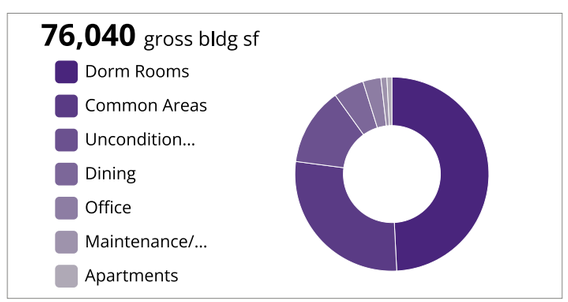
DAHL HALL

Residence hall Dahl is popular for its singles and its convenience.

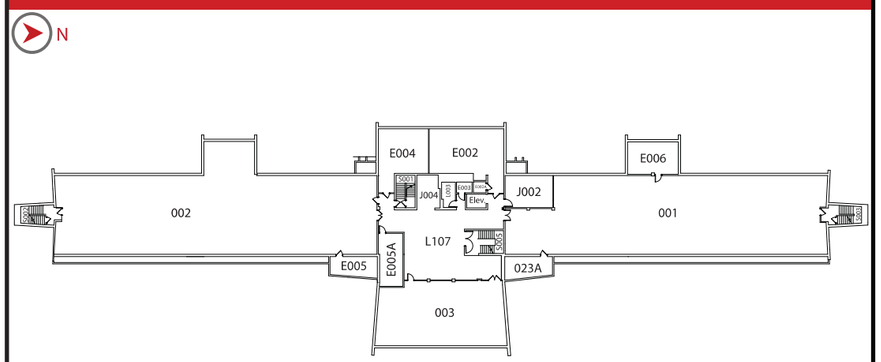
Area	76,040 gsf
Year(s) Built	1958
Stories	3
FCI/5-year FCI	NA
Replacement Value	$26.2M
Building Repair Backlog	$182,259
5-Year Renewal Forecast	$1,202,911
Roof/Exterior	BUR/Brick





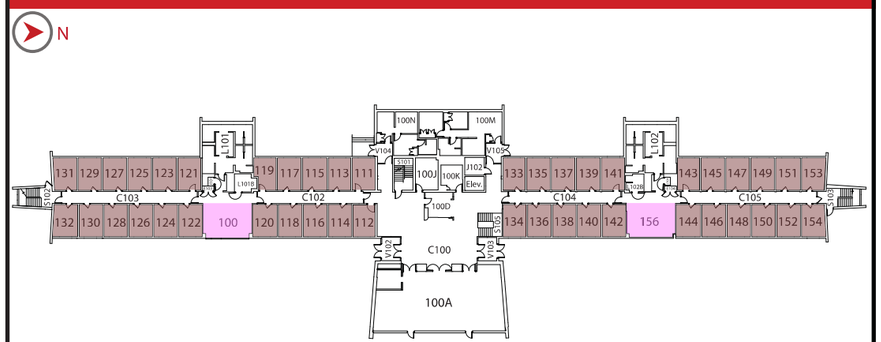


Dahl Hall - Basement



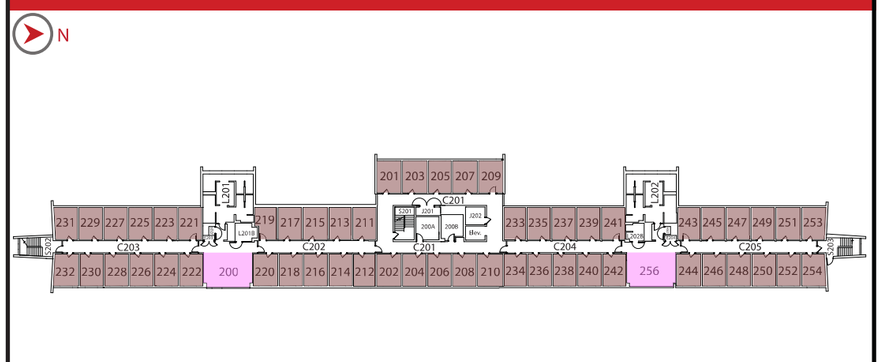
Basement Dahl Hall | 600 14th St. S. | Constructed 1958 | Remodeled 2010 | Gross Sq. Ft. 76,040

Dahl Hall - First floor



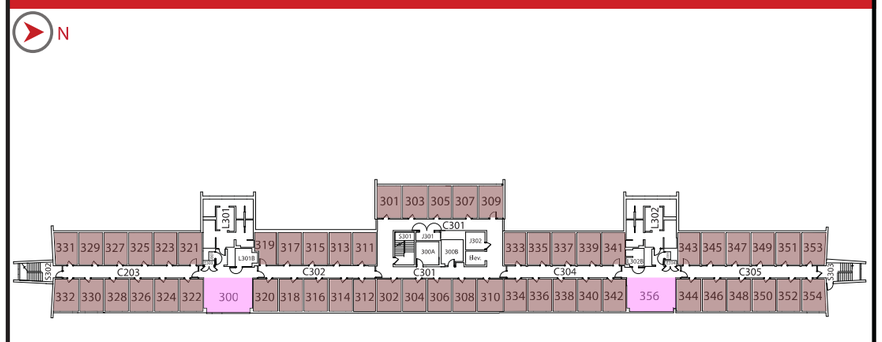
First Floor Dahl Hall | 600 14th St. S. | Constructed 1958 | Remodeled 2010 | Gross Sq. Ft. 76,040

Dahl Hall - Second floor



Second Floor Dahl Hall | 600 14th St. S. | Constructed 1958 | Remodeled 2010 | Gross Sq. Ft. 76,040

Dahl Hall - Third floor



Third Floor Dahl Hall | 600 14th St. S. | Constructed 1958 | Remodeled 2010 | Gross Sq. Ft. 76,040

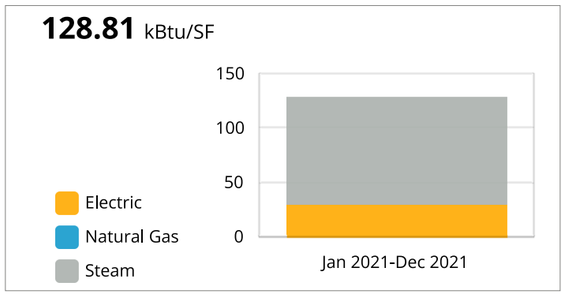

Lounge


Corridor

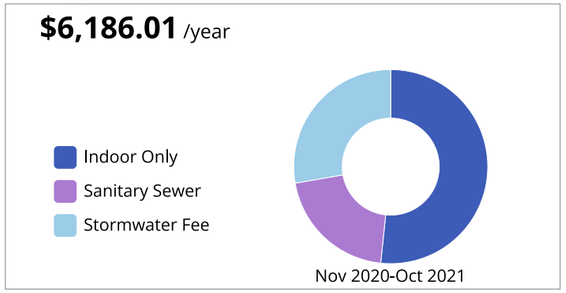
GRANTHAM HALL

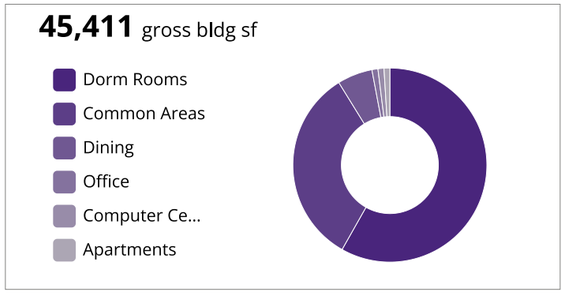
Built in 1965 this facility is used for Residential purposes.

Grantham Hall is connected to Nelson Hall. The total usable building area is appox. 45,411.00SF.

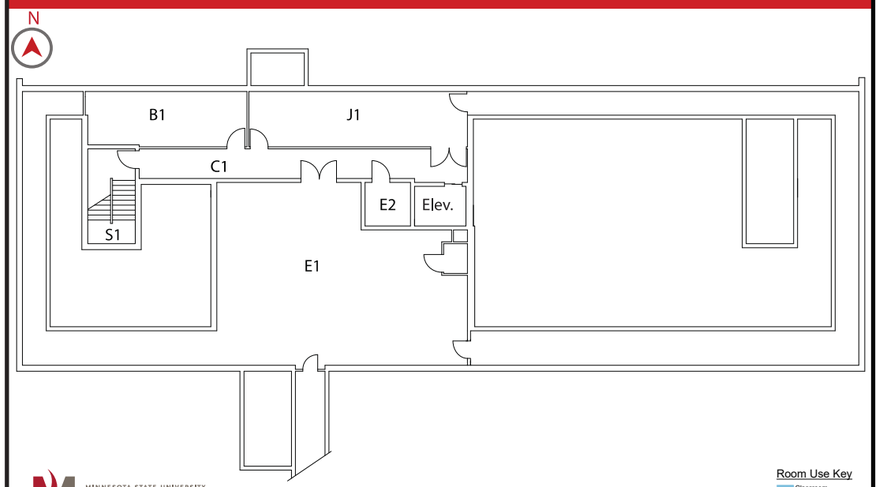


Area	45,411 gsf
Year(s) Built	1965
Stories	5
FCI/5-year FCI	0.06/ NA
Replacement Value	$18.5M
Building Repair Backlog	$1.1M
5-Year Renewal Forecast	$349,463
Roof/Exterior	BUR/Brick





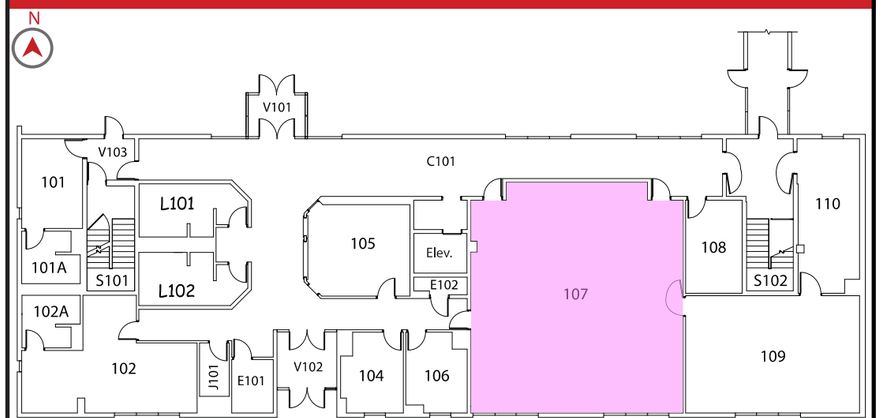
Grantham Hall - Basement



MINNESOTA STATE UNIVERSITY MOORHEAD

Basement Grantham Hall | 1415 6th Ave. S. | Constructed 1965 | Remodeled 2006 | Gross Sq. Ft. 45,411

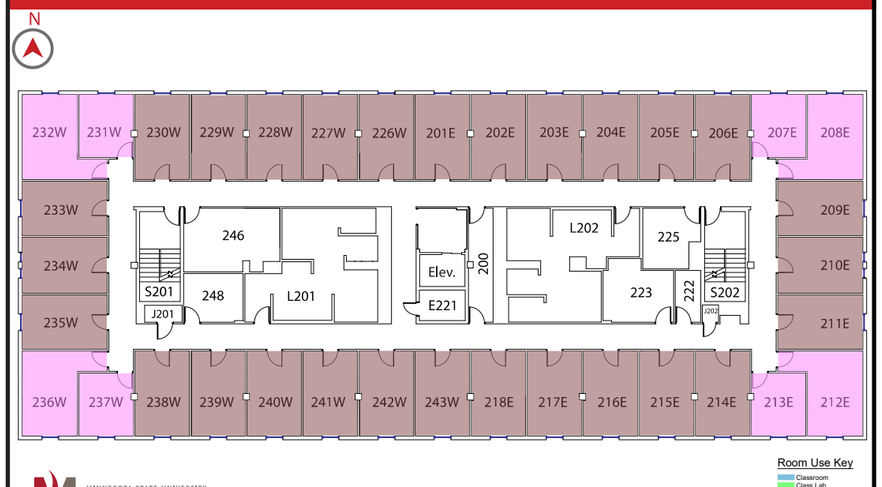
Grantham Hall - First Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor Grantham Hall | 1415 6th Ave. S. | Constructed 1965 | Remodeled 2006 | Gross Sq. Ft. 45,411

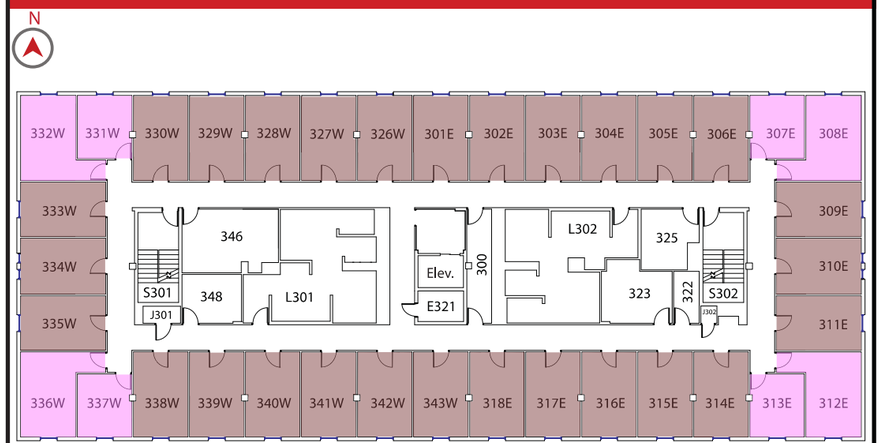
Grantham Hall - Second Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor Grantham Hall | 1415 6th Ave. S. | Constructed 1965 | Remodeled 2006 | Gross Sq. Ft. 45,411

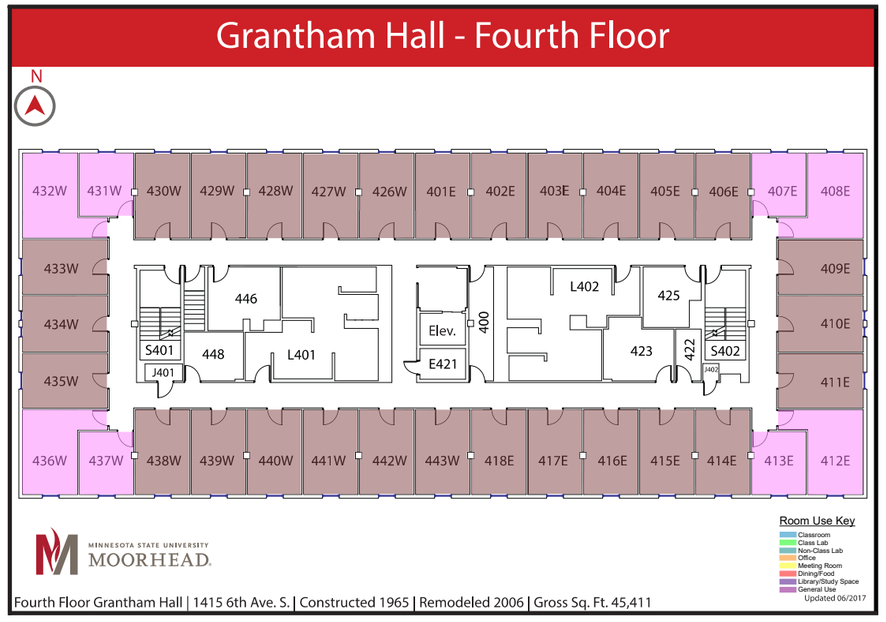
Grantham Hall - Third Floor

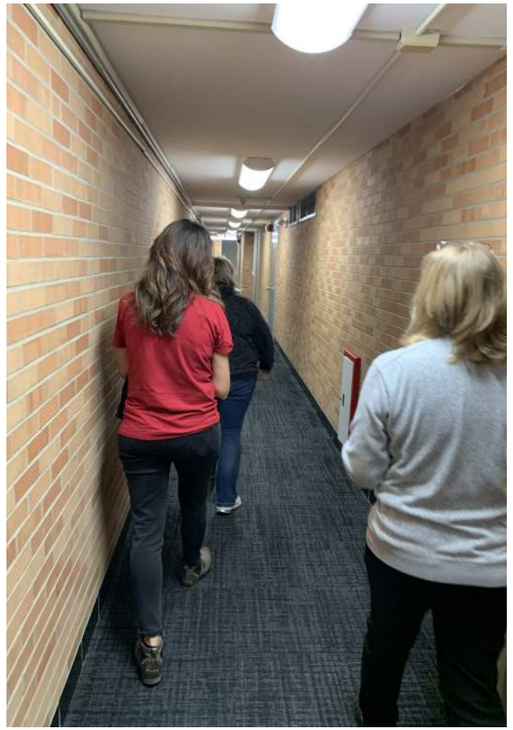


MINNESOTA STATE UNIVERSITY MOORHEAD

Third Floor Grantham Hall | 1415 6th Ave. S. | Constructed 1965 | Remodeled 2006 | Gross Sq. Ft. 45,411

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

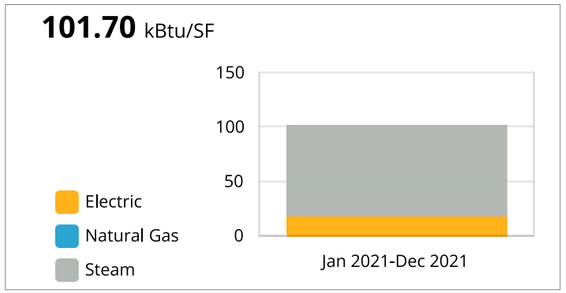


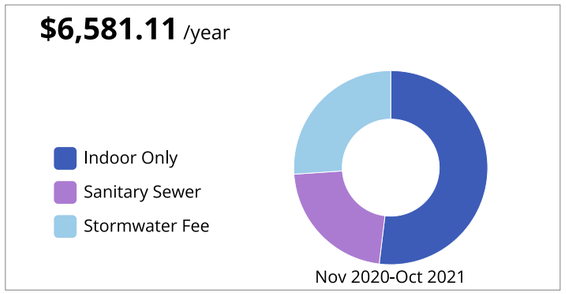


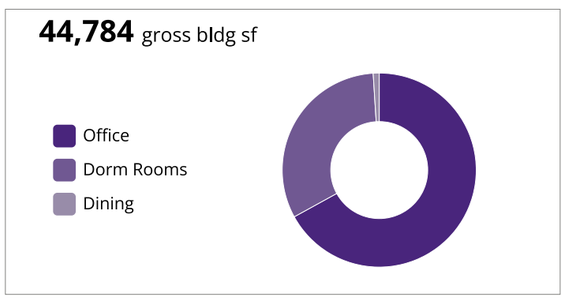
HOLMQUIST HALL

Built in 1969 this facility is used for Residential. Holmquist has nine suite-style rooms and is near the athletic/recreation segment of campus. The total usable building area is appox. 44,784.00SF.

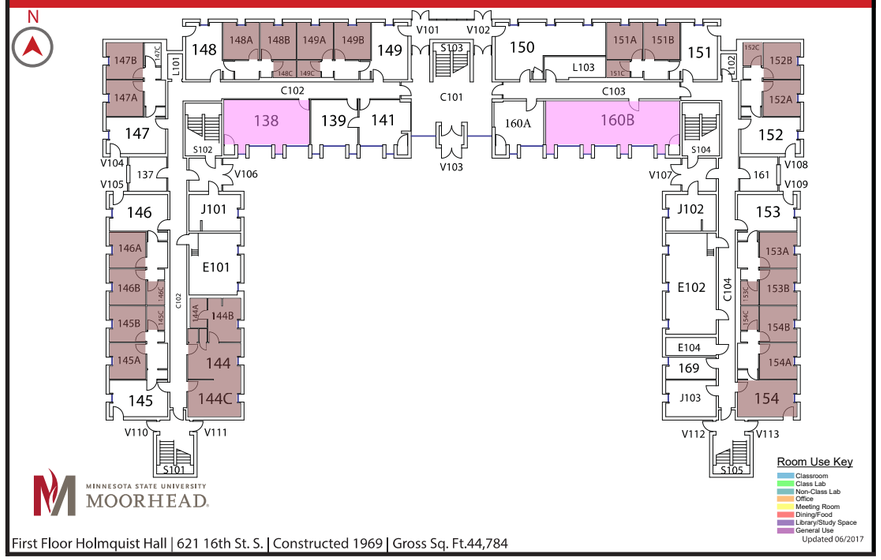
Area	44,784 gsf
Year(s) Built	1969
Stories	3
FCI/ 5-year FCI	0.3/ NA
Replacement Value	$15.5M
Building Repair Backlog	$4.1M
5-Year Renewal Forecast	$122,137
Roof/Exterior	BUR/Brick





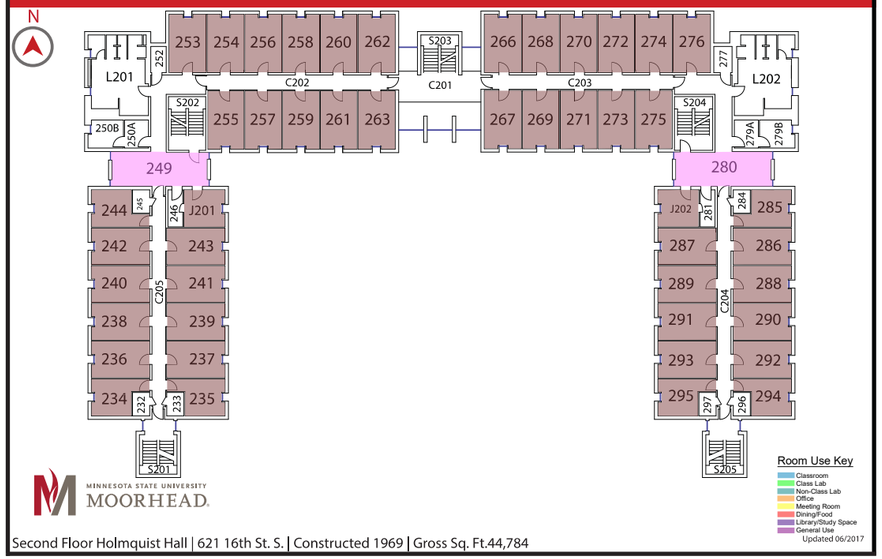


Holmquist Hall - First Floor



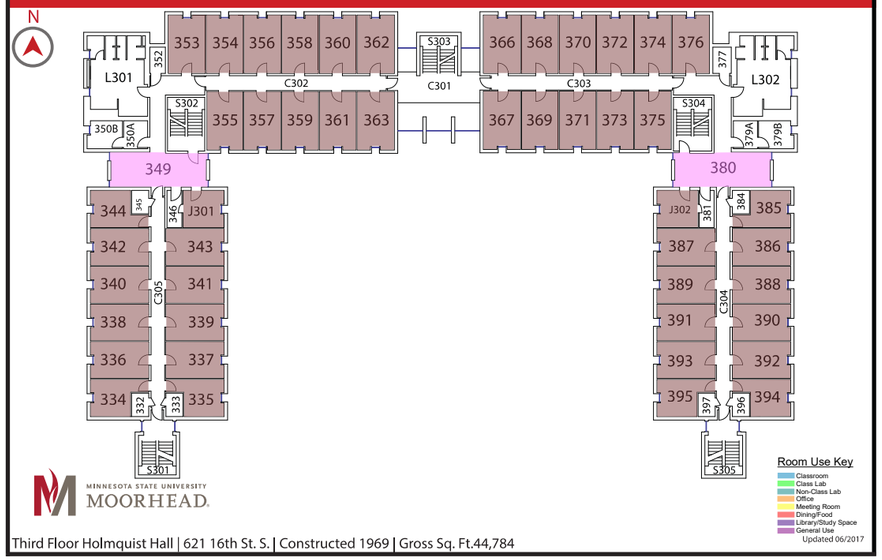
First Floor Holmquist Hall | 621 16th St. S. | Constructed 1969 | Gross Sq. Ft.44,784

Holmquist Hall - Second Floor



Second Floor Holmquist Hall | 621 16th St. S. | Constructed 1969 | Gross Sq. Ft.44,784

Holmquist Hall - Third Floor



Third Floor Holmquist Hall | 621 16th St. S. | Constructed 1969 | Gross Sq. Ft.44,784

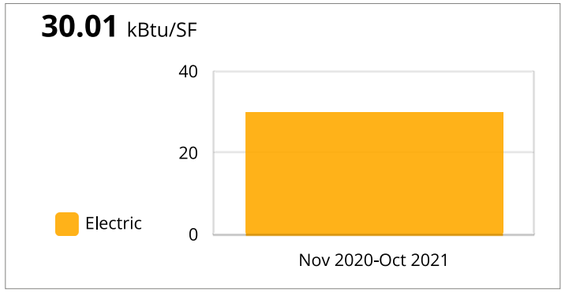

Bathroom


Dorm Room

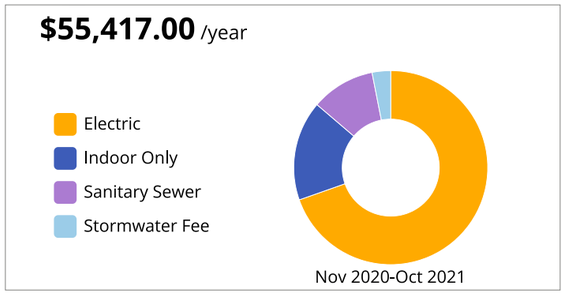

Kitchen

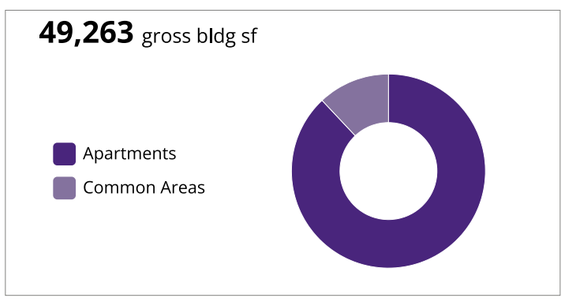
JOHN NEUMAIER HALL

Built in 2002, this facility is used for Residential purposes and houses all quad-occupancy apartments. The total usable building area is appox. 49,263.00SF.

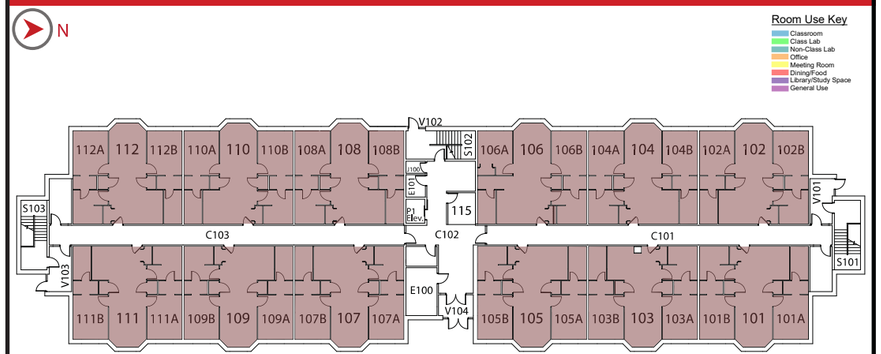


Area	49,263 gsf
Year(s) Built	2002
Stories	3
FCI/5-year FCI	0.02/ NA
Replacement Value	$17M
Building Repair Backlog	$377,848
5-Year Renewal Forecast	$747,826
Roof/Exterior	BUR/Brick





John Neumaier Hall - First Floor

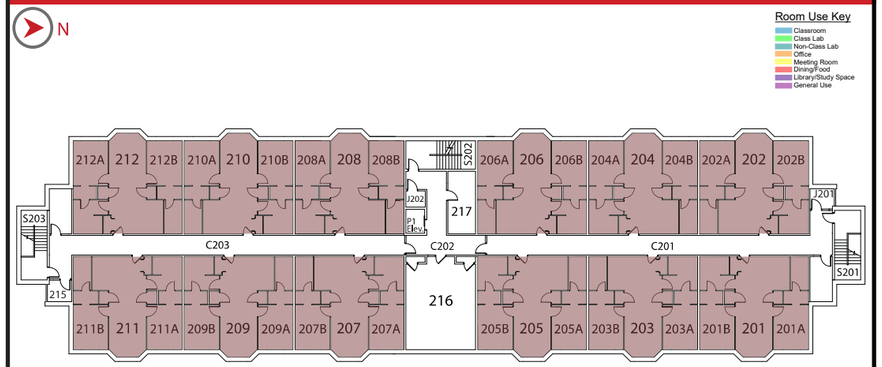


MINNESOTA STATE UNIVERSITY MOORHEAD

First Floor John Neumaier Hall | 1510 9th Ave. S. | Constructed 2002 | Gross Sq. Ft. 49,263

Updated 06/2017

John Neumaier Hall - Second Floor

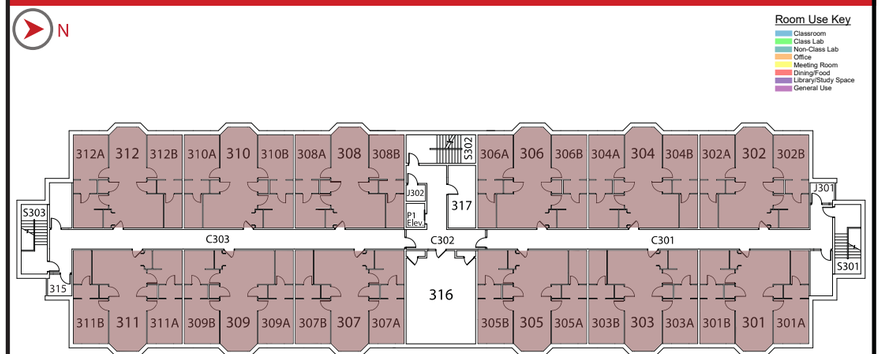


MINNESOTA STATE UNIVERSITY MOORHEAD

Second Floor John Neumaier Hall | 1510 9th Ave. S. | Constructed 2002 | Gross Sq. Ft. 49,263

Updated 06/2017

John Neumaier Hall - Third Floor



MINNESOTA STATE UNIVERSITY MOORHEAD

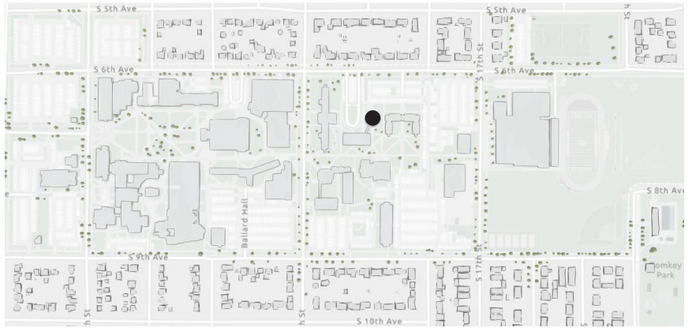
Third Floor John Neumaier Hall | 1510 9th Ave. S. | Constructed 2002 | Gross Sq. Ft. 49,263

Updated 06/2017


Study Room


Entrance

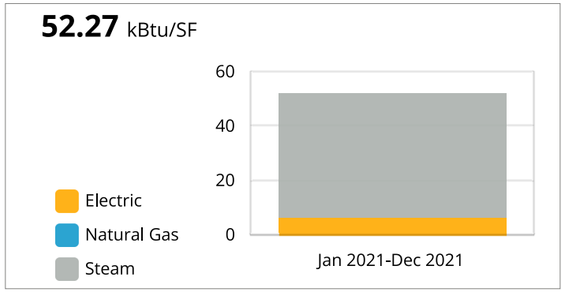

Lounge

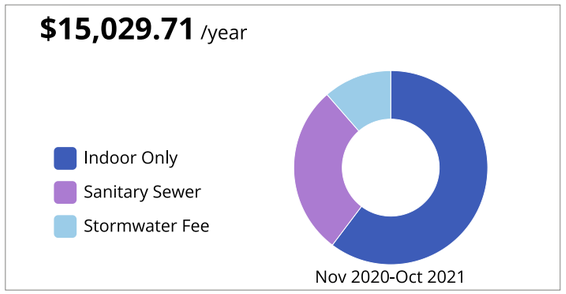


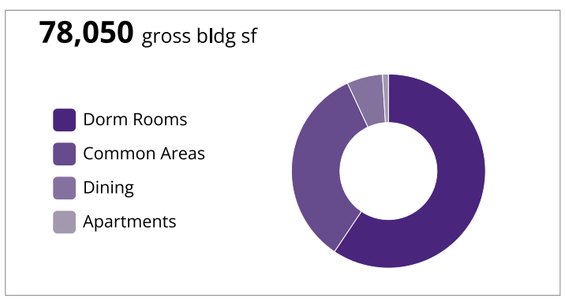
NELSON HALL

Built in 1966 this facility is used for Residential purposes. Nelson Hall is connected to Grantham Hall and has alll singles since 2020. The total usable building area is appox. 78,050.00SF.

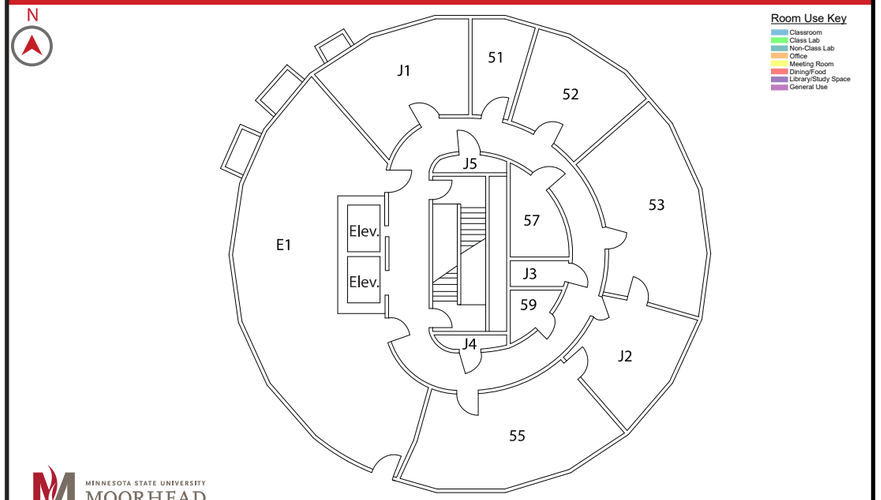
Area	78,050 gsf
Year(s) Built	1966
Stories	13
FCI/5-year FCI	0.2/ NA
Replacement Value	$33.4M
Building Repair Backlog	$7.3M
5-Year Renewal Forecast	$3.1M
Roof/Exterior	BUR/Brick







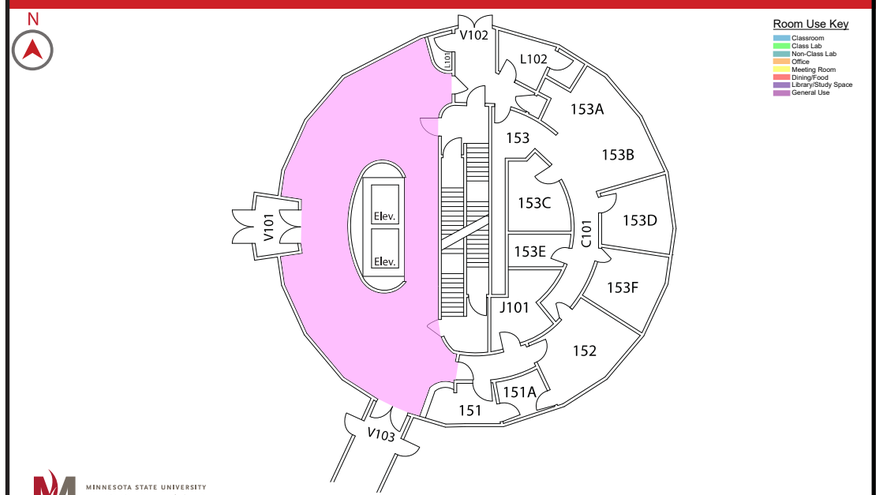
Nelson Hall - Basement



Basement Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

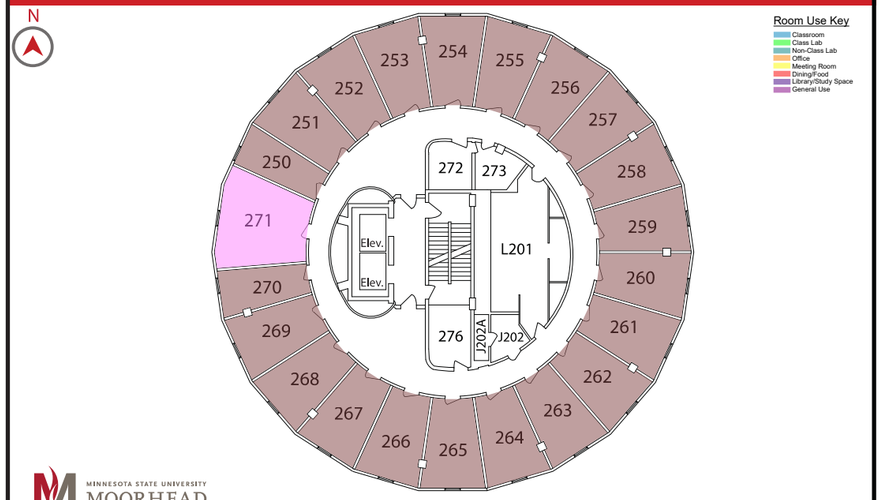
Nelson Hall - First Floor



First Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

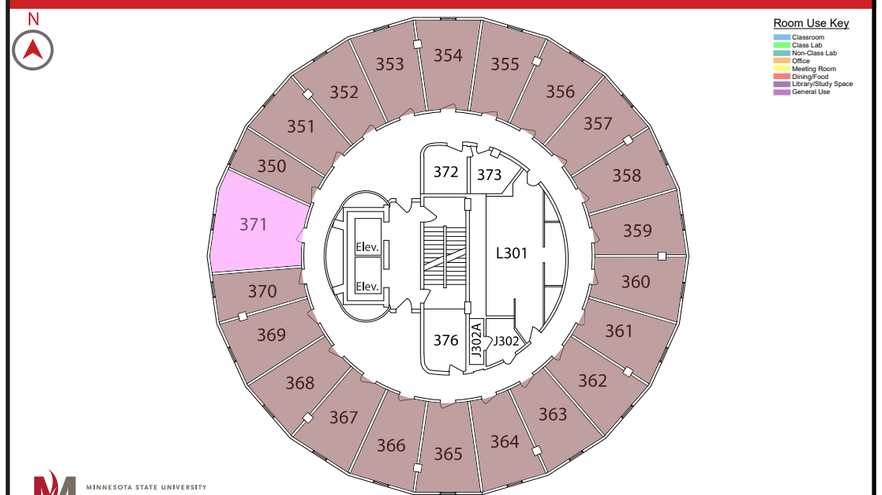
Nelson Hall - Second Floor



Second Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

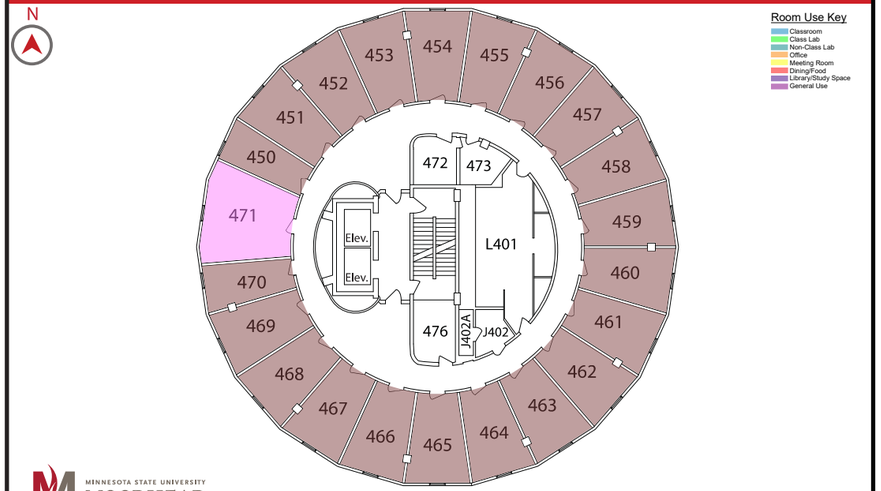
Nelson Hall - Third Floor



Third Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

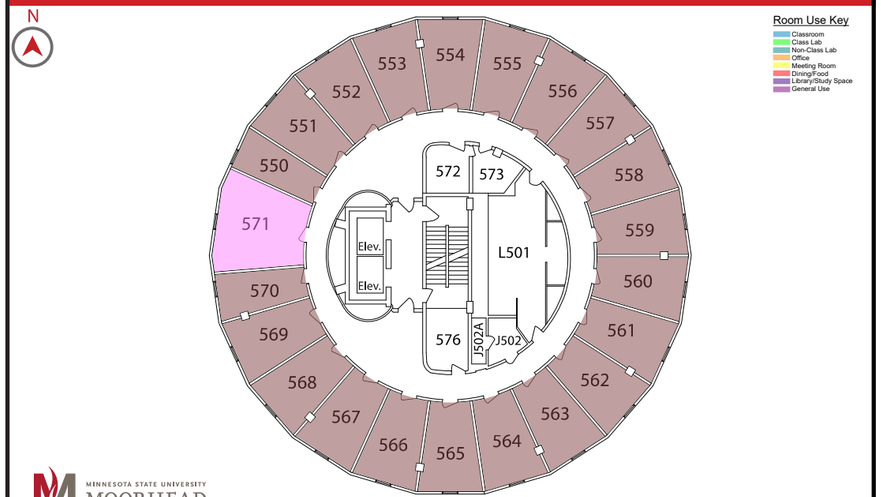
Nelson Hall - Fourth Floor



Fourth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

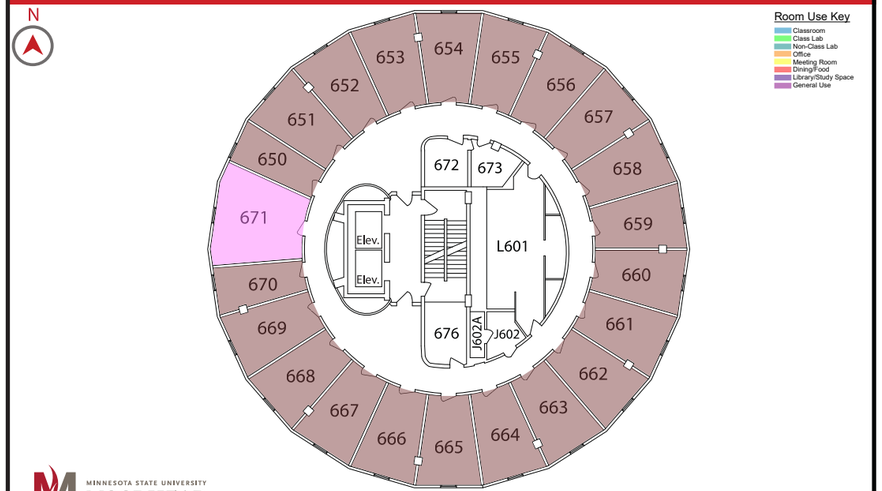
Nelson Hall - Fifth Floor



Fifth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

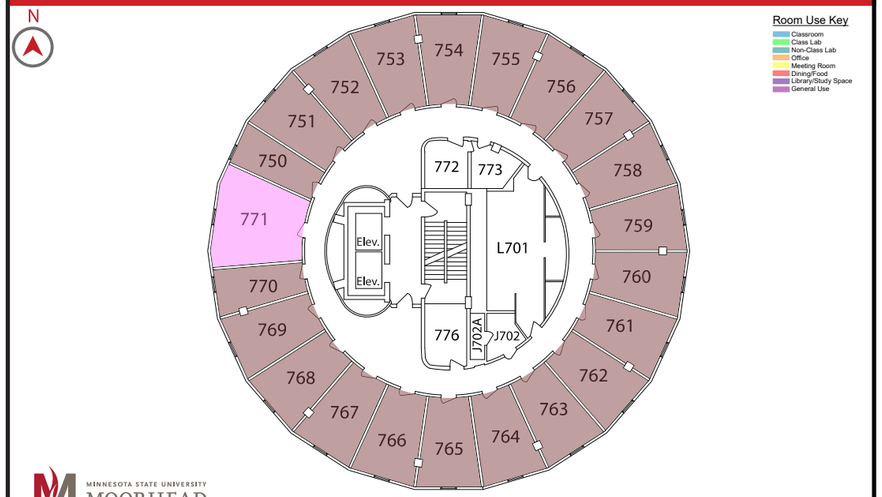
Nelson Hall - Sixth Floor



Sixth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

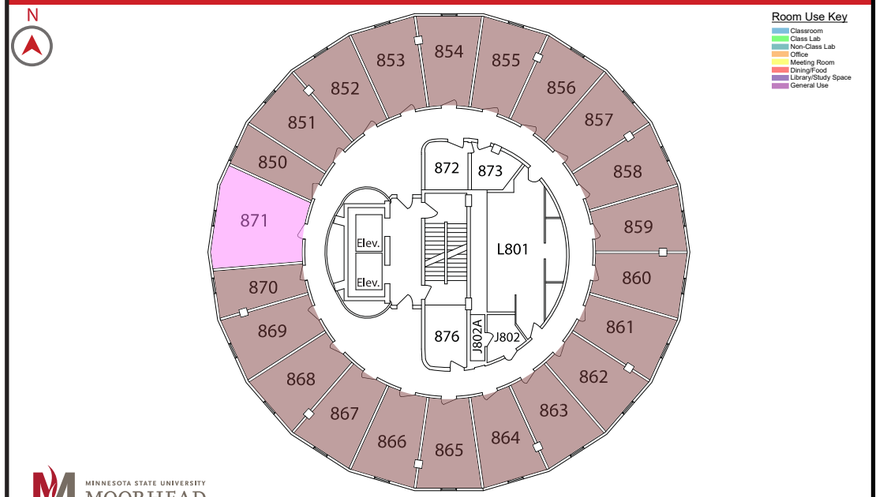
Nelson Hall - Seventh Floor



Seventh Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

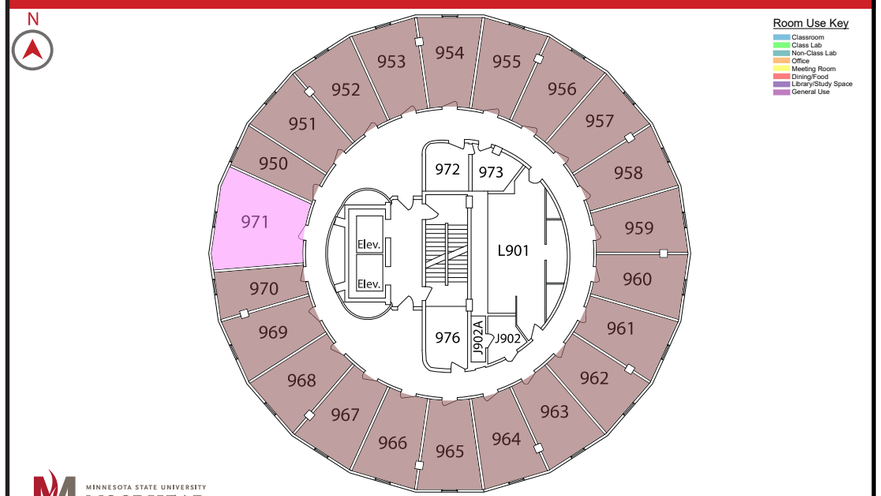
Nelson Hall - Eighth Floor



Eighth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

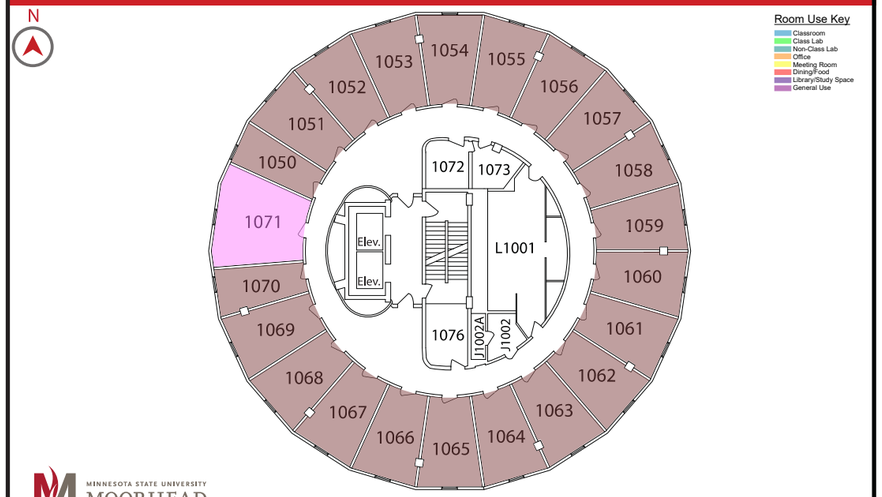
Nelson Hall - Ninth Floor



Ninth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

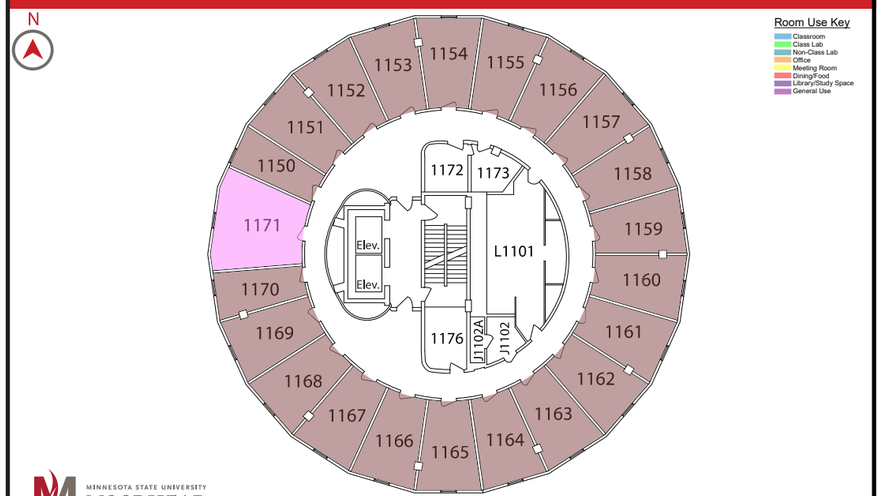
Nelson Hall - Tenth Floor



Tenth Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

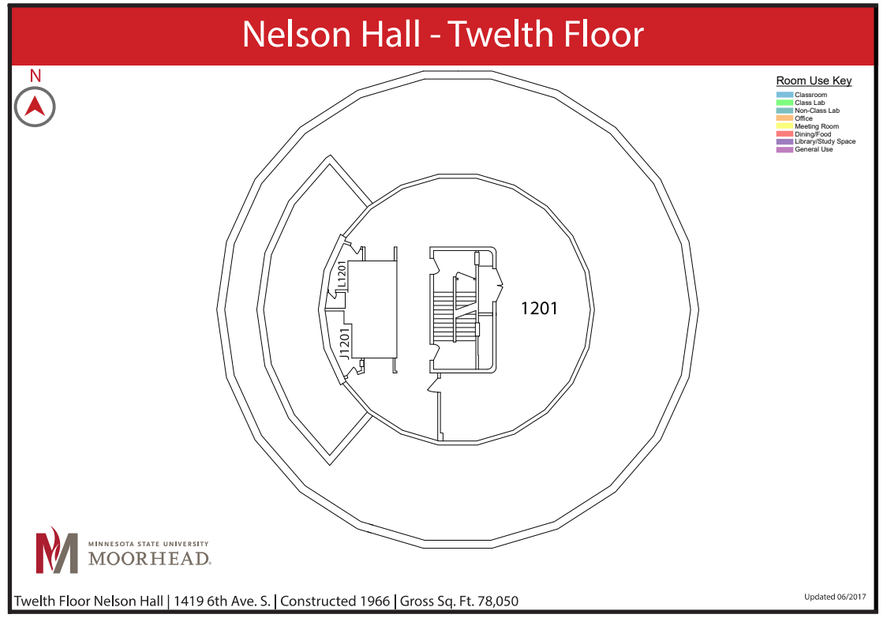
Nelson Hall - Eleventh Floor

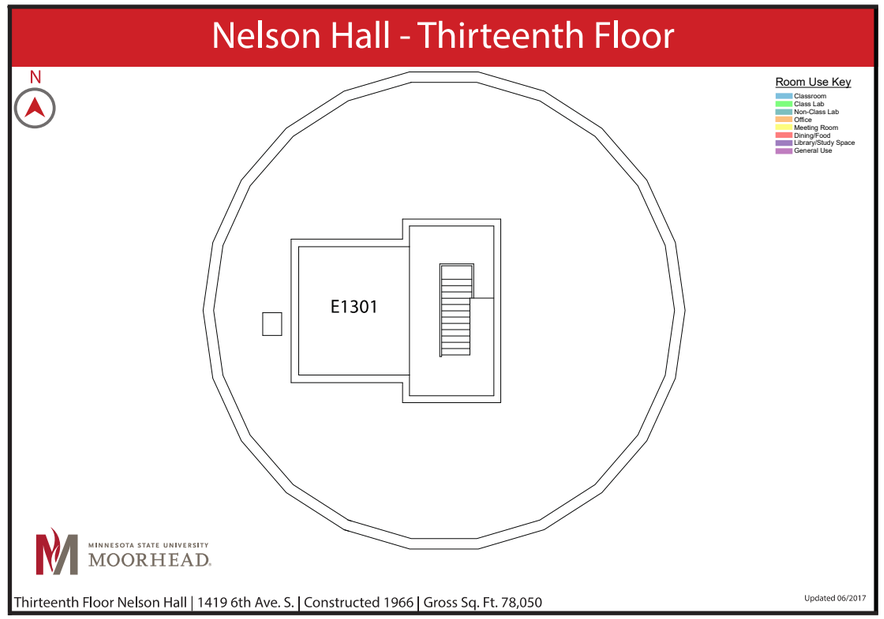


Eleventh Floor Nelson Hall | 1419 6th Ave. S. | Constructed 1966 | Gross Sq. Ft. 78,050

Updated 06/2017

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS



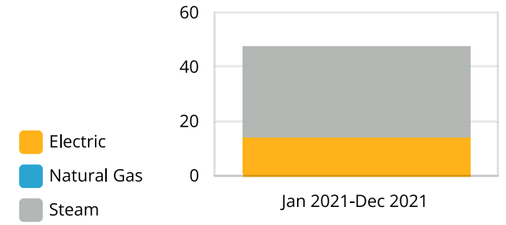


SNARR HALL WEST

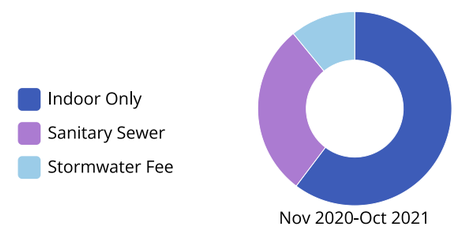
Built in 1962 with a major renovation in 2014, this facility is used for Residential purposes. The total usable building area is appox. 31,254.00SF.

Area	31,254 gsf
Year(s) Built	1962, 2014
Stories	4
FCI/5-year FCI	NA
Replacement Value	$10.8M
Building Repair Backlog	$20.3M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick

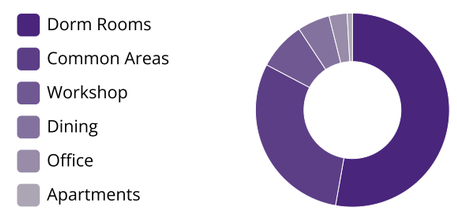
47.60 kBtu/SF



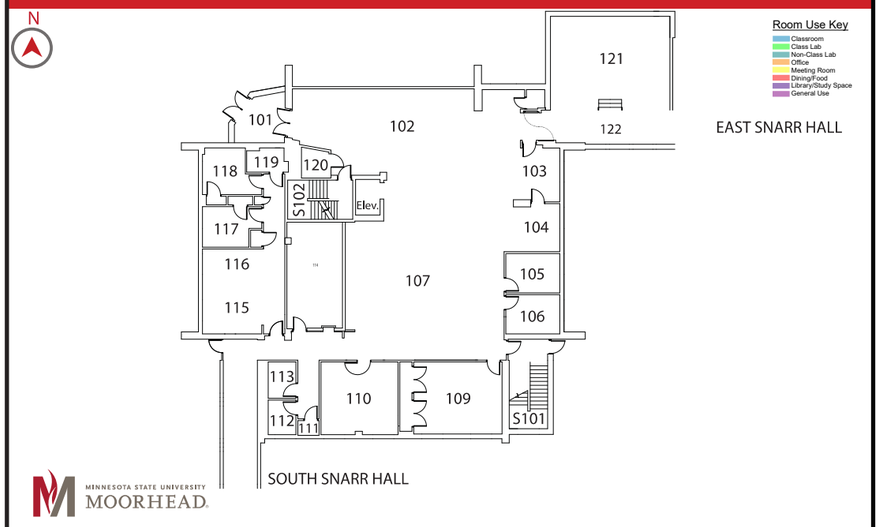
$15,708.92 /year



41,254 gross bldg sf



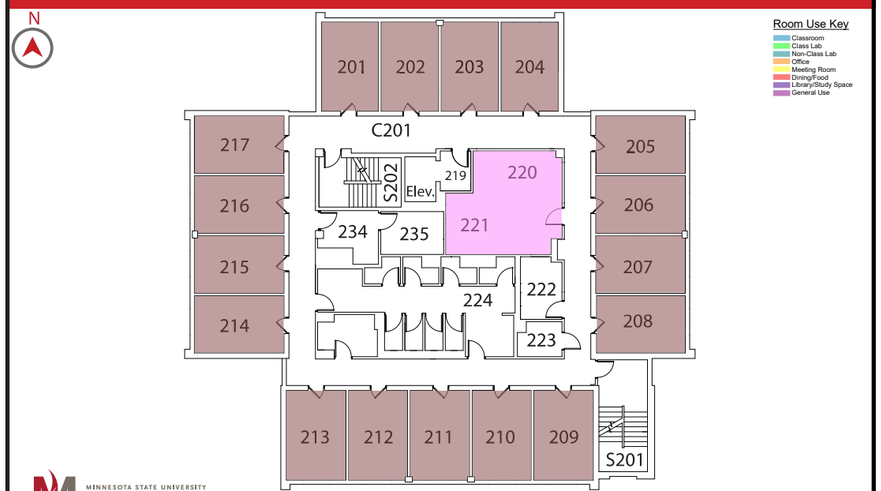
West Snarr - First Floor



First Floor West Snarr Hall | 810 14th St. S. | Constructed 1962 | Remodeled 2014 | Gross Sq. Ft. 31,112

Updated 06/2017

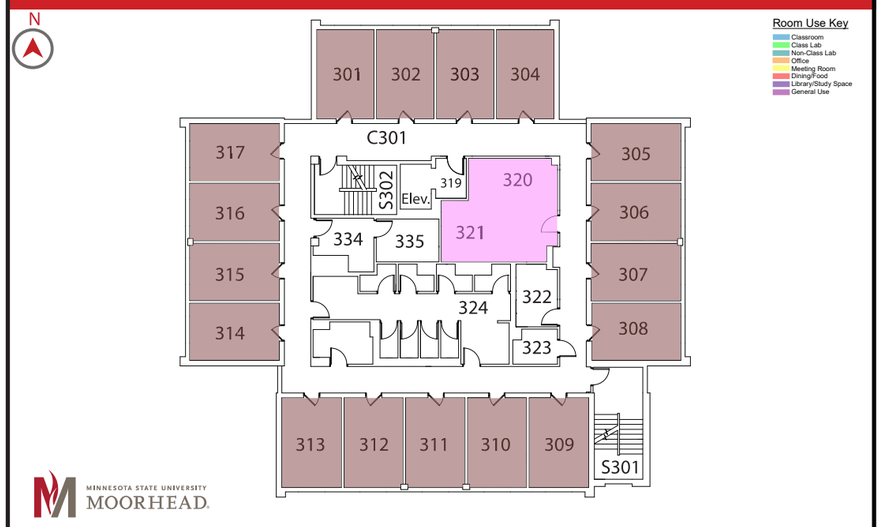
West Snarr - Second Floor



Second Floor West Snarr Hall | 810 14th St. S. | Constructed 1962 | Remodeled 2014 | Gross Sq. Ft. 31,112

Updated 06/2017

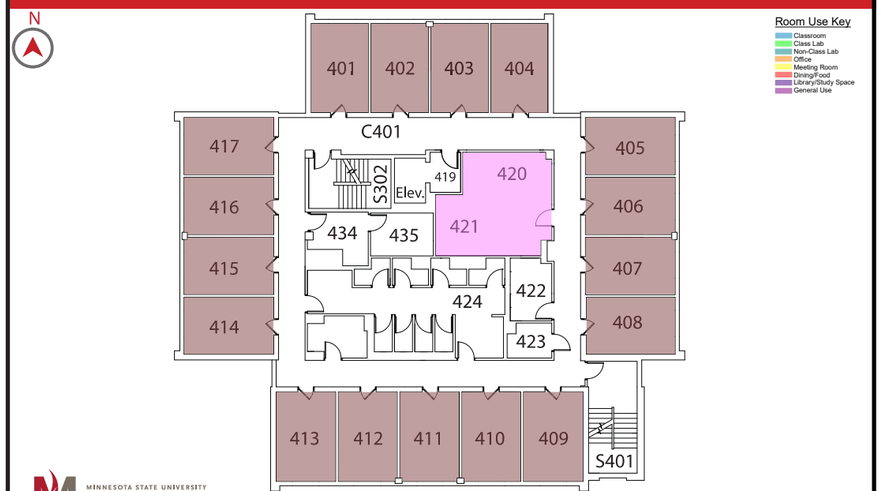
West Snarr - Third Floor



Third Floor West Snarr Hall | 810 14th St. S. | Constructed 1962 | Remodeled 2014 | Gross Sq. Ft. 31,112

Updated 06/2017

West Snarr - Fourth Floor



Fourth Floor West Snarr Hall | 810 14th St. S. | Constructed 1962 | Remodeled 2014 | Gross Sq. Ft. 31,112

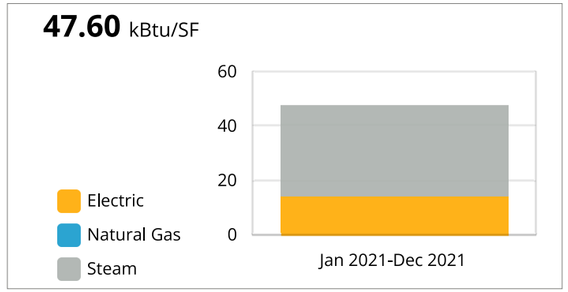
Updated 06/2017

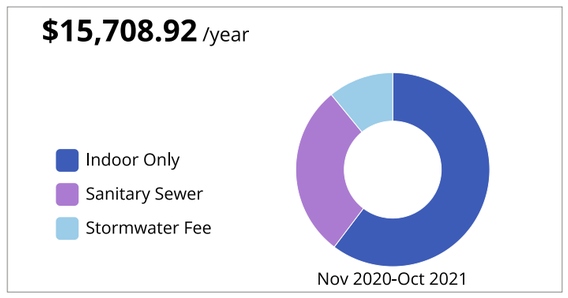
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

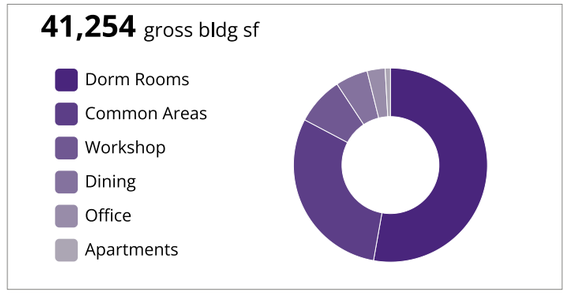
SNARR HALL EAST

Built in 1962 with a major renovation in 2014, this facility is used for Residential purposes. The total usable building area is appox. 31,254.00SF.

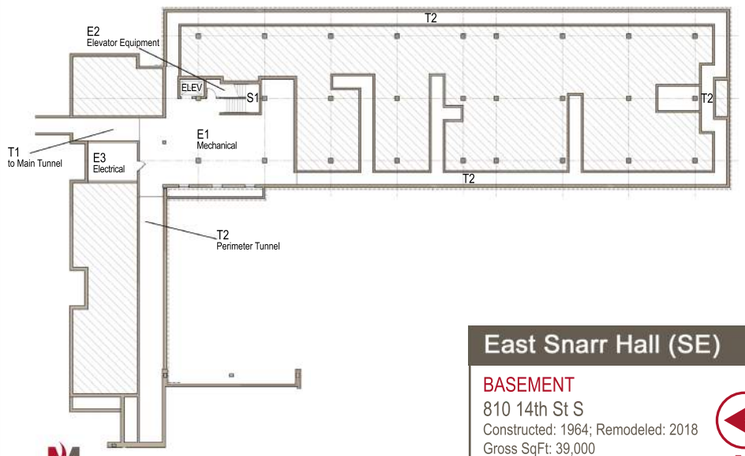
Area	31,254 gsf
Year(s) Built	1962, 2014
Stories	4
FCI/5-year FCI	NA
Replacement Value	$10.8M
Building Repair Backlog	$20.3M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick







East Snarr Hall



East Snarr Hall (SE)

BASEMENT
810 14th St S
Constructed: 1964; Remodeled: 2018
Gross SqFt: 39,000
Scale: no scale
Updated: 3/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD

East Snarr Hall

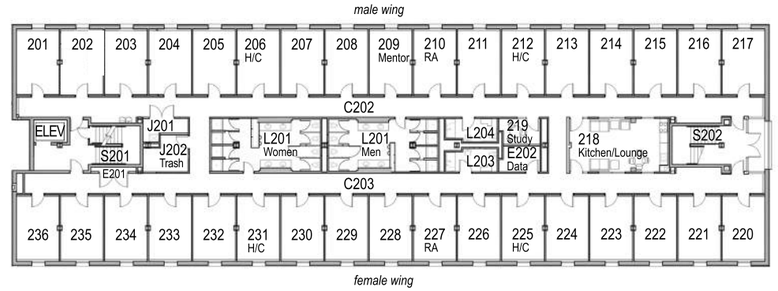
East Snarr Hall (SE)

FIRST FLOOR
810 14th St S
Constructed: 1964; Remodeled: 2018
Gross SqFt: 39,000
Scale: no scale
Updated: 9/2018

N

MINNESOTA STATE UNIVERSITY MOORHEAD

East Snarr Hall



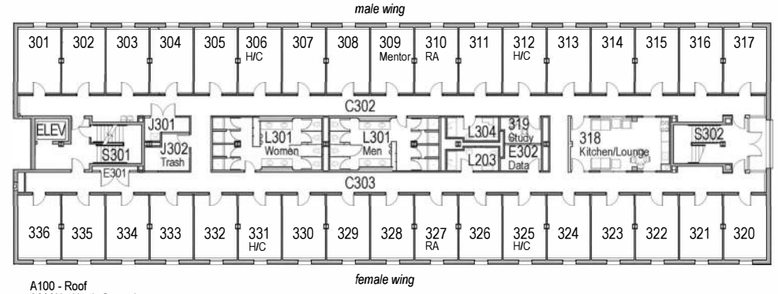
East Snarr Hall (SE)

SECOND FLOOR
810 14th St S
Constructed: 1964; Remodeled: 2018
Gross SqFt: 39,000
Scale: no scale
Updated: 9/2018

N

MINNESOTA STATE UNIVERSITY MOORHEAD

East Snarr Hall



A100 - Roof
A300N - North Grounds
A300S - South Grounds
A300E - East Grounds
A300W - West Grounds

East Snarr Hall (SE)

THIRD FLOOR
810 14th St S
Constructed: 1964; Remodeled: 2018
Gross SqFt: 39,000
Scale: no scale
Updated: 9/2018

N

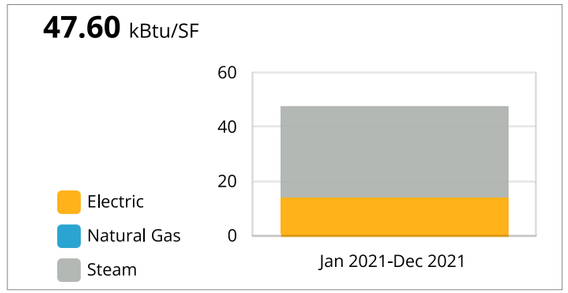
MINNESOTA STATE UNIVERSITY MOORHEAD

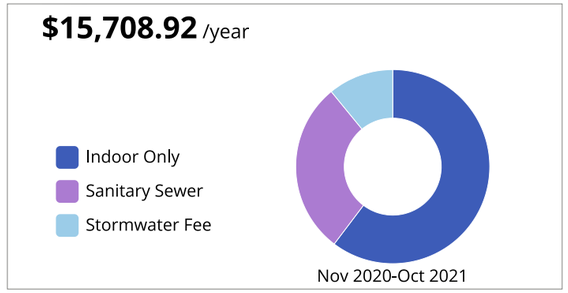
MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

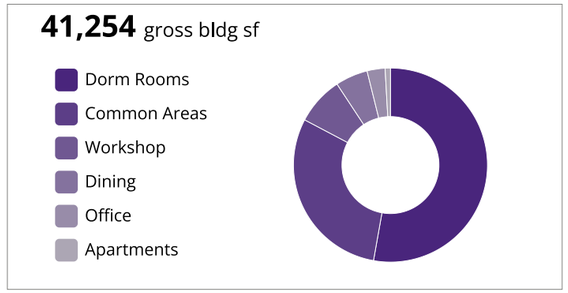
SNARR HALL SOUTH

Built in 1962 with a major renovation in 2014, this facility is used for Residential purposes. The total usable building area is appox. 31,254.00SF.

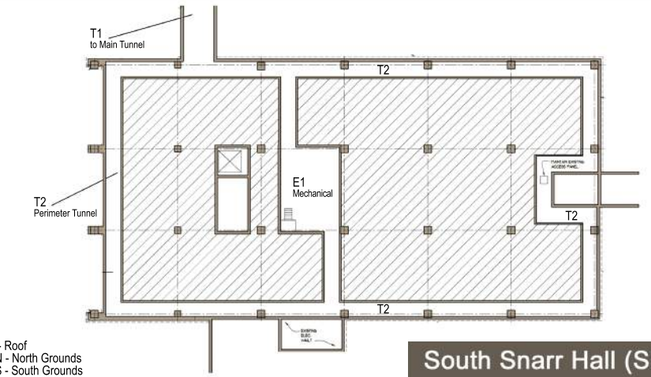
Area	31,254 gsf
Year(s) Built	1962, 2014
Stories	4
FCI/5-year FCI	NA
Replacement Value	$10.8M
Building Repair Backlog	$20.3M
5-Year Renewal Forecast	NA
Roof/Exterior	BUR/Brick







South Snarr Hall



A100 - Roof
A300N - North Grounds
A300S - South Grounds
A300E - East Grounds
A300W - West Grounds

South Snarr Hall (SS)

BASEMENT
820 14th St S
Constructed: 1967; Remodeled: 2017
Gross SqFt: 38,050
Scale: no scale
Updated: 1/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD

South Snarr Hall

A100 - Roof
A300N - North Grounds
A300S - South Grounds
A300E - East Grounds
A300W - West Grounds

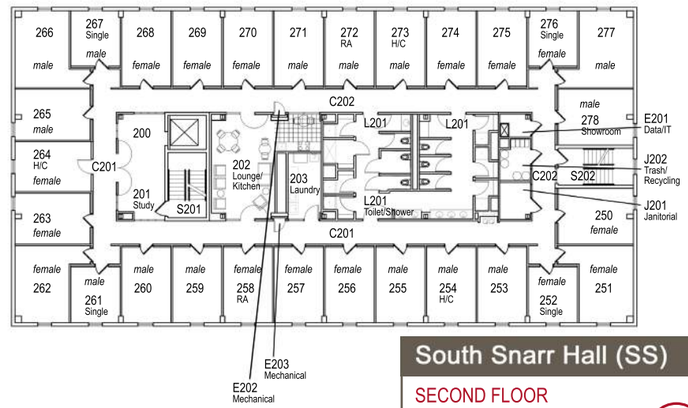
South Snarr Hall (SS)

FIRST FLOOR
820 14th St S
Constructed: 1967; Remodeled: 2017
Gross SqFt: 38,050
Scale: no scale
Updated: 1/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD

South Snarr Hall



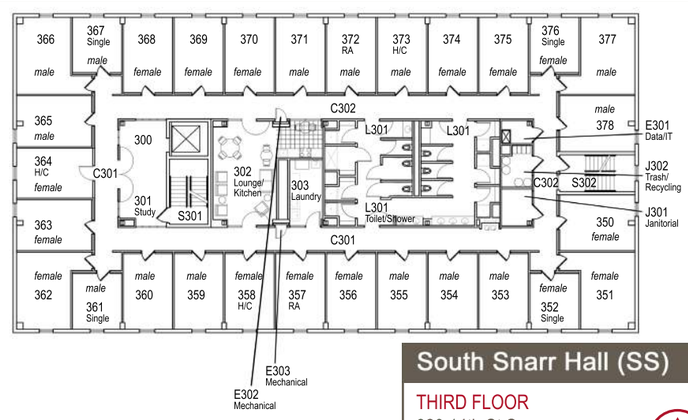
South Snarr Hall (SS)

SECOND FLOOR
820 14th St S
Constructed: 1967; Remodeled: 2017
Gross SqFt: 38,050
Scale: no scale
Updated: 1/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD

South Snarr Hall



South Snarr Hall (SS)

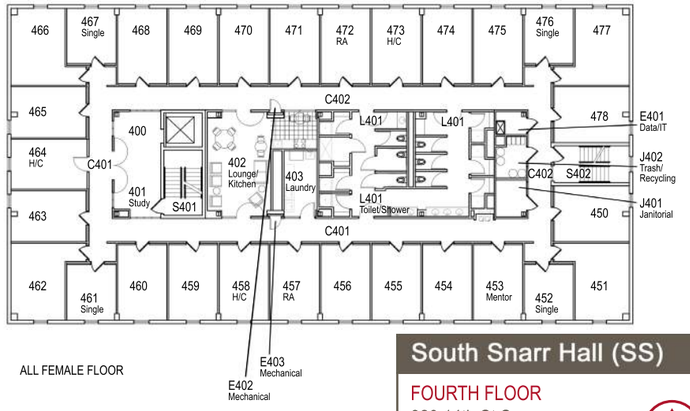
THIRD FLOOR
820 14th St S
Constructed: 1967; Remodeled: 2017
Gross SqFt: 38,050
Scale: no scale
Updated: 1/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD

MSUM COMPREHENSIVE FACILITIES PLAN
3.2 BUILDING DATA SHEETS

South Snarr Hall

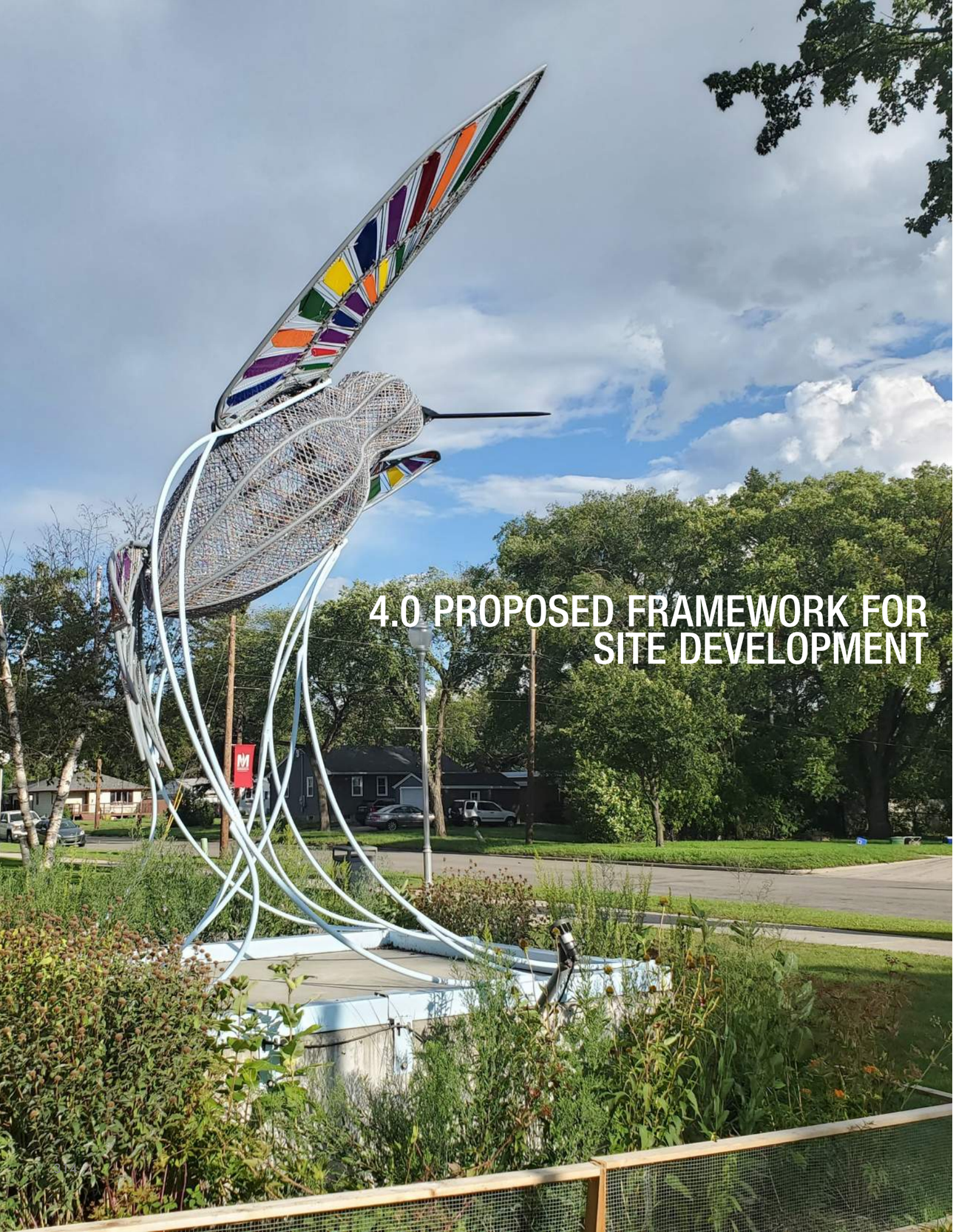


South Snarr Hall (SS)

FOURTH FLOOR
820 14th St S
Constructed: 1967; Remodeled: 2017
Gross SqFt: 38,050
Scale: no scale
Updated: 1/2017

N

MINNESOTA STATE UNIVERSITY MOORHEAD



4.0 PROPOSED FRAMEWORK FOR SITE DEVELOPMENT

4.1 CAMPUS GOALS AND OVERALL STRATEGY FOR SITE DEVELOPMENT

CAMPUS GOALS

The following list is taken from the 2013 Landscape Master Plan and still serves as a good overall summary of the campus landscape goals:

- Visually enhance the overall quality of the campus to provide a memorable environment for students, staff, and visitors
- Improve safety for pedestrians and vehicles
- Define outdoor rooms that support learning, activities, and gathering
- Enhance the campus sustainable initiatives

OVERALL STRATEGY

The overall strategy approach looks to enhance the MSUM campus from two perspectives, as seen from the outside primarily by the community and visitors and as viewed and experienced by students, faculty and staff. Also, with the increased importance of sustainability the overall landscape plan outlines initiatives that can be incorporated to create change through small moves as the campus sees building and use changes.

KEY POINTS

- Develop boulevards that include wide pedestrian and bike routes, storm water gardens, and enhanced plantings
- Build upon the existing campus pedestrian spine and academic quad to create gathering and studying opportunities, enhance plantings, and add art
- Support space-making by creating courtyards and implementing gathering spaces
  -Grier Hall area, between Library and Kise, Nemzek, Holmquist and Snarr Halls
- Restore native vegetation plantings in underutilized lawn and where buildings are removed
- Decarbonization Site Strategies:
  - Improve existing tree canopy: preserve mature trees, increase tree planting across campus to support sequestration, diversity, and next-generation trees
  - Consolidate and remove unused surface parking, restore to natural areas
  - Integrate biochar amendments to support healthy soils in restored areas and open space
  - At parking lots to remain: introduce storm water features, permeable paving, planted parking islands to reduce maintenance, add carbon sequestering elements

MSUM COMPREHENSIVE FACILITIES PLAN
4.1 CAMPUS GOALS AND OVERALL STRATEGY FOR SITE DEVELOPMENT

REGIONAL SCIENCE CENTER

The Regional Science Center consists of approximately 400 acres of land directly adjacent to Buffalo River State Park just outside of Glyndon MN. There are 160 acres of prairie restoration, with riparian forest habitat and river/wetlands spread throughout. In addition to the hiking, exploring, and research that these natural habitats provide, the RSC also has an Interpretive Center, a Field Station, and an Observatory area. Programming is provided to the General Public, K-12 field trips, and University Research groups.

Due to the habitat protection necessary at this site, the Sustainability Goals that this area can help the Masterplan provide will be limited to some small solar farming (TBD with State Agencies) and other non-intrusive methods. Wind, solar arrays, and other large infrastructure projects would be counterproductive to the goals of the RSC; however, some of the forest habitat 'understory restoration' that is being explored on previous golf course areas has the potential to contain large amounts of Carbon Sequestration.

4.2 PROPOSED PROJECTS BY PHASE

The proposed projects to meet these campus goals have been broken down by short-term (1 to 5 years), medium-term (6 to 15 years) and long-term (16 to 20+ years). Graphic campus maps have been included which note their locations and relationships to demonstrate support of the overall campus development strategy.

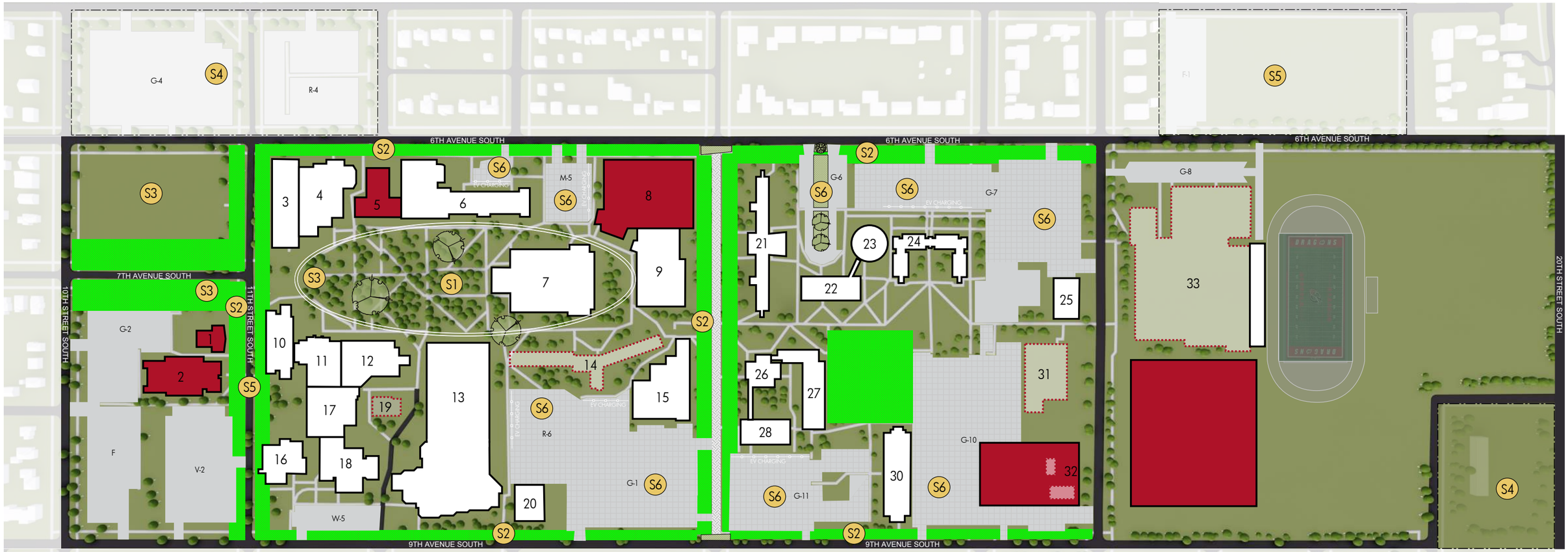
This plan recommends changes to 11th and 14th Streets which have been reviewed with the City of Moorhead. The City has shared that they are open to the changes and are coordinating with Metro COG (Council of Governments) on a potential future study which would include public input and evaluate the proposed changes. It is anticipated that the study would not be completed until the 11th Street underpass at Main has been finished.

MSUM COMPREHENSIVE FACILITIES PLAN
4.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center
2 - Center for Business
3 - Hagen Hall
4 - Langseth Hall
5 - Weld Hall
6 - Lommen Hall
7 - Livingston Lord Library
9 - Comstock Memorial Union
10 - Bridges Hall
11 - MacLean Hall
12 - MSUM Bookstore
13 - Roland Dille Center for the Arts
14 - Ballard Hall
15 - Gerdin Wellness Center
16 - Owens Hall
17 - Flora Frick Hall
18 - King Hall
19 - Grier Hall
20 - Hendrix
21 - Dahl Hall
22 - Grantham Hall
23 - Nelson Hall
24 - Holmquist Hall
25 - Heating Plant
26 - Snarr West
27 - Snarr East
28 - Snarr South
29 - Murray Hall
30 - John Newmaier Hall
31 - Maintenance
32 - Public Safety
33 - Alex Nemzek Hall

SHORT TERM KEY - SITE

- S1 Identify Legacy Trees; establish tree renewal program
- S2 Add Prairie & Pollinator Gardens
- S3 West End Campus Development
- S4 Sell West End Lots N of 6th, Potential swap for SE City Land
- S5 Sell East End Lots N of 6th Ave
- S6 Sustainability Projects (G-7 GSHP, PV & EV @ Parking, Rain Garden @ G-6)



PROPOSED SITE PROJECTS: SHORT TERM PLAN

MSUM COMPREHENSIVE FACILITIES PLAN
4.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center
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26 - Snarr West
27 - Snarr East
28 - Snarr South
~~29 - Murray Hall~~
30 - John Newmaier Hall
~~31 - Maintenance~~
~~32 - Public Safety~~
33 - Alex Nemzek Hall (New)
34 - Maint. & Public Safety
35 - Dragon Dome

MEDIUM TERM KEY - SITE

- S7 Add Campus Wind Power & PV @ parking by Stadium
- S8 Work with City to change Streets
- S9 Add Prairie & Pollinator Gardens
- S10 Greenhouse Relocation
- S11 Create Dragon Walk of Fame
- S12 West End Campus Development (Discovery Park)

PROPOSED SITE PROJECTS: MEDIUM TERM PLAN

MINNESOTA STATE UNIVERSITY MOORHEAD

MSUM COMPREHENSIVE FACILITIES PLAN
4.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center
2 - Center for Business
3 - Hagen Hall
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5 - Weld Hall
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27 - Snarr East
28 - Snarr South
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30 - John Newmaier Hall
~~31 - Maintenance~~
~~32 - Public Safety~~
33 - Alex Nemzek Hall (New)
34 - Maint. & Public Safety
35 - Dragon Dome
36 - Stadium Support

LONG TERM KEY - SITE

S13 Sustainability Projects (Add wind gen @ 20th St & Pedestrian Spine)

S14 Create W end park with sustainability features

S15 Add PV parking with EV charging

S16 Add Prairie & Pollinator Gardens

PROPOSED SITE PROJECTS: LONG TERM PLAN

4.3 PROPOSED SITE PROJECTS - SHORT TERM

S1 IDENTIFY LEGACY TREES, ESTABLISH TREE RENEWAL PROGRAM

Legacy Trees, significant and large trees should be identified in the quad and on the campus as a whole in an effort to preserve mature tree canopy. All other trees on campus should be included in a tree renewal program, which looks to selectively remove aging trees and trees in poor condition over time and replace with trees that promate age and species diversity. Canopy Management should include the creation of a tree health care plan provided by an ISA certified arborist or forester to best support legacy trees and canopy management on site. Tree renewal and a tree health care plan would be an annual cost item.

S2 ADD PRAIRIE & POLLINATOR GARDENS

In the planning process it was learned that students and many others on campus would like to reduce the amount of mowed turf grass on campus. With sustainability being important at MSUM, it is suggested that areas of prairie grass be added as available. The current small pollinator garden at the hummingbird sculpture near the Center for the Arts is seen as something that should be expanded. In addition to reducing emissions from maintenance equipment such as mowers and trimmers, these deep-rooted native plantings also increase carbon capture on campus to reduce the campus carbon footprint while also reducing stormwater runoff.

Expanding the pollinator gardens into boulevards around the perimeter of campus provide the ability to frame and highlight sustainability across the entire campus. A combination of native seeding with planted gardens at key moments will allow for strategic investment into this feature. Including elements such as interpretive signage and seating elements will further the place-making and messaging the pollinator gardens contribute to campus identity.

S3 WEST END CAMPUS DEVELOPMENT

With the completion of the new Alumni Center building the MSUM Foundation and campus are looking to move forward with projects that would focus on enhancements to the West end of campus. One part of this development would be to create a wide landscaped boulevard on 7th Avenue between 10th and 11th Streets South. This move will extend a stronger MSUM campus identity to the west which is the primary access for most campus visitors coming from 8th Street South/Highway 75. Another project would be to address the existing campus west end gateway quad entry. The current paver plaza area at the gateway quad entry has shifting and aging pavers in need of replacement to address the unevenness. The campus would like to use this project to update the plaza and landscape design of the area.

It is also suggested that an elliptical sidewalk be added to the quad at the same time as the gateway plaza. This will enhance the quad by providing a linking feature throughout, strengthen connections between the buildings and provide opportunities to add art and landscape features for the campus community to enjoy. It should also be noted that an advanced sculpture class has recently had a piece installed at the Fargo Plains Art Museum. This piece of art will be returned to the campus after two years and could be a good fit for a new art feature along the quad ellipse.

S4 SELL WEST END LOTS NORTH OF 6TH, POTENTIAL SWAP FOR SE CITY LAND

It is recommended that MSUM sell the West end campus lots which are North of 6th Avenue South. These are between 10th and 12th Street South and currently noted as parking lots G-6, G-5, and R-4. MSUM has more parking stalls available on campus for students, faculty and staff than are needed. Based on the Steering Committee's desire to have 6th Avenue South be the northern-most edge of the campus and the ability to reduce parking across campus, it is felt this would a source of potential revenue for the campus.

It is suggested that MSUM approach the City of Moorhead to swap some of the above noted land for the City Pool land at the southeast edge of campus. It is our understanding that the City is considering replacing this pool in a different location. With the pending construction of an indoor recretion and training facility and other modifications anticipated to athletic practice and competition surfaces, we feel it would be advantageous to the campus to have the additional land.

Another advantage of this additional land would be to increase MSUM's exposure on 20th Street South, which is anticipated to see increased traffic.

S5 SELL EAST END LOTS NORTH OF 6TH

It is recommended that MSUM sell the East end campus lots which are North of 6th Avenue South. These are between 17th and 19th Street South and currently parking lot F-1 and a grass soccer competition field. MSUM has more parking stalls available on campus for students, faculty and staff than are needed. Also, with a renovation to the turf field at the stadium, soccer would be moving it's games to the new stadium turf. Based on the Steering Committee's desire to have 6th Avenue South be the northern-most edge of the campus and the ability to reduce parking across campus, it is felt this would a source of potential revenue for the campus.

S6 SUSTAINABILITY PROJECTS

To promote sustainability across the campus and consider MSUM's carbon footprint the following items are suggested: 1) add a ground source heat pump field at parking lot G-7 near the Steam Plant, 2) add photovoltaics and electric vehicle charging stations to parking lots as able, 3) add a rain garden to the center of parking lot G-6 near Dahl Hall.

4.4 PROPOSED SITE PROJECTS - MEDIUM TERM

S7 ADD CAMPUS WIND POWER & PV AT PARKING BY STADIUM

The relocation of Nemzek would allow significant expansion of parking lot G-8 near the stadium. This will provide a larger pre and post-game gathering area sought by athletics and increase the amount of photovoltaics able to be installed.

To promote sustainability across the campus and consider MSUM's carbon footprint it is suggested to add blade-less wind generators at the south side of the expanded G-8 parking lot. CFP blade-less wind generation information used for consideration was sourced from Vortebladeless.com. Their website says they are not available yet, which is seen to be a possible good opportunity to reach and encourage them to beta test them in a cold weather climate to the benefit of both parties.

S8 WORK WITH CITY TO CHANGE STREETS

The Steering Committee expressed an interest in reaching out to the City of Moorhead to discuss the possibility of changing a couple of City streets that run through the campus.

The first change they would like to propose is to convert 14th Street South to a pedestrian boulevard between 6th and 9th Avenues South. This move would better physically unite the campus and promote the creation of safe, pedestrian oriented spaces. The primary campus pedestrian traffic uses an East-West central spine that runs most of the length of campus. This intersects with both 14th and 17th Streets South. The heaviest used crossing point at 14th between the academic and residential campus cores has a stop sign with flashing light. 11th and 17th Streets received pedestrian crosswalk technology in 2020. Occasionally MSUM requests a temporary closure of 14th for events. The campus is encouraged to request temporary closure of 14th more often to gauge community response to the potential of this being a permanent change.

The other change they would like to propose is to convert 11th Street South from a one-way to two-way. It is seen as a hindrance to vehicular access to the campus, especially for first time visitors.
The campus is aware that the DOT is working on a plan to add an underpass downtown at Main Avenue on 11th . It is anticipated that this would increase traffic and potentially work better as a two-way. MSUM is encouraged to stay in touch with City and DOT plans and promote the permanent change to two-way at 11th Street South.

S9 ADD PRAIRIE & POLLINATOR GARDENS

In the planning process it was learned that students and many others on campus would like to reduce the amount of mowed turf grass on campus. With sustainability being important at MSUM, it is suggested that areas of prairie grass be added as available. The current small pollinator garden at the hummingbird sculpture near the Center for the Arts is seen as something that should be expanded. In addition to reducing emissions from maintenance equipment such as mowers and trimmers, these deep-rooted native plantings also increase carbon capture on campus to reduce the campus carbon footprint while also reducing stormwater runoff.

Expanding the pollinator gardens into boulevards around the perimeter of campus provide the ability to frame and highlight sustainability across the entire campus. A combination of native seeding with planted gardens at key moments will allow for strategic investment into this feature. Including elements such as interpretive signage and seating elements will further the place-making and messaging the pollinator gardens contribute to campus identity.

MSUM COMPREHENSIVE FACILITIES PLAN
4.4 PROPOSED SITE PROJECTS - MEDIUM TERM

S10 GREENHOUSE RELOCATION

The greenhouse on campus is currently located on a roof area of Langseth Hall. It is not operating correctly and Facilities feels it is a source of roof leaks experienced in the area that persist. Departmental users and Facilities agree it would be best to relocate the greenhouse to be on the ground. The location suggested is to place it on a parking lot west of Hagen Hall.

S11 CREATE DRAGON WALK OF FAME

This project would create an area on the East end of campus near the athletic stadium where notable alumni could be recognized. This area would be adjacent to the expanded G-8 parking lot, which it is anticipated would be used for pre and post-game gatherings and is an opportunity to reinforce campus identity and demonstrate the campus's commitment to sustainability through the use of sustainable construction strategies. More detail on this feature can be found in the 2013 Landscape Master Plan.

S12 WEST END CAMPUS DEVELOPMENT (DISCOVERY PARK)

This project would expand the development of the west end of the campus by creating a Discovery Park. It is suggested that most of parking lot G-3 at the northwest corner of the campus be transformed into a park. This would be a space near the science departments in Hagen and Langseth Halls, where innovative sustainable student and research projects could be developed and showcased.

4.5 PROPOSED SITE PROJECTS - LONG TERM

S13 SUSTAINABILITY PROJECTS

To promote sustainability across the campus and consider MSUM's carbon footprint it is suggested to add blade-less wind generators along 20th Street at the east end of campus and along the pedestrian spine. The installation of blade-less wind generators at 20th will provide a visible sign to the community at large of MSUM's dedication to sustainability and contribute to campus identity.

S14 CREATE WEST END PARK WITH SUSTAINABILITY FEATURES

In the planning process the Steering Committee expressed the desire to contain the academic campus buildings west of 11th Street South. As such it is suggested that Bridges Hall be renovated for use by the Center for Business. With this move the vacant existing building would be re-purposed as business incubator space to attract innovators. It is suggested this area along with parking lots G-2, R-1 and R-3 be transformed into a park space to be enjoyed by the campus and community. To increase sustainability on campus and visibly share it with the community, it is encouraged that this park would include more sculptural examples of sustainable technology, such as blade-less wind generators, kinetic sculpture, solar trees, pressure panels, etc. Including native prairie plantings, interpretive signage, and park ameneties such as a central gathering space which will invite active and passive engagement with the park's sustainable features while supporting campus identity.

S15 ADD PV PARKING WITH EV CHARGING

To promote sustainability across the campus and consider MSUM's carbon footprint, this project encourages the addition of photovoltaics and electric vehicle charging stations to the expanded M-1 parking lot in the southwest corner of campus.

S16 ADD PRAIRIE & POLLINATOR GARDENS

In the planning process it was learned that students and many others on campus would like to reduce the amount of mowed turf grass on campus. With sustainability being important at MSUM, it is suggested that areas of prairie grass be added as available. The current small pollinator garden at the hummingbird sculpture near the Center for the Arts is seen as something that should be expanded. In addition to reducing emissions from maintenance equipment such as mowers and trimmers, these deep-rooted native plantings also increase carbon capture on campus to reduce the campus carbon footprint while also reducing stormwater runoff.

Expanding the pollinator gardens into boulevards around the perimeter of campus provide the ability to frame and highlight sustainability across the entire campus. A combination of native seeding with planted gardens at key moments will allow for strategic investment into this feature. Including elements such as interpretive signage and seating elements will further the place-making and messaging the pollinator gardens contribute to campus identity.

MSUM COMPREHENSIVE FACILITIES PLAN
4.5 PROPOSED SITE PROJECTS - LONG TERM

5.0 PROPOSED FRAMEWORK FOR BUILDING DEVELOPMENT

5.1 CAMPUS GOALS AND OVERALL STRATEGY FOR BUILDING DEVELOPMENT

GOALS

The goals noted below for this Comprehensive Facilities Plan have informed the Steering Committee's work and leadership in identifying the following proposed building projects.

1. DEVELOP PROJECTS FOR A CAPITAL BUDGET OR REVENUE BOND REQUEST TO RESPOND TO CHANGING ACADEMIC PROGRAMMING AND MISSION

- Address building physical short-falls in meeting the needs of current and future programs
- Reduce campus operational costs by eliminating deferred maintenance and incorporating energy efficient systems

2. EVALUATE AND IMPROVE SPACE UTILIZATION TO LEVERAGE AND UPGRADE EXISTING SPACE, AS NEEDED, WITH STRATEGIC INTEGRATION OF TECHNOLOGY

- Continuing to upgrade teaching classroom and lab spaces to support in-person, remote and hybrid teaching needs
- Re-locating departmental spaces to bring college spaces together and increase utilization of existing teaching classrooms and labs, and to share support spaces more broadly

3. PRIORITIZE REPAIR AND REPLACEMENT NEEDS TO TAKE CARE OF WHAT YOU HAVE AND INTEGRATE SUSTAINABILITY PRINCIPLES INTO OVERALL CAMPUS DEVELOPMENT

- Adding a ground source heat pump field near the Steam Plant to reduce carbon dependency
- Adding photovoltaics and electric vehicle charging stations to parking lots
- Consider Power Purchasing Agreement for potential funding resource
- Adding prairie and pollinator gardens across campus to reduce mowing of turf grass and its carbon footprint impact
- Address through capital budget or revenue bond requests
- Address through R & R or HEAPR project funds
- City power provided to campus is 85% carbon neutral. Continue to work toward becoming carbon neutral campus.

4. ACQUIRE OR SELL REAL ESTATE

- Evaluate expanding Regional Science Center through land gift to Alumni
- Selling main campus property north of 6th Avenue South to provide additional funds for campus needs, compress campus footprint, and reduce operational costs

5. IDENTIFY OBSOLETE SPACE TO BE REMOVED

- Reviewing buildings by area and as a whole regarding space utilization and deferred maintenance to determine value
  -See Building Matrix in executive summary and Appendix.

Consideration was given to these goals through the lens of the key priorities seen on higher educational campuses: the Future of Learning, Business of Education, and Resilience of Facilities as described in the

executive summary.

It is known that enrollment has been a challenge system-wide with little to no growth anticipated over the next few years. MSUM is experiencing this as a campus and seeing a slow continued decrease in undergraduate numbers, but steady small growth in graduate enrollment. It is also understood that space utilization and energy use will play a greater role in obtaining capital bonding requests.

The goals also look to align with and further MSUM's Strategic Priorities (see Framework in appendix) focused on providing a distinctive student experience that makes the MSUM academic experience standout, provides equity and inclusion in the changing world environment, and incorporates community engagement for the benefit of both the student and community.

OVERALL STRATEGY

The overall strategy approach used looks to proactively downsize the MSUM campus without over responding to the pandemic and retaining what is best at MSUM. The Steering Committee worked toward this end by isolating variables to consider them more deeply through the review of four extreme schemes: 1) Culture of Connecting/Activating Quad, 2) Carbon Neutral Campus, 3) Best Business Case, and 4) Honor Heritage, Technology of Tomorrow.

SOME HIGHLIGHTS OF THIS WORK WERE THE FOLLOWING:

- Decrease the physical size of campus and use 6th Avenue South as the northern boundary
- Keep clearly defined zones across campus – academic, residential, and athletics
- Enhance the existing west campus gateway, primary east-west pedestrian spine and add exterior gathering areas
- Preserve historical buildings on campus such as Weld
- Decrease campus square footage to reduce operational costs and focus the available resources
- Seek to increase sustainability and energy efficiency on campus through a variety of ways

See sections 5.4 and 5.5 for goals and strategy specific to the Residential structures and Athletic facilities.

OPERATIONAL STRATEGIES

Since the 2016 Comprehensive Facilities Plan the campus has centralized academic scheduling and optimized room automation to lock/unlock teaching spaces and 'turn up' the hvac system when scheduled for use. Classroom furniture and technology is continuing to be updated so faculty have what is needed in the appropriately sized rooms. These items help to reduce the operational costs to run the campus and the campus is working to advance these not only to newly renovated areas, but throughout other buildings were possible.

Another scheduling strategy has been put in place to combat the typical campus challenge of faculty resistance to scheduling Monday/Wednesday/Friday classes, especially in the afternoon. The option for two longer 75 minute class times Monday/Wednesday is now available.

5.2 PROPOSED PROJECTS BY PHASE

The proposed projects to meet these campus goals have been broken down by short-term (1 to 5 years), medium-term (6 to 15 years) and long-term (16 to 20+ years). Graphic campus maps have been included which note their locations and relationships to demonstrate support of the overall campus development strategy.

Section 6 outlines the potential funding resources for the proposed development.

MSUM COMPREHENSIVE FACILITIES PLAN
5.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center
2 - Center for Business
3 - Hagen Hall
4 - Langseth Hall
5 - Weld Hall
6 - Lommen Hall
7 - Livingston Lord Library
9 - Comstock Memorial Union
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28 - Snarr South
29 - Murray Hall
30 - John Newmaier Hall
31 - Maintenance
32 - Public Safety
33 - Alex Nemzek Hall

SHORT TERM KEY - BUILDINGS

- B1 Alumni Center
- B2 Renovate Weld Hall
- B3 Center for Business (refresh Interiors)
- B4 Reduce Square Footage and Def. Maintenance (Grier Hall)
- B5 Reduce Square Footage and Def. Maintenance (Murray Hall)
- B6 Remove/rebuild expanded Maint. & Public Safety Building
- B7 Complete Comstock Memorial Union Renovation
- H1 Remove Ballard Hall Building
- A1 Replace Turf Field and Track
- A2 Build Dragon Dome Facility

PROPOSED BUILDING PROJECTS: SHORT TERM PLAN

MSUM COMPREHENSIVE FACILITIES PLAN
5.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center
2 - Center for Business
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33 - Alex Nemzek Hall (New)
34 - Maint. & Public Safety
35 - Dragon Dome

MEDIUM TERM KEY - BUILDINGS

- B8 A3 Replace Nemzek Hall
- A4 Stadium Support Building
- B9 Compress Square Footage (relocate occupants/remove King Hall)
- B10 Replace Center for the Arts (smaller footprint)
- H2 Housing Study (Nelson & Holmquist)

PROPOSED BUILDING PROJECTS: MEDIUM TERM PLAN

MINNESOTA STATE UNIVERSITY MOORHEAD

MSUM COMPREHENSIVE FACILITIES PLAN
5.2 PROPOSED PROJECTS BY PHASE

1 - Alumni Center	~~14 - Ballard Hall~~	26 - Snarr West
2 - Center for Business	15 - Gerdin Wellness Center	27 - Snarr East
3 - Hagen Hall	16 - Owens Hall	28 - Snarr South
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7 - Livingston Lord Library	20 - Hendrix	~~32 - Public Safety~~
9 - Comstock Memorial Union	21 - Dahl Hall	33 - Alex Nemzek Hall (New)
10 - Bridges Hall	22 - Grantham Hall	34 - Maint. & Public Safety
11 - MacLean Hall	23 - Nelson Hall	35 - Dragon Dome
12 - MSUM Bookstore	24 - Holmquist Hall	36 - Stadium Support
13 - Roland Dille Center for the Arts	25 - Heating Plant	

LONG TERM KEY - BUILDINGS

- B11 Renovate Bridges Hall for Center for Business
- B12 Repurpose Center for Business Building
- B13 Renovate MacLean and Flora Frick Halls
- B14 Renovate Library IT for Archives
- B15 Build New Admin. & Support Building
- B16 Wellness Addition

PROPOSED BUILDING PROJECTS: LONG TERM PLAN

5.3.1 SHORT TERM ACADEMIC BUILDING PROJECTS

B1 ALUMNI CENTER

The construction of a new Alumni Center was a short-term project included in the 2016 Comprehensive Facilities Plan. That plan is now becoming a reality thanks to the fundraising success of the recent Vision 2020 campaign. In late April 2022 a groundbreaking ceremony was held for this new 18,500 square foot facility which will be located adjacent to the Center for Business on land that was made available with the demolition of the vacant Newman Center building.

Construction of the building will be completed in the summer of 2024 and will serve multiple purposes for the campus. It will be an anchor for alumni returning to campus and include space for students and community members to interact. The lobby and event space for up to 300 people will enhance its multipurpose use. It will also be home to the MSUM Foundation, whose staff will be co-located after having been scattered throughout the campus

B2 RENOVATE WELD HALL

This 35,110 sf renovation will preserve MSUM's oldest building on campus built in 1914. Used primarily by English this project will address deferred maintenance, code and accessibility deficiencies and upgrade systems for better energy efficiency. Glasrud Auditorium will be restored to its original historic character, reinstating the balcony, and increasing seating capacity to approximately 400, while also improving acoustics, stage, backstage and lighting/theatre technologies. A new addition to the northeast entry will provide ADA accessibility to the stage and backstage areas, as well as, provide much needed mechanical equipment space.

This project was developed in a 2012 predesign which was updated in 2014 and is currently under design to be ready for construction to begin upon the receipt of funding. Since the final design phase was moving forward before the CFP was complete, MSUM is encouraged to review the design to confirm it aligns with current CFP goals.

B3 CENTER FOR BUSINESS – REFINISH INTERIORS

With many interior finishes still in place from the original building construction in 1995, the campus is concerned these tired finishes do not reflect the dynamic forward thinking Center for Business image desired. Along with these upgrades a new finance lab will also be created with alumni donations.

B4 REMOVE GRIER HALL

Built in 1932 as the central steam plant Grier Hall has seen many uses over the years but currently serves as a support building and is home to University Marketing & Communications and Production Services. With 7,028 square feet this building has one of the highest deferred maintenance dollars per SF on the campus and proves to be difficult for Facilities to maintain for many reasons – a couple being its age and the adjacent vacant underground coal bin. Located in a busy area of campus near the Dragon Café and Bookstore, the removal of this building will not only reduce deferred maintenance by $1,655,000 over the next 10 years, but also drastically improve pedestrian and vehicle traffic in the area and storm water management to eliminate further basement water damage in an adjacent building.

It is anticipated that the Marketing & Communication occupants will be moving into the new Alumni Center. With the completion of that building the remaining Production Services occupants will potentially be relocated into a 2,500 sf renovated space anticipated to be in McLean Hall to co-locate them with other campus service functions. With all occupants out of the building Grier Hall (7,028 sf) will be demolished and the site improved.

MSUM COMPREHENSIVE FACILITIES PLAN
5.3 ACADEMIC BUILDINGS PROPOSED PROJECTS

B5 REMOVE MURRAY HALL

Murray Hall is an academic building currently used by Speech-Language & Hearing Services department and clinic, the Regional Assistive Technology Center (RATC), and includes classrooms, labs, and student study areas. Its basement is used by Building Services as a campus hub for supplies and services. The academic users will potentially be moved into Lommen Hall, where a small 5,000 sf area of renovation would be needed for the clinic functions. Room Utilization reporting shows classroom utilization to be around 30% in Lommen with three classroom spaces noted as unused. This along with the new classrooms expected with the Weld Hall renovation should provide adequate classroom space. There is an existing parking lot conveniently located which is anticipated to be available for community members to use when visiting the clinic for services.

This project will positively impact the campus by providing clinic users a more positive first impression of the campus when using a recently renovated building which is thought to be in a more welcoming location. Plus, the demolition of Murray Hall (34,100 sf) will also reduce deferred maintenance $10,470,000 over the next ten years.

B6 BUILD EXPANDED MAINTENANCE BUILDING

This project could be impacted by the suggested P2 Campus East Side Study. It is included as part of this plan as an ideal future campus organizational strategy.

The current Maintenance Building is not large enough for all the Facilities Management needs. As such, Building Services has been using the Murray Hall basement and additional storage space has been rented off campus for several years for large equipment and other shop and storage needs. By building a new larger facility on campus these items can be co-located and save annual rental cost. Plus, it is desirable to move this utilitarian service focused building off the campus pedestrian circulation spine if a nearby location on the south side of campus is used, it would also provide the opportunity to include space for the associated services now housed in the very small residentially constructed Public Safety Building.

With this expansion, the existing Maintenance (21,700 sf) and Public Safety (3,200 sf) Buildings will be removed saving the campus $6,500,000 in deferred maintenance in the next ten years.

B7- COMPLETE COMSTOCK MEMORIAL UNION RENOVATION

This project will look to replace existing inefficient single-pane windows remaining in some areas of the building and provide a much-needed finish update in the ballroom. Recently completed renovation projects in other areas of the building only highlight the age of the ballroom finishes.

P1 CARBON FOOTPRINT BASELINE STUDY

Study sought to follow the On Earth Day 2021 commitment signed by MSUM. This commitment had a stated goal to "make MSUM campus carbon neutral as soon as practically possible." Study would complete a baseline carbon footprint for Scope 1, 2 and selected elements of Scope 3 along with a carbon neutral plan.

P2 CAMPUS EAST SIDE STUDY

The Steering Committee feels a study should be done to look at the east side of the campus since there are several new potential buildings and other improvements being proposed which should be coordinated. The CFP recommendations show an ideal scenario, but will challenge the campus with being able to fund the construction of a new relocated Maintenance Building with local funds to allow for Nemzek to be moved to the east side of 17th Street South adjacent to the pedestrian spine. Also the proposed Dragon Dome predesign was done presuming Nemzek would be remaining in its current location so it should be reviewed to assess the potential impact of Nemzek being moved.

5.3.2 MEDIUM-TERM ACADEMIC BUILDING PROJECTS

B8/A3 REPLACE NEMZEK HALL

Nemzek Hall is a combined academic and athletics building currently used by Dragon Athletics and the Health & Human Performance department. The campus has recognized the many needs of this building and a predesign was completed in February of 2021. Since this was done before the CFP was complete another alternative was suggested by the CFP Steering Committee. They would like to consider moving Nemzek Hall from the East side of 17th Street South to the West. This would pull the academic functions in the building closer to the academic core. Provide a stronger building presence on the East end of the campus pedestrian circulation spine. And provide space for additional athletic development at the East end of the pedestrian spine.

The existing Nemzek Hall was built in several sections over the years, thought to be spatially inefficient and is difficult for campus Facilities Management to address building needs. As such, it is anticipated that a newly constructed Nemzek Hall would be able to be smaller in square footage if designed as a whole.

By replacing Nemzek Hall with a new relocated building the existing (154,696 sf) building will be removed. Allowing for the expansion of the small adjacent G-8 parking lot. This would serve as a pre/post game gathering location, which is desired.

B9 COMPRESS SQUARE FOOTAGE & CA REPLACEMENT PREP

King Hall is an academic building used for Geoscience and Art Education lab and Art (Photography & Design) studios, departmental space for Anthropology and Earth Sciences, and classrooms.

This project looks to compress square footage on campus by proposing the relocation of the Geoscience, Anthropology and Earth Sciences users to Hagen and Langseth Halls. This will allow for their co-location with other science departments within the college. It will also provide additional space in King Hall so it can be used as swing space for an anticipated future Center for the Arts building replacement project.

B10 REPLACE CENTER FOR THE ARTS

The Center for the Arts is an academic building currently used by the Entertainment Industries & Technology department, the School of Art, the School of Performing Arts, and the School of Media Arts & Design. With the theatre arts and some art production programs discontinued, this building has unused space that is not easily adaptable to other possible uses.

The existing Center for the Arts was built in several sections over the years, thought to be spatially inefficient, and difficult for campus Facilities Management to address building needs. This along with the elimination of programs, lends to the anticipation that a newly constructed Center for the Arts would be smaller in square footage.

King Hall would be used as swing space for the Center for the Arts users during the building replacement project. The new building should include space for the College of Arts & Humanities department spaces currently in King Hall. It is also desired that the Dean's office be moved from Bridges Hall to be co-located with many of its departments.

As part of the Center for the Arts building replacement project the existing building (130,465 sf) will be removed for the new building to be constructed in its place and upon completion/move-in the existing King Hall (43,570 sf) building will be removed. Demolition of these two buildings will reduce deferred maintenance by more than $30,000,000 over the next ten years.

A predesign was completed in October 2014 for the Center for the Arts to be renovated.

MSUM COMPREHENSIVE FACILITIES PLAN
5.3 ACADEMIC BUILDINGS PROPOSED PROJECTS

B11 RENOVATE BRIDGES HALL FOR CENTER FOR BUSINESS

Bridges Hall (50,880 sf) is an academic building currently used by the Dean of Arts & Humanities, Computer Science and Information Systems, Planetarium, Women's Center, Psychology, the Rainbow Dragon Center and classrooms. As noted in an earlier project description, it is anticipated that the Dean of Arts & Humanities office would have been moved out.

The Center for Business (37,925 sf) is an academic building currently used by the Professional Management department, the Paseka School of Business, and Graduate Studies offices including the Dean of the College of Business, Analytics, and Communication.

During the CFP planning process, the Steering Committee expressed wanting to move the Center for Business east across 11th Street South so it is part of the academic core of campus around the quad.

The proposed project would renovate Bridges Hall to be used by the Center for Business. It is suggested that the Planetarium remain, Psychology be relocated to Maclean Hall, and the Women's and Rainbow Dragon Centers be relocated. Bridges Hall currently houses a Business department - the Computer Science and Information Systems. With the larger square footage of Bridges, it is recommended that Economics, Law & Politics be relocated into the building from Maclean Hall. These departmental shifts will allow for the co-location of more Business departments within Bridges Hall and deferred maintenance will be reduced by $8,000,000 over the next ten years.

5.3.3 LONG-TERM ACADEMIC BUILDING PROJECTS

B12 REPURPOSE CENTER FOR BUSINESS BUILDING

Upon the completion of the renovation of Bridges Hall for the Center for Business. The existing Center for Business building will be re-purposed to create leas-able small and start-up business incubator space. Having this available will enhance campus affiliated research and development. It also aligns with the site development proposed for the west end of campus.

B13 RENOVATE MACLEAN HALL AND FLORA FRICK HALL

Maclean Hall (93,487 sf) is an academic and support building currently used by Mathematics, the School of Communication & Journalism, Economics, Law & Politics departments and includes several classrooms. It is also home to the University bookstore. As noted in an earlier project description, it is anticipated that the Economics, Law & Politics departments would have been moved out.

Flora Frick Hall (30,962 sf) is an academic and support building currently used by Student Support Services, such as the Dean of Students Office, the Office of Student Conduct & Resolution, Career Development Center, the Academic Success Center, and Veteran's Services, as well as classroom spaces.

In the renovation of MacLean and Flora Frick Halls the building finishes would be refreshed and technology, mechanical and electrical systems would be updated. Overall campus classroom and lab utilization would also be reviewed at this time to determine if some classrooms should be re-purposed for other uses. It is anticipated with departments moving out there would be space available for IT to relocate from the Library. The current loading dock area which is primarily used by the bookstore and Post Office is small. A small addition is proposed to right size this area and create a proper loading dock which would also be used by the building's new occupant, IT.

B14 RENOVATE VACATED LIBRARY IT SF FOR ARCHIVES

Library Archives services is currently undersized and in a space that does not have the ventilation controls needed for some materials. With additional space they would be able to increase their interaction and offerings to support the academic mission of the university. This proposed project would renovate the space vacated by IT moving out for the expansion of the Library Archives.

B15 NEW ADMIN & SUPPORT BUILDING

This project encourages the campus to construct a new Administration and Support Services building to replace Owens Hall. Owens is a support building currently used by University Administration and includes offices for Admissions, Business Services, Financial Aid and Scholarships and the Registrar. The CFP suggests the new building be located on the south side of the quad between the Center for the Arts and the Gerdin Wellness Center. It would allow the campus to address short-falls currently experienced in Owens Hall and create a new visible welcoming front door to the campus for visitors that is easy to find and makes the first impression desired by MSUM.

The Steering Committee discussed as part of this project that the campus should consider including space for the Accessibility Resources and Counseling Center services currently provided in Hendrix. The Hendrix building was built in 2003 using residential construction and originally intended to service the campus for a shorter period of time. It is anticipated that as this building ages it will require more maintenance. Moving these functions into the new Admin & Support building will allow for shared uses, continue to compress campus square footage and reduce maintenance costs.

Upon project completion the existing Owens Hall (30,810 sf) and Hendrix (7,411 sf) would be demolished. This would reduce deferred maintenance costs by over $6,000,000 over the next ten years.

B16 GERDIN WELLNESS CENTER ADDITION

This project looks to expand the Gerdin Wellness Center with an addition to be able to provide additional gym space and adjust existing areas to be able to better accommodate the current wellness needs of the students.

5.4 RESIDENTIAL BUILDING PROPOSED PROJECTS

HOUSING AND RESIDENTIAL LIFE GOALS

Housing & Residential Life has focused on refreshing their buildings' finishes and furniture, especially in shared spaces, and sought to upgrade bathroom facilities. Major renovations have been completed in South Snarr and East Snarr Halls and they continue to address the backlog of deferred maintenance as much as possible. All or most recommendations in the 2016 CFP have been completed.

MSUM requires first year freshman to live on-campus with limited exceptions. Housing & Residential Life have an online system which allows students to personally select the building and room style they want to live in. Additional room options have been added in recent years. Nelson Hall has upper-class singles with full size beds. Grantham and Holmquist Halls have super singles, which only have one set of furniture in a double room. Super singles are open to new and returning students. All of this has been a strategy to diversify offerings available to students, increase the number of students returning to on-campus living, and meet the desires for new and returning students while also making use of the space available.

With the pandemic, Learning Community involvement dropped, but numbers now appear to be on the rise. They are still a valued part of residential life and will continue to be supported and grown.

ISSUES

The current residential halls on campus are best able to serve a student body enrollment of 7,500 students. Enrollment is now around 5,100 so the number of rooms available exceeds the needs of the campus. Buildings are aging and deferred maintenance grows so a reduction is needed.

The bathrooms in many buildings have been updated. This work will continue until completed in all buildings. These renovations are creating gender neutral facilities by providing individual privacy. This has been a positive in allowing students to have more options as they select their room location.

The vast majority of the existing residential buildings have traditional rooms with shared bathroom facilities on each floor. Housing would like to increase the number of suite style rooms available, similar to the first floor of Holmquist or apartment style like Neumaier, but do not feel that a new building will be financially feasible in the near future.

MSUM COMPREHENSIVE FACILITIES PLAN
5.4 RESIDENTIAL BUILDING PROPOSED PROJECTS

OVERALL STRATEGY

With enrollment anticipated to have little to no growth the overall strategy would be one of reduction similar to the campus as a whole. Housing & Residential Life is working on creative ways to keep students in on-campus housing longer as studies have shown that students do better academically and it increases retention rates. They are also looking to have a review and update done of their deferred maintenance list and its potential cost, plus to complete a study to analyze the number of beds needed to align with campus enrollment and style of rooms students will be seeking. This will assure available financial resources are directed to work which will have the highest impact moving forward.

5.4.1 SHORT-TERM RESIDENTIAL BUILDING PROJECTS

H1 REMOVE BALLARD HALL

The interior room finishes and furniture have been updated in Ballard Hall but it still has a large amount of deferred maintenance. While it is requested by residential students due to its location in the campus academic core this location does not align with the Steering Committee's goal of further strengthening the academic, housing and athletic campus cores. Housing & Residential Life leadership feel the building plan layout does not work as well as to provide support services as other halls on campus. There are numerous electrical and hvac system upgrades needed, but Facilities Management is especially concerned with the high voltage inside the building.

The CFP recommends the 2,500 sf Housing & Residential Life administrative offices be relocated to another existing hall and the Ballard Hall (52,212 sf) building be demolished. This will reduce program bed capacity by 168 and reduce deferred maintenance by $4,875,000 over the next ten years.

5.4.2 MEDIUM-TERM RESIDENTIAL BUILDING PROJECTS

H2 HOUSING STUDY & ASSOCIATED PROJECTS

Housing & Residential Life feels a study should be done to have a better understanding of future anticipated housing needs. They know the existing residence halls provide more rooms than is currently required, but once Ballard is removed it would be helpful to study the projected number and type of rooms needed to best align the number of bed available to the campus enrollment and style housing that residential students will be seeking. Should a second building be removed and what building(s) would be best suited for renovation? The CFP recommendation shows a scenario which focuses on addressing the buildings which have the highest deferred maintenance.

Holmquist Hall (44,784 sf / 177 program bed capacity) currently has 18 suite style rooms on the first floor with double and single rooms on the two floors above. A potential renovation to convert the entire building to suite style rooms is encouraged. An elevator is needed to provide accessibility to all floors and other mechanical and electrical system updates. This would reduce deferred maintenance by $4,400,000 over the next ten years.

Nelson Hall (78,050 sf / 198 program bed capacity) is a round 13-story tall residential building. While most rooms were built for double occupancy, due to the pie shape nature of the rooms and current abundance of room availability, this building is being used as upper-class single rooms. With two aging elevators that Facilities anticipates they will soon not be able to get parts to provide service, replacement of these is anticipated along with a large amount of mechanical and electrical system updated. It is suggested that Nelson Hall be considered for demolition to see a reduction in deferred maintenance of more than $12,000,000 in the next ten years.

5.5 ATHLETICS BUILDING PROPOSED PROJECTS

ATHLETICS FACILITIES GOALS

The following is taken from the latest Athletics Master Plan:
While the Dragon Athletics 2020-2025 strategic plan is aligned with the purpose and strategic anchors of Minnesota State University Moorhead it has also been created with the promise of fulfilling the athletic department vision of being outstanding in our conference, competing nationally, valued by our community of stakeholders and integral to the advancement of the University.

Dragon Athletics – More than a Game!

We Believe in the Thrill of Victory and understand what it takes to experience it. Most importantly, we know that victory comes from having the right people in the right places within Dragon Athletics. It isn't enough to have the right people, those people need to be committed to winning with integrity. When those people are resourced competitively, we are going to enjoy the thrill of victory and celebrate our successes!

We Believe in Developing our People by creating a holistic growth environment. Identifying and focusing on the mental, physical, emotional, and professional development of our student-athletes and staff gives us a competitive advantage and prepares our people for life.

We Believe we are Part of Something Bigger Than Ourselves and are committed to transforming the world by transforming lives. It starts with our pride and engagement in being members of MSUM Moorhead, the NCAA, Northern Sun Intercollegiate Conference and the Minnesota State System communities. These relationships are critical because they provide a supportive environment that allows us to do more because we are doing it together.

MSUM COMPREHENSIVE FACILITIES PLAN
5.5 ATHLETICS BUILDING PROPOSED PROJECTS

Goals from the Master Plan are 1) to build the Dragon Dome enclosed practice facility, 2) grow to 100 scholarship equivalencies, 3) secure funds for the design and construction of Nemzek Hall as MSUM's #1 priority, 4) add student athlete support services.

ISSUES

NEMZEK HALL SHORTCOMINGS

- Entry lacks visibility, branding is not good, game-day experience is lacking
- Swimming needs spectator seating
- Locker rooms need to be addressed for all sports

STADIUM AND FIELD SHORTCOMINGS

- Natural turf grass does not have irrigation and there is no turf management of all-natural system
- Soccer and football use porta-potty for practice
- Football bleachers are challenging, soccer does not have any
- Getting to track and field for spectator experience is difficult
- Parking is an issue

5.5.1 SHORT-TERM ATHLETICS BUILDING PROJECTS

A1- REPLACE TURF FIELD AND TRACK

This project looks to replace the existing turf field and surrounding track. It is suggested that the track configuration be modified to accommodate a turf field wide enough for use by the soccer team.

A2- BUILD DRAGON DOME FACILITY

This project could be impacted by the suggested P2 Campus East Side Study. It is included as part of this plan as an ideal future campus organizational strategy.

This new facility will include a turf field, track, and support spaces. It will provide much needed interior practice space for many student athletes and be available for use by the general student population. A predesign has been completed to outline the preliminary design concept.

5.5.2 MEDIUM-TERM ATHLETICS BUILDING PROJECTS

A3/B5 REPLACE NEMZEK HALL

See project description for B5.

A4- STADIUM SUPPORT BUILDING

This project could be impacted by the suggested P2 Campus East Side Study. It is included as part of this plan as an ideal future campus organizational strategy.

This project would build a new stadium support building to provide space for ticketing, concessions, public restrooms, and team meeting rooms. These functions are currently located in the adjacent Nemzek Hall.

6.0 CAPITAL BUDGET INCREMENTAL DEVELOPMENT PROGRAM

6.1 INTRODUCTION

This section outlines the costs of projects proposed in the short, medium, and long-term phases of this comprehensive facilities plan. Anticipated funding resources are noted based on discussion with the MSUM Steering Committee.

Funding sources include: Capital Budget Bonds, Higher Education Asset Preservation and Replacement (HEAPR), Revenue Bonds, Revenue Reserves, Fundraising, Grants, Local Campus Funds (including proceeds from sold property), Power Purchase Agreement (PPA), and Public Private Partnerships.

The proposed projects include:
- Projects that are already in planning
- Major capital projects
- Building improvements and removals
- Site improvements and sale of property
- Asset preservation projects

Capacity to take on Debt: MSUM will be able to take on new debt service obligations through the combination of reallocation of existing resources as well as from reduction in future years' debt service obligations from existing projects.

Asset Preservation Projects
The HEAPR projects included align with and support larger campus improvement projects. As major capital projects happen, they will also continue to be used to address needs. This will allow more funds to be available for other items on the Facilities list, such as roof and equipment replacements.

Local Campus Funds
In general these funds will be continue to be used as they have in the past - for small building remodels, site improvements, and studies. Several of the items included in the list align and support larger campus improvement projects which look to relocate occupants to co-locate college programs, free up existing areas to be re-purposed, or for building demolition.

MSUM COMPREHENSIVE FACILITIES PLAN
6.1 INTRODUCTION

The Steering Committee understands the importance of work being done with these funds and encourages campus administrators to set aside larger amounts yearly for the continued implementation of the plan.

The following information summarizes the combined chronological timeline for proposed projects and their projected costs for Short (1 – 5 years), Medium (6 – 15 years) and Long-Term (16 – 20+ years) time frames. Proposed projects are also broken down by the anticipated funding resource. Estimates are anticipated construction costs in July 2022 dollars. Soft costs and escalation should be considered for total project costs when moving forward with the projects. These probable costs are based on previous study information, square footage assumptions, and comparable projects.

The Appendix contains a combined sequential list of projects by phase with more detailed information regarding anticipated costs, funding resources, and financial benefits.

6.2 CHRONOLOGICAL SUMMARY OF PROPOSED PROJECTS

Plan Ref #	*ALL COSTS ARE IN JULY 2022 DOLLARS*	Physical Work Starts (calendar yr)	Estimated Construction	DM Savings (10 years)	Funding Resources
Short-Term Projects (2022 - 2027)					
S1	Identify legacy trees & establish renewal	2022	$8,000		Local
S2	Add areas of prairie & pollinator garden	2022	$1,200,000		Local
B1	New Alumni Center	2023	$8,000,000		Fundraising
B2	Renovate Weld Hall	2023	$14,200,000	$10,716,703	Cap Bonds
P1	Carbon Footprint Baseline Study	2023	$0		Grants, Local
P2	Campus East Side Study - Maint., Dome, Nemzek	2023	$0		Local
B3	Center for Business - refinish interiors	2023	$2,000,000		Fundraising
S3	West end campus development	2024	$2,900,000		Local
	Create 7th Ave boulevard	2023	$1,800,000		
	Enhance gateway & add visible sustainability	2023	$800,000		
	Add elliptical sidewalk in quad	2024	$200,000		
	Public Art Sculpture	2024	$100,000		
B4	Remove Grier Hall	2024	$1,055,200	$1,655,520	HEAPR, Local, PPA
	Relocate Grier Occupants	2023	$515,200		
	Demolish Grier Hall Building	2024	$115,000		
	Courtyard & Paving Area	2024	$200,000		
	Energy Efficiency & Sustainable Features	2024	$125,000		
	Stormwater Improvements	2024	$100,000		
H1	Remove Ballard Hall	2024	$1,200,000	$4,875,474	Rev Reserves
	Relocate Res Life Offices	2024	$688,000		
	Demolish Ballard Hall Building	2024	$1,200,000		
S4	Sell West end lots N of 6th Ave	$2,024	($800,000)		Local (Sold Property)
	Approach City to swap some for pool land				
S5	Sell East end lots N of 6th Ave	2024	($500,000)		Local (Sold Property)
A1	Replace Turf Field and Track	$2,024	$3,000,000		Fundraising, Local
A2	Build Dragon Dome Facility	2025	$23,100,000		Rev Bonds, Fundraising
B5	Remove Murray Hall	2026	$2,187,500	$10,469,770	HEAPR, Local
	Relocate Murray Occupants	2025	$1,437,500		
	Demolish Murray Hall Building	2026	$750,000		
B6	Build Expanded Maintenance Building	2026	$13,818,000	$6,504,049	HEAPR, Local
	Construct new building	2026	$13,200,000		
	Remove Public Safety Building	2025	$75,000		
	Remove Maintenance Building	2027	$543,000		

S6	Sustainability Projects	2026	$1,700,000		Grants, Local, PPA
	Add ground source in parking at Steam Plant	2026	$0		
	Add PV & EV to available parking lots	2026	$0		
	Add rain garden in parking near Dahl	2026	$1,200,000		
	Energy Efficiency & Energy Monitoring	2024	$500,000		
B7	Complete Comstock Memorial Union Renovation	2027	$2,700,000	$4,196,346	Rev Reserves
Medium-Term Projects (2028 - 2037)					
B8/A3	Replace Nemzek Hall	2028	$56,940,000	$22,598,020	Cap Bonds
	Submit predesign for new Nemzek	2024			
	Receive funding for design of new Nemzek	2026	$1,240,000		
	Build new Nemzek Hall in new location	2028	$52,500,000		
	Remove existing Nemzek Hall Building	2030	$3,200,000		
	Enlarge G-8 Parking	2032	$0		
S7	Add PV & EV to parking near stadium	2028	$0		PPA
B9	Compress Square Footage & CA Replacement Prep	2028	$804,000		Local
	Relocate Science Departments from King				
S8	Work with City to change Streets	2030	$0		
	14th pedestrian boulevard between 6th & 9th				
	Change 11th to two-way				
S9	Add areas of prairie & pollinator garden	2030	$1,200,000		Local
H2	Housing Study & Associated Projects	2030	$17,075,000	$16,490,730	Rev Bonds & Reserves
	Housing Study	2028	$75,000		
	Renovation of Holmquist Hall	2030	$12,000,000	$4,402,655	
	Remove Nelson Hall Building	2034	$5,000,000	$12,088,075	
S10	Greenhouse Relocation	2030	$200,000		Fundraising, Grants, Local
A4	New Stadium Support Building	2032	$3,500,000	$1,617,589	Fundraising
S11	Create Dragon Walk of Fame	2032	$600,000		Fundraising
B10	Replace Center for the Arts	2034	$46,500,000	$20,786,114	Cap Bonds, Fundraising, Local
	Submit predesign for new CA	2028			
	Receive funding for design of smaller CA	2030	$3,000,000		
	Relocate CA to King Hall	2032			
	Remove existing CA Building	2032	$2,600,000		
	Build smaller new CA	2034	$40,000,000		
	Include A&H Deans office				
	Remove King Hall Building	2036	$900,000	$10,146,518	

S12	West end campus development	2036	$150,000		Grants, P3
	Create Discovery Park (NW)	2036			
Long-Term Projects (2038 - 2043+)					
S13	Sustainability Projects	2038	$2,500,000		Local, P3
	Add wind gen at 20th St & pedestrian spine		$1,000,000		
	Add other enhancements along spine		$1,500,000		
B11	Renovate Bridges Hall for Center for Business	2038	$15,240,000	$8,066,316	Cap Bonds, Local
	Submit predesign	2034			
	Design funding	2036	$1,040,000		
	Construction funding	2038	$13,000,000		
	Co-locate more business departments				
	Planetarium to remain				
	Relocate psychology to Hagen		$600,000		
	Relocate Women's Center & Rainbow Dragon Center		$600,000		
B12	Repurpose Center for Business Building	2040	$10,000,000	$4,975,341	Fundraising, Grants
	Create Small/Start-up Business Incubator				
S14	West end campus development	2040	$750,000		Fundraising, Local, P3
	Complete Discovery Park (SW) w sustainability features				
B13	Renovate MacLean & Flora Frick Halls	2042	$27,000,000		Cap Bonds, Local
	Repurpose extra classroom sf				
	Modify loading dock				
	Relocate IT from Library				
	Submit predesign	2038			
	Design funding	2040	$2,000,000		
	Construction funding	2042	$25,000,000		
B14	Library renovation for Archives	2043	$1,800,000		Local
B15	Build new Administration & Support Building	20+	$11,880,000		Cap Bonds
	Submit predesign				
	Design funding		$880,000		
	Construction funding		$8,400,000		
	Remove Owens Hall Building		$750,000		
	Relocate Hendrix Building Student Services		$1,700,000		
	Remove Hendrix		$150,000		
B16	Gerdin Wellness Center Addition	20+	$3,240,000	$872,547	Rev Reserves
	Gym expansion				

Short-Term Total *	$77,068,700
Medium-Term Total	$126,969,000
Long-Term Total	$72,410,000

* does not include sale of property

MSUM COMPREHENSIVE FACILITIES PLAN
6.2 CHRONOLOGICAL SUMMARY OF PROPOSED PROJECTS

6.3 PROPOSED PROJECT FUNDING BY RESOURCE

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Capital Budget Bonds					
B2	Renovate Weld Hall - Construction	2023	$14,200,000	$10,716,703	
B8/A3	Replace Nemzek Hall - Design	2026	$1,240,000		
	Replace Nemzek Hall - Construction	2028	$55,700,000	$22,598,020	
B10	Replace Center for the Arts - Design	2030	$3,000,000		
	Replace Center for the Arts - Construction	2032	$37,600,000	$20,786,114	$5.9M HEAPR, Local
B11	Renovate Bridges for Center for Business - Design	2036	$1,040,000		
	Renovate Bridges for Center for Business - Construct.	2038	$13,000,000	$8,066,316	$1.2M Local
B13	Renovate MacLean & Flora Frick Halls - Design	2040	$2,000,000		
	Renovate MacLean & Flora Frick Halls - Construction	2042	$25,000,000	$8,739,298	
B15	Build new Admin & Support Building - Design	20+	$880,000		
	Build new Admin & Support Building - Construction	20+	$11,000,000	$5,841,810	
	Short Term totals 2022-2027		**$15,440,000**	$10,716,703	
	Medium Term totals 2028-2037		**$97,340,000**	$43,384,134	
	Long Term totals 2038-2043+		**$51,880,000**	$22,647,424	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
HEAPR					
B4	Remove Grier Hall	2024	$215,000	$1,655,520	$840K Local, PPA
B5	Remove Murray Hall	2026	$750,000	$10,469,770	$1.44M Local
B6	Build Expanded Maintenance Building	2026	$7,218,000	$6,504,049	$6.6M Local
B10	Replace Center for the Arts	2034	$900,000	$10,146,518	$45.6M Cap Bonds, Fundraising
	Short Term totals 2022-2027		**$8,183,000**	$18,629,339	
	Medium Term totals 2028-2037		**$900,000**	$10,146,518	
	Long Term totals 2038-2043+		**$0**	$0	

MSUM COMPREHENSIVE FACILITIES PLAN
6.3 PROPOSED PROJECT FUNDING BY RESOURCE

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Local Campus Funds					
S1	Identify legacy trees & establish renewal	2022	$8,000		
S2	Add areas of prairie & pollinator garden	2022	$1,200,000		
S3	West end campus development	2024	$2,900,000		
B4	Remove Grier Hall	2024	$715,200		$340K HEAPR, PPA
A1	Replace Turf Field and Track	2024	$1,500,000		
B5	Remove Murray Hall	2026	$1,437,500	$10,469,770	$750K HEAPR
B6	Build Expanded Maintenance Building	2026	$6,600,000	$6,504,049	$7.2M HEAPR
S6	Sustainability Projects	2026	$1,200,000		$xx Grants, PPA
B9	Compress Square Footage & CA Replacement Prep	2028	$804,000		
S9	Add areas of prairie & pollinator garden	2030	$1,200,000		
S10	Greenhouse Relocation	2030	$100,000		$100K Fundraising, Grants
S13	Sustainability Projects	2038	$1,500,000		$1M P3
B11	Renovate Bridges Hall for Center for Business	2038	$1,200,000		$14M Cap Bonds
S14	West end campus development	2040	$250,000		$500K Fundraising, P3
B14	Library renovation for Archives	2043	$1,800,000		
	Short Term totals 2022-2027		**$15,560,700**	$16,973,819	
	Medium Term totals 2028-2037		**$2,104,000**	$0	
	Long Term totals 2038-2043+		**$4,750,000**	$0	

Plan Ref #	Project Name	Start Date	Estimated Construction	Maintenance Savings (10 years)	Additional Funding
Power Purchase Agreement					
B4	Remove Grier Hall	2024	$125,000		$930K HEAPR, Local
S6	Sustainability Projects	2026	$0		$1.7M Grants, Local
S7	Add PV & EV to parking near stadium	2028	$0		
	Short Term totals 2022-2027		**$125,000**	$0	
	Medium Term totals 2028-2037		**$0**	$0	
	Long Term totals 2038-2043+		**$0**	$0	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Public Private Partnership					
S12	West end campus development	2036	$75,000		$75K Grants
S13	Sustainability Projects	2038	$1,000,000		$1.5 Local
S14	West end campus development	2040	$250,000		$500K Fundraising, Local
	Short Term totals 2022-2027		**$0**	$0	
	Medium Term totals 2028-2037		**$75,000**	$0	
	Long Term totals 2038-2043+		**$1,250,000**	$0	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Revenue Fund Bonds					
A2	Build Dragon Dome Facility	2025	$11,550,000		$11.55M Fundraising
H2	Housing Study & Associated Projects	2030	$12,000,000	$16,490,730	$5M Rev Reserves
	Short Term totals 2022-2027		**$11,550,000**	$0	
	Medium Term totals 2028-2037		**$12,000,000**	$16,490,730	
	Long Term totals 2038-2043+		**$0**	$0	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Revenue Fund Reserves					
H1	Remove Ballard Hall	2024	$1,200,000	$4,875,474	
B7	Complete Comstock Memorial Union Renovation	2027	$2,700,000	$4,196,346	
H2	Housing Study & Associated Projects	2030	$5,075,000	$16,490,730	$12M Rev Bonds
B16	Gerdin Wellness Center Addition	20+	$3,240,000	$872,547	
	Short Term totals 2022-2027		**$3,900,000**	$9,071,820	
	Medium Term totals 2028-2037		**$5,075,000**	$16,490,730	
	Long Term totals 2038-2043+		**$3,240,000**	$872,547	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Fundraising					
B1	New Alumni Center	2023	$8,000,000		
B3	Center for Business - refinish interiors	2023	$2,000,000		
A1	Replace Turf Field and Track	2024	$1,500,000		$1.5M Local
A2	Build Dragon Dome Facility	2025	$11,550,000		$11.55M Rev Bonds
S10	Greenhouse Relocation	2030	$50,000		$150K Grant, Local
A4	I	2032	$3,500,000	$1,617,589	
S11	Create Dragon Walk of Fame	2032	$600,000		
B10	Replace Center for the Arts	2034	$5,000,000	$20,786,114	$41.5M Cap Bonds, HEAPR
B12	Repurpose Center for Business Building	2040	$5,000,000	$4,975,341	$5M Grants
S14	West end campus development	2040	$250,000		$500K Local, P3
	Short Term totals 2022-2027		**$23,050,000**	$0	
	Medium Term totals 2028-2037		**$9,150,000**	$22,403,703	
	Long Term totals 2038-2043+		**$5,250,000**	$4,975,341	

Plan Ref #	Project Name	Start Date	Estimated Construction	Deferred Maintenance Savings (10 years)	Additional Funding
Grants					
S6	Sustainability Projects	2026	$500,000		$xx Local, PPA
S10	Greenhouse Relocation	2030	$50,000		$150K Fundraising, Local
S12	West end campus development	2036	$75,000		$75K P3
B12	Repurpose Center for Business Building	2040	$5,000,000	$4,975,341	$5M Fundraising
	Short Term totals 2022-2027		**$500,000**	$0	
	Medium Term totals 2028-2037		**$125,000**	$0	
	Long Term totals 2038-2043+		**$5,000,000**	$4,975,341	

7.0 APPENDIX

7.0 APPENDIX