3.2 BUILDING DATA SHEETS

The following pages detail the age, size, current replacement value, backlog of repairs, five-year renewal forecast and facility condition index values for each building on the five MWCTC campuses. The Building Data Sheets also include a summary of the building use (with color-coded space type plans), utilization data (with associated plans), descriptions of building systems (HVAC, electrical and technology) and analysis of current issues.



	Englund Orig. Bldg.	Englund Addition	Technical Building 1	Technical Building 2	Technical Building 4	Technical Building 4 Addition	Carr Residence Hall
Year Constructed	1965	1970	1976	1974	1976	1989	1973
Gross Square Footage	22,000	21,913	13,100	12,800	14,700	1,380	6,300
Current Replacement Value (CRV in 000's)	\$8,220	\$7,999	\$4,894	\$4,782	\$5,492	\$492	NA
Building Repairs Backlog	\$818	\$98	\$0	\$795	\$232	\$563	NA
Facility Condition Index	0.10	0.02	0.00	0.17	0.04	1.14	NA
5-year Renewal Forecast	\$1,110	\$1,006	\$1,355	\$795	\$446	\$569	NA
Mothballed	NA	NA	30%	NA	NA	NA	NA
Roof Type	4-Ply Asphalt	4-Ply Asphalt	Stand. Seam Sht. Mtl	Stand. Seam Sht. Mtl	Stand. Seam Sht. Mtl	Stand. Seam Sht. Mtl	—
Building Exterior Type	Masonry	Masonry	Mtl. Panel	Mtl. Panel	Mtl. Panel	Mtl. Panel	Masonry
Sprinklers	N	N	Ν	Ν	N	N	Ν

BUILDING DATA SHEETS

m.



CANBY CAMPUS BUILDINGS SUMMARY

The MWCTC Canby campus consists of five buildings constructed through the 1960's and 1970's. Renovations or additions have been made over the years. Campus building include the following:

E

ENGLUND HALL

Englund Hall is contains administration, student services, classrooms and labs. It is the main building on the Canby campus.

T1

TECHNICAL BUILDING 1

Technical Building 1 contains offices for Customized Training and testing, a community meeting room, a nurse's aid training room, and storage space.

T2

TECHNICAL BUILDING 2

Technical Building 2 contains offices and classroom/lab space for the diesel technology program.

PROJECTS COMPLETED SINCE 2011 MASTER PLAN

- Evaluated condition of exterior envelope for repairs and upgrades
- Sold Technical Building 5 and removed from site
- Extended drive aisle to connect east and west parking lots
- Removed underutilized parking (east side of college)
- Upgraded geothermal/HVAC system in Technical Building 1
- Replaced roof in Technical Building 4

ISSUES

A number of issues were noted for buildings on the Canby Campus.

Englund Hall

Issues pertaining to both exterior and interior issues include:

• The facility was built on a K-12 design. The banks of lockers and wallpaper borders in the corridors, in addition to the compartmentalized rooms off corridors, diminish the collegiate atmosphere.

T4

TECHNICAL BUILDING 4

Technical Building 4 contains offices, classroom, teaching space, and storage for the wind energy and diesel programs.

C

CARR RESIDENCE HALL

Carr Residence Hall contains apartments for MWCTC students.

OTHER

Wind Turbine Tube Climbing Section

- Finishes in the recreation and fitness rooms are outdated.
- Ventilation in the fitness room is poor.
- The offices and program spaces do not feel open and inviting to students.
- The electrical program space is disordered.
- The main entry to the building is confusing. It's not clear which entry is the primary entry —the northwest entry near the campus sign (which is not readily apparent when approaching from the south) or the southeast entry where the flagpole and majority of parking is located. Most people use the entry at the commons area as students and community members congregate at this area of the building. There is also an outdoor, landscaped area near that entry which reinforces it as a primary entry point to the building.

Technical Building 1

- Customized Training offices are isolated in the building and located there through evolution rather than design. The office finishes, fixtures and furniture are outdated.
- Finishes, fixtures, furniture and lighting in the CNA testing, community meeting room and nursing space need improvement.

BUILDING DATA SHEETS

2

m.

GF F

Technical Building 4

• Much of the building is used for storage; while office, toilets, and classroom spaces need upgrades.

ROOF CONDITION RECOMMENDATIONS

Existing Roof Spec, Inc. roof reports were reviewed and the following recommendations noted.

Englund Hall: Main Building

MN State Standard 4-Ply Asphalt: Excellent: ASLR 26 years

• Clean all vegetation and debris from roof area and replace all loose or missing fasteners

Englund Hall: 1970 Addition (B1)

Area B1: MN State Standard 4-Ply Asphalt: Excellent: ASLR 26 years

• Replace all loose or missing fasteners

Area B2: MN State Standard 4-Ply Asphalt: Excellent: ASLR 26 years

Technical Building 1

Standing Seam Sheet Metal Roofing: ASLR 0 years

- Inadequate drainage
- Unknown leakage history

Technical Building 2

Standing Seam Sheet Metal Roofing: ASLR 0 years

- Inadequate drainage
- Unknown leakage history

Technical Building 4: Main Building

Standing Seam Sheet Metal Roofing: ASLR 0 years

• Recommended replacement of roof

Technical Building 4: Addition

Standing Seam Sheet Metal Roofing: ASLR 0 years

• Recommended replacement of roof

Roof condition reports are included in the Appendix.

RECOMMENDATIONS

During the comprehensive facility planning process, a variety of issues were raised for improving the MWCTC Canby facilities. These include:

Englund Hall

• Removing banks of lockers and wallpaper in the corridor would improve the collegiate atmosphere in

the building.

- The finishes and furniture in the student recreation and fitness spaces should be updated and refreshed.
- The fitness area needs improved ventilation.
- The offices and program spaces should be opened up to feel more accessible and inviting for the students, and to showcase the activity and programs on campus.
- The LARC should be strengthened as a student resource center. Locating other functions in or near the LARC would help enliven the space throughout the day.
- The business offices and administration offices could be reorganized for greater efficiency.
- The electrical program space could be reorganized for improved efficiency.
- The main entry to the building should be strengthened so it's clear for students and visitors.

HEAPR REQUESTS

The following are current and projected HEAPR requests:

- Englund Hall: Toilet accessibility upgrades: 376 SF toilet room: \$143,000
- Technical Building 1: Roof Replacement (\$200,000 / 2022)
- Technical Building 2: Replace HVAC using existing geothermal wellfield
- Technical Building 2: Roof replacement (\$200,000 / 2022)

CAMPUS-FUNDED PROJECTS

The following are current and projected campus-funded projects:

Parking lot maintenance and repair

EXISTING BUILDING CONDITIONS

BUILDING DATA SHEETS

3.2

B3 DATA ANALYSIS

In 2009, Minnesota State Colleges and Universities started using the B3 system, establishing the baseline for energy use. The information below reflects the MWCTC Jackson campus's energy use of both natural gas and electricity. The baseline shows how the site would perform in subsequent years if no changes or improvements had been made.









ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4





ENGLUND HALL

BUILDING SYSTEMS SUMMARY

Englund Hall is served by a geo-thermal system installed and commissioned in 2017. Redundancy and bump-up is provided through a 50 HP boiler. Multiple plenum-mounted AH systems distribute heat and cooling supplied by the geothermal system. The campus spaces are also served by 15 unit ventilators and 7 VAVs.

The main campus transformer is located at the geo-thermal header entry and is distributed from the main panel in the geo equipment room.



ADDITIONS/RENOVATIONS BY YEAR



	Englund Orig. Bldg.	Englund Addition
Year Constructed	1965	1970
Gross Square Footage	22,000	21,913
Current Replacement Value (CRV in 000's)	\$8,220	\$7,999
Building Repairs Backlog	\$818	\$98
Facility Condition Index	0.10	0.02
5-year Renewal Forecast	\$1,110	\$1,006
Mothballed	NA	NA
Roof Type	4-Ply Asphalt	4-Ply Asphalt
Building Exterior Type	Masonry	Masonry
Sprinklers	Ν	Ν

BUILDING DATA SHEETS

3.2

3.2 BUILDING DATA SHEETS



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING FACILITY PHOTOS



1 Commons and Cafeteria (Student Lounge)



3 Student Fitness Room







2 Student Rec Room



4 Typical Corridor



6 Dental Assisting Lab

3.2 BUILDING DATA SHEETS

ENGLUND HALL

TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4







7 Dental Assisting Clinic



9 Wind Lab



8 Corridor at Dental Assisting Clinic







ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING FACILITY PHOTOS





11 Student Space in Corridor



13 Admissions & Student Services Area





12 Lobby at Main Entry



14 Meeting Room near Admissions Area



16 Wind Lab

BUILDING DATA SHEETS

3.2

ENGLUND HALL

TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4







17 ITV Classroom



19 Bookstore







ENGLUND HALL

TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING SPACE USAGE

The plan below shows the rooms types by color. The original 1965 building provides office, classrooms and lab spaces which do not have large equipment needs. The 1970 addition includes some offices but primarily large, high-bay lab spaces for technical programs. It also includes student gathering and support spaces such as the cafeteria, recreation room and fitness room. The book store, another student support space, is located near the student services office area at the main entry.

The corridor system organizes the spaces efficiently, but the teaching and lab spaces are visually isolated from the corridor. Other than signage, it's difficult to get a sense of the programs and activity that occur in those spaces. The corridor itself lacks a collegiate atmosphere as many sections of the main corridor are lined with banks of lockers. Some of the lockers are used, but most are not large enough to accommodate the equipment/books/ materials that students need for various programs. Many lockers can accommodate a coat and small bag, not other materials such as tools which students need for the technical programs.

There is some disconnect between the internal spaces and building entries. The west entry at the student services area is considered the main building entry, but most visitors and students use the entry near the cafeteria/dining space on the east side of the building; more parking is available and there is an outdoor patio and crossing to the tech buildings. So while most activity and gathering occurs on the east end of the building, support spaces such as the bookstore, student services and LARC are at the east end of the building.

	Englu	nd
Use Type	SF	9
Classroom	4,600	-
Labs	3,500	
Technical Lab	8,500	-
Library & Study Areas	2,700	
Academic/Athletics	0	

8% 19% 6% 0%

%

10%

Subtotal Academic Area

41,900 43%

Offices	5,300	12%
Conf/Meeting	0	0%
Recreation/Activity	1,400	3%
Stud Support/Other	0	0%
Arts Area	0	0%
Cafeteria/Bookstore	4,600	10%
Kitchen	800	2%
Leased Space	0	0%
Support & Mech./Maint.		
Space	3,100	7%
Circulation	10,000	22%

Total Net Area

44.500 100%



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4



SPACE UTILIZATION

The space utilization diagram indicates very low or low usage for classroom and lab spaces.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)



Data from reporting period

3.2

^{8/22/2016} through 5/10/2017 ELEC. ITV LAB 128 123 ITV 126A ITV 126B ELEC. ELEC. LAB NIDA WIND LAB 116 120 LAB LAB 112 114 CLASS ROOM 103 CLASS ROOM 103 DENTAL DENTAL CLINIC DENTAL CLASS CLASS 113 CLASSRM ROOM ROOM LAB 107 106 113A 109





C GF

ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4



TECHNICAL BUILDING 1

BUILDING SYSTEMS SUMMARY

Technical Building 1 (Customized Training) is heated by a gas-fired hot water boiler system and cooled by a rooftop DX unit The main campus transformer is located at the geo-thermal header entry and is distributed from the main panel in the geo equipment room.

	Technical Building 1
Year Constructed	1976
Gross Square Footage	13,100
Current Replacement Value (CRV in 000's)	\$4,894
Building Repairs Backlog	\$0
Facility Condition Index	0.00
5-year Renewal Forecast	\$1,355
Mothballed	30%
Roof Type	Stand. Seam Sht. Mtl
Building Exterior Type	Mtl. Panel
Sprinklers	Ν



ADDITIONS/RENOVATIONS BY YEAR



BUILDING DATA SHEETS

3.2

ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4



EXISTING FACILITY PHOTOS



1 Offices



2 Testing Area/Office



4 Nurse Aid Lab





3 Community Room



5 Facility Storage



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING SPACE USAGE

The plan below shows the rooms types by color. The 1976 building provides space for the Customized Training Program offices, community gathering/meeting, nurse aide training and facility storage. Large community events are held in the community room. Outside of the cafeteria/dining in Englund Hall, this is the largest meeting space on campus, but the interior is dated. Significant interior upgrades are needed, in addition to planned HEAPR requests to re-skin/insulate the exterior and replace the roof.

		Tech 1	
Use Type		SF	%
Classroom		0	0%
Labs		900	14%
Technical Lab		0	0%
Library & Study Areas		0	0%
Academic/Athletics		0	0%
Subtotal Academic Area		900	14%
Offices		1,900	29%
Conf/Meeting		1,200	18%
Recreation/Activity		0	0%
Stud Support/Other		0	0%
Arts Area		0	0%
Cafeteria/Bookstore		0	0%
Kitchen		0	0%
Leased Space		0	0%
Support & Mech./Maint. Space		300	5%

2,300

6,600 100%

35%

Circulation

Total Net Area



3.2



SPACE UTILIZATION

The space utilization diagram indicates low usage for the Nurse Aide Lab. All other spaces are used for other functions such as offices, testing, storage or community gathering.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)



EXISTING BUILDING CONDITIONS



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4



TECHNICAL BUILDING 2

BUILDING SYSTEMS SUMMARY

Technical Building 2 (Diesel) is heated by geo-thermal and gas fire radiant tube heating (shop). The main campus transformer is located at the geo-thermal header entry and is distributed from the main panel in the geo equipment room.

	Technical Building 2
Year Constructed	1974
Gross Square Footage	12,800
Current Replacement Value (CRV in 000's)	\$4,782
Building Repairs Backlog	\$795
Facility Condition Index	0.17
5-year Renewal Forecast	\$795
Mothballed	NA
Roof Type	Stand. Seam Sht. Mtl
Building Exterior Type	Mtl. Panel
Sprinklers	Ν



ADDITIONS/RENOVATIONS BY YEAR





EXISTING BUILDING CONDITIONS

BUILDING DATA SHEETS

3.2

EXISTING FACILITY PHOTOS



1 Diesel Teaching/Lab Space



2 Diesel Teaching/Lab Space



3 Renovated toilets









ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING SPACE USAGE

The plan below shows the rooms types by color. This 1974 building is used entirely as lab space for the Diesel Technology program. Some office space and storage space is included, as well as recently renovated toilet rooms.

	Tech	2
Use Туре	SF	%
Classroom	0	0%
Labs	0	0%
Technical Lab	11,500	90%
Library & Study Areas	0	0%
Academic/Athletics	0	0%
Subtotal Academic Area	11,500	90%

Offices Conf/Meeting **Recreation/Activity** Stud Support/Other Arts Area Cafeteria/Bookstore Kitchen Leased Space Support & Mech./Maint. Space Circulation

Total Net Area

300 2% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 300 2% 700 5%

12,800 100%





SPACE UTILIZATION

The space utilization diagram indicates medium usage for the Diesel Technology teaching/lab space.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)



Data from reporting period 8/22/2016 through 5/10/2017



3.2



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4



TECHNICAL BUILDING 4

BUILDING SYSTEMS SUMMARY

Technical Building 4 (Auto) classroom is heated by electric coilers and cooled by a rooftop DX unit. The main campus transformer is located at the geo-thermal header entry and is distributed from the main panel in the geo equipment room.





	Technical Building 4	Technical Building 4 Addition
Year Constructed	1976	1989
Gross Square Footage	14,700	1,380
Current Replacement Value (CRV in 000's)	\$5,492	\$492
Building Repairs Backlog	\$232	\$563
Facility Condition Index	0.04	1.14
5-year Renewal Forecast	\$446	\$569
Mothballed	NA	NA
Roof Type	Stand. Seam Sht Mtl	Stand. Seam Sht Mtl
Building Exterior Type	Mtl. Panel	Mtl. Panel
Sprinklers	Ν	Ν



EXISTING FACILITY PHOTOS





2 Classroom



4 Wind Lab space







5 Toilets



ENGLUND HALL TECHNICAL BUILDING 1 TECHNICAL BUILDING 2 TECHNICAL BUILDING 4

EXISTING SPACE USAGE

The plan below shows the rooms types by color. This 1976 building is used primarily as lab space for the Automotive Technology program. It also contains a classroom, storage for Wind Technology, and office space.

Use Type
Classroom
Labs
Technical Lab
Library & Study Areas
Academic/Athletics

Subtotal Academic Area

Offices
Conf/Meeting
Recreation/Activity
Stud Support/Other
Arts Area
Cafeteria/Bookstore
Kitchen
Leased Space
Support & Mech./Maint.
Space
Circulation
Total Net Area

Tech 4

SF	%
900	7%
0	0%
10,600	83%
0	0%
0	0%
11 500	01%

11,500 91%

100	1%
0	0%
0	0%
0	0%
0	0%
0	0%
0	0%
0	0%
200	2%
900	7%
12,700	100%







SPACE UTILIZATION

The space utilization diagram indicates very low/low usage for the Automotive Technology teaching/lab space and classroom. The Wind Lab area is coded as unused.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)



Data from reporting period 8/22/2016 through 5/10/2017



3.2

BUILDING DATA SHEETS

3.2





AG BUSH BUILDING

PROJECTS COMPLETED SINCE 2011 MASTER PLAN

- Evaluated condition of exterior envelope for repairs and upgrades
- Evaluated life safety and accessibility needs
- Incrementally removed lockers in corridors (ongoing) •
- Identifed portion of west end of building for lease • opportunities
- Documented available classrooms for future emerging technologies
- Evaluated the needs of the nursing program and updated for new technology and finishes
- Renovated space available north and northeast of library and bookstore to create more open and energetic campus core
- Created extended hours campus core
- Evaluated entire campus property and grounds to • capitalize on sustainable opportunities
- Incorporated vegetation/screening to block daycare and playground
- Removed underutilized parking on northwest side of building
- Provided exterior wayfinding signage

ISSUES

The primary issues in the AG Bush building include location of the main entry and interior updates.

- The main entry does not face the primary vehicular access routes. People need to be directed to the north side of the building to find the main entry.
- The furniture and finishes for some interior spaces, such as the "Pit" are outdated.
- Some of the student and program spaces such as the recreation, commons and LARC - feel "walled off" and uninviting to students.
- Some of the lab spaces are not used to their full potential, or do not meet current needs, as programs have changed.
- The banks of lockers diminish the collegiate atmosphere and prevent visual access to program spaces.



EXISTING BUILDING CONDITIONS

3.2 BUILDING DATA SHEETS

ADDITIONS/RENOVATIONS BY YEAR



	AG Bush Building Main 100	AG Bush Building Add. to 100	AG Bush Building 200 Bldg	AG Bush Building 300 Bldg	AG Bush Building Add. to 300	AG Bush Building Child Care Ctr.	AG Bush Building Library
Year Constructed	1965	1967	1972	1974	1984	1989	1992
Gross Square Footage	22,440	15,675	17,780	23,353	8,650	4,450	5,200
Current Replacement Value (CRV in 000's)	\$8,384	\$5,722	\$6,490	\$8,525	\$3,158	\$1,624	\$1,898
Building Repairs Backlog	\$597	\$0	\$335	\$254	\$312	\$0	\$0
Facility Condition Index	0.07	0.00	0.05	0.03	0.10	0.00	0.00
5-year Renewal Forecast	\$2,106	\$1,223	\$1,463	\$661	\$793	\$125	\$280
Mothballed	NA	15%	NA	40%	NA	NA	NA
Roof Type	4-Ply Asphalt	4-Ply Asphalt	4-Ply Asphalt & Stand. Seam Sht. Mtl.	4-Ply Asphalt	4-Ply Asphalt	4-Ply Asphalt	4-Ply Asphalt
Building Exterior Type	Masonry	Masonry	Masonry	Masonry	Masonry	Masonry	Masonry
Sprinklers	Ν	Ν	Y	Ν	Y	Ν	Y



ROOF CONDITION RECOMMENDATIONS

Existing Roof Spec, Inc. roof reports were reviewed and the following recommendations noted.

Main 100 Building

MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

• Repair: Resecure loose fasteners and remove all debris from the roof area

Addition to Main 100 Building

MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

• Repair: Resecure loose fasteners and remove all debris from the roof area

200 Building

Standing Seam Sheet Metal Roofing: Very Good: ASLR 26 years MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

• Repair: Clean all leaves and debris from the roof area and resecure any loose fasteners. Replace wet insulation.

300 Building

MN State Standard 4-Ply Asphalt: Very Good: ASLR 22 years

• Repair: Perform recommended repairs consisting of replacing wet insulation, installing sheet metal caps at obsolete curbs, repairing the displaced coverplate, resecuring loose fasteners and installing new sealant where missing or damaged.

Addition to 300 Building

MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

• Repair: Resecure loose fasteners

Child Care Center

MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

Repair: Resecure loose fasteners and remove all debris
and vegetation from the roof area

<u>Library</u>

MN State Standard 4-Ply Asphalt: Very Good: ASLR 26 years

• Repair: Resecure loose fasteners

Roof condition reports are included in the Appendix.

BUILDING SYSTEMS SUMMARY

One central heating plant (2-original vintage boilers providing redundancy) in the original building serves the entire building which has several additions. This plant consists of two steam boilers and a heat exchanger providing hot water to all AH units. One main AH unit supplies the original building and 14 other AH units supply the building additions.

A/C Systems

The building is cooled by multiple rooftop DX units of

varying age, but all older. There is one McQuay unit on the ground adjacent to the food service/daycare spaces.

Note: The entire heating and cooling system is currently under design, waiting for future HEAPR dollars to improve operation and efficiency.

Electrical System

One transformer located on the east end of the campus, adjacent to the original heating plant space, provides all electrical service to the campus. This space contains the main distribution panel for all sub panels throughout the building/campus.

RECOMMENDATIONS

During the comprehensive facility planning process, a variety of issues were raised for improving the MWCTC Granite Falls facilities. These include:

- Better site signage or landscaping elements to help define the campus boundaries.
- Better site signage to direct visitors to main entry.
- Reconfiguration of student recreation and commons spaces so that they are more open and welcoming.
- Improved finishes and furniture for student spaces.
- Increased visibility to program spaces to help showcase the programs and create a more vibrant atmosphere.
- Incorporation of environmental graphics to help wayfinding and to showcase MWCTC programs.
- Development of on-site programs to increase activity in the building.
- Revamp of current lab spaces for new uses.
- Enhancement of a collegiate environment by removing banks of lockers and opening up the program spaces.

HEAPR REQUESTS

The following are current and projected HEAPR requests:

• Restroom remodel for the 300 building and 100 building

CAMPUS-FUNDED PROJECTS

The following are current and projected campus-funded projects:

Parking lot maintenance and repair

WJ



In 2009, Minnesota State Colleges and Universities started using the B3 system, establishing the baseline for energy use. The information below reflects the MWCTC Granite Falls campus's energy use of both natural gas and electricity. The baseline shows how the site would perform in subsequent years if no changes or improvements had been made.







GF N J

EXISTING FACILITY PHOTOS



1 Student Services



3 Student Lounge





2 Student Rec



4 Cafeteria



6 LARC







Classroom



9 Welding Shop









EXISTING BUILDING CONDITIONS

BUILDING DATA SHEETS

3.2

GF P

EXISTING FACILITY PHOTOS





11 Child Care (under construction)



13 Corridor



15 Science lab



12 Computer Lab



14 General Classroom/Auditorium



16 Machine Tool Technology





17 Nursing Lab



19 Child Development



18 ITV Classroom



20 Lobby at Main Entry

G

WJ

BUILDING DATA SHEETS

3.2



EXISTING SPACE USAGE

The plan below shows the rooms types by color.

	Granite Falls		
Use Type	SF	%	
Classroom	10,900	12%	
Labs	5,200	6%	
Technical Lab	21,900	24%	
Library & Study Areas	4,500	5%	
Subtotal Academic Area	42,500	48%	
Offices	7,200	8%	
Conf/Meeting	0	0%	
Rec/Athletics	1,600	2%	
Church Courses and /Others		00/	

Total Net Area	89,400	100%
Circulation	21,800	24%
Space	5,900	7%
Support & Mech./Maint.		
Leased Space	6,200	7%
Kitchen	1,200	1%
Cafeteria/Bookstore	3,000	3%
Arts Area	0	0%
Stud Support/Other	0	0%
Rec/Athletics	1,600	2%
Conf/Meeting	0	0%
Offices	7,200	8%

WRAP CLASSRN 350C LEASED 260 COMPUTER CLASSROOM ITV 123 NIRSING LAB 121 E. ROOM 117 LAB 350 ST. SERVICES ITV 124 TRNG 203 JH J CLASSRM 350A LIBRARY (LARC) 251 1TV 204 CLASS ROOM 302 CLASS ROOM 305 STUDENT LOUNGE COMPUTER LAB 113 STUDENT REC 206 CHILD DEVEL LAB BOILER ROOM 100 ITV 250 1 MN STATE ITS LEASED dal My ITS LEA CLASS ROOM 301 DINING/ LOUNGE 205 ARE 7 HILD 103 LEASED 150 LAB 306 I 207 AUD./ ASSROO 107 SCIENCE LAB 105 SCIENCE LAB 105 RENEWABLE ENERGY LAB MACHINE TOOL TECHNOLOGY LAB to the second **m** SHOP 308

BUILDING DATA SHEETS

3.2

SPACE UTILIZATION

The space utilization diagram indicates very low and low usage for classroom and lab spaces, with the exception of an ITV classroom on the east end of the building. Three spaces are unused: a lab space near Fluid Power on the west end of the building, a general classroom/auditorium space, and a lab space at the east end of the building.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)



Data from reporting period 8/22/2016 through 5/10/2017











PROJECTS COMPLETED SINCE 2011 MASTER PLAN

- Relocated bookstore to high-profile area
- Renovated administrative office to create open and energetic campus core
- Moved student recreation room to campus core
- Relocated computer labs to campus core
- Renovated student rec area to accommodate displaced cosmetology space
- Constructed new on-campus powerline technology training facility
- Reduced number of building entries and created zones to better control facility
- Renovated existing boiler room upon completion of current energy analysis
- Renovated library/moved ITV classrooms and computer lab to heart of campus
- Vacated and leased out former ITV classrooms and computer lab
- Constructed outdoor powerline training field, substation, storage buildings and trenching for electrical program in conjunction with powerline building project
- Remodeled Room Y-101 and updated technology

ISSUES

Primary issues at the Jackson campus include program space needs, outdated interiors, and lack of visibility of student spaces and programs.

- The welding program needs more space to accommodate equipment (the laser cutter) and to grow the program.
- Stored equipment and materials should be evaluated and eliminated if outdated or not used.
- The commons area, although centrally located near the main entry, is obscured by the wood partition at the main lobby.
- There is a desire to revitalize the food service kitchen. The food preparation area (microwaves and trash and counter area) needs improvement.
- The auditorium space needs an interior refresh. The tiered seating also limits space usage.
- The powerline program is a high enrollment program but not visible to the community.





Bldg.

1964

22,080

\$8,249

\$964

0.12

\$1,879

4-Ply

Asphalt

Masonry

Υ

(partial)

100

Year Constructed

(CRV in 000's)

Roof Type

Sprinklers

Gross Square Footage

Current Replacement Value

Building Repairs Backlog

Facility Condition Index

5-year Renewal Forecast

Building Exterior Type

Bldg.

1974

57,000

\$20,807

\$0

0.00

\$2,362

4-Ply

Asphalt

Masonry

Υ

Addition

Shop

1978

1,880

\$686

\$15

0.02

\$101

EPDM-B

Masonry

Ν

Addition

Classrooms

1989

2,850

\$1,040

\$0

0.00

\$67

4-Ply

Asphalt

Masonry

Ν

1983

5,760

\$2,103

\$79

0.04

\$162

Masonry

Ν

Powerline

Addition

2016

\$0

0.00

Metal Panel

Ν

292
VCTC
ž



ROOF CONDITION RECOMMENDATIONS

Existing Roof Spec, Inc. roof reports were reviewed and the following recommendations noted.

Main 100 Building

MN State Standard 4-Ply Asphalt: Excellent: ASLR 30 years

• Repair: Resecure any loose fasteners. Remove and replace wet insulation.

Main Building Addition

MN State Standard 4-Ply Asphalt: Excellent: ASLR 30 years

• Repair: Remove all debris and vegetation from the roof area. Replace any loose or missing fasteners. Repair area of damaged base flashing. Verify suspected area of wet with a core cut and replace if wet.

Auto Body Shop Addition

EPBM-B: Poor: ASLR 0 years

- Repair: Perform emergency repairs as necessary until reroofing is accomplished.
- Replace roof

ITV Classrooms

MN State Standard 4-Ply Asphalt: Excellent: ASLR 30 years

 Repair: Remove all leaves from the roof area and resecure any loose fasteners. Replace suspected wet insulation.

Cosmetology

MN State Standard 4-Ply Asphalt: Excellent: ASLR 27 years

• Repair: Resecure loose fasteners and remove all leaves and debris from the roof area.

Roof condition reports are included in the Appendix.

BUILDING SYSTEMS SUMMARY

No interruptible gas service.

The original 1964 building is served by two steam boilers providing redundancy, and is equipped with a heat exchanger converting all supply to hot water. This system serves Automotive Technology, Power Sports Technology, nursing areas and cosmetology areas. Adjacent to the heating plant, in a separate room, is a central AH unit (original) which serves the above noted spaces.

The 1974 building and 1985 additions are served by three Fulton condensing boilers sized to be connected to the 1964 building to eliminate that system completely. Rooftop AH/AC units serve these spaces with hot and cold deck systems. The Powerline Technology Lab is served by two natural gas-powered radiant-heat systems mounted near the ceiling, along with large fans to distribute the heat. (There is no cooling in this lab.)

Electrical Systems

One main transformer, adjacent to the 1974 heating plant room, serves as the main electrical supply. The main distribution panel and heating plant are located in the equipment room.

RECOMMENDATIONS

During the comprehensive facility planning process, a variety of issues were raised for improving the MWCTC Jackson facilities. These include:

- The welding space should be expanded to accommodate growth and equipment needs.
- To free up space, all materials and equipment in storage throughout the building should be evaluated and eliminated if outdated or not used.
- The food service area at the student commons should be reorganized to better serve food preparation.
- The interior finishes, furniture and lighting in the auditorium space the largest space on campus and what the campus uses when bringing in the community for events should be updated to better accommodate campus needs and to create a better identity and "face" for the institution.
- Improve visibility of powerline program to the community by defining an open area near the campus for program use.

HEAPR REQUESTS

The following are current and projected HEAPR requests:

- Restroom renovations
- Room O-115: expand welding lab to adjacent room

CAMPUS-FUNDED PROJECTS

The following are current and projected campus-funded projects:

• Parking lot maintenance and repair

BUILDING DATA SHEETS

2

m.

BUILDING DATA SHEETS

3.2



B3 DATA ANALYSIS

In 2009, Minnesota State Colleges and Universities started using the B3 system, establishing the baseline for energy use. The information below reflects the MWCTC Jackson campus's energy use of both natural gas and electricity. The baseline shows how the site would perform in subsequent years if no changes or improvements had been made.







3.2 BUILDING DATA SHEETS



EXISTING FACILITY PHOTOS



1 Lobby at Main Entry











2 Student Services



4 Commons

















8 Welding Lab





Ρ



EXISTING FACILITY PHOTOS



Corridor 11



Classroom 13







12 Powerline Lab



14 Multi-purpose/Lecture Room



16 Cosmetology Salon/Demonstration





17 Powerline Technology Lab



19 Automotive Classroom



18 Nursing Classroom



20 Power Sports Technology

Ρ



C GF	
w J	

Jackson		
Use Type	SF	%
Classroom	9,700	9%
Labs	6,300	6%
Technical Lab	39,600	38%
Library & Study Areas	2,500	2%
Subtotal Academic Area	58,100	55%

lackcon

Subtotal Academic Area

Offices 4,000 4% 3,000 Conf/Meeting 3% **Rec/Athletics** 1,100 1% Stud Support/Other 0 0% 0 Arts Area 0% Cafeteria/Bookstore 4,200 4% Kitchen 2,000 2% Leased Space 3,000 3% Support & Mech./Maint. Space 7,700 7% 22,000

EXISTING SPACE USAGE

The plan below shows the rooms types by color.





SPACE UTILIZATION

The space utilization diagram indicates very low and low usage for all classroom and lab spaces.

The following items provide some context for spaces with low utilization rates:

- Reporting is for academic credit courses only and may not reflect other non-credit courses such as continuing • education or customized training.
- Lab spaces are specialized and not adaptable for other uses. Utilization may not reflect the need for clean-up/set up time between classes.
- Room scheduling inconsistencies may not reflect the true usage rates of these spaces. Scheduling procedures are . under refinement/review. (The current usage reflects reports generated prior to the refinement/review process.)

