

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

# ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

MARCH 2015

Document prepared by:

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This document is the result of cooperation and assistance from the staff at Minnesota West Community and Technical College. Each person's contribution of information, time, and effort is sincerely appreciated. The Consultant extends an acknowledgement of thanks to the following individuals:

Barbara McDonald, *Interim President* Jeffrey Williamson, *College Provost* Lori Voss, *Vice President of Administration* Dawn Gordon, *Campus Dean, Worthington* Rebecca Weber, *Campus Dean, Canby* Jackie Otkin, *Campus Dean, Pipestone* Dennis Hampel, *Campus Dean, Jackson* 

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# EXECUTIVE SUMMARY

# Introduction

Paulien & Associates, Inc., a nationally recognized planning firm, was contracted in early 2014 to review environmental scanning data and conduct an abbreviated environmental scan and a college-wide Space Needs Analysis for each of the five main campuses of Minnesota West Community and Technical College (Minnesota West or MWCTC).

# Process

The consultant initiated the process by reviewing information contained in the *Five Campus Master Plan Update – 2011* by Hay Dobbs, and then reviewed current population, demographic and occupational demand projections for MWCTC. Minnesota West provided enrollment, staffing, course and facilities data prior to the beginning of the space needs analysis process. Fall semester 2013 is referred to as the Base Year throughout this report. The consultants validated facilities, staffing, and course information with MWCTC representatives during on-site meetings in August 2014 and a webinar conducted in October 2014. Meetings were held with the Interim President, Vice President, Provost, Deans, and Campus Deans. The consultant did not tour campus facilities as part of the validation process.

Preliminary study findings were shared with the Executive Committee in mid-October 2014. Comments and suggestions were incorporated into the analysis and draft findings were resubmitted to the campus planning team. This report details the findings from the environmental scan and academic space utilization study, while the space needs analysis reviews MWCTC's existing facilities and quantifies the space requirements based on enrollment and staffing projections and program migrations.

# **Environmental Scan**

Data collection was narrowly focused on secondary sources at a very broad level. It must be noted that much of the population and occupational data obtained for this document was published after the recession and has a greater level accuracy than data analyzed in MWCTC's current *Master Plan Update*. In all instances, efforts were made to obtain the most updated information available.

- Between 2000 and 2010, with the exception of Nobles and Lyon counties, the counties in MWCTC's service area lost population. Much of the population growth (25% or more) was centered within the Minneapolis and St. Paul metropolitan area and to areas in the north central part of the state where the population growth was from 5% to 15%.
- Population projections for the 19 counties in MWCTC's service area between 2010 and 2020 indicate that population growth will be somewhat stagnant, ranging from a negative of 3.8% in Swift County to a high of 6.2% in Rock County. The average population growth for the 19 counties is projected at 2.7%. Between 2010 and 2025, the average growth in the 19 counties is projected at 5.5%.
- The number of high school graduates statewide has been declining for the last several years. After a low point in the 2013-14 academic year, the number of graduates will start to increase with steady growth through 2023-24.
- By 2020, 65% of the jobs in the nation will require postsecondary education. In Minnesota, 74% of the jobs will require higher education. As a result, demand for college will be greater than average as many jobs cannot be filled without formal education.
- Between 2000 and 2010, there are projected to be 1,065,000 job openings in the state. Occupation projections by Georgetown University note that Healthcare Support, Healthcare Professional, and Social Sciences have a high growth rates between 25% and 34%.
- MWCTC is situated in the Southwest Planning Area. Between 2010 and 2020, a total of 71,060 new hires were projected. Approximately 48,000 will be replacement workers. The top three largest areas of employment regardless of education include retail workers, nursing/health aides, and food and beverage serving workers.

# Planning Assumptions

This study focused on the five campuses that currently comprise Minnesota West Community and Technical College. The current centers were not reviewed in detail as part of this study.

For Fall semester 2013, the total campus MWCTC enrollment was 1,960 FTE and 3,229 headcount (HC) using a 0.61 ratio of FTE to HC. After review of the environmental scan effort, it was determined that the Fall 2013 FTE and HC for each campus would be used as the Plan Horizon enrollment assumption. Therefore, the Base Year and Plan Horizon space need findings will be the same using the Fall 2013 student and staffing information.

# **Key Findings**

### **Existing Space**

The consultant documented total assignable square feet (ASF) of each campus.

The five campuses contain a total of 371,058 ASF of space, of which 43,306 ASF is presently inactive and 23,943 ASF is dedicated to outside organization use.

#### College Wide Existing Space

Campus		Existing Available ASF
Canby Campus		64,364
Granite Falls Campus		43,981
Jackson Campus		64,461
Pipestone Campus		46,509
Worthington Campus		84,494
	Subtotal	303,809
Inactive/Conversion Space		43,306
Outside Organizations		23,943
	Total	371,058

ASF = Assignable Square Feet

### Classroom Utilization

The course data and facility inventory files were used to conduct a classroom utilization analysis for the Fall 2013 semester. Results by campus are noted in the table. In reviewing the MWCTC average, classrooms were being utilized 15 weekly room hours (WRH) at 42% student station occupancy (SSO). Classrooms averaged 37 ASF per station.

#### **Classroom Utilization Summary by Campus**

		Average				
Site	Number of Rooms	Room Size	ASF per Station	Section Size	Weekly Room Hours	Student Station Occupancy %
Canby	9	612	32	6	12	30%
Granite Falls	8	672	35	10	17	38%
Jackson	12	911	46	23	17	57%
Pipestone	9	756	49	7	16	39%
Worthington	19	783	24	15	15	44%
Total / Average	57	747	37	12	15	42%

ASF = Assignable Square Feet

As an example, the Worthington Campus, with 19 classrooms, averaged 15 weekly room hours at 44% student station occupancy. Typical community college metrics suggest rooms be used 30-35 weekly room hours at a 65% student station occupancy as fiscal realities demand more efficient course scheduling. Given the expectations, classrooms at all sites were underutilized.

### Teaching Laboratory Utilization

As with the classroom utilization, the course data and facility inventory files were used to conduct a Teaching Laboratory Utilization Analysis for the Fall 2013 semester. The teaching laboratories were being utilized an average of 10 WRHs at a 67% student station occupancy.

		Average				
Site	Number of Rooms	Room Size	ASF per Station	Section Size	Weekly Room Hours	Student Station Occupancy %
Canby	10	3,183	171	11	13	67%
Granite Falls	7	1,720	97	10	5	74%
Jackson	12	2,352	108	8	10	45%
Pipestone	6	1,516	91	13	10	90%
Worthington	9	1,009	44	11	11	59%
Total / Average	44	1,956	102	11	10	67%

#### **Teaching Laboratory Utilization Summary by Campus**

ASF = Assignable Square Feet

The Jackson Campus has the most teaching laboratories at 12, but the lowest SSO at only 45%. The Granite Falls seven teaching laboratories have the lowest WRH of use at 5 WRHs at a 74% SSO. The teaching laboratory utilization outcomes suggest that some consolidation or right-sizing of teaching laboratories can occur on each campus.

### Space Needs Analysis

Student headcount enrollment, courses data, and the faculty and staff information were used to establish the relative quantities of space needed for this analysis. The amount of space required was compared to existing space on campus to illustrate surpluses or deficits in various space categories.

When the space needs guideline analysis was applied at the Plan Horizon, no campus generated a need for additional space (see graph below). The Canby and Pipestone Campuses had the largest surplus of space given enrollment, program, and staffing data analysis.



At the Plan Horizon (Fall 2013), the guideline analysis was applied using the same student HC and FTE, as well as staffing levels.

Campus		Existing Available ASF	Plan Horizon Space Need
Canby Campus		64,364	49,712
Granite Falls Campus		43,981	33,970
Jackson Campus		64,461	54,618
Pipestone Campus		46,509	31,196
Worthington Campus		84,494	78,279
	Subtotal	303,809	247,775
Inactive/Conversion Space		43,306	
Outside Organizations		23,943	
	Total	371,058	

### **Campus Wide Space Needs Analysis**

ASF = Assignable Square Feet

As noted in the table, the five campuses currently use 303,809 of their space for academic program delivery and support. The application of guidelines at the Plan Horizon indicates a total need of 247,775 ASF for an overall surplus of about 56,000 ASF in all space categories. A list of assumptions and a more detailed space needs analysis for each campus can be found later in this report.

In the long term, MWCTC generated surpluses of space on all campuses. This situation occurs even with the reallocation of some space to inactive and the leasing of other space to outside organizations. MWCTC is presented with opportunities on most campuses to further consolidate programmed facilities through renovation of space to increase utilization and provide state of the art teaching facilities.

The environmental scan and space needs findings provide valuable information to MWCTC leadership in support of providing an improved environment that will allow MWCTC to continue to fulfill its role as a leader in higher education in the State of Minnesota.

# ENVIRONMENTAL SCAN

As part of the space needs analysis process, Paulien & Associates reviewed current population, demographic, and occupational demand projections for Minnesota West Community & Technical College. This document supplements information contained in the *Five Campus Master Plan Update – 2011* by Hay Dobbs.

The higher education literature is replete with references to effective community college planning. Seminal works by Marvin Peterson, Arthur Cohen, Paul Jedamus, and George Baker paved the way in current planning practices at both the institutional and academic program levels. Dorothy M. Knoell's research lists several tools and aids that are essential for effective college planning. The most important include population projections from census data, community and regional occupational data, and participation rate analyses. Her planning model assumes that community colleges reflect both the needs and diversity of the state and local community. In today's planning environment, strategic and academic planning goals are closely aligned with demographic, economic, and occupational data. In turn, this information is also a driver of future enrollments.

The purpose of this report is to summarize the results of demographic and occupational documentation, as gathered from secondary sources and presented to MWCTC during the space planning process.

# Environmental Scanning Introduction and Methodology

Environmental scanning is an external analysis that focuses on scanning, monitoring, forecasting, and assessing the external environment. The goal of this process is to alert constituents within the institution to potentially significant external changes so they can be proactive in decision making for new programs and facilities. This study focused on securing information that supports the development of the new initiatives by asking the question: What "external" forces will impact MWCTC and its facilities during the next five to ten years.

Data collection was narrowly focused on secondary sources at a very broad level. Interviews with economic development representatives, demographers, and other industry experts to determine the validity and reliability of the data were not part of this study.

It must be noted that much of the population and occupational data obtained for this document was published after the recession and has a greater level accuracy than data analyzed in MWCTC's current Master Plan Update. In all instances, efforts were made to obtain the most updated information available.

During the week of August 11, 2014, consultants from Paulien & Associates met with various representatives of MWCTC. During these sessions, preliminary demographic and occupational data were reviewed. After the meeting, the consultant conducted additional online research and collected updated data from key government sources.

# Area of Investigation

Minnesota West Community and Technical College serves the educational needs of citizens in the southwest corner of Minnesota. For Fall 2013, the majority of students were attending from Martin, Nobles, Lyon, Pipestone, and Jackson counties, with the largest campus located in Worthington, Minnesota. Given the proximity of state borders, MWCTC also attracts students from Iowa and South Dakota.

Occupational projection data were secured from the Minnesota Department of Employment and Economic Development and the Georgetown University Public Policy Institute. Statewide data spans from 2012 to 2022 while occupational data from the Southwest Planning Area is less current, noting job demand from 2000 to 2010. Much of the long-term occupational data from the Southwest Planning Area includes the counties in MWCTC's service area.

In the absence of local and regional data, state sources were examined to determine trends. In some instances, national data were obtained and compared to state and county information in an attempt to understand averages or indices of the data.

# **Data Interpretation and Outcomes**

More important than the collection of demographic, economic and population trend data are the implications for the future operations of MWCTC. After reviewing the information presented during on-campus meetings, (see Appendices for slide presentation), the following findings and implications were evident. The outcomes are not prioritized in any particular order but are divided by demographic and occupational findings. These implications were used in the planning assumptions for enrollment projections, as part of the space needs analysis process.

### Demographic and Population Trends

- Between 2000 and 2010, with the exception of Nobles and Lyon counties, the counties in MWCTC's service area lost population. Much of the population growth in Minnesota (25% or more) was centered within the Minneapolis and St. Paul metropolitan area and to areas in the north central part of the state where the population growth was from 5% to 15%.
- From 2000 to 2010, the Black or African American population at the state level increased by 60% while the Asian population increased by 51% during the same time period. Citizens of Hispanic or Latino race increased by 75%. The diversification of the population will continue to increase due to increases of immigration patterns. High school graduates will also be more diverse in the future.
- Population projections for the 19 counties in MWCTC's service area between 2010 and 2020 indicate that population growth will be somewhat stagnant, ranging from a negative of 3.8% in Swift County to a high of 6.2% in Rock County. The average population growth for the 19 counties is projected at 2.7%. Between 2010 and 2025, the average growth in the 19 counties is projected at 5.5%.
- In looking at the projected change in the population for 18-24 year olds in the southwest portion of the State for 2015, 2020, and 2025, data from MNSCU System suggests declines in this age cohort for the Southwest region. For example, between 2010 and 2020, the 18-24 year old population is expected to decline by 18.1% as many young people leave more rural counties for urban centers. For the 25-34 year old cohort, there is projected to be a 26.5% decrease between 2010 and 2025.
- The number of high school graduates statewide has been declining for the last several years. After a low point in the 2013-14 academic year, the number of graduates will start to increase with steady growth through 2023-24. As 36% of MWCTC's students were less than 20 years of age during the Fall 2013 semester, high school graduates are an important component of enrollment growth.
- Participation rates were calculated for Fall 2013 enrollments. A participation rate is a percentage of the resident population in each county that is attending MWCTC. Jackson County had the highest participation rate with 1.72% of the county population attending MWCTC. Participation rates for Martin (1.69%), Pipestone (1.56%), and Nobles (1.52%) were slightly lower. Overall, the 19 county catchment area averaged 0.83%. The top five counties averaged 1.58%. Overall, statewide participation rates for community and technical colleges averaged 2.4% for Fall 2013. The lower participation rate is due to educational attainment and demographic of existing population. A lower participation rate also signifies the potential for additional enrollments as the market is less saturated.
- Using participation rates and county population projections, it was estimated that MWCTC has the potential to enroll 3,145 headcount students by Fall 2020. This is 84 less students based on the Fall 2013 student headcount. Given slow population growth and declining populations within the more traditional student age cohorts, on-campus student growth is expected to be flat.
- MWCTC should embrace a student services model that emphasizes enhanced recruitment and outreach to non-traditional age groups. However, on average, non-traditional students have higher expectations regarding ease of campus access, security, and convenience of services such as food service, vending and student support services.

### Statewide Occupational Trends

- This report reviews two occupational data sources
  - Georgetown Center on Education and the Workforce Statewide Perspective
  - Minnesota Department of Employment and Economic Development 2012-2022 Long-Term, Occupational, & Industry Projections

Each source has different methodologies, time periods, and geographic boundaries, but both point to an improving job market with employment demand at the two-year college degree level.

- By 2020, 65% of the jobs in the nation will require postsecondary education. In Minnesota, 74% of the jobs will require higher education. As a result, demand for college will be greater than average as many jobs cannot be filled without formal education.
- Between 2000 and 2010, there are projected to be 1,065,000 job openings in the state. Occupation projections by Georgetown University note that Healthcare Support, Healthcare Professional, and Social Sciences have a high growth rates between 25% and 34%.
- Of the 1,065,000 job openings, 134,000 will require an Associate's degree while 238,000 will require some college (certificate) but no degree. If totaled, these two categories are larger than the total need for Bachelor's degrees at 280,000 jobs.
- At the statewide level, the demand for the Associate degrees is most pronounced in managerial, healthcare and production occupations.
- In reviewing state occupational data, industry employment projections indicate 7% growth in employment between 2012 and 2022. This equates to more than 205,000 new jobs. The largest percentage of change will be in construction and extraction industries followed by jobs in the service industry.
- Long-term Occupational Projections by Major Category note that more than 901,000 jobs will need to be filled. This includes replacement hires due to retirements or leaving the workforce. Many of these jobs will be in the Sales and Office and Administrative Support categories.

#### Occupational Overview- Southwest Planning Area

- MWCTC is situated in the Southwest Planning Area. Between 2010 and 2020, a total of 71,060 new hires were projected. Approximately 48,000 will be replacement workers. The top three largest areas of employment regardless of education include retail workers, nursing/health aides, and food and beverage serving workers.
- Occupations that require an Associate's degree include preschool teachers, physical therapist assistants, mechanical engineering technicians, mechanical drafters, and medical and clinical laboratory technicians.
- In terms of total hires, the largest employment categories for the Southwest Planning Area include food processing workers, mental and plastic workers, and assemblers and fabricators. Overall, a good percentage of jobs are in the production or manufacturing area but require no formal higher education training.

# **Environmental Scan Documentation**

The slides used in the on-campus presentation are provided in the Appendices of this document. Sources of the information are noted on each slide. All information was obtained from published secondary sources.

# SPACE NEEDS ANALYSIS

# Planning Assumptions

### **Enrollment Projections**

MWCTC provided the consultant with Fall 2000 through Fall 2013 student full-time enrollment (FTE) and headcount (HC) enrollment by campus, center, and online/virtual delivery. Enrollment assumptions are based on the number of students that would physically be present on the campus. Hence, online/virtual, centers, and off-site delivery was listed separately, as noted in the following table.

	FTE	Headcount
CAMPUS	2013/Plan Horizon	2013/Plan Horizon
Canby	139	165
Fairmont	70	116
Granite Falls	262	362
Jackson	283	444
Luverne	102	128
Management	124	440
Online/Virtual	167	298
Pipestone	191	277
Redwood Falls	42	70
Springfield	0	0
Worthington	581	929
TOTAL	1,960	3,229
Ratio FTE/HC	0.61	

The Fall 2013 student FTE and HC were assumed at the Plan Horizon.

As part of the planning process, the location of programs and sites was reviewed. However, no major migrations of programs between campuses was determined.

### Staff Projections

The consultants used current faculty and staff to project faculty needs for the Plan Horizon for each campus.

#### Academic Programs

Each Campus Dean was interviewed for the space needs analysis. Information varied, but generally included enrollment trends, issues related to current space needs, and a list of current programs and programs under consideration. No new programs were sufficiently along in planning to include potential space needs in this study.

# **Campus and Site Building Assumptions**

During the study, no buildings were in design or under construction at any campus. It is assumed that all inactive/ conversion space is available for reuse. Space occupied by outside organizations was listed separately. The partnerships and the facilities were assumed to continue over the planning period.

# EXISTING SPACE

# Inventory of Existing Space

As part of the overall planning services provided by the consultant, portions of the facilities inventory were field verified for accuracy. It must be noted that no departmental data was collected or reviewed during the facilities review process.

A list of ASF contained in the facilities inventory by campus or site is noted in the following table.

Space Category	Canby Campus ASF	Granite Falls Campus ASF	Jackson Campus ASF	Pipestone Campus ASF	Worthington Campus ASF	Total
Classroom & Service	4,711	5,379	10,926	6,001	14,883	41,900
Teaching Laboratories & Service	33,875	12,664	30,136	9,723	10,246	96,644
Open Laboratories & Service	-	-	3,073	1,389	1,268	5,730
PE & Recreation	-	-	-	-	21,737	21,737
Offices & Service	6,712	6,797	6,679	10,041	8,085	38,314
Library	2,459	3,450	2,422	1,874	8,975	19,180
Assembly & Exhibit	-	-	-	-	5,586	5,586
Physical Plant	7,334	2,476	1,599	5,175	5,253	21,837
Child Care	-	4,430	-	-	-	4,430
Other Department Space	2,971	3,444	6,111	6,488	2,351	21,365
Student Center	6,302	5,341	3,515	5,818	6,110	27,086
Inactive/Conversion Space	1,459	14,715	8,335	18,797	-	43,306
Outside Organizations	-	5,116	2,257	10,268	6,302	23,943
Total ASF	65,823	63,812	75,053	75,574	90,796	371,058

ASF = Assignable Square Feet

In total, MWCTC contained 371,058 ASF on five campuses. Over 96,000 ASF (26%) is classified as Teaching Laboratories & Service. Inactive/Conversion Space and Outside Organizations comprise over 67,200 ASF (18%) of all campus facilities.

# Space Classifications

Facility space is calculated according to major space classifications as outlined in the National Center for Education Statistics' *Postsecondary Education Facilities Inventory and Classification Manual, 2006 Edition*. Some additional points of clarification are:

- Classrooms are those rooms that are regularly scheduled.
- Teaching laboratories are laboratories that are regularly scheduled.
- Open laboratories are laboratories that are irregularly scheduled. This category includes open computer laboratories. They may be laboratories used as combination teaching laboratories and open access laboratories. The Open Laboratory category includes music practice rooms, art studios, and laboratories built for one individual or a small group. It also includes senior capstone space and collaborative learning areas.
- The Office category includes offices, office supply and storage areas, workrooms, reception areas, conference rooms, and conference room service space.
- Library space is defined as space dedicated to the main and branch libraries, and not departmental study rooms that serve as an unofficial library.

- Assembly/Exhibit Space is space that accommodates many persons for events such as dramatic and musical
  activities or space that is used for exhibitions of materials or art such as a museum or an art gallery. It
  includes planetariums and herbariums.
- Other Department Space includes: departmental libraries, building or departmental student lounges, armories, media production rooms, clinics, demonstration rooms, meeting rooms, and central computer or telecommunications space. It also includes field buildings, animal quarters, and greenhouses that support instructions. Field buildings and greenhouses in support of physical plant and campus grounds are included as Physical Plant Space.
- The Student Center is space that is used for college life and student activities functions and includes bookstores, cafés, student lounges, student organization and government spaces, and ballroom space, if applicable.
- Physical Plant includes shops, warehousing, and grounds facilities that provide centralized space for support systems and services to a campus.
- Non-assignable areas include restrooms, corridors, mechanical rooms and central utility plants that primarily house central utility production and/or distribution to more than one facility on campus.

# SPACE NEEDS PROCESS AND CAMPUS FINDINGS

# Process

Paulien & Associates was provided with enrollment, course, and staffing data from Fall semester 2013. The facilities inventory provided building, square footage, and space use classification on a room-by-room basis. The course data contained the course number and description, student enrollments, start and stop times, and meeting locations. The staffing data contained headcount by major employee category on a campus basis. The data provided a snapshot of the activities for the Fall 2013, which was used as the planning Base Year and Plan Horizon.

The consultants conducted work sessions in August 2014. Meetings were held with all key college officials including the Interim President, Provost, Vice President of Administration, and Campus Deans. Additionally, a webinar of initial findings was held in October 2014 with MWCTC leadership to discuss and review preliminary findings and recommendations.

Enrollment goals, institutional vision, academic program objectives, changing pedagogies, current space needs, and MWCTC's strategic goals were the focus of the on-site sessions and webinar.

# College-Wide Space Needs Analysis

This section summarizes campuswide space needs by functional space category for each of the five MWCTC campuses. Different methods that included national and state guideline recommendations, benchmarking, and empirical data were used to project space needs. In an effort to maintain consistency of analysis, some of the same guideline application parameters were used for each campus in this study. Teaching laboratory guideline space needs were generated by program focus. A guideline was developed and compared to existing space on a program by program basis. Paulien & Associates then determined the best guideline to apply and totaled that need by campus. The results of the *Teaching Laboratory Analysis by Campus* can be found in the Appendices of this report.

The operating assumption in applying these guidelines was to provide MWCTC with enough space to conduct its current activities. The space needs analysis by space category is noted in each *Campuswide Space Needs Analysis* table. Each campuswide space needs analysis consists of a campus map, the guideline applied by space category, the *Campuswide Space Needs Analysis Summary* table, and observations and recommendations.

### Interpretation of Space Needs Analysis Outcomes

For each space category, four columns illustrate the findings at the Plan Horizon. The Existing ASF includes all current academic facilities. Only assignable square feet (ASF) were included, which is the usable area of a building and does not include circulation areas such as corridors, mechanical/electrical areas, building structure space, custodial closets, or restrooms.

Reviewing the second column, the Guideline ASF is a calculation of how much space is ideally needed in each space category at the Plan Horizon, given enrollment, programs offered, and staffing assumptions. The consultant applied appropriate space guidelines relative to an institution of MWCTC's enrollment, program mix, and mission.

The Surplus/(Deficit) column is the difference between the Existing ASF and Guideline ASF totals, while the Percent Surplus/(Deficit) column is the magnitude of the difference expressed as a percent. For each column, deficits are in parentheses and indicate a space need in that category only and does not take into account the quality of space to serve the campus mission. The space needs analyses for each campus and center will be reviewed.

# **Canby Campus**

The Canby Campus of Minnesota West has been educating students in a variety of highly specialized technical programs since 1965. Current technical programs include Dental Assisting, Diesel Technology, Electrician and the newest program, Wind Energy Technology. Distance learning options, such as online degrees and ITV courses, allow students access to over 25 additional educational opportunities including Liberal Arts & Science programs.

Distance learning opportunities allow students access to educational opportunities close to home. The Canby campus offers a learning environment that focuses on the individual student. The goal of faculty and staff is to work with students to achieve their educational objectives.

The Canby community is nestled below Buffalo Ridge on Minnesota's prairie. Stone Hill Regional Park, the largest man-made lake in Minnesota, is a popular camping destination. The community is proud of it's agricultural heritage as well as its renown renewable resource, wind energy.

Canby's economy continues to show confidence in growth with the recent openings of a new hotel, Canby Inn & Suites, Prasada Boutique, and Subway. In addition, the community supports the health services and provides employment opportunities at Sanford Hospital, Clinic and Wellness Center, as well as the elementary and high school which is located right in the city of Canby and also at Minnesota West Community and Technical College.





As of June 30, 2009 This map was created for display purposes only. It should not be used for accurate measurements or where a survey is required.

Sources: Minnesota West Community and Technical College Master Plan (2005), USDA FSA DOQ (2008),



Text and map graphic from Hay Dobbs' Five Campus Master Plan Update 2011

- -	<b>Plan Horizon</b> Student Headcount = 165 Staff Headcount = 82			
SPACE CATEGORY	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic Space				
Classroom & Service	4,711	3,032	1,679	36%
Teaching Laboratories & Service	33,875	31,075	2,800	8%
Academic Space Subtotal	38,586	34,107	4,479	12%
Academic Support Space				
Offices & Service	6,712	5,660	1,052	16%
Library	2,459	1,485	974	40%
Physical Plant	7,334	3,509	3,825	52%
Other Department Space	2,971	2,971	0	0%
Academic Support Space Subtotal	19,476	13,625	5,851	30%
Auxiliary Space				
Student Center	6,302	1,980	4,322	69%
Auxiliary Space Subtotal	6,302	1,980	4,322	69%
CAMPUS TOTAL	64,364	49,712	14,652	23%
Inactive/Conversion Space	1,459			

# Campuswide Space Needs Analysis • Plan Horizon MnWest • Canby

ASF = Assignable Square Feet

### **Guidelines Applied**

This section summarizes the guidelines/metrics applied for each space category in the Space Needs Analysis Summary Table. Each campus was reviewed individually and, in some instances, the guidelines/metrics applied will be different than other campuses. The operating assumptions in applying these guidelines/metrics was to provide the campus with adequate quantities of space to successfully deliver current and future services.

### <u>Classrooms</u>

Course files were reviewed and classroom use determined based on need by time of day and by course enrollment.

- 6 classrooms @ 12 stations
- 1 classrooms @ 24 stations
- 1 classrooms @ 36 stations

#### Laboratories

See Appendix for the Laboratory Analysis

#### **Offices**

Faculty — 100 ASF plus service and conference room factors Staff — 90 ASF - 160 ASF plus service and conference room factors, depending on title

#### <u>Library</u>

9 ASF per student headcount

#### Physical Plant

6% of existing and guideline space less physical plant ASF

#### Other Dept. Space

8.7 ASF per student headcount Contains meeting rooms, demonstration classroom, and central computer space

#### Student Center

10 ASF per student headcount

### Child Care

Existing equals guideline

#### Issues/Recommendations

- Reduce classroom space and reallocate excess to other space needed
- Laboratory space could be consolidated
- Student Center 64% surplus
- Consider converting Tech Building 1 to inactive space (mothballed)
- Consider moving programs now using Tech Building 4 to Tech Building 2 and Englund Hall, then convert Tech Building 4 to inactive space (mothballed)
- Englund Hall renovate/reallocate space to meet current and future needs through a capital project

# **Granite Falls Campus**

The Granite Falls Campus of Minnesota West prides itself on a quality education with accessibility for many different types of students. The campus meets the needs of the workforce and community by providing many online, technical, and liberal art courses. Whether a student wants to complete a few courses and transfer or earn a degree, the Granite Falls campus has a variety of educational options. Minnesota West, Granite Falls Campus, is a leader in the state and the upper Midwest in Renewable Energy and Computerized Manufacturing.

The City of Granite Falls is located in the Minnesota River Valley approximately 125 miles southwest of Minneapolis and is the County seat for Yellow Medicine County. Granite Falls is a full service community offering a diversified local economy including a mix of agriculture, manufacturing, health care and post secondary education. Housing includes a mix of both single and multi-family. The community supports a hospital, medical clinic, an elementary and high school campus as well as the Minnesota West Community and Technical College. Granite Falls provides opportunities to experience fine shopping and excellent customer service in either the quaint downtown, located on the West bank of the Minnesota River or along Highway 212. Kilowatt Community Center and Prairie's Edge Casino and Resort are also in close proximity. The economic condition of the City of Granite Falls has remained very stable over the past several years.



Granite Falls, MN 56241

#### Minnesota West Community and Technical College Granite Falls Main Campus



As of June 30, 2009 This map was created for display purposes only. It should not be used for accurate measurements or where a survey is required.

Sources: Minnesota West Community and Technical College Master Plan (2005). USDA FSA DOQ (2008).



Text and map graphic from Hay Dobbs' Five Campus Master Plan Update 2011

	<b>Plan Horizon</b> Student Headcount = 362 Staff Headcount = 35			
SPACE CATEGORY	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic Space				
Classroom & Service	5,379	3,048	2,331	43%
Teaching Laboratories & Service	12,664	8,411	4,253	34%
Open Laboratories & Service	0	584	(584)	n/a
Academic Space Subtotal	18,043	12,043	6,000	33%
Academic Support Space				
Offices & Service	6,797	3,795	3,002	44%
Library	3,450	3,258	192	6%
Physical Plant	2,476	3,680	(1,204)	(49%)
Other Department Space	3,444	3,144	300	9%
Academic Support Space Subtotal	16,167	13,877	2,290	14%
Auxiliary Space				
Student Center	5,341	3,620	1,721	32%
Child Care	4,430	4,430	0	0%
Auxiliary Space Subtotal	9,771	8,050	1,721	18%
CAMPUS TOTAL	43,981	33,970	10,011	23%
Inactive/Conversion Space	14,715			
Outside Organizations	5,116			

# Campuswide Space Needs Analysis • Plan Horizon MnWest • Granite Falls

ASF = Assignable Square Feet

### **Guidelines Applied**

This section summarizes the guidelines/metrics applied for each space category in the Space Needs Analysis Summary Table. Each campus was reviewed individually and, in some instances, the guidelines/metrics applied will be different than other campuses. The operating assumptions in applying these guidelines/metrics was to provide the campus with adequate quantities of space to successfully deliver current and future services.

#### <u>Classrooms</u>

Course files were reviewed and classroom use determined based on need by time of day and by course enrollment.

- 4 classrooms @ 12 stations
- 2 classrooms @ 24 stations
- 1 classrooms @ 36 stations

#### Laboratories

See Appendix for the Laboratory Analysis

#### **Open Laboratories**

2.4 ASF per student headcount None presently exist on campus

#### **Offices**

Faculty — 100 ASF plus service and conference room factors Staff — 90 ASF - 160 ASF plus service and conference room factors, depending on title

#### <u>Library</u>

9 ASF per student headcount

#### Physical Plant

6% of existing and guideline space less physical plant ASF

#### Other Dept. Space

8.7 ASF per student headcount Contains customized training room, ABE/GED meeting room and multi-purpose room

#### Student Center

10 ASF per student headcount

#### Child Care

Existing equals guideline

#### Issues/Recommendations

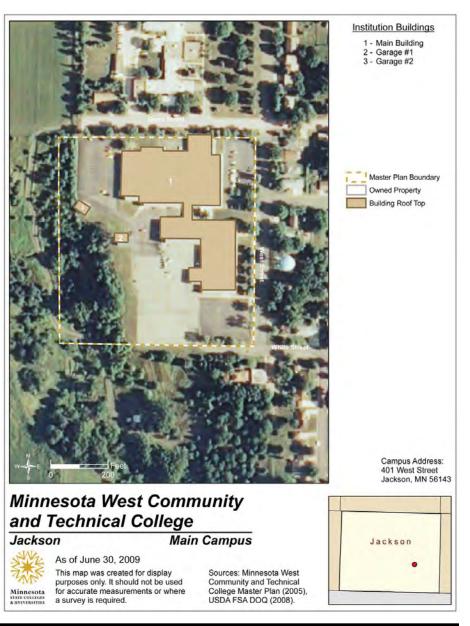
- Reduce classroom space and reallocate to other space needs
- Laboratory space could be consolidated into the south-southwest side of the building. This would free up the entire west side for lease or other use
- Student Center 32% surplus reallocate space to create campus student services and academic support core

### Jackson Campus

The Jackson Campus of Minnesota West has played an important role in preparing students for meaningful careers since 1967. Jackson is nestled in the beautiful Des Moines River Valley in Southwest Minnesota. The campus has long been known for preparing technicians in fields of electrician and power line worker. As a leader in the development of distance learning, the technical campus continues to expand its online course offerings. The campus offers students a variety of programs in areas such as business, computer, mechanics, power sports, and cosmetology. Students may begin their four-year degree at the campus by attaining an Associate in Arts degree either through on-campus or online instruction.

Through 2010 Jackson County was the home of 345 business establishments providing 5,125 covered jobs, with an annual payroll of \$152.5 million and average wages of \$29,692, according to data from DEED's Quarterly Census of Employment and Wages program. In addition to covered employment, Jackson County also had 735 non-employer establishments in 2009 as well as 969 farms in 2007. These operations are vital components of Jackson County's broad economy, contributing hundreds of millions of dollars to the county's economy. In fact Jackson County ranked 14th in the state in the total value of agricultural products sold in 2007, with just over \$267 million in sales.

Jackson has adequate space to serve the enrollment anticipated over the next 5 years. A predesign was recently completed to study removing an underutilized twostory wing of the Jackson campus and replace it with a new powerline training facility. Once complete, the project provides the College with an opportunity to eliminate underutilized square footage on their main campus in addition to divesting existing acreage at the current outdoor powerline facility located about 1 1/2 miles from campus. Currently Jackson campus leases 1,168 sf of space to Southwestern Mental Health Center and has opportunities to lease more with proper rightsizing of the building.



Text and map graphic from Hay Dobbs' *Five Campus Master Plan Update 2011* 

MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

	<b>Plan Horizon</b> Student Headcount = 444 Staff Headcount = 70			
SPACE CATEGORY	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic Space				
Classroom & Service	10,926	4,140	6,786	62%
Teaching Laboratories & Service	30,136	22,686	7,450	25%
Open Laboratories & Service	3,073	3,073	0	0%
Academic Space Subtotal	44,135	29,899	14,236	32%
Academic Support Space				
Offices & Service	6,679	5,765	914	14%
Library	2,422	3,996	(1,574)	(65%)
Physical Plant	1,599	4,407	(2,808)	(176%)
Other Department Space	6,111	6,111	0	0%
Academic Support Space Subtotal	16,811	20,279	(3,468)	(21%)
Auxiliary Space				
Student Center	3,515	4,440	(925)	(26%)
Auxiliary Space Subtotal	3,515	4,440	(925)	(26%)
CAMPUS TOTAL	64,461	54,618	9,843	15%
Inactive/Conversion Space	8,335			
Outside Organizations	2,257			

# Campuswide Space Needs Analysis • Plan Horizon MnWest • Jackson

ASF = Assignable Square Feet

#### Guidelines Applied

This section summarizes the guidelines/metrics applied for each space category in the Space Needs Analysis Summary Table. Each campus was reviewed individually and, in some instances, the guidelines/metrics applied will be different than other campuses. The operating assumptions in applying these guidelines/metrics was to provide the campus with adequate quantities of space to successfully deliver current and future services.

#### <u>Classrooms</u>

Course files were reviewed and classroom use determined based on need by time of day and by course enrollment.

- 5 classrooms @ 12 stations
- 2 classrooms @ 24 stations
- 2 classrooms @ 36 stations

### Laboratories

See Appendix for the Laboratory Analysis

#### **Open Laboratories**

Existing equals guideline Contains Cosmetology, Power Line and Automotive laboratory support space

#### **Offices**

Faculty — 70 ASF plus service and conference room factors Staff — 90 ASF - 160 ASF plus service and conference room factors, depending on title

#### <u>Library</u>

9 ASF per student headcount

#### **Physical Plant**

6% of existing and guideline space less physical plant ASF

#### Other Dept. Space

Existing equals guideline Contains large meeting/presentation room, the Nursing clinic, and a study room

#### Student Center

10 ASF per student headcount

#### Issues/Recommendations

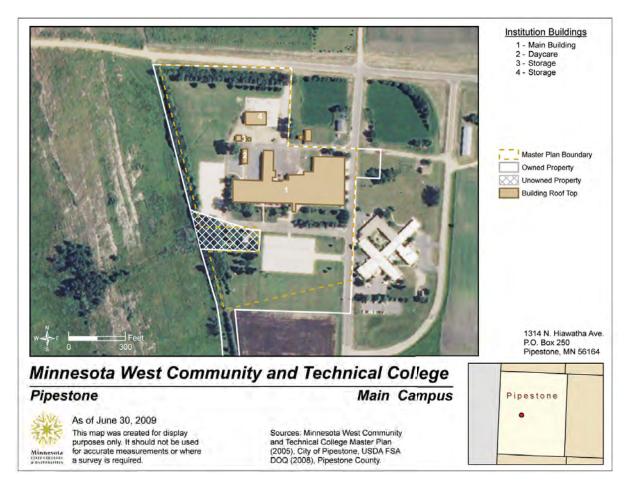
- Reduce classroom space and reallocate to other campus needs
- Laboratory space could be consolidated
   Auto/Power Sports/Elect/Power Line
- Student Center 60% surplus

# **Pipestone Campus**

Since 1967, the Pipestone Campus of Minnesota West has been educating students in a variety of highly specialized technical programs. The construction trades, health, and business programs, as well as specialty programs such as cosmetology create the heart of instruction opportunities offered at the Pipestone Campus. Liberal Arts and Science courses leading to associate degrees are also available through the Pipestone campus. This expanded learning opportunity allows students to earn their associate degree close to home. The Pipestone campus offers a bright and friendly learning environment focused on the individual student.

The community of Pipestone is rich with cultural history. Pipestone is often a popular tourist destination with visitors enjoying the Pipestone National Monument, downtown Historic District, Aquatic Center and the friendly locals. The campus is located adjacent to the world-famous Pipestone quarries, where for centuries; American Indians have come in peace to quarry the beautiful red Pipestone, from which sacred peace pipes are made.

Pipestone is a full service community offering a diversified local economy including agriculture, manufacturing, health care, post secondary education, and tourism. Pipestone has one of Minnesota's largest historic districts that include the beautiful Pipestone National Monument. The community supports a hospital, medical clinic, an elementary and high school as well as the Minnesota West Community and Technical College.



Text and map graphic from Hay Dobbs' *Five Campus Master Plan Update 2011* 

	<b>Plan Horizon</b> Student Headcount = 277 Staff Headcount = 56			
SPACE CATEGORY	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic Space				
Classroom & Service	6,001	3,348	2,653	44%
Teaching Laboratories & Service	9,723	5,760	3,963	41%
Open Laboratories & Service	1,389	1,389	0	0%
Academic Space Subtotal	17,113	10,497	6,616	39%
Academic Support Space				
Offices & Service	10,041	4,170	5,871	58%
Library	1,874	2,493	(619)	(33%)
Physical Plant	5,175	4,224	951	18%
Other Department Space	6,488	6,488	0	0%
Academic Support Space Subtotal	23,578	17,375	6,203	26%
Auxiliary Space				
Student Center	5,818	3,324	2,494	43%
Auxiliary Space Subtotal	5,818	3,324	2,494	43%
CAMPUS TOTAL	46,509	31,196	15,313	33%
Inactive/Conversion Space	18,797			
Outside Organizations	10,268			

# Campuswide Space Needs Analysis • Plan Horizon MnWest • Pipestone

ASF = Assignable Square Feet

### Guidelines Applied

This section summarizes the guidelines/metrics applied for each space category in the Space Needs Analysis Summary Table. Each campus was reviewed individually and, in some instances, the guidelines/metrics applied will be different than other campuses. The operating assumptions in applying these guidelines/metrics was to provide the campus with adequate quantities of space to successfully deliver current and future services.

#### <u>Classrooms</u>

Course files were reviewed and classroom use determined based on need by time of day and by course enrollment.

- 5 classrooms @ 12 stations
- 2 classrooms @ 24 stations
- 1 classrooms @ 36 stations

#### Laboratories

See Appendix for the Laboratory Analysis

#### **Open Laboratories**

5 ASF per student headcount Contains Cosmetology and open computer laboratories

#### **Offices**

Faculty — 100 ASF plus service and conference room factors Staff — 90 ASF - 160 ASF plus service and conference room factors, depending on title

#### <u>Library</u>

9 ASF per student headcount

#### Physical Plant

6% of existing and guideline space less physical plant ASF

#### Other Dept. Space

Existing equals guideline Contains community and meeting rooms, customized training room and central computer, Cosmetology demonstration classroom, etc.

#### Student Center

12 ASF per student headcount

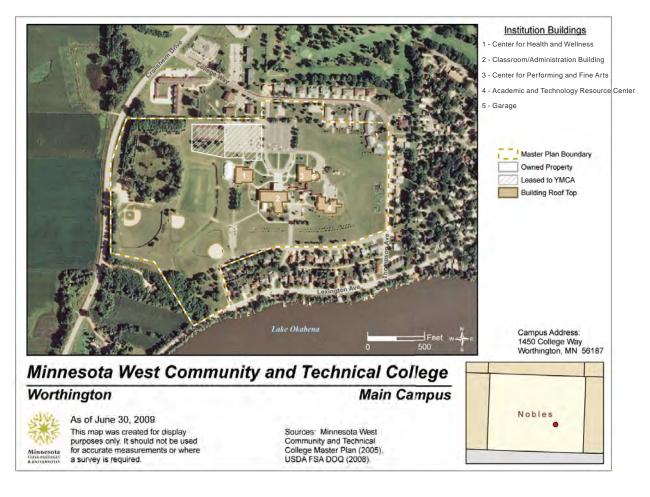
#### Issues/Recommendations

- Reduce classroom space and reallocate to other campus needs
- Laboratory space could be consolidated and inactive trades laboratories leased to others
- Student Center 43% surplus
- Consolidate space into central portion of building
- Try to consolidate laboratories into one side of building for flexibility

# Worthington Campus

The Minnesota West – Worthington Campus is dedicated to students and potential students of it's rural community. Population and economic conditions are experiencing growth, unlike most parts of rural Minnesota (*2010 Census; http://2010.census.gov/2010census/data/index.php*). The Worthington Campus is supportive of serving the growing rural community and seeks to maintain facilities to adapt to the many changing faces of the student population. Partnerships with surrounding primary and secondary schools completes the picture of facility development for this campus. Area industries are strong and involved locally and globally. The industries take time to realize the impact of the College by partnering in grants (BioSTAR grant submitted to NSF, Fall 2011), speaking in public forums and in classes (Dr. Randy Simonson, Prairie Holdings Group, Inc., November 30, 2011), arts and athletic event involvement, and participating in active advisory committees of the campus and programs. The campus celebrated its 75<sup>™</sup> anniversary of classes in the Fall 2011 – Spring 2012 academic year. A proud community supported the past, current, and future students of Minnesota West – Worthington Campus.

Worthington is the only campus of all the Minnesota West campuses that provides Fine Arts and intercollegiate athletics in addition to general academic offerings. The biggest change to Worthington campus over the last 5 years has come with the addition of the Worthington Area YMCA. With multiple buildings on its site, Worthington definitely has the ambience of community and collegiate campus. The addition of the YMCA enhances both the collegiate and public perception of the Minnesota West community. Opening up the student services area at the entry to administration creates an open and welcoming first impression that can be duplicated at other Minnesota West campuses.



Text and map graphic from Hay Dobbs<sup>;</sup> Five Campus Master Plan Update 2011

	Si	Plan Ho tudent Heado		
		Staff Headco	ount = 135	
SPACE CATEGORY	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic Space				
Classroom & Service	14,883	8,424	6,459	43%
Teaching Laboratories & Service	10,246	10,647	(401)	(4%)
Open Laboratories & Service	1,268	1,167	101	8%
Physical Education & Recreation	21,737	21,737	0	0%
Academic Space Subtotal	48,134	41,975	6,159	13%
Academic Support Space				
Offices & Service	8,085	9,285	(1,200)	(15%)
Library	8,975	8,361	614	7%
Assembly & Exhibit	5,586	5,600	(14)	0%
Physical Plant	5,253	5,133	120	2%
Other Department Space	2,351	2,351	0	0%
Academic Support Space Subtotal	30,250	30,730	(480)	(2%)
Auxiliary Space				
Student Center	6,110	5,574	536	9%
Auxiliary Space Subtotal	6,110	5,574	536	9%
CAMPUS TOTAL	84,494	78,279	6,215	7%
Off Campus Facilities	5,882			
Outside Organizations	420			

# Campuswide Space Needs Analysis • Plan Horizon MnWest • Worthington

ASF = Assignable Square Feet

### **Guidelines Applied**

This section summarizes the guidelines/metrics applied for each space category in the Space Needs Analysis Summary Table. Each campus was reviewed individually and, in some instances, the guidelines/metrics applied will be different than other campuses. The operating assumptions in applying these guidelines/metrics was to provide the campus with adequate quantities of space to successfully deliver current and future services.

### <u>Classrooms</u>

Course files were reviewed and classroom use determined based on need by time of day and by course enrollment.

- 3 classrooms @ 12 stations
- 6 classrooms @ 24 stations
- 3 classrooms @ 36 stations
- 2 classrooms @ 45 stations

### Laboratories

See Appendix for the Laboratory Analysis

#### **Open Laboratories**

1.25 ASF per student headcount Contains music practice rooms and open computer laboratories

#### PE/REC

Existing equals guideline

#### **Offices**

Faculty — 70 ASF plus service and conference room factors Staff — 90 ASF - 160 ASF plus service and conference room factors, depending on title

#### <u>Library</u>

9 ASF per student headcount

#### Assembly/Exhibit

5,600 ASF core guideline from CEFPI (Council of Facilities Planners International)

#### Physical Plant

6% of existing and guideline space less physical plant ASF

#### Other Dept. Space

Existing equals guideline Contains ITV/conference rooms, radio station, central computer, etc.

#### Student Center

6 ASF per student headcount

#### **Off-Campus Facilities**

The Center for Career Education (CCE) was created in 2013 when Minnesota West purchased the former Worthington Fire Hall, located near Worthington's downtown. The College remodeled the building in summer 2013 and began offering technical classes, including automobile mechanics, in that year's fall semester. As this building is off of the main Worthington campus, it was not included in the space needs analysis.

#### Outside Organizations

The 420 ASF is office space that is provided to an outside agency.

#### Issues/Recommendations

- Excess classroom space could be used to provide space for other campus needs
- Existing offices are, in some cases, larger than the guideline applied
- Remainder of space categories are in relative balance
- Other Department Space includes ITV/conference rooms, radio station, and central computer rooms

# COLLEGE-WIDE SUMMARY

Considering the anticipated mix of programs, enrollment, faculty and staffing needs, all MWCTC campuses generated surpluses of space when compared to existing space. This does not include space classified as inactive/conversion space or space on campus previously leased to outside entities.

Campus wide Space Needs	Anar	ysis		
Campus		Existing Available ASF	Plan Horizon Space Need	Surplus/ (Deficit)
Canby Campus		64,364	49,712	(14,652)
Granite Falls Campus		43,981	33,970	(10,011)
Jackson Campus		64,461	54,618	(9,843)
Pipestone Campus		46,509	31,196	(15,313)
Worthington Campus		84,494	78,279	(6,215)
Su	btotal	303,809	247,775	(56,034)
Inactive/Conversion Space		43,306		
Outside Organizations		23,943		_
	Total	371,058		

#### **Campus Wide Space Needs Analysis**

The environmental scan and space needs analysis should not be considered as a master plan update as no physical planning nor capital development scenarios are articulated in this study. However, over the course of the process, discussion of potential physical affects of the study outcomes were included in the conversations. Each campus is quite distinctive in their programs and mission within their service area and any physical response to this study will need to be taken within each campus' context.

Opportunities exist to consolidate, right size, and upgrade facilities to better address programmatic needs and to utilize space more effectively. To accomplish this, in some instances, requires little capital investment and, in other instances, a capital project may be warranted. These decisions were not a component of this study but may be an outgrowth of opportunity. It is the intent of this process to assist MWCTC administration in the analysis of these opportunities and constraints over time to make informed decisions relative to facility allocation and/or reallocation.

# APPENDIX - TEACHING LABORATORY ANALYSIS BY CAMPUS

# Interpretation of Teaching Laboratory Analysis

Teaching laboratory guideline space needs were generated by program focus. A guideline was developed and compared to existing space on a program by program basis. Paulien & Associates then determined the best guideline to apply and totaled that need by campus.

MINNESOTA WEST COMM	UNITY AND TECHNIC	
FILMESOTA WEST COM	IONITIT AND TECHNIC	AL GOLLLOL
ENVIRONMENTAL SCAN AN	ND SPACE NEEDS ST	UDY

	Guideline Application
T - CANBY	Guideline
NNESOTA WEST - CANBY	aboratory

			Fal	Fall 2013 Actual	stual				P & A Recommendations	commend	ations
Program		Room ID	Weekly Room Hours	Average Enroll- ment	Hours in Use Student Station Occupancy	Number of Stations	Guideline Applied ASF/ Station *	Guideline Assignable Square Feet	Recommended Assignable Square Feet	Existing ASF	Existing Surplus/ Deficit
Career & Technology Programs	iv Programs										
Diesel	Diesel Technology	AUTMCH 301	13	19	95%	20	170	3.400	3.400	4,479	1.079
Diesel	Diesel Technology	DSLMCH 213	32	18	93%	20	480	9,600	9,600	11,796	2,196
Dental	Dental Clinic	MAIN53 113	22	18	77%	24	50	1,200	2,953	1,100	(1,853)
Electrical	Elec Mockup Lab	MAIN53 120	12	80	30%	12	70	840	840	1,440	600
Wind Tech	Wind Lab	AUTMCH 312	2	9	60%	10	170	1,700	4,291	4,291	0
Wind Tech	Wing Energy Lab	MAIN53 112	4	6	30%	10	170	1,700	0	3,848	3,848
Laboratory Service ?	Laboratory Service Space * 30% of total Laboratory Guideline	ooratory Guideline					0.3	5,532	6,325	2,043	(4,282)
					C	Career & Tech Total			27,409	28,997	1,588
Instruction											
Computer-Based Lab Computer Lab	th Computer Lab	MAIN53 108	ω	16	%02	24	30	720	720	828	108
Electrical	NIDA Lab	MAIN53 114	4	7	25%	12	20	840	840	1,200	360
Electrical	Electrical Lab	MAIN53 123	30	12	45%	18	70	1,260	1,260	1,890	630
Nursing	Nurse's AID Training	g AGBLDG 420	0	0	%0	0	65	0	0	960	096
Laboratory Service ?	Laboratory Service Space * 30% of total Laboratory	ooratory Guideline				I	0.3	846	846		(846)
						Instruction Total			3,666	4,878	1,212
						TOTAL	29	AVERAGE	31,075	33,875	2,800

Canby Campus

# Granite Falls Campus

AINNESOTA WEST - GRANITE FALLS	Laboratory Guideline Application
MINNESOTA WEST -	Laboratory G

			Fal	Fall 2013 Actual	stual				P & A Recommendations	commend	ations
Program		Room ID	Weekly Room Hours	Average Enroll- ment	Hours in Use Student Station Occupancy	Number of Stations	Guideline Applied ASF/ Station *	Guideline Assignable Square Feet	Recommended Assignable Square Feet	Existing ASF	Existing Surplus/ Deficit
Career & Technology Programs Auto Auto Auto Body Auto Fluid Powe	<b>Programs</b> Auto Body Shop Fluid Power Lab	MN100B 308 MN100B 350	00	00	%0 %0	0 24	080	0 1,920	0 1,920	0 4,600	0 2,680
Laboratory Service Space * 30% of total Laboratory Guideline	ace * 30% of total La	aboratory Guideline					0.3	0	576		(576)
					0	Career & Tech Total			2,496	4,600	2,104
Instruction											
<b>Biological Sciences</b>	Science Lab	MN100B 105	5	6	38%	16	45	720	720	1,224	504
Biofuels	Biofuels Lab	MN100B 103	0	0	%0	14		0	0	1,941	1,941
Education	Child Dev. Lab	MN100B 112	10	15	75%	20	45	006	006	1,428	528
Computer-Based Lab	Computer Lab	MN100B 113	7	10	33%	24	30	720	720	761	41
Computer-Based Lab	Comp. Support	MN100B 115	4	17	68%	24	40	960	960	1,213	253
Nursing	Nursing Lab	MN100B 121	<b>б</b>	21	130%	5	150	750	750	872	122
Nursing	Nursing Lab					10	50	500	500	0	(200)
Nursing	Abandoned	MN100B 306	8	13	20%	0	0	0	0	0	0
Laboratory Service Space * 30% of total Laboratory Guideline	ace * 30% of total La	aboratory Guideline				•	0.3	1,365	1,365	625	(740)
						Instruction Total			5,915	8,064	2,149
						TOTAL	28	AVERAGE	8,411	12,664	4,253

# Jackson Campus

		Fal	Fall 2013 Actual	ctual				P & A Re	P & A Recommendations	ations
		Weeklv	Averade	Hours in Use Student		Guideline	Guideline	Recommended		Existing
		Room	Enroll-	Station		Applied ASF/	Assignable	Assignable	Existing	Surplus/
Program	Room ID	Hours	ment	Occupancy	Number of Stations	Station *	Square Feet	Square Feet	ASF	Deficit
Career & Technology Programs										
Auto AutoMech Con		ю	1	%69	12	80	960	1,741	1,741	0
Auto AutoMech Lab	MAIN56 R-110	14	8	40%	12	200	2,400	2,400	2,157	(243)
Auto AutoMech Lab	MAIN56 R-113	19	11	45%	16	200	3,200	3,200	5,012	1,812
Cosmetology Cosmetology	MAIN56 B-166	16	9	19%	24	06	2,160	2,160	006	(1,260)
Electrical Elec Lab	MAIN56 O-113	12	17	71%	24	100	2,400	2,400	4,651	2,251
Electrical Elec Lab	MAIN56 Y-109	12	8	40%	12	80	096	096	2,019	1,059
Electrical Elec Lab	MAIN56 O-119	22	15	64%	24	65	1,560	1,560	2,151	591
Electrical Power-Line Lab	MAIN56	0	0	%0	0	0	0	0	2,213	2,213
Laboratory Service Space * 30% of total Laboratory Guideline	al Laboratory Guideline				I	0.3	4,092	4,326	2,547	(1,779)
				C	Career & Tech Total			18, 747	23,391	4,644
Instruction										
Computer-Based Lab Networking Lab	b MAIN56 B-127	7	5	23%	12	40	480	480	1,198	718
Nursing Bed Lab	ab MAIN56 R-103	7	12	60%	5	150	750	750	1,230	480
					12	50	600	600	0	(009)
Power Sports Equipme Power Sports Lab	ab MAIN56 R-111	12	7	29%	12	100	1,200	1,200	4,317	3,117
Laboratory Service Space * 30% of total Laboratory Guideline	al Laboratory Guideline				·	0.3	606	606		(606)
					Instruction Total			3,939	6,745	2,806
					TOTAL	61	AVFRAGE	22.686	30.136	7.450

MINNESOTA WEST - JACKSON Laboratory Guideline Application

MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

## Pipestone Campus

EST - PIPESTONE	y Guideline Application
MINNESOTA WEST - PIPESTONE	Laboratory Guideline A

		Fal	Fall 2013 Actual	ctual				P & A Re	P & A Recommendations	ations
Program	Room ID	Weekly Room Hours	Average Enroll- ment	Hours in Use Student Station Occupancy	Number of Stations	Guideline Applied ASF/ Station *	Guideline Assignable Square Feet	Recommended Assignable Square Feet	Existing ASF	Existing Surplus/ Deficit
Career & Technology Programs Cosmotology Cosmotology	PIPBIL 222	31	9	60%	10	06	006	842	842	0
	PIPBIL 408	6	2 2	31%		130	2,080	0	0	0
Plumbing Plumbing Lab	PIPBIL 400B	4	œ	32%		65	780	780	4,450	3,670
Laboratory Service Space * 30% of total Laboratory Guideline	l Laboratory Guideline					0.3	1,128	487	627	140
				C	Career & Tech Total			2,109	5,919	3,810
Instruction										
Biochemistry Bio-Chem Lab	PIPBIL 110	თ	17	66%	24	55	1,320	1,320	1,275	(45)
Nursing Nursing Lab	PIPBIL 106	9	22	268%	5	150	750	750	695	(22)
Nursing Lab	PIPBIL 108	5	16	183%	12	50	600	600	872	272
r-Based Lab	PIPBIL 203	ო	10	36%	12	30	360	360	962	602
Laboratory Service Space * 30% of total Laboratory Guideline	l Laboratory Guideline				•	0.3	621	621		(621)
					Instruction Total			3,651	3,804	153
					TOTAL	41	AVERAGE	5,760	9,723	3,963

## Worthington Campus

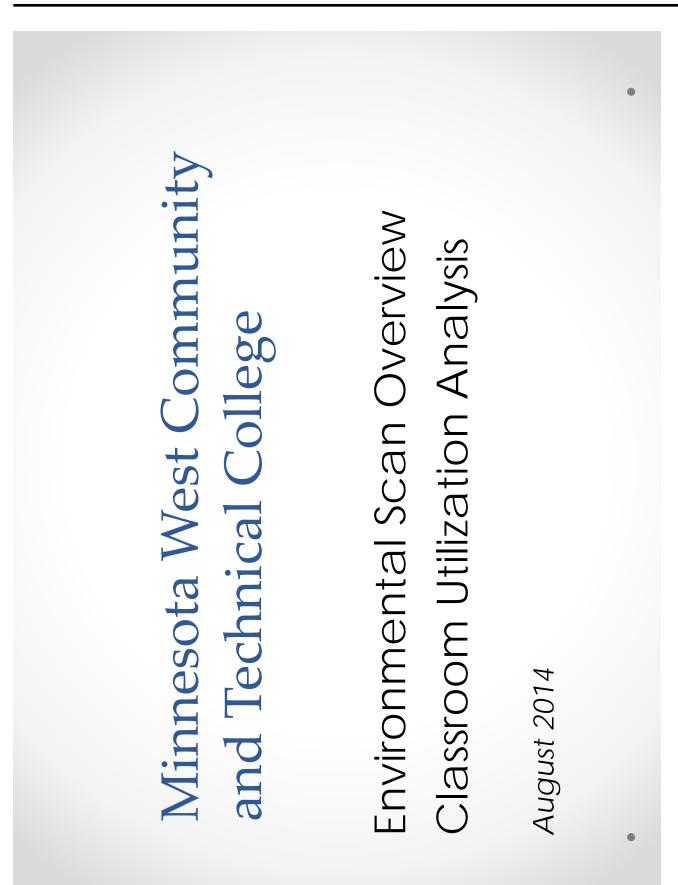
			Fal	Fall 2013 Actual	stual				P & A Recommendations	commend	ations
			Weekly	Average	Hours in Use Student		Guideline	Guideline	Recommended		Existing
Ръссъди			Room	Enroll-	Station	Mumber of Stations	Applied ASF/	Assignable Source Eoot	Assignable Senaro Ecot	Existing	Surplus/
I KUGKAM		Koom ID	SIDUL	IIIeIII	occupancy	SUDINAL OF STATIOUS	DIGUIDI	oquare reer	oquare reet	ASF	Delicit
Instruction											
Art	Ceramics Lab	FA 412	0	0	%0	16	60	960	0	733	733
Art	Paint Lab	FA 413	11	11	53%	16	60	960	1,000	1,000	0
Biology	Biology Lab	CLADCM 114	16	14	62%	24	45	1,080	1,240	1,240	0
Chemistry	Chemistry Lab	CLADCM 110	10	11	51%	20	53	1,060	1,240	1,240	0
Computer Based Lab	Computer Lab	MD 606	10	14	43%	24	30	720	720	1,006	286
Music	Music Rehearsal	FA 408	20	11	40%	32	45	1,440	1,440	1,436	(4)
Nursing	Nursing Lab	CLADCM 204	16	14	%06	5	150	750	750	816	66
Nursing	Health Lab	CLADCM 206	16	14	72%	12	50	600	600	368	(232)
Physics	Physics Lab	CLADCM 108	5	10	47%	20	60	1,200	1,200	1,240	40
I aboratoru Cartica Sna	I abovetowi Service Snace \$ 300% of total I abovetowi Guideline	atom Guidalina					εO	7 631	2 457	1 167	(1 200)
rautainty per vice ppa	00 30% OT 10141 F400	Tatory Outdoning				1	0.0	100,1	101.12	1,101	(007,1)
						Instruction Total			10,647	10,246	(401)
								TOTAL	10,647	10,246	(401)

MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

Laboratory Guideline Application

MINNESOTA WEST - WORTHINGTON

## APPENDIX - ENVIRONMENTAL SCAN PRESENTATION



	ACE CHANGE 2000-2010	2.8% 1	59.8% 🕇	10.8% 🕇	50.9% 🕇	8.9% 🕇	56.5% 🕇	51.2% 🕇	IO ORIGIN	CHANGE 2000-2010	74.5%	6 5.8% <b>†</b>
lund	22	85.3%		ive alone		fic Islander alone			SPANIC OR LATIN TA: 2010	CHAN		95.3%
on Change by County: 2000-2010	STATE POPULATION BY MINNESOTA: 2010	Mhite alone	Black or African American alone 5.2%	American Indian and Alaska Native alone 11.1%	Asian alone	Native Hawaiian and Other Pacific Islander alone	Some Other Race alone 1.9%	Two or More Races	STATE POPULATION BY HISPANIC OR LATINO ORIGIN MINNESOTA: 2010	PERCENT OF POPULATION	Hispanic or Latino	Not Hispanic or Latino
Change 1 2000-2010			~									
on C 20(	15-25% <b>25%</b> +	2	Y X			~					A A	
Populati	0-5% 5-15%	}										
0	ross			)					1	X	ĨF	

MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

Appendix	Environmental	Scan	Presentation	

**Population Projections** 

Service Area Population Projections by County	a Populatio	n Projecti	ons by Co	ounty			
				% Change			% Change
County	2010 Census	2015	2020	2010-2020	2025	2030	2010-2030
Big Stone	5,269	5,401	5,388	2.3%	5,371	5,336	1.3%
Brown	25,893	26,183	26,316	1.6%	26,466	26, 729	3.2%
Chippewa	12,441	12,570	12,704	2.1%	12,868	13,031	4.7%
Cottonwood	11,687	11,880	12,020	2.8%	12,184	12,317	5.4%
Jackson	10,266	10,366	10,499	2.3%	10,648	10,754	4.8%
Kandiyohi	42,239	43,174	44,495	5.3%	45,924	46,937	11.1%
Lac qui Parle	7,259	7,442	7,452	2.7%	7,446	7,461	2.8%
Lincoln	5,896	6,037	6,053	2.7%	6,068	6,066	2.9%
Lyon	25,857	25,837	26,347	1.9%	27,062	27,653	6.9%
Martin	20,840	21,377	21,743	4.3%	22, 161	22,460	7.8%
Murray	8,725	8,928	8,987	3.0%	9,011	9,017	3.3%
Nobles	21,378	21,418	22,139	3.6%	22,924	23,599	10.4%
Pipestone	9,596	9,820	9,974	3.9%	10, 132	10,312	7.5%
Redwood	16,059	16,410	16,655	3.7%	16,913	17,173	6.9%
Renville	15, 730	16,028	16,240	3.2%	16,436	16,594	5.5%
Rock	9,687	10,062	10,283	6.2%	10,512	10,731	10.8%
Swift	9, 783	9,405	9,411	-3.8%	9,591	9,655	-1.3%
Watonwan	11, 211	11,245	11,437	2.0%	11,683	11,849	5.7%
Yellow Medicine	10,438	10,581	10,680	2.3%	10,809	10,909	4.5%
Total	280,254	284,164	288,823		294,209	298,583	
Average				2.7%			5.5%
Source: Minnesota State Demographic Center, March 2014	ota State Demo	graphic Cente	er, March 20	014			

<b>Rates</b>
pation
Fall 2013 Participation
2013
Fall

## Participation Rate by Service Area Counties

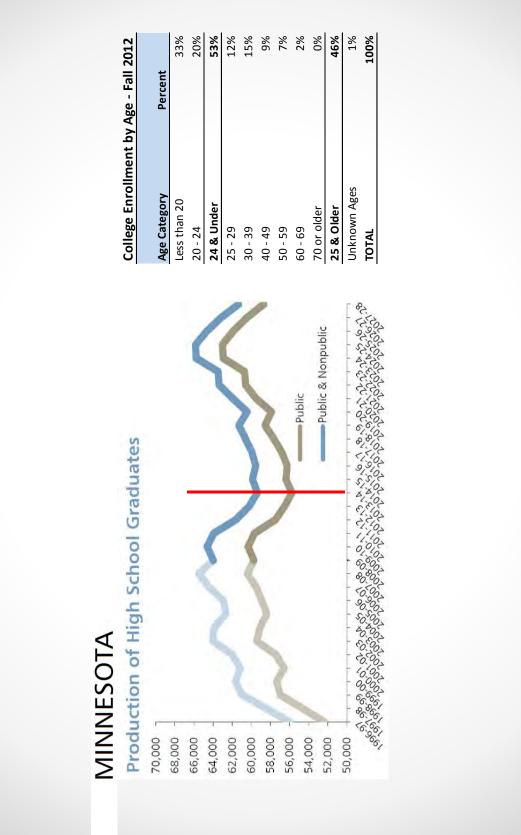
MINNESOTA WEST COMMUNITY AND TECHNICAL COLLEGE

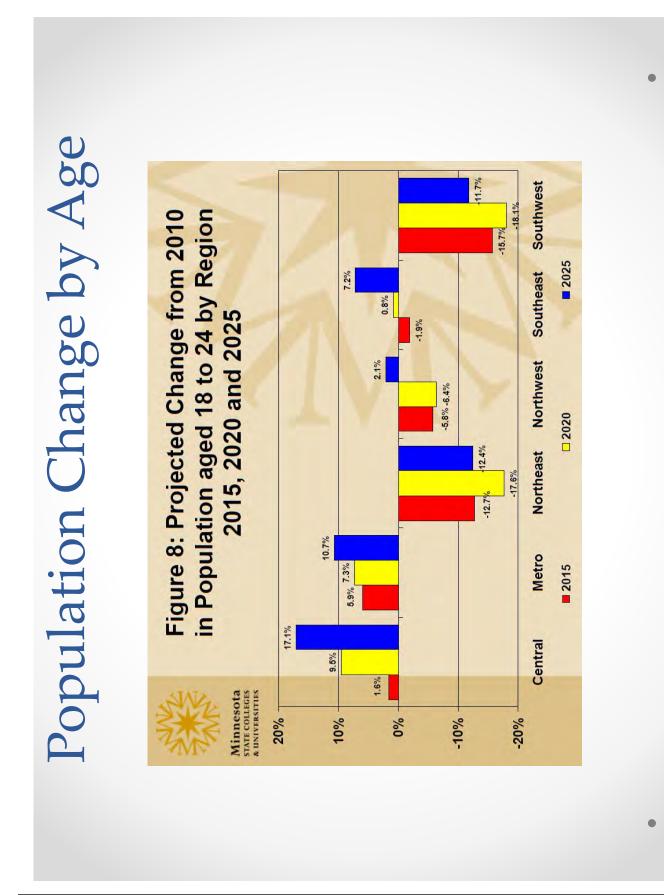
ENVIRONMENTAL SCAN AND SPACE NEEDS STUDY

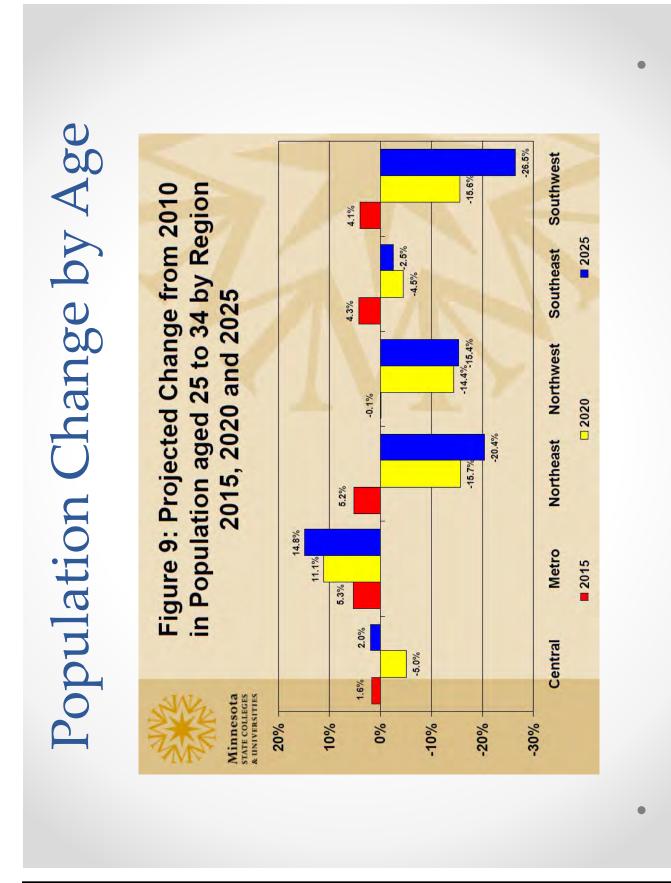
-			
		2013	
	2013	Popualtion	Participation
County	Headcount	Estimate	Rate
Jackson	176	10,260	1.72%
Martin	346	20,422	1.69%
Pipestone	145	9,270	1.56%
Nobles	328	21,617	1.52%
Rock	133	9,520	1.40%
Lincoln	64	5,830	1.10%
Murray	85	8,533	1.00%
Yellow Medicine	66	10,143	0.98%
Cottonwood	66	11,616	0.85%
Lac qui Parle	53	7,027	0.75%
Chippewa	85	12,093	0.70%
Lyon	162	25,487	0.64%
Redwood	86	15,744	0.55%
W atonwan	46	11,137	0.41%
Renville	41	15,166	0.27%
Big Stone	13	5,122	0.25%
Brown	40	25,332	0.16%
Swift	15	9,546	0.16%
Kandiyohi	20	42,410	0.05%
Out of State	276		
Not Specficied	689		
Total/Average	3,022	276,275	0.83%
Source: Institutional and U.S. Census Data	Data		

Fall 2013 Statewide Participation Rates	tes	
	Fall 2013	Participation
Category	Enrollment	Rate
<b>Community and Technical Colleges</b>	128097	2.4%
Minnesota State Universities	67181	1.2%
Total Public Institutions	263325	4.9%
Private Institutions (excluding 100% online)	91335	1.7%
All Minnesota Institutions	354660	6.5%
2013 Statewide Population	5,420,380	

Graduates	
ligh School (	
V High	)
NN	







# Participation Rate Enrollment Projections

Participation Rate Enrollment Projections	n Rate Enr	ollment Pro	jections			
		2013	2020		2025	
	2013	Participation	Population	Fall 2020	Population	Fall 2025
County	Headcount*	Rate	Projection	Headcount	Projection	Headcount
Big Stone	13	0.25%	5,388	14	5,371	17
Brown	40	0.16%	26,316	42	26,466	59
Chippewa	85	0.70%	12,704	89	12,868	66
Cottonwood	66	0.85%	12,020	102	12,184	112
Jackson	176	1.72%	10,499	180	10,648	190
Kandiyohi	20	0.05%	44,495	21	45,924	52
Lac qui Parle	53	0.75%	7,452	56	7,446	61
Lincoln	64	1.10%	6,053	99	6,068	71
Lyon	162	0.64%	26,347	167	27,062	190
Martin	346	1.69%	21,743	368	22, 161	390
Murray	85	1.00%	8,987	06	9,011	96
Nobles	328	1.52%	22,139	336	22,924	363
Pipestone	145	1.56%	9,974	156	10,132	165
Redwood	86	0.55%	16,655	91	16,913	103
Renville	41	0.27%	16,240	44	16,436	55
Rock	133	1.40%	10,283	144	10,512	154
Swift	15	0.16%	9,411	15	9,591	21
Watonwan	46	0.41%	11,437	47	11,683	56
Yellow Medicine	66	0.98%	10,680	104	10,809	113
Out of State	276			290		299
Not Specficied	689			722		800
Total	3,022			3,145		3,463
Source: Institutional and U.S.Census Data	nal and U.S.Ce	nsus Data				

	SUC
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CAMPUS2000200220042006200320132013Canby1941942161391872511660Cenby1941942161391872511660Cerbor1681581321331471301250Cerbor1681581321331471301250Cerbor1681581321321331471301250Cerbor1683162162772342882540Cerbor3163163163102743422790Jackson4423763563102743422790Jackson4423763563102743422790Jackson4423763563102743422790Jackson4423763563102743422170Unverne24122726925518625121452170Pipestone241227269255186254530Pipestone2412722692,0251,9392,03900Worthington5436947437727682,03900Morthington5436947437,9392,0390,0500,050	FULL TIME EQUIVALENTS: FALL TERMS	VALENTS	: FALL TE	RMS						
MMPUS         2000         2002         2004         2006         2003         2010         2012           1104         1194         1194         1194         1130         1155         1166           111         1168         1158         1132         1138         1147         1130         1125           111         1168         1131         2114         213         2134         234         254           111         211         2114         2114         213         2134         213           111         211         2114         211         212         214         214           111         211         211         212         213         214         214           111         211         211         211         211         211           111         211         212         216         216         216           111         211         212         216         216         216           111         212         216         216         216         217           111         213         216         216         216         217           111         213										Plan
19419419421613318725116611681581321381471301251168158132138137136125116831631271234238254116316316356310274342279116316356310274342279101116117274281274342279101116118111274214217217217116113111227269255186251217116113101274274214217217116113101274274214217217116113101274251216216216116113101274274217217116113101274274217217116113101274274213217116113101274274213217116113101274274213217116113101172172172216216116113101173775276327032131161131096270519392,0352,0352,0351	CAMPUS	2000	2002	2004	2006	2008	2010		2013	Horizon
168         158         132         138         147         130         125           ont         2         2         38         53         64         125           e Falls         316         314         281         277         234         288         254           n         442         376         356         310         273         288         254           n         442         376         356         310         274         342         279           n         442         376         356         310         274         279         101           n         442         376         356         310         274         279         101           /virtual         1         2         2         269         255         186         217         217           one         241         227         269         251         217         217         217           one fails         1         2         2         186         251         218         217           one fails         1         2         2         2         2         2         2         2         2	Canby	194	194	216	139	187	251	166	0	
ntt         i	CE/CT	168	158	132	138	147	130	125	0	
eFalls         316         314         281         273         288         254           n         442         376         356         310         274         342         279           n         442         376         356         310         274         342         279           ne         442         376         356         310         274         342         279           /virtual         1         1         49         955         145         181         101           /virtual         241         227         269         255         186         217         217           one         241         227         269         255         186         217         217           one         241         227         269         269         217         217           one         243         772         768         685         600         0           ington         543         772         768         676         703         0           ington         546         7,93         7,93         3466         5,039         5,039           ington         3287         5,033	Fairmont					38	53	64	0	
n         442         376         356         310 $274$ 342 $279$ le         1         1         1         1         1         1         1           le         1         1         1         1         1         1         1         1           /virtual         1         1         1         1         1         1         1         1           /virtual         1	<b>Granite Falls</b>	316	314	281	277	234	288	254	0	
ee         1         1         49         95         101           /virtual         1         1         1         1         1         1           /virtual         1         1         1         1         1         1         1           /virtual         1         1         1         1         1         1         1         1           one         241         227         269         255         186         217         217           ond Falls         1         1         2         1         1         217         217           ond Falls         1         1         2         1         2         1         2         1         1           of Falls         1         2         1         2         1         2         1         <	Jackson	442	376	356	310	274	342	279	0	
/virtual           55         145         181            one         241         227         269         255         186         251         217           ond Falls         241         227         269         255         186         251         217           od Falls         13         20         26         255         186         251         217           field         13         0         0         0         0         0         0         0         0           field         543         694         743         772         768         685         600         <	Luverne					49	95	101	0	
one         241         227         269         255         186         251         217           od Falls         1         2         1         2 <td>Online/Virtual</td> <td></td> <td></td> <td></td> <td></td> <td>55</td> <td>145</td> <td>181</td> <td>0</td> <td></td>	Online/Virtual					55	145	181	0	
ood Falls         1         1         24         53           field         13         0         0         0         0         0         0         0         10<	Pipestone	241	227	269	255	186	251	217	0	
field       13       0       0       0       0       0       0         ington       543       694       743       772       768       685       600         ington       1,916       2,097       1,996       2,025       1,939       2,265       2,039         count       3287       3287       3463       3466       3466       0.59       0.59         count       0.58       0.58       0.65       0.59       0.59       0.59       0.59	Redwood Falls						24	53	0	
ington     543     694     743     772     768     685     600       1,916     2,097     1,996     2,025     1,939     2,265     2,039       count     3287     1,996     2,025     1,939     3463     3466       count     0.58     0.58     0.59     0.59     0.59	Springfield	13	0	0	0	0	0	0	0	
1,916         2,097         1,996         2,025         1,939         2,265         2,039           count         3287         3463         3463         3466           0.58         0.58         0.59         0.59         0.59	Worthington	543	694	743	772	768	685	600	0	
count         3287         3463           0.58         0.65	TOTAL	1,916	2,097	1,996	2,025	1,939	2,265	2,039	0	
0.58 0.65	Headcount	3287					3463	3466		
	Ratio	0.58					0.65			

MINNESOTA 2010-2020 Total Job Openings 1,065,000	OCCUPATION	2010 jobs	2020 jobs	Growth rate (%)
MN TOTAL JOBS, excluding military	Managerial and Professional Office	441,330	511,820	16
3,200,000	STEM	132,710	154,920	17
3,000,000	Social Sciences	14,910	18,670	25
2,900,000	Community Services and Arts	141,900	168,870	19
	Education	157,190	182,550	16
2000 2010 2010 2010 2010 2010 2010 2010	Healthcare Professional and Technical	ial 133,560	167,660	26
GEORGETOWON UNIVERSITY Center on Education and the Workforce	Healthcare Support	83,440	111,600	34
	Food and Personal Services	429,020	504,300	18
	Sales and Office Support	708,820	789,800	П
	Blue Collar	545,620	590,380	∞
	TOTAL	2,788,500	3,200,550	15

	O BOL	PENINGS BY OC	CUPATION AND	JOB OPENINGS BY OCCUPATION AND EDUCATION LEVEL (IN THOUSANDS)	/el (in thous/	ANDS)
OCCUPATION	Less than high school	High school diploma	Some college/ no degree	Associate's degree	Bachelor's degree	Master's degree or better
Managerial and Professional Office	1	18	30	17	73	31
STEM	0	ĸ	9	7	25	11
Social Sciences	0	0	0	0	1	2
Community Services and Arts	1	2	П	7	24	Π
Education	0	ß	4	2	21	31
Healthcare Professional and Technical	0	1	9	12	17	20
Healthcare Support	2	6	14	7	ę	1
Food and Personal Services	18	55	45	22	24	ς
Sales and Office Support	7	61	75	35	76	10
Blue Collar	23	84	48	25	14	2
TOTAL	52	235	238	134	280	126

rojections	
west Minnesota Employment Projections	
t Minnesota l	
Southwest	

Major Group	Employment	Employment	Change	Hires	Total Change	Total Hires
Protective Service Occupations	7,369	7,418	-0.07%	2,320	49	2,480
Education, Training, and Library Occupations	32,284	32,272	%60.0	7,450	-12	7,810
Office and Administrative Support Occupations	73,900	78,673	2.01%	16,110	4,773	21,810
Food Preparation and Serving Related Occupations	44,652	46,593	2.83%	15,270	1,941	17,450
Management Occupations	50,465	51,022	5.09%	10,280	557	11,780
Computer and Mathematical Occupations	4,122	4,333	5.28%	062	211	066
Arts, Design, Entertainment, Sports, and Media Occupations	8,246	8,824	7.70%	2,210	578	2,880
Building and Grounds Cleaning and Maintenance Occupations	20,133	22,002	8.39%	3,580	1,869	5,430
Life, Physical, and Social Science Occupations	4,476	4,895	8.43%	1,380	419	1,790
Sales and Related Occupations	55,924	60,313	8.43%	17,540	4,389	21,960
Architecture and Engineering Occupations	6,643	7,048	9.56%	1,460	405	2,020
Legal Occupations	2.069	2,290	10.00%	350	221	590
Farming, Fishing, and Forestry Occupations	11,683	13,341	10.49%	3,530	1,658	5,190
Production Occupations	57,227	62,180	10.70%	12,550	4,953	17,930
Installation, Maintenance, and Repair Occupations	23,570	26,219	12.30%	5,440	2,649	8,110
Transportation and Material Moving Occupations	43,713	49,960	12.56%	10,370	6,247	16,710
Community and Social Service Occupations	13,519	15,231	12.59%	2,860	1,712	4,570
Business and Financial Operations Occupations	21,934	24,525	13.44%	4,530	2,591	7,150
Personal Care and Service Occupations	26,759	34,431	16.16%	5,710	7,672	13,400
Healthcare Practitioners and Technical Occupations	28,634	33,835	20.89%	5,940	5,201	11,100
Construction and Extraction Occupations	22,127	26,988	23.02%	4,740	4,861	9,610
Healthcare Support Occupations	29,725	39,832	26.41%	4,030	10,107	14,140
All Occupations	206,339	227,716	10.40%	48,340	21,377	71,060

