



Meeting Local Worker Demand: Labor Market Outcomes for Missoula College

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MONTANA
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Montana Department of
LABOR & INDUSTRY

MISSOULA COLLEGE

UNIVERSITY OF MONTANA



Report Outline

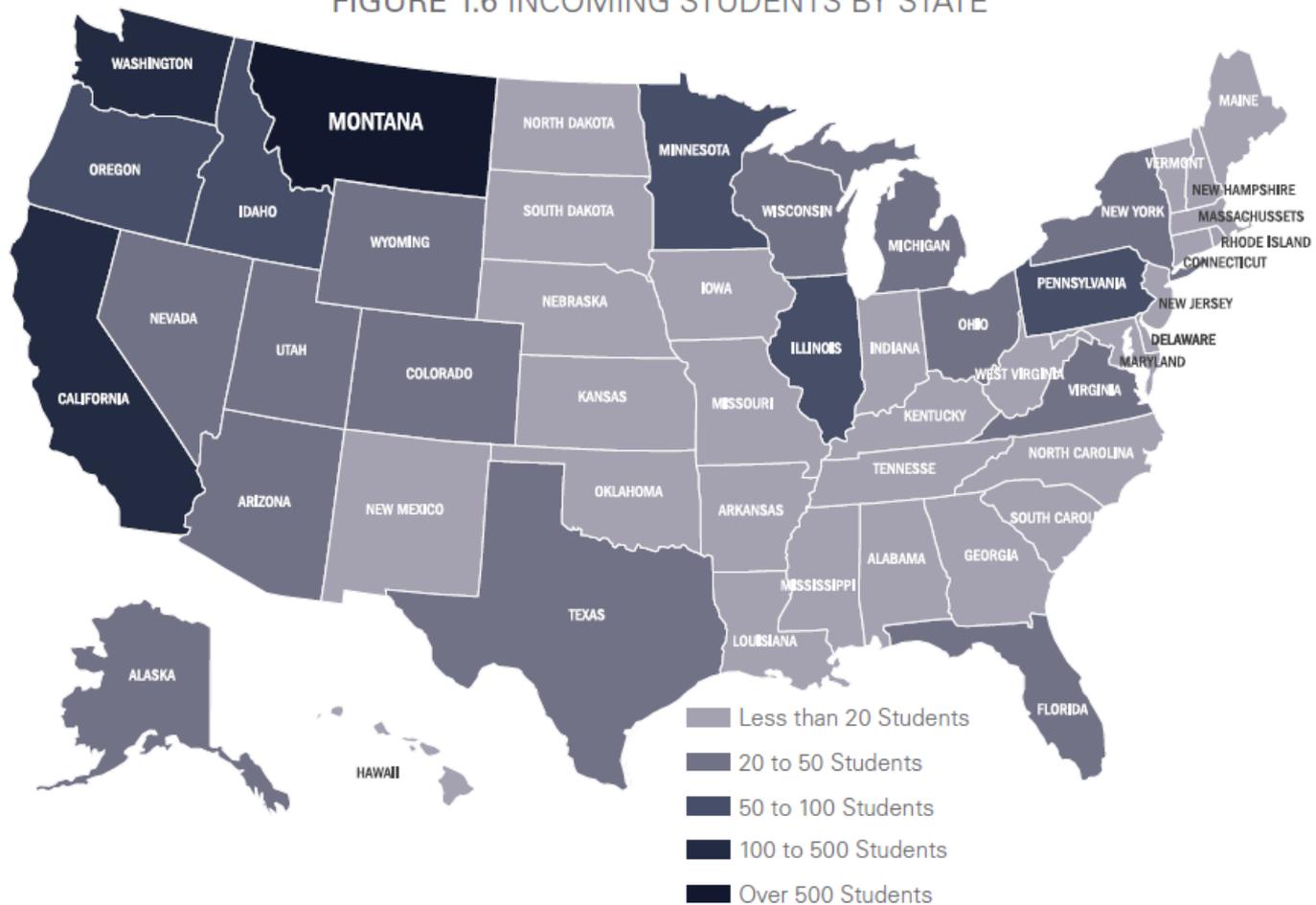
1. **What are Missoula College Students Like?**
2. How Do Missoula College Graduates Fare in the World of Work?
3. Does the Supply of Graduates from Missoula College Meet Local Demand?



Students Come From All Over United States

Figures 1.6 (page 19)

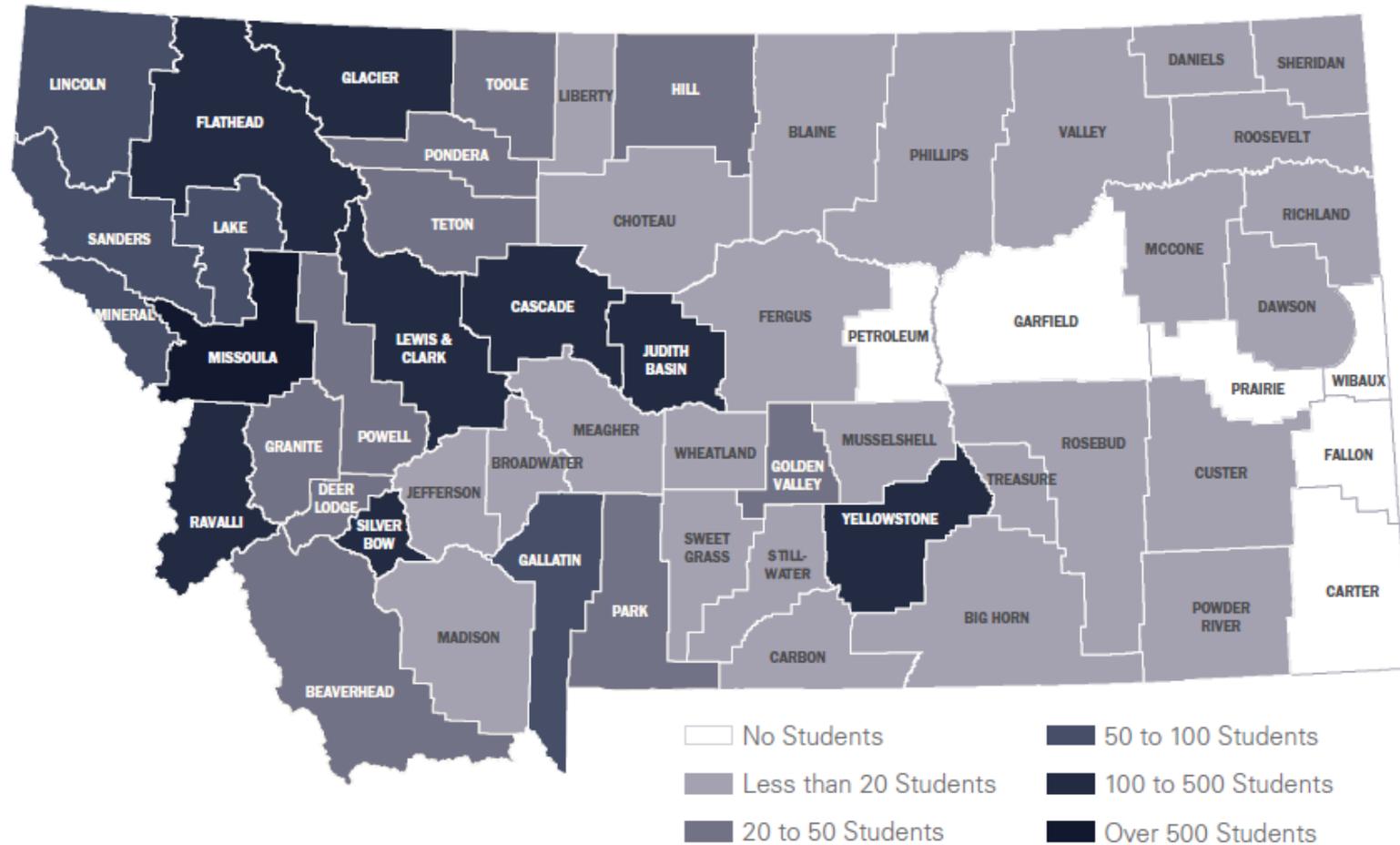
FIGURE 1.6 INCOMING STUDENTS BY STATE





Students Come From Western Montana

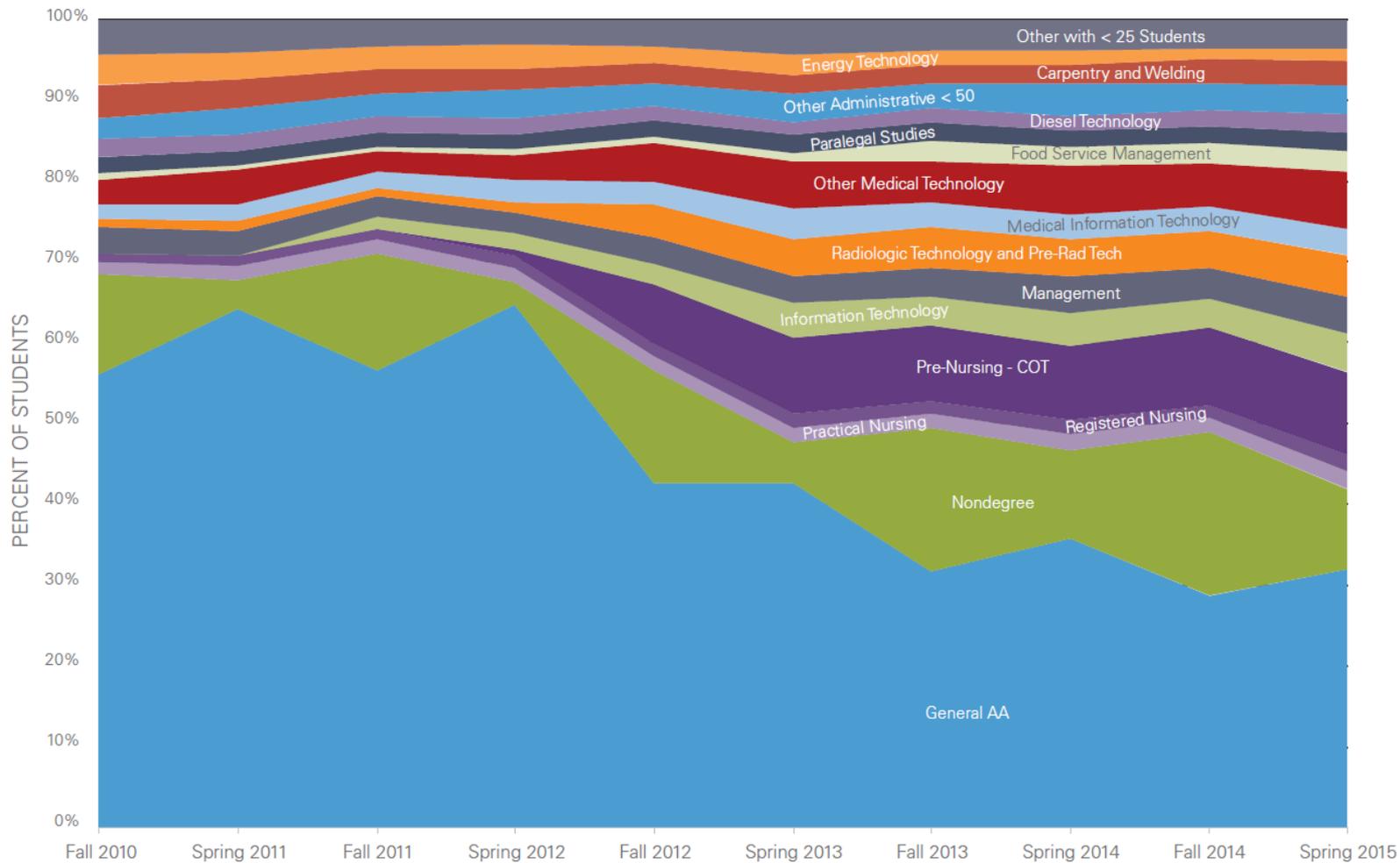
Figures 1.7 (page 19)





Students by Program

Figures 1.9 (page 21)





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Workforce Outcomes Data

Graduate data from Missoula College matched to MT UI wage records back to 2001.

| | |
|----------------------------|--------------------|
| Timeframe | 2001-02 to 2014-15 |
| Number of Years | 14 |
| Total Records | 4,738 |
| Number of Graduates | 4,088 |
| Average Graduates Per Year | 290 |
| Average Degrees Per Year | 340 |
| % Single Degree Holders | 85% |

All wages adjusted using CPI to 2015 Q4 dollars.

Individuals evaluated after terminal degree from Missoula College.

Wages matched by semester of graduation.

Does not include self employment income, or data outside Montana.



Workforce Outcomes for Graduates

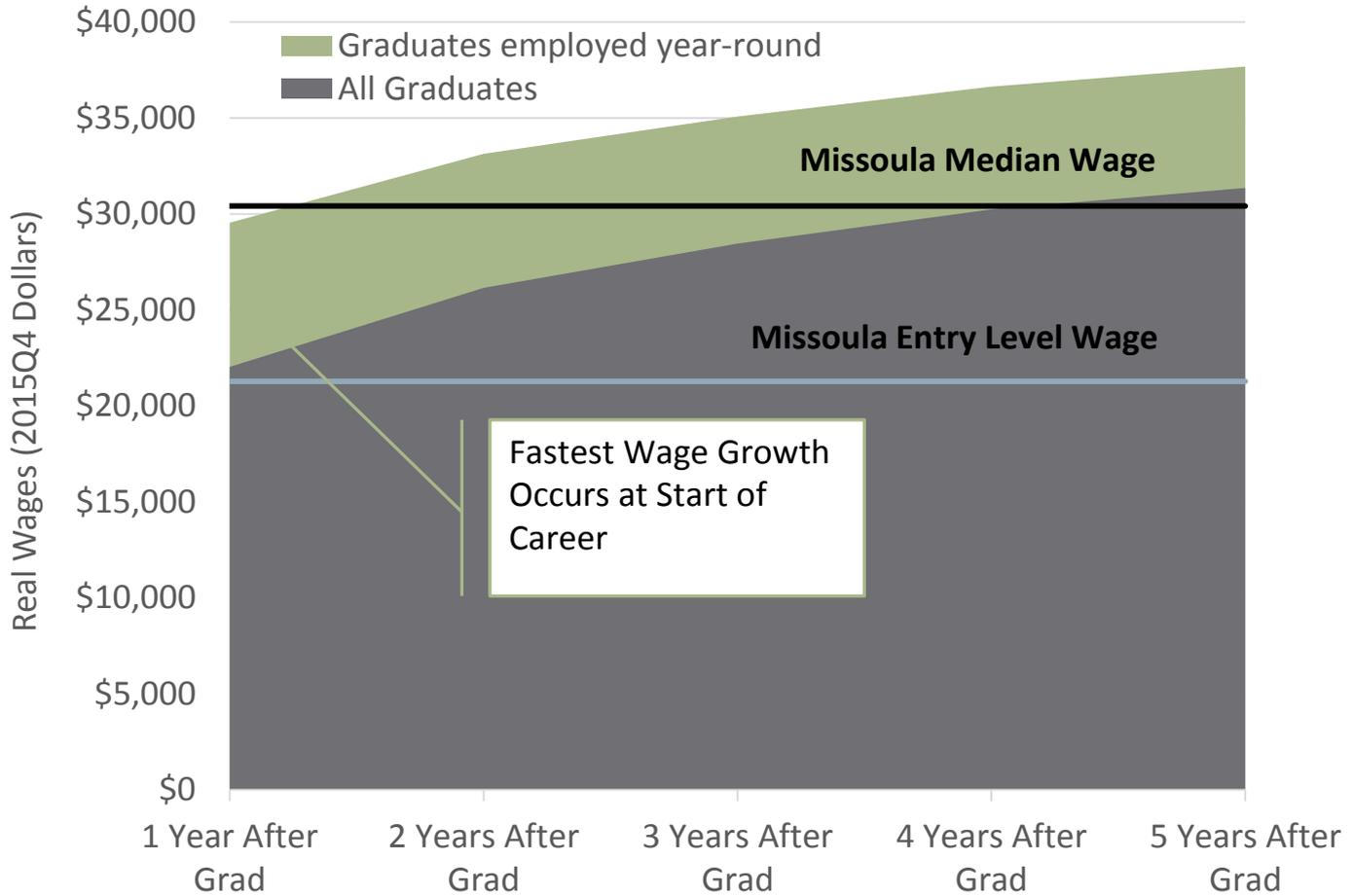
Figure 2.4 (page 28)

83% of Missoula College graduates employed in MT one year after graduation

Average wages roughly \$22,000 in the first year

\$31,300 five years after graduation

Consistent wage earners and incumbent workers make more

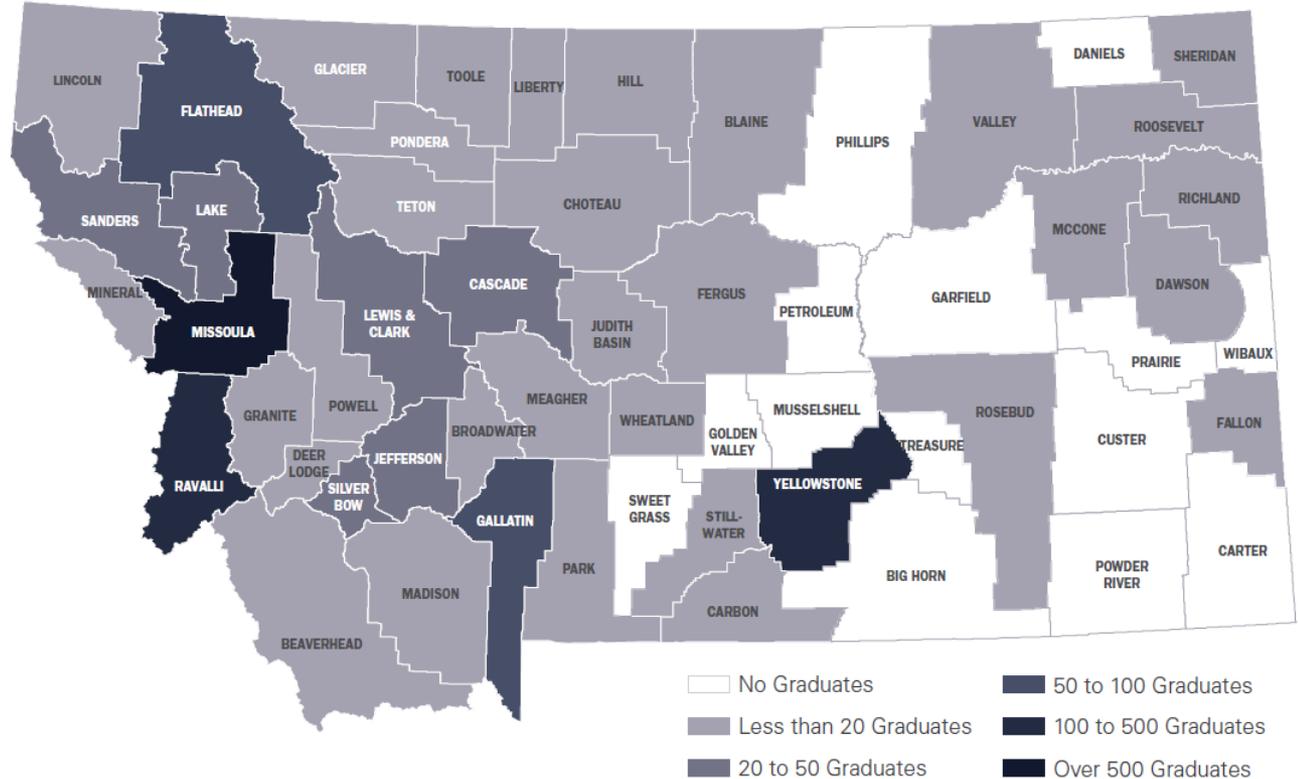


Source: Data match by DLI. Entry and median wages in 2014 dollars from the Occupational Employment Statistics

Missoula College Supplies Local Labor Force

Figure 2.3 (page 27)

74% of employed Missoula College graduates join the local workforce after graduation, making them an important economic asset for the Missoula region.



Source: MT DLI and OCHE MUS graduate data wage match, excluding spring 2015 graduates. 2014 graduates identified using only two quarters of data, rather than full year for other included graduates. Graduate location based on the location of their primary employer.



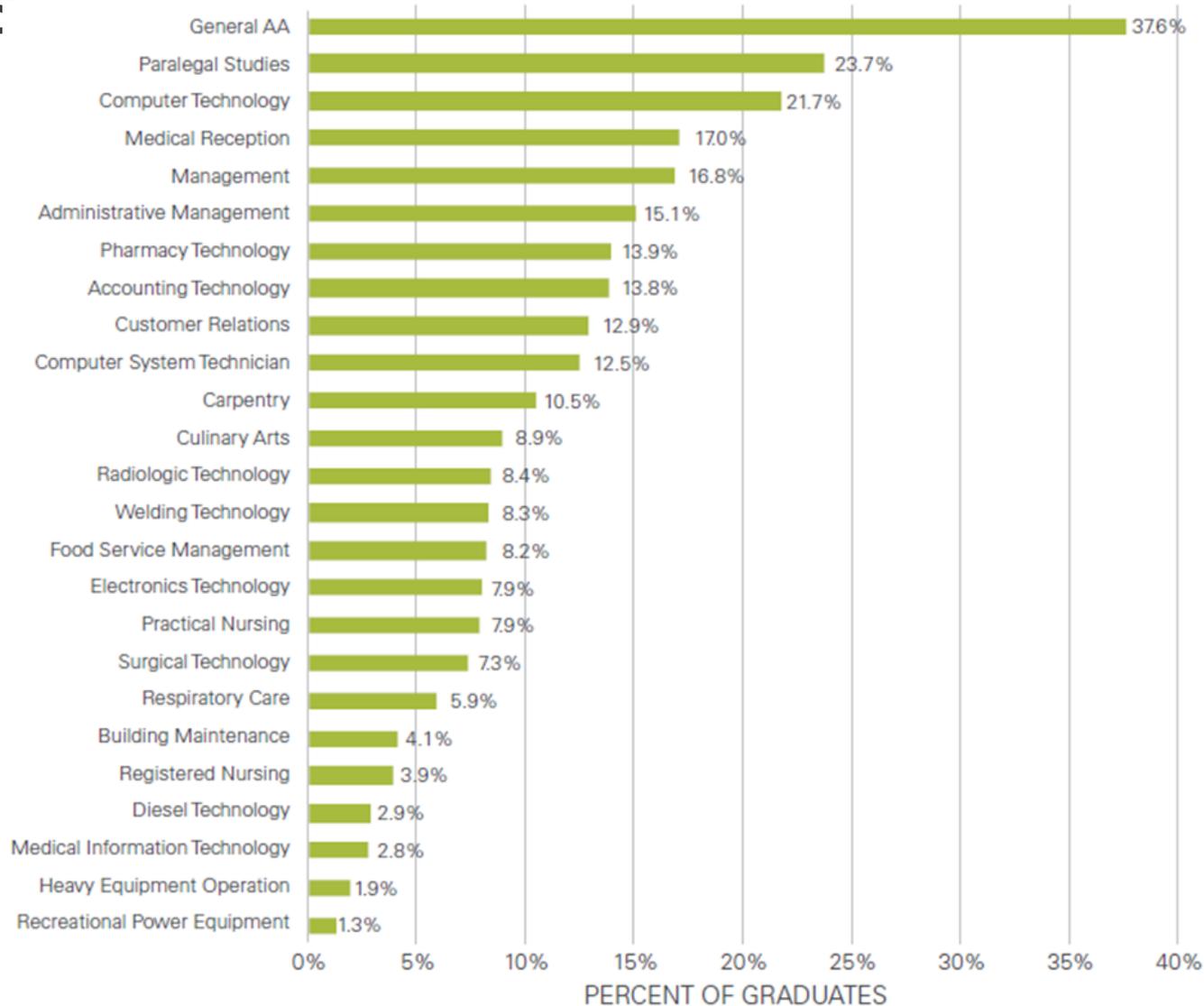
Employment and Wages Outcomes by Industry

Figure 2.8 (page 32)

| Industry | <u>One Year After Graduation</u> | | <u>Five Years After Graduation</u> | | Local Area |
|-----------------------------|----------------------------------|--------------|------------------------------------|--------------|------------------------|
| | <i>% of Employed Graduates</i> | <i>Wages</i> | <i>% of Employed Graduates</i> | <i>Wages</i> | <i>Avg Annual Wage</i> |
| 11 Agriculture | 0.7% | \$19,386 | 0.6% | \$30,852 | \$47,170 |
| 21 Mining | 0.5% | \$33,792 | 0.7% | \$46,492 | \$52,589 |
| 23 Construction | 4.7% | \$19,975 | 5.2% | \$28,201 | \$42,536 |
| 33 Manufacturing | 3.8% | \$21,885 | 4.2% | \$31,829 | \$37,872 |
| 42 Wholesale Trade | 3.2% | \$26,902 | 3.5% | \$33,651 | \$51,376 |
| 44 Retail Trade | 11.2% | \$16,110 | 9.6% | \$25,365 | \$25,940 |
| 48 Transportation | 1.9% | \$24,165 | 2.0% | \$30,783 | \$36,332 |
| 51 Information | 1.0% | \$21,252 | 0.8% | \$34,266 | \$46,326 |
| 52 Finance | 2.5% | \$21,912 | 3.4% | \$34,312 | \$57,166 |
| 53 Real Estate | 1.0% | \$15,700 | 1.2% | \$25,694 | \$33,622 |
| 54 Prof. and Tech. Services | 5.0% | \$22,200 | 5.7% | \$30,690 | \$58,157 |
| 56 Admin and Waste | 6.6% | \$15,317 | 5.3% | \$26,026 | \$29,128 |
| 61 Educational Services | 4.9% | \$14,807 | 5.2% | \$22,406 | \$21,776 |
| 62 Health Care | 35.8% | \$29,287 | 38.8% | \$36,893 | \$42,717 |
| 71 Arts, Entertain and Rec | 1.9% | \$13,286 | 1.2% | \$22,909 | \$17,948 |
| 72 Acc. and Food Service | 9.4% | \$12,444 | 5.3% | \$18,718 | \$15,759 |
| 81 Other Services | 3.3% | \$15,602 | 2.6% | \$25,547 | \$24,800 |
| 92 Public Admin | 2.5% | \$23,673 | 4.4% | \$31,221 | \$45,300 |

Bachelor's Degree Attainment of Graduates

- Figure 2.2 (page 25)
10% of graduates obtained a higher degree above their Missoula College degree after graduation.
- General studies has the highest bachelor degree attainment rate, at 38%.
- Programs with better wage outcomes tend to have lower bachelor's degree attainment rates.





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How to Define Demand?

- MT DLI industry and occupational employment projections for the NW Region
- Not expected to fill 100% of Demand for the region

Growth
Openings



Total
Openings
(Replacement
& Growth)





Four Supply and Demand Analyses

INDUSTRY

Demand: Estimated annual employment growth by industry in the Northwest

Supply: The number of Missoula College graduates who find employment in the industry one year after graduation.

PROGRAM OF STUDY

Demand: The sum of estimated annual employment growth for all occupations graduates from the program would be qualified to fill.

Supply: The annual average number of graduates from the program over the last three academic years.

OCCUPATION

Demand: Estimated annual employment growth by occupation for high-demand occupations in the Northwest that require an Associate's Degree or post-secondary award.

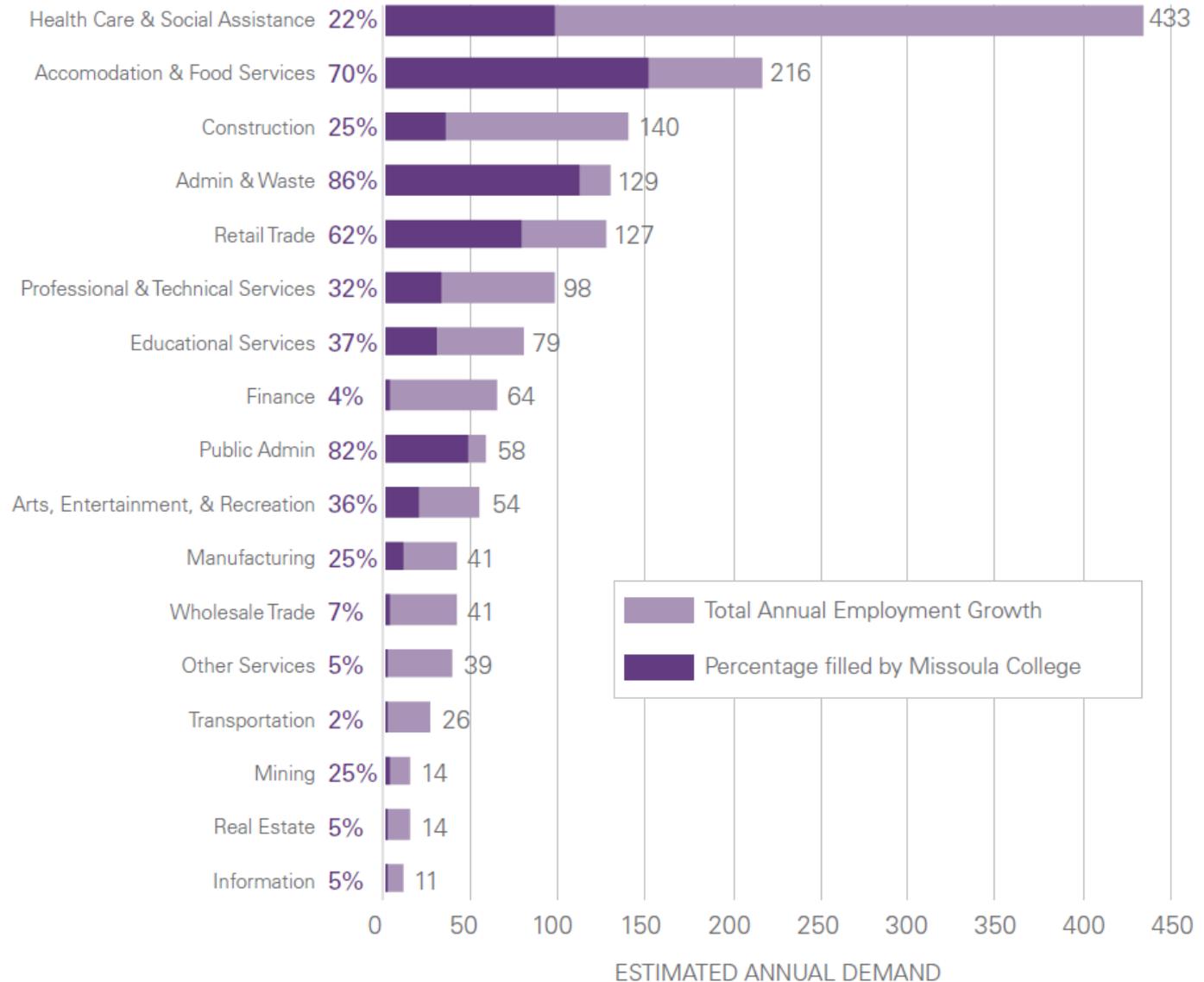
Supply: Average annual number of Missoula College graduates over the last three academic years who graduate from programs that prepare them to work in the occupation.

EMPLOYMENT AND WAGES BY PROGRAM OF STUDY

Employment and wage outcomes for graduates confirm conclusions of the other three supply and demand analyses. Under-supplied programs have better outcomes than over-supplied programs.

Supply and Demand by Industry

Figure 3.2





Matching Occupations and Programs

- U.S. DOL and Dept. of Ed 2010 CIP to 2010 SOC Code crosswalk
- Occupational Supply = Sum of average annual program supply.
- Program Demand = Sum of average annual occupational demand.

30 academic programs at Missoula College that are associated with 79 different occupations.

| Minimum Education Requirement | Total Occupations | Northwest Region | |
|-----------------------------------|-------------------|------------------|-------------|
| | | Very-High Demand | High Demand |
| High school diploma or equivalent | 36 | 8 | 5 |
| Bachelor's degree | 15 | 2 | 3 |
| Associate's degree | 12 | 1 | 4 |
| Postsecondary non-degree award | 5 | 1 | 1 |
| Doctoral or professional degree | 4 | 0 | 2 |
| Less than high school | 4 | 1 | 0 |
| Master's degree | 2 | 0 | 0 |
| Some college, no degree | 1 | 0 | 0 |



Supply and Demand by Occupation

Figure 3.5 (page 42)

| | Ed Req. | Occupation | Total | Growth | MC Supply | GAP Analysis |
|--|---------------------------------|---|-------|--------|-------------------|---------------------------|
| Very-High Demand (Top 10% of occupations) | Associate's Degree | Registered Nurses | 90 | 40 | 35 | Under Supplied |
| | | Dental Hygienists | 10 | 5 | 0 | No Program |
| | | Web Developers | 10 | 4 | 0 | No Program |
| | | Preschool Teachers | 9 | 3 | 0 | No Program |
| | | Forest and Conservation Techs | 34 | 0 | 0 | Meets Demand |
| | Post-Secondary Award | Nursing Assistants | 56 | 25 | 0 | No Program |
| | | Heavy/Tractor-Trailer Truck Drivers | 51 | 22 | 0 | No Program |
| | | LPN and LVN | 37 | 17 | 37 | Meets Demand |
| | | Medical Records and HIT | 22 | 9 | 0 | No Program |
| | | | | | | |
| High Demand (Top 25% of occupations) | Associate's Degree | Paralegals and Legal Assistants | 8 | 4 | 10 | Slight Over Supply |
| | | Medical and Clinical Lab Techs | 7 | 3 | 0 | No Program |
| | | Radiologic Technologists | ND | ND | 11 | Over Supplied |
| | | Respiratory Therapists | 4 | 2 | 11 | Over Supplied |
| | | Medical Equipment Repairers | 4 | 2 | 0 | No Program |
| | | Architectural and Civil Drafters | 4 | 1 | 7 | Over Supplied |
| | Post-Secondary Award | EMTs and Paramedics | 17 | 8 | 0 | No Program |
| | | Dental Assistants | 15 | 7 | 0 | No Program |
| | | Medical Assistants | 11 | 6 | 6 | Meets Demand |
| | | Firefighters | 11 | 3 | 0 | No Program |
| | Hairdressers and Cosmetologists | 15 | 3 | 0 | No Program | |

Supply and Demand by Program

Figure 3.6 (page 44)

Meets Demand: 6 programs

Under Supply: 10 programs

Expansion Candidates:

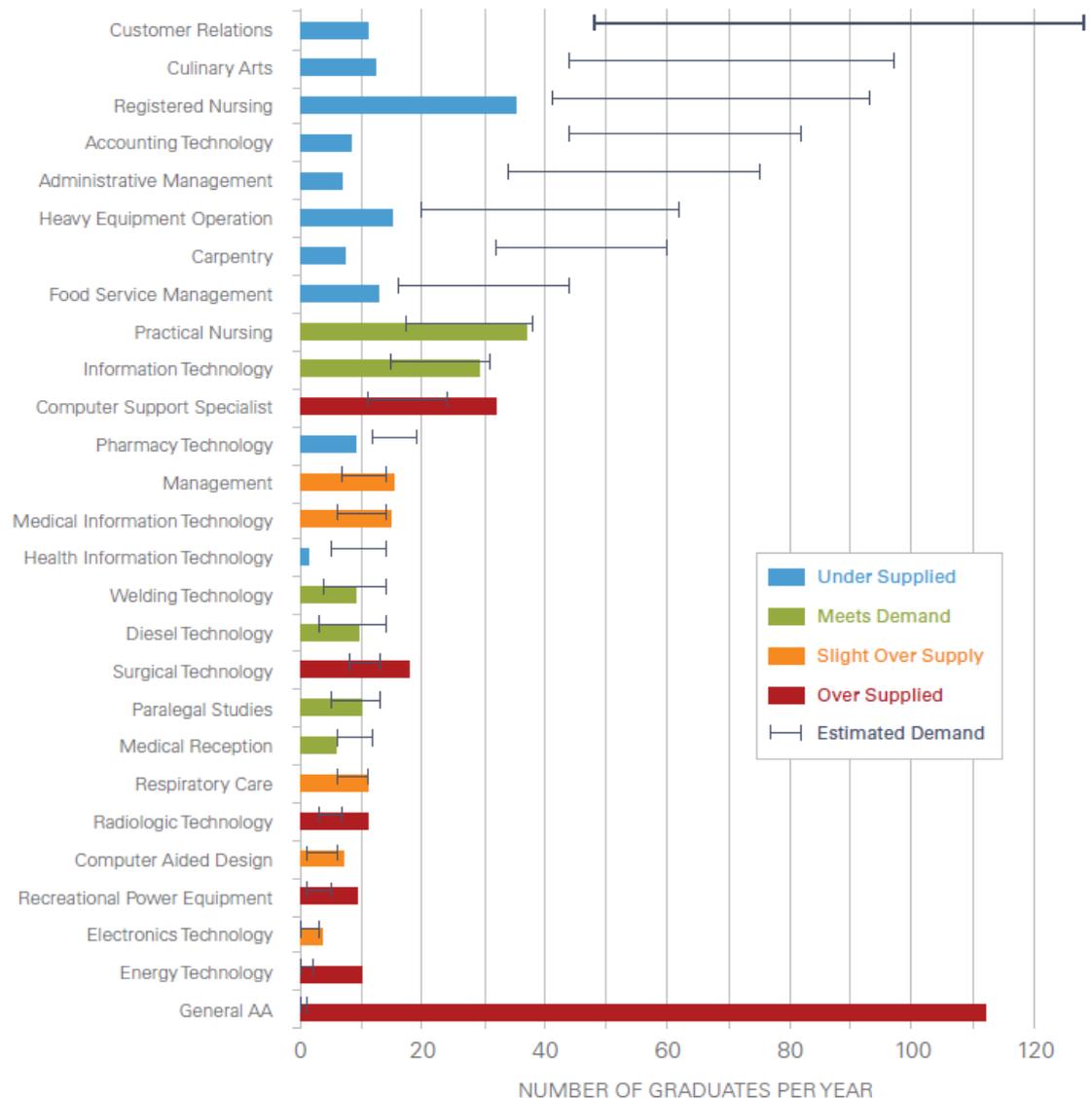
- Registered Nursing
- Health Information Technology
- Pharmacy Technology

Slight Over Supply: 5

Programs

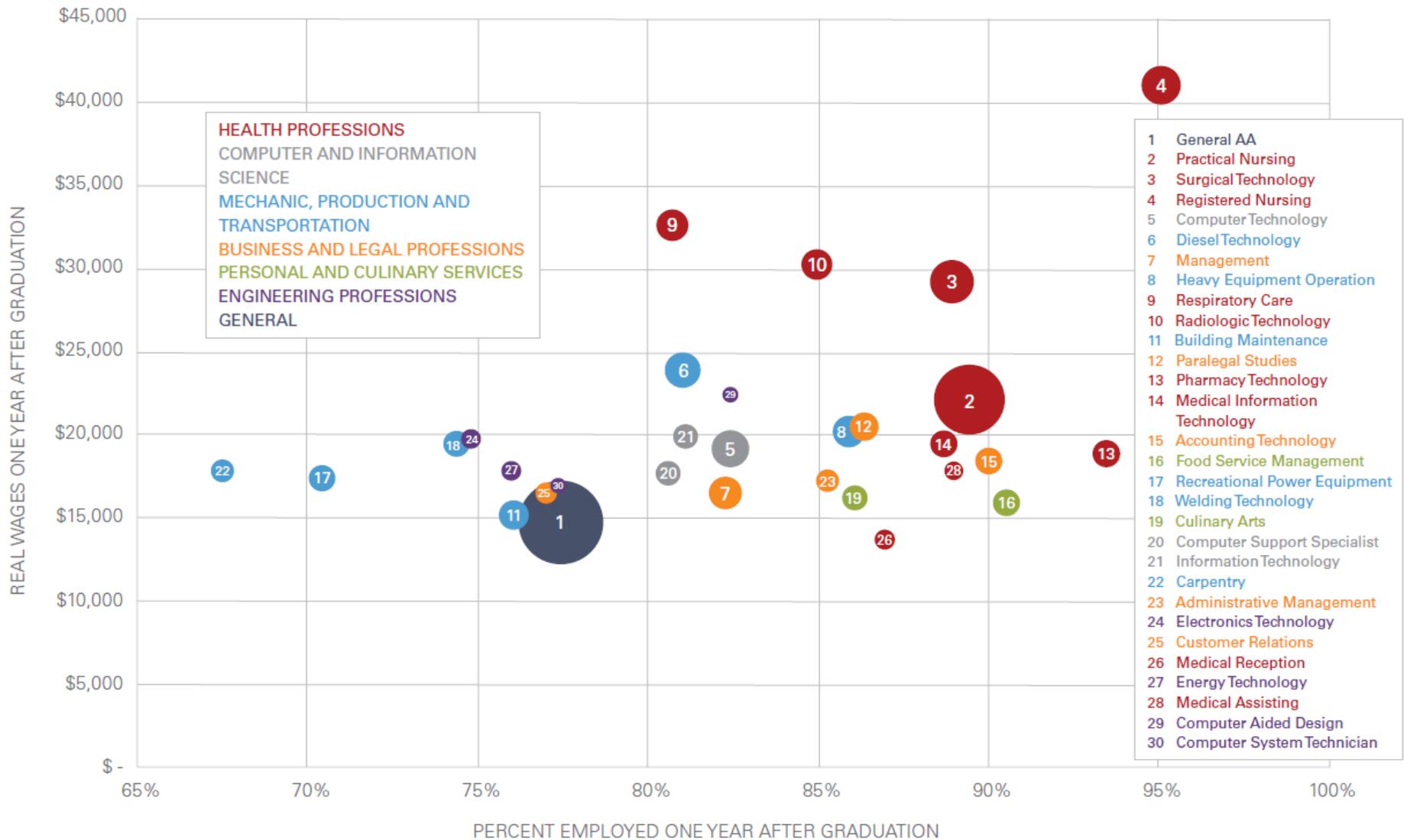
Over Supply: 6 Programs

- General Studies students better served by more specific degree programs.



Workforce Outcomes by Program

Figure 3.8 (page 48)



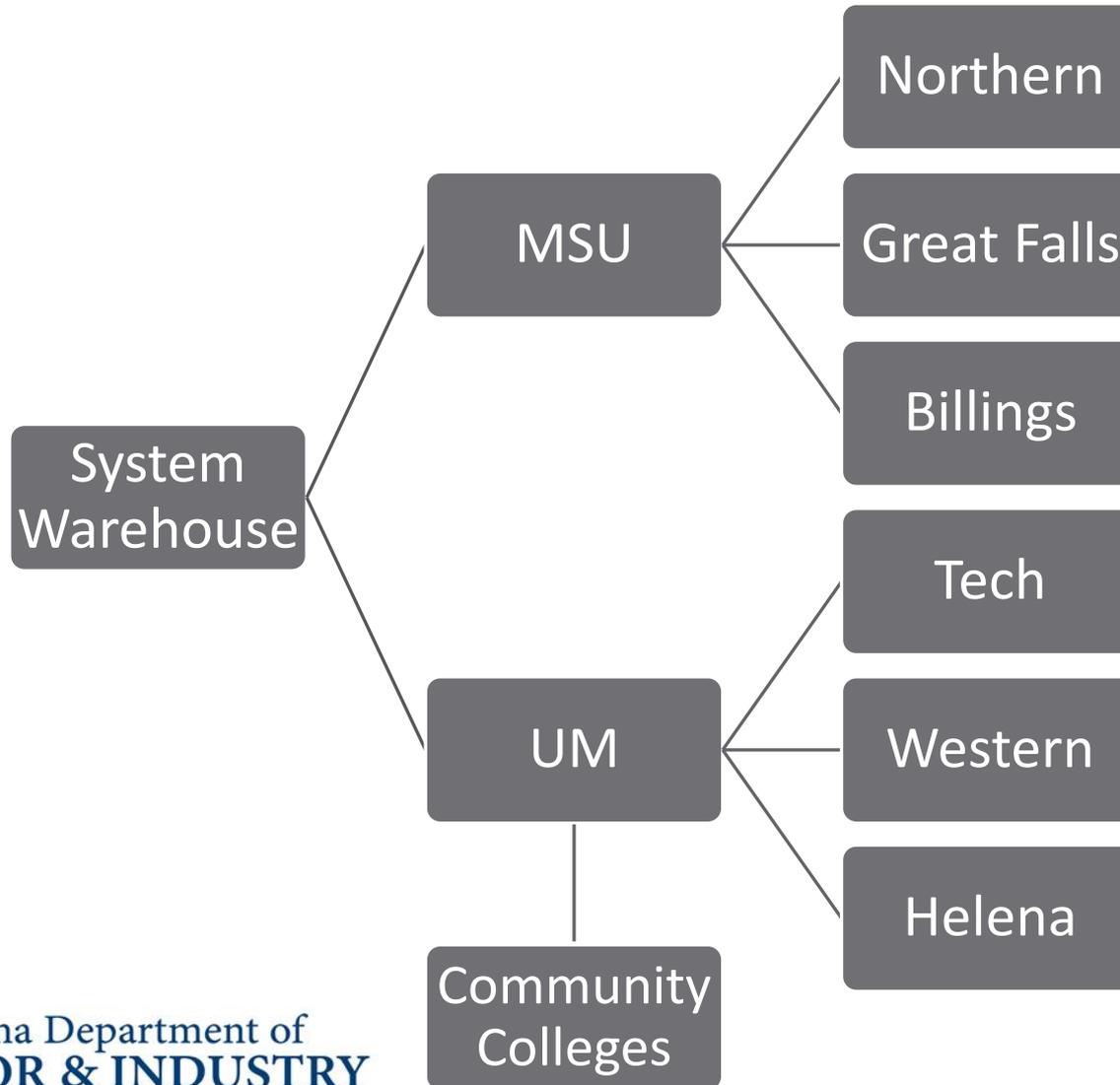


Future Research

- **Statewide Report: In-Progress**
 - Statewide college supply compared to statewide projections
 - Include wage data from Wyoming, Idaho, South Dakota
 - Include Income Tax data from DOR
 - DOR will indicate (Y/N) if the individual filed taxes in MT in the most recent year, if the graduate is not found in wage data
 - Includes all MUS graduates and graduate supply from:
 - Flathead Valley Community College
 - Carroll College
 - Rocky Mountain College
- Continue college-level reports

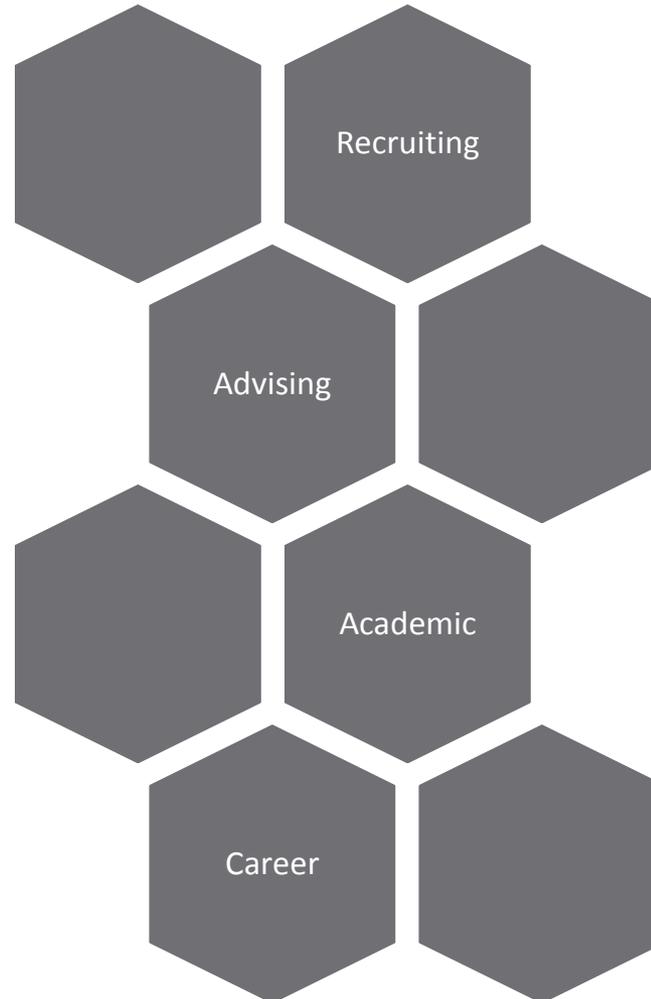


Future Research





Campus Uses





More Information at [LMI.MT.GOV](https://lmi.mt.gov)

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