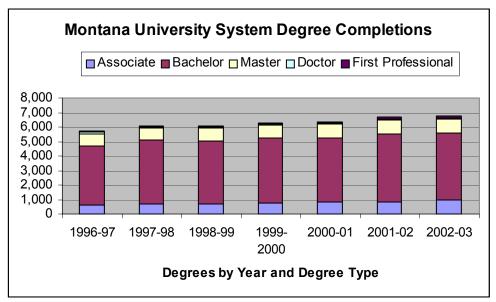
**Goal 1: Prepare Students for Success through Quality Education** 



Source: Federal Integrated Post-secondary Education Data System (IPEDS) Report- Degree Completions Does not include Community College data

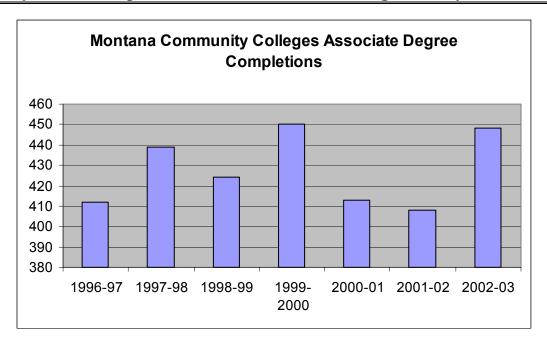
| Degree             | 1996-97 | 1997-98 | 1998-99 | 1999-2000 | 2000-01 | 2001-02 | 2002-03 | % change<br>02-03 |
|--------------------|---------|---------|---------|-----------|---------|---------|---------|-------------------|
| Associate          | 590     | 695     | 703     | 785       | 805     | 834     | 952     | 14%               |
| Bachelor           | 4,125   | 4,410   | 4,359   | 4,474     | 4,443   | 4,700   | 4,649   | -1%               |
| Master             | 834     | 797     | 847     | 907       | 941     | 959     | 949     | -1%               |
| Doctor             | 93      | 98      | 83      | 65        | 56      | 73      | 75      | 3%                |
| First Professional | 75      | 68      | 80      | 70        | 83      | 121     | 118     | -2%               |
| All Degrees        | 5,717   | 6,068   | 6,072   | 6,301     | 6,328   | 6,687   | 6,743   | 1%                |

<u>Degree completions</u> are one measure of institutional productivity. Individual campuses report these data annually to the National Center for Education Statistics in the U.S. Department of Education. Failure to meet this reporting requirement can render an institution ineligible to receive federal funds, including student financial aid.

Montana University System data show relatively steady growth in the numbers of undergraduate degrees awarded over the past seven years. Notably, two-year degree production has increased over 61 percent since 1996-97.

Some data has changed since the 2003 Accountability Report to the Legislature. Some changes are caused by error corrections. Additionally, the category "First Professional" was added to better reflect the total number of degrees conferred by the Montana University System each year. "First Professional" degrees are offered at The University of Montana Missoula and include Law and Pharmacy.

# Policy Goal 1: Prepare Students for Success through Quality Education



| Degree    | 1996-97 | 1997-98 | 1998-99 | 1999-2000 | 2000-01 | 2001-02 | 2002-03 |
|-----------|---------|---------|---------|-----------|---------|---------|---------|
| Associate | 412     | 439     | 424     | 450       | 413     | 408     | 448     |

Source: Federal Integrated Post-secondary Education Data System (IPEDS) Report- Degree Completions

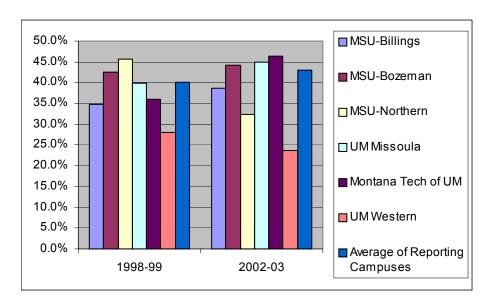
<u>Degree completions</u> are one measure of institutional productivity. Individual community colleges report these data annually to the National Center for Education Statistics in the U.S. Department of Education. Failure to meet this reporting requirement can render an institution ineligible to receive federal funds, including student financial aid.

Montana Community Colleges have awarded between 412 and 450 associate's degrees per year over the period. Some variability in enrollments and completions can be explained by the fact that students often enroll in or return to college in times of economic downturn and may leave school in prosperous times to pursue full-time employment. Other students are only interested in the skill or vocational coursework, and do not take the additional general education courses that are part of a post-secondary credential.

# Policy Goal 1: Prepare Students for Success through Quality Education

Retention: Six-year Graduation Rates for First-Time, Full-Time Baccalaureate Degree-seeking Students

| Institutio | on Name                 | MSU-<br>Billings | MSU-<br>Bozeman | MSU-<br>Northern | UM<br>Missoula | Montana<br>Tech of<br>UM | UM<br>Western | Average of Reporting Campuses |
|------------|-------------------------|------------------|-----------------|------------------|----------------|--------------------------|---------------|-------------------------------|
| 1998-99    | Completers within 6 Yrs | 99               | 651             | 86               | 496            | 96                       | 46            | •                             |
|            | Cohort<br>Grad Rate     | 285<br>34.7%     | 1530<br>42.5%   | 188<br>45.7%     | 1246<br>39.8%  | 266<br>36.1%             | 164<br>28.0%  | 40.1%                         |
|            | Completers              | 34.7 %           | 42.5%           | 45.7 70          | 39.0%          | 30.176                   | 20.076        | 40.1%                         |
| 1999-00    | within 6 Yrs            | 91               | 735             | 86               | 534            | 108                      | 51            |                               |
|            | Cohort                  | 385              | 1716            | 223              | 1411           | 227                      | 195           |                               |
|            | Grad Rate               | 23.6%            | 42.8%           | 38.6%            | 37.8%          | 47.6%                    | 26.2%         | 38.6%                         |
| 2000-01    | Completers within 6 Yrs | 95               | 757             | 48               | 585            | 119                      | 46            |                               |
|            | Cohort                  | 338              | 1747            | 147              | 1452           | 254                      | 177           |                               |
|            | Grad Rate               | 28.1%            | 43.3%           | 32.7%            | 40.3%          | 46.9%                    | 26.0%         | 40.1%                         |
| 2001-02    | Completers within 6 Yrs | 185              | 712             | 55               | 695            | 105                      | 49            |                               |
|            | Cohort                  | 520              | 1740            | 151              | 1615           | 260                      | 167           |                               |
|            | Grad Rate               | 35.6%            | 40.9%           | 36.4%            | 43.0%          | 40.4%                    | 29.3%         | 40.4%                         |
| 2002-03    | Completers within 6 Yrs | 195              | 806             | 54               | 767            | 131                      | 38            | _                             |
|            | Cohort                  | 506              | 1819            | 167              | 1706           | 283                      | 160           |                               |
|            | Grad Rate               | 38.5%            | 44.3%           | 32.3%            | 45.0%          | 46.3%                    | 23.8%         | 42.9%                         |



Source: Federal Integrated Post-secondary Education Data System (IPEDS) Report- Graduation Rates

<u>The Graduation Rate Survey (GRS)</u> measures the percentage of first-time, full-time undergraduate students in a specific cohort that complete a baccalaureate degree at a particular institution within six years. The GRS is the compliance measure for the federal *Student Right to Know* requirement and a reliable proxy for <u>Retention</u>. Retention is a measure of student progress in the institution and can be evaluated on a semester-by-semester or year-to-year basis or across the total curriculum by graduation rates.

## Policy Goal 1: Prepare Students for Success through Quality Education

# Measuring Up The National Report Card on Higher Education

| Category        | First Time, full-time students of (Within 6 years of |                                  |                    |
|-----------------|--|----------------------------------|--------------------|
|                 | Measuring Up 2004<br>(2002 data)                     | Measuring Up 2002<br>(1999 data) | IPEDS<br>2003 data |
| Montana         | 42%  | 38%                              | 44%                |
| U.S. Mean       | 52%  | 52%                              | 54%                |
| U.S. Top States | 64%  | 61%                              | 65%                |

Source: The National Center for Public Policy and Higher Education

The comparison measure used in this report, Measuring Up, is different from the one used in the 2003 Accountability Report. Graduation rates are not readily available by Carnegie Classification (the 2003 measure.) However, the Measuring Up Report is updated every two years and is an independent, public measure.

Measuring Up 2004 is a national report card on higher education that is compiled by the National Center for Public Policy and Higher Education. The initial publication was Measuring Up 2000. The National Center for Public Policy and Higher Education is an independent, nonprofit, nonpartisan organization.

The data reported above for Montana includes all Montana 4-year institutions. Therefore, included in addition to the Montana University System campuses are Montana's three private colleges and Salish Kootenai Tribal College. The completion data is collected by the National Center for Public Policy and Higher Education from the Federal Integrated Post-Secondary Education Data System (IPEDS). For the 2002 data, only The University of Montana, Missoula, has a higher graduation rate than the Montana average. However, for the 2003 IPEDS data, MSU Bozeman and The University of Montana at Missoula and Montana Tech are higher than the state average.

### **Policy Goal 2: Promote Access and Affordability**

# **Affordability Compared to Other States Ratio of Tuition and Fees to Median Household Income**

| STATE          | Two-Yea | r Degree | Baccalaure | ate/Masters | Research | /Doctoral |
|----------------|---------|----------|------------|-------------|----------|-----------|
|                | 1992-93 | 2002-03  | 1992-93    | 2002-03     | 1992-93  | 2002-03   |
| Colorado       | 3.5%    | 3.3%     | 5.5%       | 5.4%        | 7.1%     | 6.5%      |
| Idaho          | 3.5%    | 4.0%     | 5.0%       | 7.6%        | 5.0%     | 8.1%      |
| Montana        | 4.6%    | 5.9%     | 7.0%       | 10.7%       | 7.5%     | 12.4%     |
| Nevada         | 2.6%    | 3.3%     |            | 4.4%        | 5.1%     | 5.5%      |
| North Dakota   | 6.3%    | 6.3%     | 6.6%       | 8.9%        | 8.1%     | 10.0%     |
| Oregon         | 3.6%    | 5.4%     | 8.2%       | 9.0%        | 8.9%     | 9.9%      |
| South Dakota   |         |          | 8.0%       | 10.0%       | 8.3%     | 9.7%      |
| Utah           | 4.3%    | 3.7%     | 5.4%       | 4.9%        | 6.9%     | 6.6%      |
| Washington     | 3.0%    | 4.7%     | 5.3%       | 8.2%        | 6.6%     | 10.7%     |
| Wyoming        | 2.7%    | 4.0%     |            |             | 4.9%     | 7.5%      |
| WICHE avg w/CA | 3.0%    | 3.7%     | 5.4%       | 6.7%        | 6.5%     | 8.1%      |

Source: Western Interstate Commission for Higher Education (WICHE), Regional Fact Book, Data Tables-Table 24

Affordability may be measured by several factors: the ratio of college tuition and fees to median household income is one measure that takes into account both the absolute level of tuition/fees charged and the income levels in that state. Other factors that can impact affordability include the level of state-based financial aid available, particularly need-based aid for low-income students.

In 1992-93, it took 7% of a family's annual income (\$26,470) to pay for their yearly tuition and fees bill toward a baccalaureate degree. In 2002-03, that percentage grew to almost 11% of a median income of \$34,108. Montana University System data using this measure of affordability reflects a decline both over time (1992-1993 to 2002-2003) and relative to other states. This decline has occurred at all institutional levels (Two-Year, Four-Year, and Research/Doctoral) with the greatest decline occurring at the Research/Doctoral level (MSU-Bozeman and UM-Missoula).

Resident and Nonresident Undergraduate Tuition and Fees at Public Four-Year Institutions - State Averages

| STATE         | 20       | 03-03       | 19       | 92-93       | Ten-ye   | ar change   |
|---------------|----------|-------------|----------|-------------|----------|-------------|
|               | Resident | Nonresident | Resident | Nonresident | Resident | Nonresident |
| Colorado      | \$3,151  | \$11,886    | \$2,124  | \$6,966     | 48.4%    | 70.6%       |
| Idaho         | \$3,004  | \$9,272     | \$1,298  | \$3,933     | 131.4%   | 135.7%      |
| Montana       | \$3,733  | \$10,753    | \$1,772  | \$5,286     | 110.7%   | 103.4%      |
| Nevada        | \$2,235  | \$10,088    | \$1,665  | \$5,700     | 34.2%    | 77.0%       |
| North Dakota  | \$3,315  | \$7,437     | \$1,846  | \$4,582     | 79.6%    | 62.3%       |
| Oregon        | \$3,884  | \$12,014    | \$2,583  | \$6,129     | 50.4%    | 96.0%       |
| South Dakota  | \$3,919  | \$8,168     | \$2,016  | \$3,365     | 94.4%    | 142.7%      |
| Utah          | \$2,639  | \$7,964     | \$1,649  | \$4,872     | 60.0%    | 63.5%       |
| Washington    | \$3,823  | \$12,447    | \$1,941  | \$6,313     | 97.0%    | 97.2%       |
| Wyoming       | \$2,997  | \$8,661     | \$1,430  | \$4,502     | 109.6%   | 92.4%       |
| WICHE Average | \$3,084  | \$9,869     | \$1,752  | \$5,407     | 76.0%    | 82.5%       |
| US Average    | \$3,900  | N/A         | \$2,260  | N/A         | 72.6%    | N/A         |

Looking at the dollars paid for tuition, Montana's residents paid over 110% more for tuition and fees in 2003 than they did in 1992-93. The increase was well above the WICHE Average of 76% (but less than South Dakota) or the U.S. average of under 73%. Nonresident student tuition and fees in Montana increased 103% over the ten-year period.

# Policy Goal 2: Promote Access and Affordability

## State Support per \$1,000 of Personal and Per Capita Income

State Support of Higher Education per \$1,000 Personal Income and Per Capita, FY 2004

| Appropriations | FY02   | Per \$   | 1,000 Inco  | me   | Per Capita  |  |   |  |
|----------------|--|--|---|--|---|--|---|--|
| (\$1,000's)    | Reported   | \$   | Rank  | Rank 02  | \$  | Rank   | Rank 02   |  |
| 591,511        | 783,421  | 3.88   | 48  | 45   | 129.98  | 47   | 42  |  |
| 315,145        | 330,776  | 9.02   | 14  | 12   | 230.65  | 19   | 15  |  |
| 1,286,715      | 1,382,576  | 7.39   | 21  | 20   | 254.32  | 13   | 10  |  |
| 150,576        | 149,738  | 6.41   | 30  | 34   | 164.09  | 41   | 44  |  |
| 200,430        | 201,497  | 11.13  | 4   | 3  | 316.22  | 5  | 4   |  |
| 588,920        | 714,837  | 5.72   | 37  | 29   | 165.45  | 39   | 33  |  |
| 152,299        | 141,973  | 6.94   | 25  | 31   | 199.26  | 31   | 37  |  |
| 603,196        | 608,644  | 10.54  | 5   | 5  | 256.52  | 11   | 12  |  |
| 1,323,134      | 1,373,895  | 6.42   | 29  | 27   | 215.79  | 22   | 24  |  |
| 196,935        | 169,929  | 12.47  | 2   | 4  | 392.89  | 1  | 1   |  |
|                | ·  | 8 17   |   |  | 240 12  |  | ·   |  |
|                | (\$1,000's)  591,511 315,145 1,286,715 150,576 200,430 588,920 152,299 603,196 1,323,134 | (\$1,000's)         Reported           591,511         783,421           315,145         330,776           1,286,715         1,382,576           150,576         149,738           200,430         201,497           588,920         714,837           152,299         141,973           603,196         608,644           1,323,134         1,373,895 | (\$1,000's)         Reported           591,511         783,421         3.88           315,145         330,776         9.02           1,286,715         1,382,576         7.39           150,576         149,738         6.41           200,430         201,497         11.13           588,920         714,837         5.72           152,299         141,973         6.94           603,196         608,644         10.54           1,323,134         1,373,895         6.42 | (\$1,000's)         Reported         \$ Rank           591,511         783,421         3.88         48           315,145         330,776         9.02         14           1,286,715         1,382,576         7.39         21           150,576         149,738         6.41         30           200,430         201,497         11.13         4           588,920         714,837         5.72         37           152,299         141,973         6.94         25           603,196         608,644         10.54         5           1,323,134         1,373,895         6.42         29           196,935         169,929         12.47         2 | (\$1,000's)         Reported         \$         Rank         Rank 02           591,511         783,421         3.88         48         45           315,145         330,776         9.02         14         12           1,286,715         1,382,576         7.39         21         20           150,576         149,738         6.41         30         34           200,430         201,497         11.13         4         3           588,920         714,837         5.72         37         29           152,299         141,973         6.94         25         31           603,196         608,644         10.54         5         5           1,323,134         1,373,895         6.42         29         27           196,935         169,929         12.47         2         4 | (\$1,000's)         Reported         \$         Rank         Rank 02         \$           591,511         783,421         3.88         48         45         129.98           315,145         330,776         9.02         14         12         230.65           1,286,715         1,382,576         7.39         21         20         254.32           150,576         149,738         6.41         30         34         164.09           200,430         201,497         11.13         4         3         316.22           588,920         714,837         5.72         37         29         165.45           152,299         141,973         6.94         25         31         199.26           603,196         608,644         10.54         5         5         256.52           1,323,134         1,373,895         6.42         29         27         215.79           196,935         169,929         12.47         2         4         392.89 | (\$1,000's)         Reported         \$ Rank         Rank 02         \$ Rank           591,511         783,421         3.88         48         45         129.98         47           315,145         330,776         9.02         14         12         230.65         19           1,286,715         1,382,576         7.39         21         20         254.32         13           150,576         149,738         6.41         30         34         164.09         41           200,430         201,497         11.13         4         3         316.22         5           588,920         714,837         5.72         37         29         165.45         39           152,299         141,973         6.94         25         31         199.26         31           603,196         608,644         10.54         5         5         256.52         11           1,323,134         1,373,895         6.42         29         27         215.79         22           196,935         169,929         12.47         2         4         392.89         1 |  |

Source: Center for Higher Education & Educational Finance, 2002 Grapevine Report – Table 5: Rankings of States on Appropriations of State Tax Funds for Operating Expenses of Higher Education per \$1,000 Personal Income and per Capita, FY 2004

State support of higher education affects both access and affordability of higher education in a state. State support as a percent of personal income takes into account both higher education state appropriations and state income levels. State support per capita reflects state support (appropriations) on an average basis over the state population.

Montana University System data indicate that Montana's rank relative to state support for higher education is low (30/50) per \$1,000 of personal income but even lower (41/50) on a per capita basis. Montana's rank on a per capita basis is lower than on a per \$1,000 of personal income basis as a result of Montana's low per capita personal income.

Table I: Transferability Among Institutions
For MUS Graduates from Summer 2003 through Spring 2004

| Campus                | Average Total Credits Earned<br>by Students Without Transfer<br>Credits | •      | Reported<br>In 02 | Average # of Transfer<br>Credits for Transfer<br>Students |
|-----------------------|---|--------|-------------------|---|
| MSU Billings<br>–Main | 132.40  | 146.98 | 141.20            | 59.56   |
| MSU-<br>Bozeman       | 135.10  | 150.24 | 148.46            | 44.88   |
| MSU-<br>Northern      | 141.38  | 155.59 | 157.39            | 60.42   |
| UM-Missoula<br>Main   | 134.25  | 143.61 | 142.65            | 42.16   |
| MT Tech of<br>UM-Main | 142.94  | 144.84 | 149.46            | 40.54   |
| UM-Western            | 143.67  | 158.50 | 160.61            | 42.42   |
| Average               | 138.29  | 149.96 | 149.96            | 48.33   |

Source: Office of the Commissioner of Higher Education, Data Warehouse

**Transfer** refers to the increasingly frequent student practice of withdrawing from one educational institution or course of study to enroll in another. Student transfer among institutions often involves a change of "major." This means that course work from the first institution may bear relatively little relationship to the requirements of the new institution/program of study. *Transferability* indicates the ease with which students' previous courses move between institutions and are applied to new requirements of the new institution and/or curriculum.

The U.S. Department of Education studied 10,000 students enrolled since 1996 and found that 32 percent transferred at some point. In Montana, more than <u>60 percent</u> of 4,820 Montana University System bachelor's degree graduates in 2003-2004 had transferred at least once.

There is no nationally accepted indicator to measure *transferability*. States are experimenting how to assess this practice with several indicators: Four-Year Graduation Rates of Transfer Students, Comparisons of Transfer Students' Performance to "Native" Students, Comparison of Percent of Students Graduating with Accumulated Hours @ 115 Percent of Degree Requirements.

Table II: Transfer Audit for Academic Year 2003-04 Plus Summer 2003

| Campus           | # BA/BS Degrees | #<br>Students | # Students w Transfer<br>Credits and % of<br>Campus Student Total | Campus Share of all MUS<br>Students with Transfer Credits<br>Current/Last Reported |
|------------------|-----------------|---------------|---|--|
| MSU Billings     | 516             | 509           | 330 64%   | 11%  |
| MSU-Bozeman      | 1,817           | 1,781         | 1,081   | 37%40%   |
| MSU-Northern     | 221             | 211           | 142   | 5%4%   |
| UM-Missoula      | 1,797           | 1,746         | 1,121   | 39%  |
| MT Tech of<br>UM | 267             | 265           | 159   | 5%   |
| UM-Western       | 128             | 124           | 77 62%  | 3%4%   |
| Total            | 4,746           | 4,636         | 2,910   | 100%   |

Source: Office of the Commissioner of Higher Education, Data Warehouse

Table II shows the frequency of transfer within the Montana University System. Of 4,636 students that were awarded bachelor's degrees from Summer 2003 through Spring 2004, 2,910 or some 63 percent had transferred credit to the institution, which awarded the degree. As might be expected, the two largest institutions received the largest number of transfer students.

The Legislative Audit Division recently completed a performance audit of transfer credits in the Montana University System. The report (#04P-06) may be viewed online at http://leg.state.mt.us/css/audit/reports.asp#perf

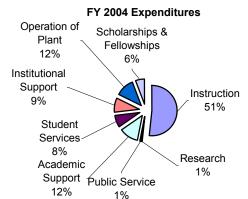
## **Expenditures by Function**

#### MONTANA UNIVERSITY SYSTEM Current Unrestricted Funds Educational Units Only

**Expenditures by Function** 

| 1984 | 1994                                       | 2004   |  |  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|--|--|--|
| 53%  | 55%  | 52%  |  |  |  |  |  |  |  |  |
| 1%   | 1%   | 1%   |  |  |  |  |  |  |  |  |
| 0%   | 1%   | 1%   |  |  |  |  |  |  |  |  |
| 11%  | 11%  | 12%  |  |  |  |  |  |  |  |  |
| 9%   | 9%   | 8%   |  |  |  |  |  |  |  |  |
| 10%  | 9%   | 9%   |  |  |  |  |  |  |  |  |
| 13%  | 12%  | 12%  |  |  |  |  |  |  |  |  |
| 2%   | 3%   | 6%   |  |  |  |  |  |  |  |  |
|      | 53%<br>1%<br>0%<br>11%<br>9%<br>10%<br>13% | 53%         55%           1%         1%           0%         1%           11%         11%           9%         9%           10%         9%           13%         12% |  |  |  |  |  |  |  |  |

#### **Expenditures by Function**



The Montana University System has been reasonably consistent in maintaining its commitment to the instructional component by spending 52%-55% of current unrestricted funds on instruction for the past 20 years. However, with tuition growing 114% over the past 10 years, scholarships and fellowships (fee waivers) have taken a larger piece of the campus operating budgets and grown to 6% of the expenditures (from 2% in 1984). See glossary for definitions of the functional categories (pg. 16).

# Policy Goal 4: Be Responsive to Market and Employment Needs and Opportunities

#### **JOB PLACEMENT**

Montana University System Employment Statistics Based on a Survey of 2003 Graduates

|                        | Total #    |             | Employed in  | Employed | Seeking    | Not Seeking | Furthering | Other of |        |
|------------------------|------------|-------------|--------------|----------|------------|-------------|------------|----------|--------|
| Baccalaureate          | Graduates  | Respondents | Degree Field | Other    | Employment | Employment  | Education  | Unknown  | Totals |
| MSU-Bozeman            | 2180       | 1336        | 630          | 298      | 107        | 56          | 220        | 25       | 1336   |
| UM-Missoula            | 1709       | 767         | 284          | 167      | 52         |             | 248        | 16       | 767    |
| MSU-Billings           | 519        | 391         | 239          | 97       | 17         | 11          | 25         | 2        | 391    |
| UM-Western             | 164        | 78          | 46           | 23       | 4          | 1           | 4          |          | 78     |
| MSU-Northern           | 218        | 86          | 75           | 4        | 3          |             | 6          |          | 88     |
| UM-MT Tech             | 267        | 267         | 176          | 36       | 2          | 6           | 42         | 5        | 267    |
| Total                  | 5057       | 2925        | 1450         | 625      | 185        | 74          | 545        | 48       | 2927   |
| Percent of Re          | espondents |             | 50%          | 21%      | 6%         | 3%          | 19%        | 2%       | 100%   |
| Associate              |            |             |              |          |            |             |            |          | 0      |
| COT-Missoula           | 252        | 169         | 88           | 11       | 33         |             | 36         | 1        | 169    |
| COT-Billings           | 133        | 112         | 61           | 29       | 6          | 2           | 13         | 1        | 112    |
| COT-Helena             | 166        | 44          | 28           | 12       | 4          |             | 1          |          | 45     |
| COT-Great Falls        | 127        | 105         | 40           | 13       | 4          |             | 48         |          | 105    |
| COT-Butte              | 77         | 77          | 19           | 8        | 0          | 1           | 49         |          | 77     |
| Total                  | 755        | 507         | 236          | 73       | 47         | 3           | 147        | 2        | 508    |
| Percent of Respondents |            |             | 47%          | 14%      | 9%         | 1%          | 29%        | 0%       | 100%   |

Some respondents answered multiple categories.

Percent of Graduates Responding: Baccalaureate 58% Associate 67%

Source: 2004 Montana University System Campus- Career Placement Offices: Annual Survey of Graduates

Montana University System campuses conduct annual placement surveys of the previous year's graduates:

- 1. To evaluate the marketability of the various MUS degree offerings in the competitive job market.
- 2. To gather data for use as a marketing tool by admissions when courting prospective students.
- 3. To inform parents and students about job prospects of certain majors.
- 4. To assist faculty to keep curricula current given the changing needs of employers/job market.

Alumni response is voluntary, so rates of response may vary widely across disciplines and institutions. Surveys collect data on the job search, current employers, signing bonuses, salaries earned, graduate schools, military service and other factors. Those compiling survey data aggregate results by field of study and publish summary reports annually, both in print and on campus Web sites.

Campus Career Services offices also survey employers after a campus recruiting visit or a career fair to solicit employers' views of the students interviewed, the services offered them, the facilities and the logistics of the event. Finally, campuses participate in on-going surveys of employers in cooperation with the national professional association to gather information on recruiting trends and salaries in the current job market.

# Policy Goal 4: Be Responsive to Market and Employment Needs and Opportunities

#### Growth in FTE Enrollments in 2-year Education

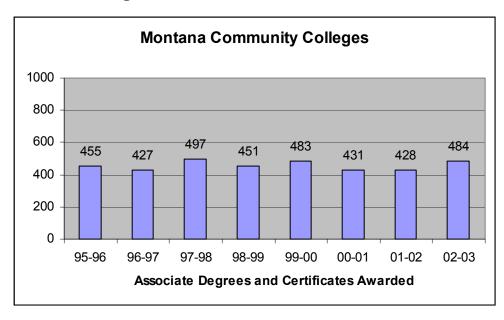
Montana University System Colleges of Technology and Community Colleges

| Unit                                | 1996 | 1997  | 1998 | 1999  | 2000  | 2001 | 2002 | 2003 | 2004  |
|-------------------------------------|------|-------|------|-------|-------|------|------|------|-------|
| Billings COT                        | 436  | 462   | 469  | 507   | 509   | 474  | 509  | 580  | 660   |
| <b>Great Falls COT</b>              | 727  | 714   | 705  | 750   | 766   | 834  | 952  | 1053 | 1098  |
| Missoula COT                        | 629  | 748   | 794  | 766   | 776   | 797  | 803  | 886  | 895   |
| <b>Butte COT</b>                    | 329  | 363   | 354  | 334   | 310   | 285  | 295  | 233  | 260   |
| Helena COT                          | 467  | 543   | 663  | 664   | 704   | 724  | 736  | 738  | 749   |
| <b>Total Colleges of Technology</b> | 2588 | 2830  | 2985 | 3021  | 3065  | 3114 | 3295 | 3490 | 3662  |
| Year-to-year % change               |      | 9.4%  | 5.5% | 1.2%  | 1.5%  | 1.6% | 5.8% | 5.9% | 4.9%  |
|                                     |      |       |      |       |       |      |      |      |       |
| Dawson CC                           | 423  | 379   | 472  | 467   | 429   | 413  | 445  | 415  | 450   |
| Flathead Valley CC                  | 1200 | 1174  | 1205 | 1236  | 1186  | 1174 | 1289 | 1414 | 1642  |
| Miles CC                            | 537  | 553   | 526  | 460   | 465   | 506  | 509  | 473  | 509   |
| <b>Total Community Colleges</b>     | 2160 | 2106  | 2203 | 2163  | 2080  | 2093 | 2243 | 2302 | 2601  |
| Year-to-year % change               |      | -2.5% | 4.6% | -1.8% | -3.8% | 0.6% | 7.2% | 2.6% | 13.0% |

FTE enrollments in MUS Colleges of Technology have grown steadily since 1996. In the Community Colleges, enrollments have fluctuated some reflecting, at least in part, varying economic conditions by region and over time.

Source: Montana University System Registrar Reports on Fall 15-Day Enrollment Report C: A.

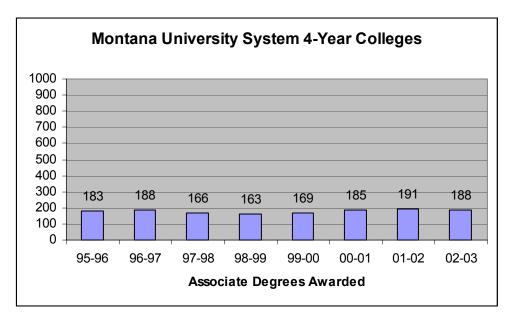
# **Degrees Conferred 2-Year Education**

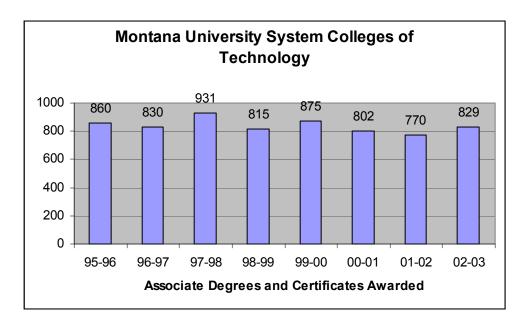


Source: Federal Integrated Post-secondary Education Data System (IPEDS) Report- Degree Completions,

Policy Goal 4: Be Responsive to Market and Employment Needs and Opportunities

**Degrees Conferred 2-Year Education** 





Source: Federal Integrated Post-secondary Education Data System (IPEDS) Report- Degree Completions

The tables report the number of certificates and associate degrees awarded by sector: community colleges, four-year institutions, and colleges of technology. Many four-year campuses with an affiliated college of technology shifted most two-year programs to the college of technology when the two were formally affiliated.

## Policy Goal 5: Contribute to Montana's Economic and Social Success

# Research and Development Receipts/Expenditures at Doctorate-granting Institutions by State and Source of Funds: Fiscal Year 2002

|                    |           | Federal    | State       |          | Institu-  | All other |
|--------------------|-----------|------------|-------------|----------|-----------|-----------|
| Division and State | Total     | Government | and local   | Industry | tional    | sources   |
|                    |           |            | governments |          | funds     |           |
| Alaska             | 116,279   | 66,169     | 3,117       | 22,907   | 24,086    | 0         |
| Arizona            | 531,106   | 287,052    | 14,553      | 31,455   | 171,237   | 26,809    |
| California         | 4,758,520 | 2,738,083  | 254,315     | 253,002  | 1,021,318 | 491,802   |
| Colorado           | 617,093   | 475,572    | 24,123      | 33,225   | 58,756    | 25,417    |
| Idaho              | 93,323    | 42,376     | 21,328      | 7,469    | 21,077    | 1,073     |
| Montana            | 117,578   | 62,598     | 21,597      | 7,413    | 24,212    | 1,758     |
| Nevada             | 126,713   | 85,085     | 5,925       | 4,120    | 28,370    | 3,213     |
| New Mexico         | 289,985   | 193,430    | 13,471      | 10,936   | 64,449    | 7,699     |
| North Dakota       | 106,078   | 46,418     | 2,569       | 6,505    | 46,964    | 3,622     |
| Oregon             | 161,823   | 110,882    | 29,126      | 9,957    | 11,858    | 0         |
| South Dakota       | 38,145    | 21,895     | 9,040       | 280      | 3,682     | 3,248     |
| Utah               | 359,556   | 234,918    | 22,715      | 11,246   | 55,334    | 35,343    |
| Washington         | 739,742   | 543,419    | 16,077      | 50,503   | 103,833   | 25,910    |
| Wyoming            | 41,632    | 20,017     | 2,038       | 2,581    | 16,216    | 780       |

Table B-23. R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1993-2002

[Dollars in thousands]

|                     |        |        |        |        |        |        |         |         | Growth Rate  | Ranking<br>among 50<br>states for |
|---------------------|--------|--------|--------|--------|--------|--------|---------|---------|--------------|-----------------------------------|
|                     | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001    | 2002    | 1995 to 2002 | growth                            |
| Montana             | 66,879 | 71,518 | 70,591 | 72,425 | 79,847 | 94,914 | 103,128 | 117,578 | 75.81%       | 15                                |
| Average (50 states) |        |        |        |        |        |        |         |         | 65.85%       |                                   |

Source: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002; Table B-23. R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1993-2002

The top table shows total R&D expenditures for peer states and the sources of that funding: Federal, State/Local, Industry, Institutional and Other.

Table B-23 above shows the six-year trend in Research and Development expenditures at Montana's doctoral degree-granting institutions, Montana State University-Bozeman and the University of Montana-Missoula. Growth in the R&D expenditures at these institutions was 75.81 percent as compared to the 50-state average of 65.85 percent.

### **Policy Goal 5: Contribute to Montana's Economic and Social Success**

## **Technological Transfers for FY 2003**

| Name of Institution                              | Montana State<br>University,<br>Bozeman | The University<br>of Montana -<br>Missoula | Montana Tech of<br>The University of<br>Montana |
|--|---|--|---|
| Licensing FTEs in Technology Transfer Office     | 2.0                                     | 0.5  | 0   |
| Other FTEs in Technology Transfer Office         | 1.0                                     | 0  | 0   |
| Total Sponsored Research Expenditures for FY     |   |  |   |
| 03   | \$82,353,322                            | \$49,071,601                               | \$6,885,530                                     |
| Research Expenditures: Federal Govt. Sources     | \$66,423,680                            | \$40,375,745                               | \$5,135,116                                     |
| Research Expenditures: Industrial Sources        | \$15,929,642                            | \$875,146                                  | \$506,779                                       |
| Licenses/Options Executed                        | 21                                      | 4  | 0   |
| Licenses/Options Executed that included Equity   | 0                                       | 0  | 0   |
| Licenses/Options Executed to Start-Ups           | 4                                       | 1  | 0   |
| Licenses/Options Executed to Small Companies     | 13                                      | 3  | 0   |
| Licenses/Options Executed to Large Companies     | 4                                       | 1  | 0   |
| Invention Disclosures Received                   | 31                                      | 3  | 0   |
| Total U.S. Patent Applications Filed             | 33                                      | 6  | 0   |
| New U.S. Patent Applications Filed               | 26                                      | 6  | 0   |
| U.S. Patents Issued                              | 7                                       | 1  | 0   |
| Start-Up Companies Formed                        | 4                                       | 1  | 0   |
| Start-Up Companies formed in the <b>previous</b> |   |  |   |
| five (5) fiscal years                            | 2                                       | 4  | 0   |
| Licenses/Options which became                    |   |  |   |
| Available for Commercial Use                     | 0                                       | 2  | 0   |

Data Source: 2004Montana University System Licensing Survey

The table above shows survey responses from three of Montana's institutions, Montana State University-Bozeman, The University of Montana-Missoula, and Montana Tech regarding technology transfers. The survey includes measures of research expenditures, licensing activities, patents and inventions, and start-up company formations.

Research expenditures include all expenditures made by the institution in support of research activity. Since monies for projects are received only after a claim for expenditures is submitted, institutions use their research expenditures as one of the measures in determining their success in attracting research funding.

For 2003, federal government sources made up over 80% of research expenditures for MSU-Bozeman and UM-Missoula, and almost 75% for Montana Tech. Montana Tech received 7% of its research funding from industry sources; MSU-Bozeman received 19% in industrial funding for research and UM-Missoula industrial research funding was under 2%.

Executions to small companies made up the majority of licensing/options agreements, and none involved ownership interests for the institutions or employees. House Bill 349, passed, during the 2001 Legislative session, allowed University employees to have equity ownership in certain corporations.

A total of 34 invention disclosures were made by the three campuses and 39 patent applications filed. Of the total patent applications, 32 were for new patents rather than continuations, divisionals, or reissues.

The institutions were issued eight patents in 2003 and had five successful start-ups. Since 1998, six new Montana companies have started which depended upon licensing a Montana University System's institutional technology for initiation.

# Policy Goal 6: Collaborate with the K-12 School System and Other Postsecondary Education Systems Collaborative Programs

In accord with the agreement between the Legislature's Joint Subcommittee on Postsecondary Education Policy and Budget and the Board of Regents, campuses of the Montana University System were to report on four types of collaboration, with K-12 education, with community colleges, with tribal colleges and with private colleges.

Campuses were invited to provide four or five examples in each category but submitted more than 50 pages of examples. The unedited list of campus collaborations may be seen at: http://www.montana.edu/wwwbor/LinkReports.htm

# Policy Goal 6: Collaborate with the K-12 School System and Other Postsecondary Education Systems Collaborative Programs

**Average ACT/SAT Student Test Scores Fall 2004 First Time, Full-Time Students** 

| Fall 2004 First-Time, Full-Time Students |               |               |  |  |  |  |  |
|--|---------------|---------------|--|--|--|--|--|
|  | # of Students | Average Score |  |  |  |  |  |
| Average ACT Composite                    | 4,870         | 21.88         |  |  |  |  |  |
| Average ACT English                      | 4,868         | 20.97         |  |  |  |  |  |
| Average ACT Math                         | 4,868         | 21.61         |  |  |  |  |  |
| Average SAT Verbal                       | 2,466         | 532.10        |  |  |  |  |  |
| Average SAT Math                         | 2,584         | 536.71        |  |  |  |  |  |

The average national composite ACT score for the class of 2004 was 20.9 as compared to the Montana composite average of 21.88. The Montana University System average ACT score in English for entering freshman was 20.97, which is higher than the 20.8 average for all Montana test takers or the 20.4 average of all national test takers. For mathematics, the University System average ACT score for entering full-time students was 21.61, which is also above the state average of 21.4 and the national average of 20.7.

For the SAT, Montana's scores compare favorably with the national averages of 508 on verbal and 518 on mathematics exams.

ACT: www.act.org/news/data/04/states.html.

The College Board. http://www.collegeboard.com/prod\_downloads/about/news\_info/cbsenior/yr2004/table\_3\_mean\_sat\_verbal\_math\_by\_state.

<sup>\*</sup>Montana University System Data Source: OCHE Data Warehouse Census Event 200470 Fall Semester

#### **Glossary of Budget Terms**

**Instruction**: This category includes expenditures for general academic instruction, vocational technical instruction, special session instruction, continuing education, and remedial instruction. It includes expenditures for department chairpersons but does not include expenditures for academic deans.

**Research**: The research category includes expenditures for activities specifically organized to produce research, whether commissioned by an agency external to the institution or separately budgeted by an organizational unit within the institution. Most of the budget of the Agricultural Experiment Station is recorded as research and is the biggest research component of the current unrestricted funds of the Montana University System.

**Public Service**: This category includes expenditures for community service, cooperative extension services, and public broadcasting services. The largest component of current unrestricted public service expenditures is the Extension Service. Also included in this category are expenses for the Montana Repertory Theatre, KUFM, KUSM, and the Montana Center for Handicapped Children.

**Academic Support**: This category of support includes expenditures for support of higher education's primary missions of instruction, research, and public service, as well as the retention, preservation, and display of educational materials. Typical expenditures include educational media services, academic administration, sabbaticals, and course and curriculum development.

**Student Services**: Student Services includes expenditures for student services administration, social and cultural development, counseling, career guidance and placement, financial aid administration, student admissions and recruitment, and student records. Expenditures for athletics are recorded in this program.

**Institutional Support**: Institutional Support is the program where most "administrative" expenditures are recorded. Expenditures for executive-level activities concerned with management and planning for the institution, legal services, fiscal operations, administrative data processing, employee personnel and records, purchasing, support services for faculty and staff, development, and alumni relations.

**Operations and Maintenance of Plant**: This category includes expenditures for physical plant administration, building maintenance, custodial services, utilities, landscape and grounds maintenance, repairs, and minor renovations.

**Scholarships and Fellowships**: Fee waivers are recorded in this program, as authorized by the Board of Regents. Generally, waivers of registration, incidental, and nonresident incidental are granted for certain eligible students.