WORK for ce Montana

Higher Education & the Workforce

In 2006 a good education is no longer just a way for an individual to get ahead. It is also, and increasingly, the best way a state can get ahead — and therefore a real economic priority. A college degree confers specific, calculable benefits on a state's citizens: the average lifetime income of an individual with a bachelor's degree is \$2.1 million, compared to \$1.2 million for those with just a high school diploma. But the benefits realized by the state are just as impressive as those that an individual sees. Not only does a state with a well-educated populace see increased tax revenues from its (better-paid) citizens, it is also able to use the education level of its citizens as a powerful lure for business and industry — a way to build its economy overall.

For that to happen, however, a state must make sure that all of its citizens have access to a college education. Businesses are no longer simply looking for a small, well-educated elite but instead need to be able to draw upon a labor pool that's both broadly educated and diverse. In fact, a report from the Business-Higher Education Forum, a coalition that includes some of the country's top corporate CEOs, states that an educated and diverse population is an essential competitive asset in today's global economy.

In Montana, the demand for well-educated employees will only increase over the next several years. In the decade leading up to 2012, healthcare occupations will see growth of 28 percent. Teachers will be in demand, particularly postsecondary teachers: almost 1,700 new educators will need to be hired for the state's higher education institutions. Managers will see their ranks swell by 13 percent — over 9,200 new openings will need to be filled in all — and there'll be much higher growth in top jobs, like CEO and general manager. The growth of these sectors is good news for Montana's citizens, since wages for jobs in these areas are significantly higher than the average for Montana in general. But entry into these jobs comes with a price tag: most positions in these fields will require a bachelor's degree or higher. The question for Montana and other states is how, in a time of tight budgets, to meet the increasing demands on higher education and thereby meet the needs of an increasingly sophisticated economy.

The Western Interstate Commission for Higher Education (WICHE) has had workforce issues at the top of its agenda since its creation in the 1950s. In fact, WICHE was launched specifically to address the shortage of workforce-training opportunities in medicine, dentistry, and other professional fields. Today, WICHE offers a slew of undergraduate, graduate, and professional options that help the West's states educate and train their citizens, building their economies in the process.

Montana's Occupational Outlook

Employment in Montana (including hourly and salaried jobs and self-employment) is projected to grow by 17 percent from 2002 to 2012, adding over 96,000 new jobs to the state's economy and growing the workforce from 554,456 to 651,135. The rate of growth is higher than the 15 percent increase projected for the nation as a whole.

Growth will occur in most sectors of Montana's economy, with the largest number of new jobs being generated in lower-paying fields such as retail sales, food preparation and service, and carpentry. However, Montana's "top jobs" — those with the strongest employment outlook and high earnings — are all professional positions (see Table 1).

Table 1. Montana's Top Jobs*

Network/Computer Anal.
Registered Nurses
Personal Financial Advisors
Physician Assistants
Cardiovascular Techs.
Respiratory Therapists

Management Analysts
Market Research Analysts
Dental Hygenists
Comp. Sftwr. Engnrs.
Comp. Syst. Analysts
Pharmacists

* Jobs with the strongest employment outlook (2002-12) and strong wages.

Source: Montana Department of Labor and Industry.

All of the top jobs listed on Table 1 require considerable education and training. Three of them (registered nurse, dental hygenist, cardiovascular technician) require an associate's degree, while all the rest demand a bachelor's degree or higher.

Montana will see strong growth in a variety of sectors in the decade leading up to 2012. Three of the state's top jobs are in the computer field: network/computer analyst, computer systems analyst, and computer software engineer. Overall, the state is projected to add nearly 2,100 new jobs in these and other technical fields $-\,$ a 36 percent increase.

Healthcare will also see big increases: over 6,200 new jobs will be created in a variety of fields, from dentistry to vet med. The demand for registered nurses — one of the state's top jobs — will see a 33 percent increase: about 2,600 R.N.s will need to be hired for new posts. And Montana will see strong competition for those nurses: the top five states needing the largest numbers of nurses are all in the West. Physician assistants will see a 52 percent increase in their ranks, with over 100 being hired for new positions. Pharmacists will log growth of 41 percent, while physical therapists will experience a 33 percent increase. Montana will also experience a strong demand for new optometrists and occupational therapists. One reason for the increase: the aging of the state's population. In 2000, over 13 percent of Montana's citizens were over 65, a percentage point above the national average.

Two other essential professionals, managers and teachers, will also see a large number of hires in the decade leading up to 2012, due to new job creation and the need for replacement workers. Some 9,200 new jobs will be created for managers of all types — from CEOs and operations managers to supervisors. Large numbers of teachers at every level from kindergarten through college will be needed. At the primary and secondary levels, some 1,050 new jobs will be created, with the biggest chunk slated for elementary school teachers. Over 1,660 new slots in postsecondary education are projected to open up during the decade. In all, some 500 hires will have to be made each year to cover all of education's new job openings and retirements.

As Montana's economy changes, so do the kinds of jobs available to Montanans. The projections indicate that plenty of jobs will be available for those without formal training beyond high school. However, wages in most of the sectors hiring those workers — particularly retail sales and food service — fall significantly below the statewide mean (\$28,980 a year), and many positions don't provide even a living wage. Over the next several years, workers who have the most education and training will have the best opportunity for high-paying jobs in growing sectors. In addition, a number of professions requiring education beyond the bachelor's degree are expected to see moderate to strong growth (see Table 2).

Table 2						
Montana Professional	Employment	Projections,	2002-2012			

Profession	Number		% Change	Total New Openings
	2002	2012	<u> </u>	
All professions	554,456	651,135	17%	96,679
Architects	1,260	1,488	19%	228
Dentists	539	530	-1.7%	-9
Librarians	756	786	4%	30
Occupational Therapists	245	319	30%	74
Optometrists	275	366	33%	91
Pharmacists	814	1,146	41%	332
Physical Therapists	764	1,019	33%	255
Physician Assistants	221	337	52%	116
Physicians and Surgeons	1,655	2,077	30%	422
Podiatrists	42	48	14%	6
Registered Nurses	8,083	10,707	33%	2,624
Veterinarians	610	782	28%	172

MONTANA & WICHE's Student Exchange

In 2002, 55 percent of Montana's new high school grads enrolled in college — and 29 percent of them went to school out of state, according to WICHE's Policy Indicators for Higher Education (www.wiche.edu/Policy/FactBook). One of the most economical ways for them to do that: our Western Undergraduate Exchange (WUE), which allows students to enroll in out-of-state institutions at a reduced tuition level (150 percent of resident tuition). More than 1,300 Montana students enrolled in WUE in 2005, saving over \$5.6 million and working toward degrees in fields that are essential to Montana's economy. Some of the most popular fields of study for Montana's students: education, biology, business, nursing, and psychology.

WICHE's Professional Student Exchange Program (PSEP) offers students opportunities to train outside of their home state in 14 highly competitive fields: architecture, dentistry, graduate library studies, medicine, nursing, occupational therapy, optometry, osteopathic medicine, pharmacy, physical therapy, physician assistant, podiatry, public health, and veterinary medicine. In Montana, employment projections in almost all these fields are on the rise (see Table 2). Through PSEP, Montana students are studying to be allopathic and osteopathic physicians, dentists, veterinarians, occupational therapists, optometrists, podiatrists, and public health professionals. In general, at least 60 percent of PSEP students return to their home state to practice.

Montana students also participate in the Western Regional Graduate Program (WRGP), which offers them the chance to engage in graduate studies and includes 175 distinctive programs in 14 states, such as education, nursing, and business. On the horizon is a distance learning option, NEON (the Northwest Educational Outreach Network), which will provide electronically delivered degree programs in high-demand disciplines, such as a Ph.D. in nursing and a graduate certificate in supply chain management.

Six Fast-Track Fields

The Outlook for Montana & the Nation

From 2002 to 2012, the economy in Montana and the nation will continue generating jobs for workers at all levels of education and training. But there will be an increasing demand for employees with at least some postsecondary education, preferably a bachelor's degree. Nationwide, during a decade that will witness large numbers of baby boomers moving into retirement, 21.4 million new jobs will be created, an increase of 15 percent. However, in some fields, the increase will be more than triple that. Across the country, competition will be especially stiff for physician assistants, who will see their ranks grow by 49 percent, as well as for physical and occupational therapists (whose fields will experience growth of 35 percent) and pharmacists (30 percent). More than 620,000 new nurses will be needed (an increase of 27 percent) and some 14,500 new veterinarians. Below is a debriefing that focuses on trends in some of Montana's — and the nation's — fast growing professions.

Registered Nurses. Nursing is #1 in Montana in terms of growth among occupations requiring some postsecondary education: it will make more new hires in the decade leading up to 2012 than any other job in that category. Working in the largest healthcare profession, registered nurses held 8,083 jobs in 2002 in Montana; that number will grow to 10,707 by 2012, a 33 percent increase. Demand for R.N.s is expected to be high for a number of reasons, including the need to replace experienced nurses who leave the field, especially as the median age of the R.N. population continues to rise; a growing elderly population; and an imbalance between the supply of and demand for qualified R.N.s. Nationally, employment of registered nurses is expected to grow by 27 percent in the decade leading up to 2012. Median annual earnings of registered nurses in Montana were \$46,840 in 2004; the top 10 percent earned \$58,890 and up (nationally, that number was \$77,170).

Physician Assistants. This is the fourth fastest growing profession in Montana among all occupations requiring a bachelor's degree or higher. Physician assistants held 221 jobs in 2002; that number is projected to grow to 337 in 2012, a 52 percent increase. Demand will be strong for P.A.s, particularly in places that have difficulty attracting physicians, such as rural areas and inner city clinics. In addition, physicians and institutions are expected to employ more P.A.s to provide primary care and assist with medical and surgical procedures. Nationally, the number of physician assistants is expected to grow by 49 percent: over 4,000 new physician assistants will be needed each year. Median annual earnings of physician assistants in Montana were \$63,100 in 2004; the top 10 percent earned \$87,260 and up (nationally, that figure was \$94,840).

Pharmacists. In Montana, this is the twelfth fastest growing profession among all occupations requiring a bachelor's degree or higher. Pharmacists held 814 jobs in 2002, a number slated to jump to 1,146 in 2012, a 41 percent increase. Competition for pharmacists is expected to be steep over the 2002-12 period due to the increased pharmaceutical needs of a larger and older population. In addition, the number of degrees granted in pharmacy is expected to be lower than the number of job openings created by employment growth and replacement needs. Nationally, the number of pharmacists is expected to grow by 30 percent. Median annual earnings of Montana's pharmacists in 2004 were \$78,710; the top 10 percent earned \$93,750 and up (nationally, that figure was \$112,530).

Physical Therapists. Montana will see a 33 percent increase in the ranks of its physical therapists, who held 764 jobs in 2002, a number that will climb to 1,019 in 2012. Thanks to a rapidly growing elderly population that's particularly vulnerable to chronic conditions requiring therapeutic services — as well as to the use of physical therapists at the workplace, to evaluate worksites, develop exercise programs, and teach safe work habits to employees — the demand for P.T.s will be strong throughout the 2002-12 decade. Nationally, the number of physical therapists is expected to grow by 36 percent. In Montana, median annual earnings of physical therapists were \$59,280 in 2004; the top 10 percent earned \$81,130 and up (nationally, that number was \$89,830).

Teachers. When it comes to the number of new hires, teaching is one of the top professions among occupations requiring a bachelor's. Primary, secondary and special ed teachers held 13,883 jobs in 2002 in Montana; that number will grow to 14,930 by 2012, an 8 percent increase. In the decade leading up to 2012, Montana will also have to find 1,664 new postsecondary teachers for its colleges and universities. Nationally, the demand for teachers will vary, ranging from 38 percent for postsecondary teachers down to 9 percent for middle school teachers. Median annual earnings ranged from \$35,770 for the state's primary teachers to \$34,840 for secondary in 2004; the top 10 percent earned \$54,690 and \$51,680 and up, respectively (nationally, those figures were \$68,930 and \$72,110).

Tech Professions. In Montana, computer-related occupations are some of the fastest growing in the state among occupations requiring a college education; they're also among those adding a high number of new jobs. Occupations like network systems analyst and computer software engineer will see growth in the decade leading up to 2012 of 65 percent and more. In addition to a fast growth rate, there will also be a sizable number of jobs: over 2,000 computer professionals will need to be hired for new positions. Nationally,

those with strong computer skills will also be in high demand: the number of software engineers is expected to grow by 46 percent. Median annual earnings in 2004 in Montana were \$41,720 for network systems analysts and \$64,600 for computer software engineers; the top 10 percent earned \$57,250 and \$110,970 and up, respectively (nationally, those figures were \$95,510 and \$119,750).

The Regional Outlook

Seven of the top 10 states in terms of projected job growth are in the West: Nevada, Utah, Idaho, Arizona, Colorado, New Mexico, and California. In the 15 WICHE states, an additional 5.9 million jobs will be added in the decade leading up to 2012. While California has the greatest numerical growth in the region, with some 270,000 new jobs being created each year, the states seeing the fastest job growth are Nevada (41 percent), Utah (31 percent), Idaho (24 percent), and Arizona and Colorado (23 percent). Most of the region's fastest growing professions are in the health and computer sectors.

Sources: Workforce Report Data

All information used in the text and tables of this report is available from the Montana Department of Labor and Industry (http://ourfactsyourfuture.mt.gov) and the U.S. Department of Labor's Bureau of Labor Statistics (www.bls.gov/emp).

WICHE

WICHE and its 15 member states — Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming — work collaboratively to expand educational access and excellence for all citizens of the West. By promoting innovation, cooperation, resource sharing, and sound public policy among states and institutions, WICHE strengthens higher education's contributions to the region's social, economic, and civic life.

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