

WORKforce

Wyoming

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 Wyoming, 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 22 percent. Teachers will be in demand: over 5,000 educators (including librarians and trainers) will need to be hired to fill new and replacement slots. Managers will see their ranks swell by 20 percent; when you add in retirements, over 4,500 openings will need to be filled each year. The growth of these sectors is good news for Wyoming’s citizens, since wages for jobs in these areas are significantly higher than the average for Wyoming 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 Wyoming 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.

Wyoming’s Occupational Outlook

Employment in Wyoming (including hourly and salaried jobs and self-employment) is projected to grow by 16 percent from 2002 to 2012, adding 37,588 new jobs to the state’s economy and growing the workforce from 235,658 to 273,246. The rate of growth is slightly higher than the 15 percent increase projected for the nation as a whole.

Growth will occur in virtually all sectors of Wyoming’s economy, with a large number of new jobs being generated in lower-paying fields such as retail sales, food preparation and service, and cashiering. However, Wyoming’s “top jobs” – those with the strongest employment outlook and high earnings – are all professional positions (see Table 1).

Table 1. Wyoming’s Top Jobs*

Computer Sfwr. Engineers	Physician Assistants
Network/Comm. Analysts	Management Analysts
Environmental Engineers	Radiologic Techs.
Computer Systems Analysts	Physical Therapists
Pharmacists	Dental Hygienists

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

Source: Wyoming Department of Employment.

All of the top jobs listed on Table 1 require considerable education and training. Just two – dental hygienist and radiologic technologist – require an A.A. degree, while all the rest demand at least a bachelor’s and often a professional degree.

Wyoming will see growth in a variety of sectors in the decade leading up to 2012. Several of the state’s top jobs are in health-related professions. The demand for radiologic technologists will see a 37 percent increase: nearly 100 will need to be hired for new posts. Pharmacists will log growth of 49 percent; about 290 hires will need to be made for new jobs and replacements. The number of dental hygienists is also projected to increase, by 48 percent. In other health professions, physicians and surgeons will experience a 29 percent increase and make about 120 hires during the decade. Physical therapists will experience a 40 percent increase; occupational therapists will see their numbers increase by 25 percent. Physician assistants will see a 49 percent increase in their ranks, and almost 1,000 new registered nurses will need to be hired by 2012. One reason for the increasing demand for health professionals of all stripes: the aging of the state’s population. Wyoming is seeing strong growth in its older population: in 2004, more than 16 percent, or 85,600, of its citizens were 60 or older.

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. Over 2,300 new hires of managers of all types – from CEOs and operations managers to supervisors – will need to be made to help run the state’s various enterprises. Postsecondary teachers will see their numbers increase by 26 percent, with health specialties, nursing, math, and business making the largest number of hires. At the primary and secondary levels, close to 600 new jobs will be created, with the biggest chunk (over 120) slated for elementary school teachers. In all, over 500 hires will have to be made each year to cover education, training, and library occupations’ new job openings and retirements.

As Wyoming’s economy changes, so do the kinds of jobs available to Wyoming’s citizens. The projections indicate that plenty of jobs will be available for those without formal training beyond high school. However, wages in the sectors hiring those workers – retail sales and food service will be top employers – fall significantly below the statewide mean (\$32,094 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
Wyoming Professional Employment Projections, 2002-2012

Profession	Number		% Change	Total Openings*
	2002	2012		
All professions	235,658	273,246	16%	96,320
Architects	93	123	32%	40
Dentists	50	55	10%	10
Librarians	384	408	6%	120
Occupational Therapists	129	161	25%	50
Optometrists	41	55	34%	30
Pharmacists	428	637	49%	290
Physical Therapists	161	225	40%	80
Physician Assistants	59	88	49%	40
Physicians and Surgeons**	255	328	29%	120
Registered Nurses	2,133	2,661	25%	970
Veterinarians	113	160	42%	70

* Includes new jobs and replacements, rounded.

**Includes anesthesiologists, family/general practitioners, internists, OB-GYNs, pediatricians, psychiatrists, and surgeons.

Source: Wyoming Department of Employment.

WYOMING & WICHE's Student Exchange

In 2002, over 56 percent of Wyoming's new high school grads enrolled in college – and almost a third 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). Over 1,500 Wyoming students enrolled in WUE in 2005, saving almost \$7.5 million and working toward degrees in fields that are essential to Wyoming's economy. Some of the most popular fields of study for Wyoming students: education, engineering, biology, and business.

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 Wyoming, employment projections in all these fields are on the rise (see Table 2). Through PSEP, Wyoming students are studying to be allopathic and osteopathic physicians, dentists, veterinarians, physical therapists, occupational therapists, optometrists, osteopaths, podiatrists, physician assistants, and architects. In general, at least 60 percent of PSEP students return to their home state to practice.

Wyoming 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.

Seven Fast-Track Fields

The Outlook for Wyoming & the Nation

From 2002 to 2012, the economy in Wyoming 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 Wyoming's – and the nation's – fast growing professions.

Registered Nurses. Nursing is #1 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 2,133 jobs in 2002 in Wyoming; that number will grow to 2,661 by 2012, a 25 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 were \$45,100 in 2004; the top 10 percent earned \$60,760 and up (nationally, that number was \$77,170).

Managerial Professions. In Wyoming, management-related occupations, most of which require a college degree, are projected to see strong growth in the decade leading up to 2012. The state's businesses will create hundreds of new jobs for general managers, financial managers, and others. In addition, the number of top execs is projected to grow by 21 percent, with over 200 jobs opening up each year. Nationally, those with strong managerial skills will also be in demand: the number of general/operations managers, for instance, is expected to grow by 18 percent, as is the number of financial managers. Median annual earnings in 2004 in Wyoming were \$60,110 for general managers and \$58,000 for financial managers; the top 10 percent earned \$114,190 and \$92,000 and up, respectively.

Pharmacists. In Wyoming, this is the third fastest growing profession among all occupations requiring a bachelor's degree or higher. Pharmacists held 428 jobs in 2002, a number slated to jump to 637 in 2012, a 49 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 Wyoming's pharmacists in 2004 were \$80,300; the top 10 percent earned \$99,500 and up (nationally, that figure was \$112,530).

Physician Assistants. This is the fourth fastest growing profession in Wyoming among all occupations requiring a bachelor's degree or higher, though its numbers are not yet large. Physician assistants held 59 jobs in 2002; that number is projected to grow to 88 in 2012, a 49 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 Wyoming were \$55,610 in 2004; the top 10 percent earned \$83,420 and up (nationally, that figure was \$94,840)

Physical Therapists. This is the ninth fastest growing profession among all occupations requiring a bachelor's degree or higher in Wyoming. Physical therapists held 161 jobs in 2002, a number that will climb 40 percent to 225 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 Wyoming, median annual earnings of physical therapists were \$57,120 in 2004; the top 10 percent earned \$74,890 and up (nationally, that number was \$89,830).

Teachers. When it comes to the number of new jobs that will be created up in the decade leading up to 2012, teachers (postsecondary, secondary, and primary) held three of the top 10 slots among occupations requiring a bachelor's. Primary, secondary, and special ed teachers held 7,536 jobs in 2002 in Wyoming; that number will grow to 8,123 by 2012: that's just an 8 percent increase, but with the addition of retirements, Wyoming will have to hire almost 240 teachers each year. The state will also have to find 770 postsecondary teachers for its colleges and universities over that decade. 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 were \$41,800 for the state's primary teachers and \$40,820 for secondary in 2004; the top 10 percent earned \$55,060 and \$54,830 and up, respectively (nationally, those figures were \$63,930 and \$72,110).

Veterinarians. Veterinarians held 113 jobs in 2002 in Wyoming; that number will grow to 160 by 2012, a 42 percent increase. Demand for vets will be strong across the country (the nation will see a 26 percent increase in hires), especially as older vets retire and as the household pet population increases. Median annual earnings of veterinarians were \$54,050 in 2004; the top 10 percent earned \$99,320 and up (nationally, that figure was \$120,150).

The Regional Outlook

The top seven states in terms of projected job growth are all in the West: Nevada, Utah, Idaho, Colorado, Arizona, 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

Information in this report is from the Wyoming Department of Employment (<http://doe.state.wy.us>) 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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