WYOMING LABOR FORCE September 2016

TRENDS

Vol. 53 No. 9 Research & Planning

Postsecondary Employment and Earnings in Wyoming and 11 Other States

by: Chris McGrath, Office Support Specialist, and Michael Moore, Editor

This article introduces readers to employment and earnings outcomes for postsecondary graduates from Wyoming institutions of higher education. The tables discussed in this article are available in PDF and Excel format at http://doe.state.wy.us/LMI/education_we_connect/outcomes.htm

Research & Planning (R&P) is a separate exclusively statistical entity within the Wyoming Department of Workforce Services. R&P collects, analyzes, and publishes timely and accurate labor market information. Through memoranda of understanding with the Wyoming Department of Education, the University of Wyoming (UW), the Wyoming Community College Commission (WCCC), other Wyoming state agencies, 11 partner states, and others, R&P has the ability to examine postsecondary and workforce employment and wage outcomes by linking student graduation records with other administrative databases.

As noted by Faler (2016), "the extensive data to which R&P has access allows for high quality causational studies. … Evaluating the effectiveness of employment and training initiatives serves both policy makers and program customers. Outcome reports can provide the information policy makers need to better direct government resources of time and money. Knowing a program's outcomes can also allow customers to make informed decisions about participation and realistic assumptions about their results."

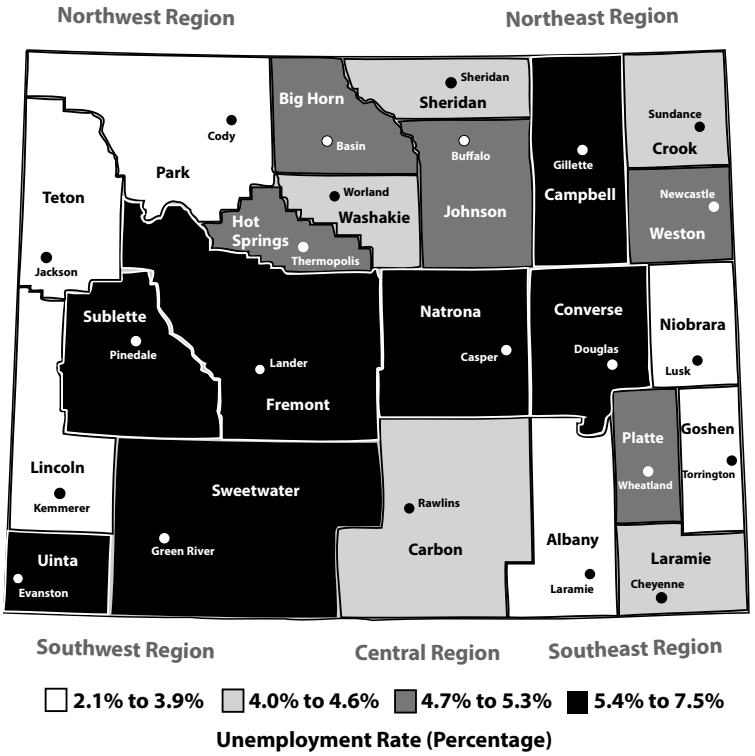
The purpose of this article is to illustrate R&P's ability to track UW and Wyoming community college graduates into the labor market by linking UW and WCCC data files

(Text continued on page 3)

HIGHLIGHTS

- **Registered nurses with a bachelor's degree receive higher earnings on average than those with an associate's degree, as dictated by Wyoming's market . … *page 14***
- **The Baker Hughes rig count for Wyoming rose from seven in June 2016 to eight in July, an increase of 14.3%. This was the first over-the-month increase in the number of rigs since August 2015. … *page 20***

Unemployment Rate by Wyoming County, July 2016 (Not Seasonally Adjusted)



IN THIS ISSUE

Wyoming Labor Force Trends

A monthly publication of the Wyoming Department of Workforce Services,
John Cox, Director

Research & Planning
P.O. Box 2760
Casper, WY 82602-2760
dws-researchplanning@wyo.gov
307-473-3807

Tom Gallagher, Manager

Tony Glover, Workforce Information Supervisor

Carola Cowan, Bureau of Labor Statistics Programs Supervisor

Michael Moore, Editor

Editorial Committee: David Bullard, Carola Cowan, Valerie A. Davis, Katelynd Faler, Matthew Halama, Christine McGrath, Lynae Mohondro, and Michael Moore

Contributors to *Wyoming Labor Force Trends* this month: David Bullard, Carola Cowan, Chris McGrath, Michael Moore, and Sherry Wen.

Subscriptions, additional copies, and back issues available free of charge.

Department of Workforce Services Nondiscrimination Statement
The Department of Workforce Services does not discriminate on the basis of race, color, religion, national origin, sex, age, or disability. It is our intention that all individuals seeking services from our agency be given equal opportunity and that eligibility decisions be based upon applicable statutes, rules, and regulations.
Mission statement available at: http://doe.state.wy.us/LMI/mission.pdf.

ISSN 0512-4409

(Text continued from page 1)

with administrative databases for Wyoming and 11 partner states. As shown in Figure 1, R&P has data sharing agreements with Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah. These states represent much of the region that surrounds Wyoming, and other states that have similar economies with a strong presence of oil & gas. This type of research helps inform students, jobseekers, educators, training providers, and others of employment and wage trends for specific areas of study.

Throughout this article, *Table 1* refers to outcomes data for University of Wyoming graduates and *Table 2* refers to outcomes data for Wyoming community college graduates. These tables provide employment and earnings data for graduates one, two, three, and four quarters after graduation. Samples of these tables are presented on pages 4 and 5 of this article, showing employment and earnings data for the fourth quarter (one year) after graduation.

The full tables are available at http://doe.state.wy.us/LMI/education_we_connect/outcomes.htm.

(Text continued on page 6)

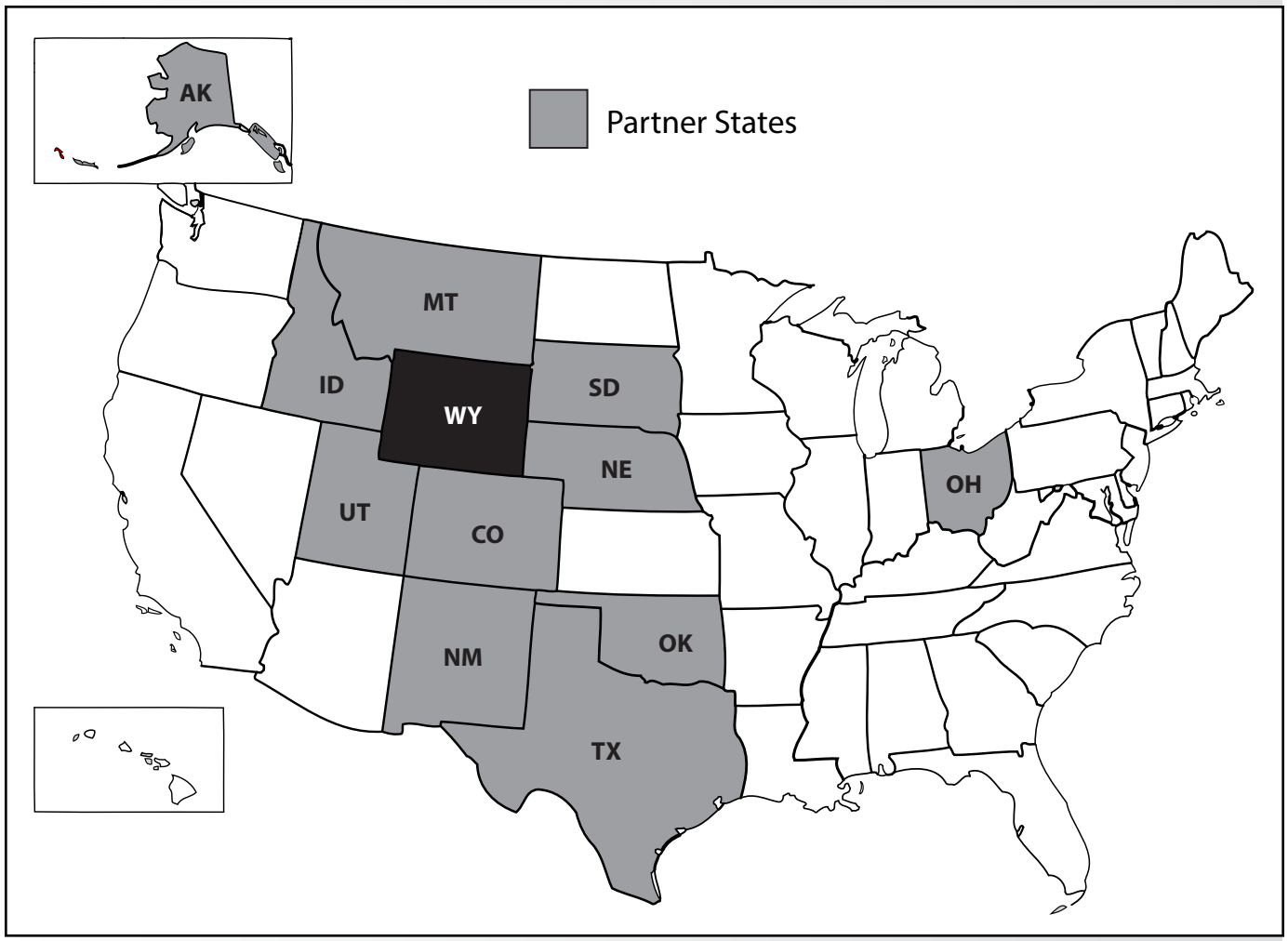


Figure 1: **States With Which Research & Planning has Data Sharing Agreements**

Table 1: **University of Wyoming Graduates with a BA/BS Degree, 2007/08, 2008/09, & 2009/10 School Years Combined with Wage Records Matches in the Fourth Quarter (1 Year) After Graduation in Wyoming and 11 Partner States[a] (Excerpt. Full table for all graduation years and CIP[b] codes available at http://doe.state.wy.us/LMI/education_we_connect/outcomes.htm)**

				Found Working in 12 States[a] 4 Quarters After Graduation			
					Degrees		
CIP[b] Code	Title	Individuals	Degrees	Individuals	N	%	Median Quarterly Wage
All	**All CIP Codes**	**5,165**	**5,249**	**3,274**	**3,317**	**63.2**	**$7,515**
13	**EDUCATION**	**756**	**756**	**613**	**613**	**81.1**	**$9,118**
1312	Teacher Education & Professional Development, Specific Levels & Methods	417	417	340	340	81.5	$8,893
131202	Elementary Education & Teaching	408	408	335	335	82.1	$8,820
131205	Secondary Education & Teaching	9	9	5	5	55.6	$11,253
1313	Teacher Education & Professional Development, Specific Subject Areas	338	338	272	272	80.5	$9,241
131301	Agricultural Teacher Education	10	10	9	9	90.0	$11,622
131302	Art Teacher Education	14	14	12	12	85.7	$7,475
131305	English/Language Arts Teacher Education	34	34	30	30	88.2	$11,097
131309	Technology Teacher Education/ Industrial Arts Teacher Education	14	14	12	12	85.7	$10,919
131311	Mathematics Teacher Education	56	56	47	47	83.9	$9,749
131312	Music Teacher Education	38	38	31	31	81.6	$12,841
131314	Physical Education Teaching & Coaching	57	57	50	50	87.7	$9,312
131318	Social Studies Teacher Education	76	76	53	53	69.7	$6,178
131322	Biology Teacher Education	24	24	18	18	75.0	$7,590
131323	Chemistry Teacher Education	8	8	5	5	62.5	$12,471
14	**ENGINEERING**	**477**	**480**	**245**	**247**	**51.5**	**$12,410**
1404	Architectural Engineering	92	92	44	44	47.8	$10,296
140401	Architectural Engineering	92	92	44	44	47.8	$10,296
1407	Chemical Engineering	56	56	25	25	44.6	$10,217
140701	Chemical Engineering	56	56	25	25	44.6	$10,217
1408	Civil Engineering	108	108	73	73	67.6	$12,181
140801	Civil Engineering, General	108	108	73	73	67.6	$12,181
1409	Computer Engineering	17	17	9	9	52.9	$9,904
140901	Computer Engineering, General	17	17	9	9	52.9	$9,904
1410	Electrical, Electronics & Comm. Engineering	63	63	29	29	46.0	$14,683
141001	Electrical & Electronics Engineering	63	63	29	29	46.0	$14,683
1419	Mechanical Engineering	110	110	52	52	47.3	$13,977
141901	Mechanical Engineering	110	110	52	52	47.3	$13,977
1425	Petroleum Engineering	32	32	14	14	43.8	$18,904
142501	Petroleum Engineering	32	32	14	14	43.8	$18,904

[a]Wyoming & 11 partner states: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, & Utah.

[b]Classification of Instructional Programs.

Source: WDQI Data Warehouse.

Prepared by T Glover, Research & Planning, WY DWS, 7/22/2016.

Table 2: **Wyoming Community College Graduates 2007/08, 2008/09, & 2009/10 School Years Combined with Wage Records Matches in the Fourth Quarter (1 Year) After Graduation in Wyoming and 11 Partner States[a] (Excerpt. Full table for all graduation years and CIP[b] codes available at http://doe.state.wy.us/LMI/education_we_connect/outcomes.htm)**

		Found Working in 12 States[a] 4 Quarters After Graduation					
					Degrees		
CIP[b] Code	Title	Individuals	Degrees	Individuals	N	%	Median Quarterly Wage
All	**All CIP Codes**	**7,261**	**8,553**	**5,054**	**5,940**	**69.4**	**$5,527**
48	**PRECISION PRODUCTION**	**248**	**327**	**181**	**232**	**70.9**	**$7,329**
4805	Precision Metal Working	248	327	181	232	70.9	$7,329
480501	Machine Tool Technology/Machinist	22	29	17	23	79.3	$8,179
480503	Machine Shop Technology/Assistant	18	18	10	10	55.6	$9,147
480508	Welding Technology/Welder	226	279	165	198	71.0	$7,230
51	**HEALTH PROFESSIONS & RELATED PROGRAMS**	**1,879**	**2,245**	**1,412**	**1,671**	**74.4**	**$8,822**
5106	Dental Support Services & Allied Prof.	141	141	97	97	68.8	$9,685
510601	Dental Assisting/Assistant	19	19	13	13	68.4	$4,210
510602	Dental Hygiene/Hygienist	122	122	84	84	68.9	$10,261
5107	Health & Medical Admin. Services	17	25	14	21	84.0	$5,540
5108	Allied Health & Medical Assisting Svcs.	116	127	95	104	81.9	$7,019
510803	Occupational Therapist Assistant	44	44	36	36	81.8	$8,272
510805	Pharmacy Technician/Assistant	11	22	9	18	81.8	$5,640
510806	Physical Therapy Technician/Assist.	16	16	13	13	81.3	$7,766
510808	Veterinary/Animal Health Technology/ Technician & Veterinary Assistant	40	40	32	32	80.0	$6,149
510899	Allied Health & Medical Assist. Svcs., Other	5	5	5	5	100.0	$4,422
5109	Allied Health Diagnostic, Intervention, & Treatment Professions	316	319	173	176	55.2	$8,894
5110	Clinical/Medical Lab. Science/Research & Allied Professions	31	46	25	39	84.8	$8,195
5111	Health/Medical Preparatory Programs	116	116	79	79	68.1	$3,033
5115	Mental & Social Health Services & Allied Prof.	26	27	19	19	70.4	$6,542
5123	Rehab. & Therapeutic Professions	18	18	8	8	44.4	$7,395
5135	Somatic Bodywork & Related Therapeutic Svcs.	32	39	20	27	69.2	$4,145
5138	Registered Nursing, Nursing Admin., Nursing Research & Clinical Nursing	759	759	636	636	83.8	$12,422
513801	Registered Nursing/Registered Nurse	759	759	636	636	83.8	$12,422
5139	Practical Nursing, Vocational Nursing & Nursing Assistants	582	584	423	424	72.6	$4,922
513901	Licensed Practical/Vocational Nurse Training	556	556	403	403	72.5	$5,000
513902	Nursing Assistant/Aide and Patient Care Assistant/Aide	28	28	21	21	75.0	$3,127
5199	Health Professions and Related Clinical Sciences, Other	35	35	26	26	74.3	$3,303

[a]Wyoming & 11 partner states: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, & Utah.

[b]Classification of Instructional Programs.

Source: WDQI Data Warehouse.

Prepared by T Glover, Research & Planning, WY DWS, 7/22/2016.

(Table continued from page 3)

Introduction to Postsecondary Education Employment & Earnings Outcomes Research

In *Leveraging Employment Data to Measure Labor Market Outcomes* (2016), Zinn states, "The nation's students, educators, and policymakers are increasingly calling for better information to demonstrate that postsecondary education provides people with opportunities … information about postcollege labor market outcomes is critical to help students make wiser choices about their education and careers, post secondary institutions ensure and demonstrate that their offerings are effectively preparing students to succeed in the job market." Providing this information to individuals who are entering postsecondary education for the first time, returning for training, or starting a new career is crucial in establishing a foundation for success in whatever field of study they may pursue.

Zinn (2016) also notes "the growing consensus that postcollege labor market outcomes are one critical component of information that should be available to students, institutions, and other stakeholders." R&P has the unique capability of providing these outcomes by linking several administrative databases.

This is demonstrated in Table 1, which R&P created by linking UW files with wage records for Wyoming and the 11 partner states with which R&P has data sharing agreements. Wage records represent an individual's wage history based on employers' quarterly wage and employment reports to the Unemployment Insurance (UI) tax section of the Wyoming Department of Workforce Services and the UI tax entities of selected other states (Bullard, 2015).

Each graduate's field of study is categorized by the Classification of Instructional Programs (CIP) code system, which is maintained by the National Center for Education Statistics (NCES) categorized by two-, four-, and six-digit levels of instructional programs. The purpose of the classification system is to support the accurate tracking, assessment, and reporting of fields of study and program completions activity. A complete listing of CIP codes can be found at https://nces.ed.gov/pubs2002/cip2000/.

The CIP code structure is illustrated in Figure 2 (see page 7). For example, the broad category of education is given the two-digit CIP code of 13. Within CIP 13 are more specific four-digit CIP codes, such as CIP 1312 (teacher education & professional development, specific levels & methods) and CIP 1313 (teacher education & professional development, specific subject areas). Within CIP 1312 are more detailed six-digit CIP codes, such as CIP 131202 (elementary education & teaching) and CIP 131205 (secondary education & teaching).

Tables 1 and 2 provide data for graduates at the two-, four-, and six-digit CIP code levels. For example, as shown in Figure 2, during the 2007/08, 2008/09, and 2009/10 aggregate years, there were 756 UW graduates with bachelor's degrees in education. Of those 756 graduates, 417 were from programs classified as teacher education & professional development, specific levels & methods (four-digit CIP 1312). Of those 417 graduates, 408 were from programs classified as elementary education & teaching (six-digit CIP 131202) while nine were from programs classified as secondary education & teaching (six-digit CIP 131205).

In order to present the most comprehensive data and avoid conflicts with confidentiality, UW and Wyoming community college graduates were combined into three-year aggregate groups of graduating classes, such as graduates from the 2007/08, 2008/09, & 2009/10 school years. By linking UW and WCCC files with wage records, R&P is able to track these graduates' employment and earnings in Wyoming and R&P's 11 partner states. Tables 1 and 2 show employment and wage data for each CIP code for the quarter of graduation and the four quarters after graduation.

University of Wyoming Graduates

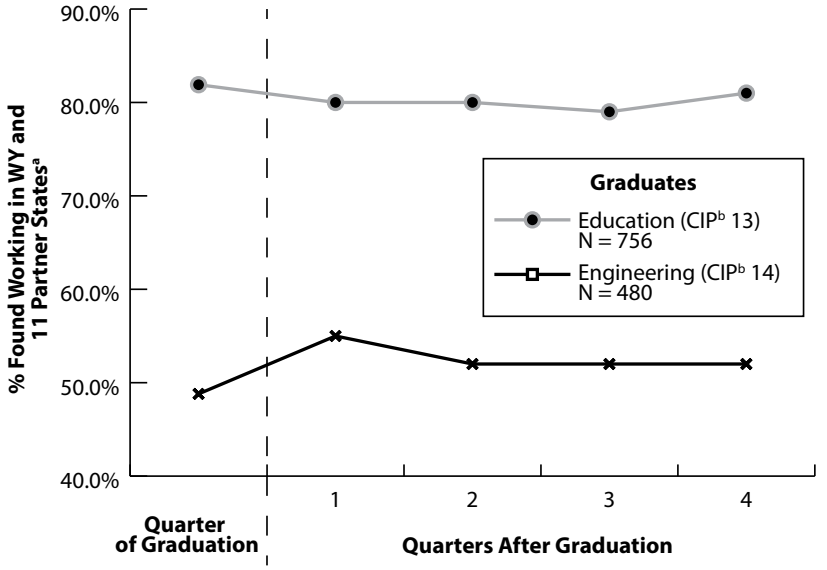
Table 1 provides information on UW graduates from the 2007/08 to 2014/15 school years.

For the 2007/08, 2008/09, & 2009/10 aggregate graduating classes, for example, 5,165 total individuals graduated from UW with 5,249 total degrees (see Table 1). Graduation year includes the summer, fall, and spring semesters of two consecutive calendar years. For example, 2007/08 would include the summer 2007, fall 2007, and spring 2008 graduates. *Total individuals* refers to the number of distinct individual social security numbers (SSNs) graduating in a given year, while *total degrees* refers to the total number of degrees earned by those individuals. In other words, one individual may have graduated with multiple degrees in the same year. Median quarterly wages presented in Table 1 are presented in

Figure 2: Selected 2-, 4-, and 6-Digit Classification of Instructional Programs (CIP) Codes for Education (CIP 13) and University of Wyoming (UW) BA/BS Graduates from 2007/08, 2008/09, & 2009/10 Aggregate

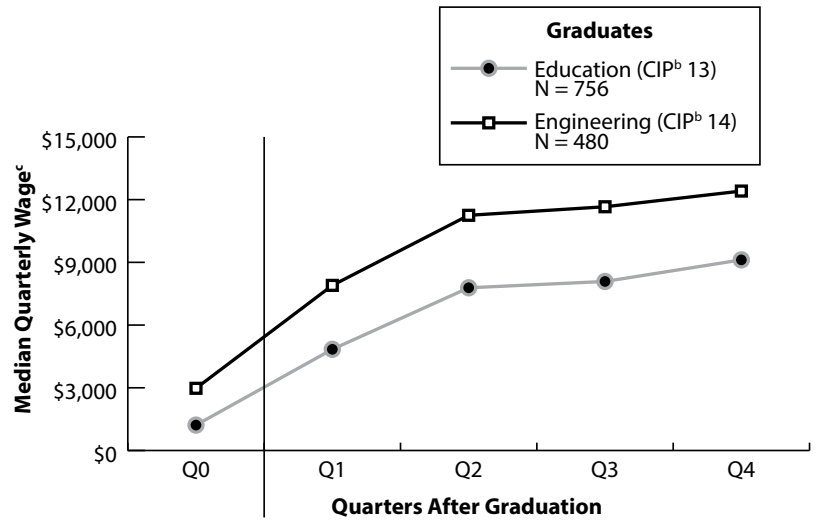
	CIP Code	Description	UW Graduates
2-Digit	**13**	**Education**	**756**
4-Digit	**1312**	**Teacher Education & Professional Development, Specific Levels & Methods**	**417**
6-Digit	131202	Elementary Education & Teaching	408
	131205	Secondary Education & Teaching	9
4-Digit	**1313**	**Teacher Education & Professional Development, Specific Subject Areas**	**338**
6-Digit	131301	Agricultural Teacher Education	10
	131302	Art Teacher Education	14
	131305	English/Language Arts Teacher Education	34
	131309	Technology Teacher Education/Industrial Arts Teacher Education	14
	131311	Mathematics Teacher Education	56
	131312	Music Teacher Education	38
	131314	Physical Education Teaching and Coaching	57
	131316	Science Teacher Education/General Science Teacher Education	N/D
	131318	Social Studies Teacher Education	76
	131322	Biology Teacher Education	24
	131323	Chemistry Teacher Education	8
	131330	Spanish Language Teacher Education	N/D

N/D = Not discloseable due to confidentiality.
Education (CIP 13) can be found in its entirety at https://nces.ed.gov/pubs2002/cip2000/ciplist.asp?CIP2=13.
Source: Classification of Instructional Program Codes (https://nces.ed.gov/pubs2002/cip2000/).



[a]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
[b]Classification of Instructional Programs.
Percentage of University of Wyoming graduates is defined in this example as the percentage of total bachelor's degrees from 2007/08, 2008/09, and 2009/10 graduates (combined) found working in Wyoming or 11 partner states.
Source: WDQI Warehouse Tabulations.

Figure 3: Percentage of University of Wyoming Graduates (2007/08, 2008/09, & 2009/10) with Bachelor's Degrees in Education (CIP 13) and Engineering (CIP 14) Found Working in Wyoming and 11 Partner States[a] During the Quarter of Graduation and the Four Quarters After Graduation



[a]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
[b]Classification of Instructional Programs.
[c]Nominal dollars.
Source: WDQI Warehouse Tabulations.

Figure 4: Median Quarterly Wages of University of Wyoming Graduates (2007/08, 2008/09, and 2009/10) in Education (CIP 13) and Engineering (CIP 14) Found Working in Wyoming and 11 Partner States[a] During the Quarter of Graduation and the Four Quarters After Graduation

terms of nominal dollars. For a complete listing of table definitions, please see Appendix 1: Community College and UW Graduate Wage Record Reports Operational Definitions at http://doe.state.wy.us/LMI/education_we_connect/UW_WCCC_Operational_Definitions.pdf.

Comparing Fields of Study

Readers can use the data in Table 1 to gain an understanding of employment opportunities for different fields of study. For example, there were 756 total individuals who graduated with 756 bachelor's degrees in education (CIP 13; see Table 1) and 477 total individuals with 480 degrees who graduated with bachelor's degrees in engineering (CIP 14; see Table 1) during the 2007/08, 2008/09, & 2009/10 aggregate school years.

Figure 3 was created using data from Table 1, and shows the percentage of graduates from each CIP code found working in Wyoming and 11 partner states during each of the four quarters after graduation. (For this article, *graduates* refers to the number or percentage of degrees, not the number of individuals.) As shown in Figure 3, a greater proportion of

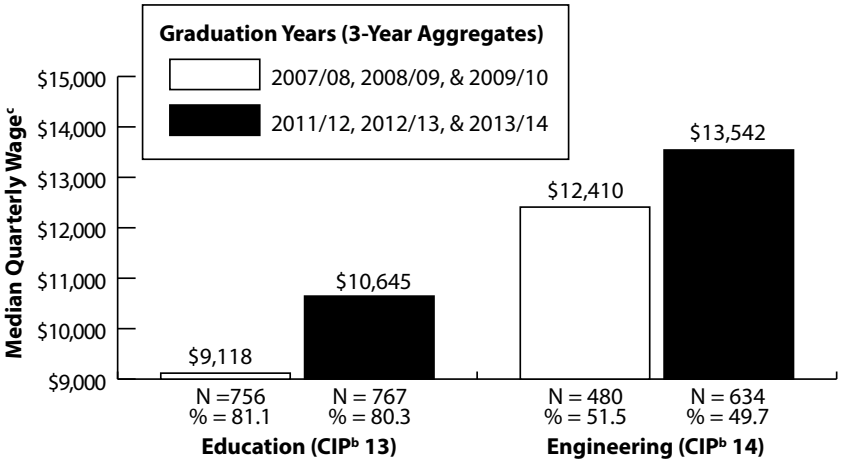
education graduates than engineering graduates were found working in Wyoming and 11 partner states during the four quarters after graduation. In other words, individuals who graduated with a degree in education had more success finding a job in Wyoming or partner states than those who graduated with a degree in engineering.

Table 1 can also be used to compare wages between different CIP codes. Figure 4 (see page 8) was built with median quarterly wage data from Table 1, and compares the median quarterly wages of education graduates and engineering graduates. (Please note that wages are presented in nominal dollars in this article.) Figure 4 shows that the median quarterly wage for engineering graduates was higher than the median quarterly wage for education graduates during each of the four quarters following graduation.

The data presented in Table 1 and illustrated in the examples in Figures 3 and 4 can be very valuable to educators, policymakers, training providers, students, jobseekers, and other stakeholders in Wyoming, who can use this information to determine their return on investment — or, in other words, identify which fields of study are more likely to produce educated workers who will be retained in Wyoming. Students and jobseekers can use this information to plan for their education and careers by understanding the likelihood that they will be able to find work in Wyoming for a given degree, and which fields of study may result in higher paying jobs.

Comparing Wages Over Time

The data in Table 1 can also be used to determine if wages have remained constant or changed over time for graduates from the same CIP code. For example, education (CIP 13) graduates from 2007/08, 2008/09, & 2009/10 had a median quarterly wage of $9,118 four quaters after graduation. By comparison, education (CIP 13) graduates from 2011/12, 2012/13, & 2013/14 had a median quarterly wage of $10,645 — a difference of $1,527, or 16.7% (see Figure 5). This indicates that nominal (unadjusted) wages four quarters after graduation increased for the graduates from 2011/12, 2012/13, & 2013/14 compared to the graduates from 2007/08,



[a]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
[b]Classification of Instructional Programs.
[c]Nominal dollars.
N = Total number of degrees. % = Percent of total degrees found working in Wyoming and 11 partner states four quarters after graduation.
Source: WDQI Warehouse Tabulations.

Figure 5: Percentage of University of Wyoming Graduates (2007/08, 2008/09, & 2009/10) with Bachelor's Degrees in Education (CIP 13) and Engineering (CIP 14) Found Working in Wyoming and 11 Partner States[a] During the Quarter of Graduation and the Four Quarters After Graduation

2008/09, & 2009/10. This was also true for engineering (CIP 14) graduates; the median quarterly wage four quarters after graduation increased from $12,410 for graduates from 2007/08, 2008/09, & 2009/10 to $13,542 for graduates from 2011/12, 2012/13, & 2013/14 — an increase of $1,132, or 9.1%.

Wyoming Community College Graduates

Table 2 provides information on Wyoming community college graduates by year of graduation from 2007/08 to 2014/15. As previously mentioned, R&P combined consecutive graduating classes together into three-year aggregates in order to provide more discloseable data while upholding confidentiality. For example, Table 2 shows the number of Wyoming community college graduates from 2007/08, 2008/09, & 2009/10 combined. Table 2 provides data for all community college graduates as a total, and also provides data tables for each community college.

Table 2 shows that 7,261 total individuals graduated with 8,553 total academic or occupational degrees from Wyoming's seven community colleges. In other words, one individual may have graduated with multiple degrees in the same year. For this article, Wyoming community college graduates are discussed in number of degrees rather than number of individuals. *Percent degrees* is calculated by dividing the

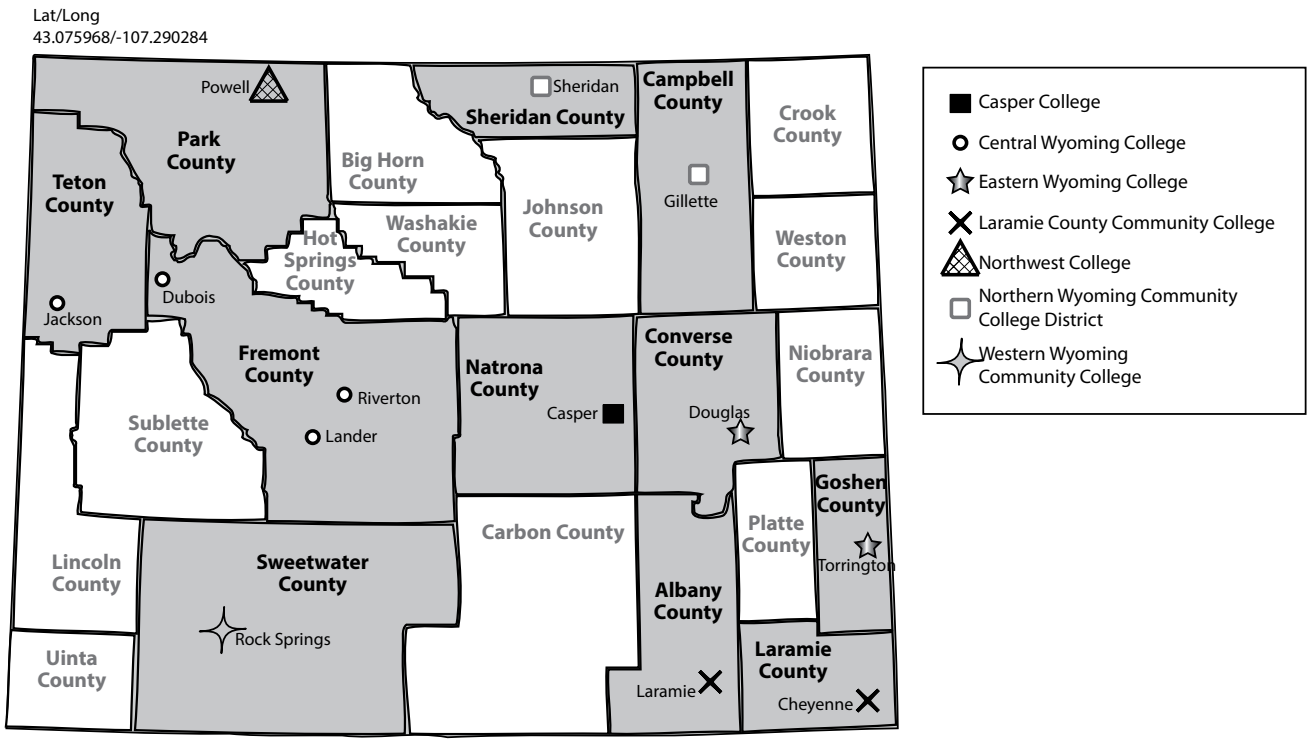


Figure 6: **Map of Wyoming Community Colleges**

number of degrees found in wage records each quarter by the total number of degrees received by each three-year aggregate of graduates.

For example, as shown in Table 2, of the 759 total degrees in registered nursing/registered nurse programs (CIP 513801) earned during 2007/08, 2008/09, & 2009/10, 636 of those degrees (84.0% of the total) were found working in Wyoming and 11 partner states four quarters after graduation (see related article on Wyoming nurses, page 14). Figure 6 (see page 10) provides a map showing the locations of Wyoming's community colleges.

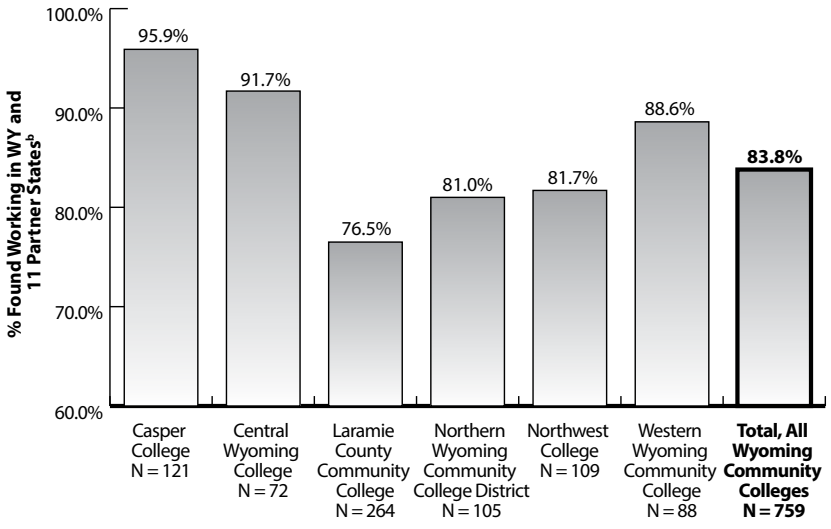
The data presented in Table 2 (community college graduates) can be used in many of the same ways as the data from Table 1 (UW graduates) discussed in the previous section, such as comparing fields of study, wages between different CIP codes, and wages over time. The community college graduate outcomes data presented in Table 2 have additional other uses.

Comparing Outcomes for Different Colleges

Figure 7 was created using data from Table 2 to compare outcomes for Wyoming community college graduates from 2007/08, 2008/09, & 2009/10 from registered nursing/ registered nurse programs (CIP 513801) by college. As shown in Figure 7, a greater proportion of Casper College graduates (95.9%) from registered nursing programs were found working in Wyoming and 11 partner states four quarters after graduation than graduates of registered nursing programs from any of the other community colleges. By comparison, Laramie County Community College had the smallest proportion (76.5%) of registered nursing program graduates found working in Wyoming and 11 partner states four quarters after graduation.

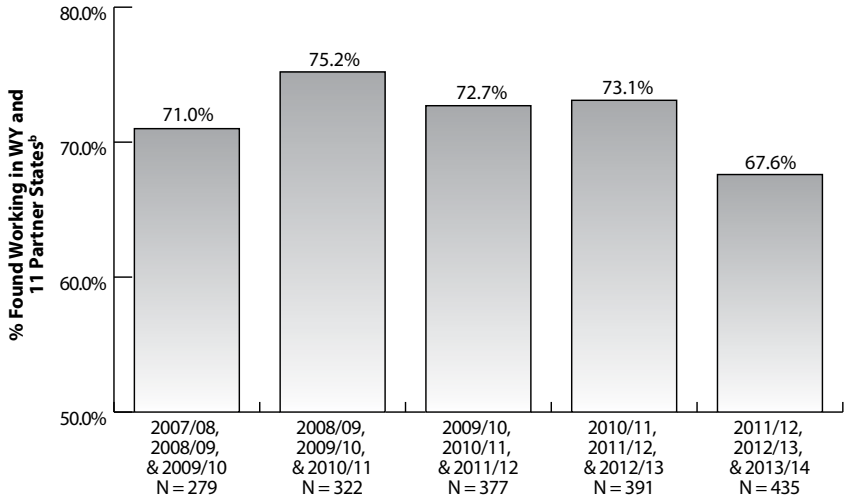
Effects of Economic Change

The data from Table 2 can also be used to determine if economic conditions affected community college graduates' chances of finding work after graduation. Figure 8 (see page 12) shows the percentage of Wyoming community college



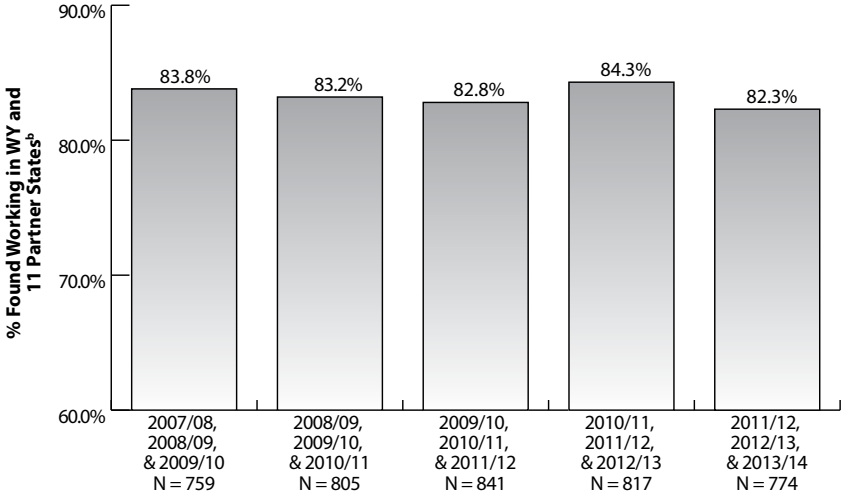
[a]Classification of Instructional Programs.
[b]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
Percent of Wyoming community college graduates refers to degrees earned from Registered Nursing/Registered Nurse (CIP 513801) 2-Year Occupational Track Programs from 2007/08, 2008/09, & 2009/10 found working in Wyoming and 11 partner states.
Source: WDQI Warehouse Tabulations.

Figure 7: Percent of Wyoming Community College Graduates in Registered Nursing/Registered Nurse (CIP[a] 513801) 2-Year Occupational Track Programs by College of Graduation, 2007/08, 2008/09, & 2009/10, Found Working in Wyoming and 11 Partner States Four Quarters After Graduation



[a]Classification of Instructional Programs.
[b]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
Percent found working refers to degrees earned from Welding Technology/Welder (CIP 480508) programs by graduation year found working in Wyoming and 11 partner states.
Source: WDQI Warehouse Tabulations.

Figure 8: Percent of Wyoming Community College Graduates in Welding Technology/Welder (CIP[a] 480508) Programs by Years of Graduation Found Working in Wyoming and 11 Partner States Four Quarters After Graduation



[a]Classification of Instructional Programs.
[b]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
Percent found working refers to degrees earned from Registered Nursing/Registered Nurse (CIP 51.3801) programs by graduation year found working in Wyoming and 11 partner states.
Source: WDQI Warehouse Tabulations.

Figure 9: Percent of Wyoming Community College Graduates in Registered Nursing/Registered Nurse (CIP[a] 513801) Programs by Years of Graduation Found Working in Wyoming and 11 Partner States Four Quarters After Graduation

graduates from welding technology/welder (CIP 480508) programs who were found working in Wyoming and 11 partner states four quarters after graduation. A smaller proportion (67.6%) of welding graduates from 2011/12, 2012/13, & 2013/14 were found working in Wyoming and 11 partner states four quarters after graduation than any of the other three-year aggregate groups of graduates. This decrease may be due to changes in Wyoming's economy that began in second quarter 2015 (2015Q2). As noted by Gallagher (2016), Wyoming entered an economic downturn in 2015Q2 that was driven by the "substantial decline in the prices of oil, an extended period of low natural gas prices, and the erosion in the price of coal." The downturn likely resulted in fewer welding jobs in Wyoming's mining industry, so community college graduates from welding programs in 2013/14 may have had fewer opportunities to find work.

Figure 9 shows the proportion of Wyoming community college graduates from registered nursing/registered nurse (CIP 513801) programs found working in Wyoming

and 11 partner states four quarters after graduation. In contrast to welding graduates, nursing graduates did not appear to be as affected by the downturn in Wyoming's economy. For each three-year aggregate group of graduates, the percentage of nursing graduates found working four quarters after graduation was between 82.3% and 84.3%.

By familiarizing themselves with data presented in these tables, readers can help determine the particular fields of study that consistently produce solid employment and earning opportunities. These tables can also give some indication as to how likely jobseekers are to find a job in a particular field of study in this region.

Future studies using these data will be able to show which programs are most likely to produce graduates who maintain ties to Wyoming's economy, which may help lawmakers and stakeholders make informed decisions when supporting academic programs. Overall, Wyoming is far ahead of many other states in using high quality data to assess labor market outcomes.

References

Bullard, D. (2015). Local jobs and payroll in Wyoming in first quarter 2015: job losses appear in the oil & gas sector. *Wyoming Labor Force Trends, 52*(10). Retrieved June 6, 2016, from http://doe.state.wy.us/LMI/trends/1015/1015.pdf

Faler, K. (2016). Chapter 2: Review of the literature. *Wyoming's Hathaway Scholarship Program: A Workforce Outcomes Evaluation of a State Merit-Based Scholarship Initiative Using Administrative Records*. Retrieved September 23, 2016, from http://doe.state.wy.us/LMI/education_we_connect/Hathaway_2016.pdf

Gallagher, T. (2016). Chapter 1: Economic analysis. Workforce Planning Report 2016, *Wyoming Labor Force Trends, 53*(4). Retrieved July 25, 2016, from http://doe.state.wy.us/LMI/trends/0416/a1.htm

Zinn, R. (May 2016). *Classroom to Career: Leveraging Employment Data to Measure Labor Market Outcomes*.

Funding of this Research

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantee, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

Earnings and Educational Opportunities for Wyoming Nurses

by: Chris McGrath, Office Support Specialist

The Research & Planning (R&P) section of the Wyoming Department of Workforce Services recently published tables of employment and earnings outcomes of University of Wyoming (UW) and Wyoming community college graduates (see related article, page 1). In order to present the most comprehensive data possible, postsecondary graduates were combined into three-year aggregates of graduating classes, such as 2007/08, 2008/09, & 2009/10 (McGrath, 2016). These tables are available online at http://doe.state.wy.us/LMI/education_we_connect/we_connect_outcomes.htm.

Data presented in those tables indicate that four quarters after graduation, graduates from a four-year nursing program at UW earn more than graduates from a two-year nursing program from a Wyoming community college. This article discusses those differences in earnings, as well as postsecondary changes and opportunities for Wyoming nurses.

Through memoranda of understanding with the Wyoming Department of Education, UW, the Wyoming Community College Commission (WCCC), other Wyoming state agencies, 11 partner states[1], and others, R&P has the ability to track UW and Wyoming community college graduates from school years 2007/08 to 2014/15 into the labor market by linking UW and WCCC data files with administrative databases (McGrath, 2016). Each graduate's field of study is identified by the Classification of Instructional Programs (CIP) code system, by two-, four-, and six-digit levels of instructional programs.

1 Partner states are those states with which R&P has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.

The CIP code structure is illustrated in Table 1 (see page 15). For example, the broad category of Health Professions & Related Programs is given the two-digit CIP code of 51. Within CIP 51 are more specific four-digit CIP codes, such as CIP 5102 (Communication Disorders Sciences & Services), CIP 5106 (Dental Support Services & Allied Professions), and CIP 5138 (Registered Nursing, Nursing Administration, Nursing Research & Clinical Nursing). Within CIP 5138 is the more detailed six-digit CIP 513801 for Registered Nursing/Registered Nurse.

The UW and Wyoming community college graduate tables that are available online show the number of individuals who graduated in a specific field of study, the percent of total degrees found working in Unemployment Insurance employer tax files in 12 states, and the median wage for the quarter of graduation and four quarters after graduation. For a more detailed definition of the data segments, please visit http://doe.state.wy.us/LMI/education_we_connect/UW_WCCC_Operational_Definitions.pdf.

Figure 1 (see page 15) shows the median quarterly wages of UW (four-year bachelor's degree) and Wyoming community college graduates (two-year associate's degree) from Registered Nursing/Registered Nurse (CIP 513810) programs by three-year aggregates who were found working in Wyoming or 11 partner states four quarters (one year) after graduation. As illustrated in Figure 1, the median quarterly wage for UW graduates was higher than that of Wyoming community college graduates for each of the three-year aggregate groups of graduates. For graduates from 2007/08, 2008/09, & 2009/10, for example, the median quarterly wage for UW

graduates four quarters after graduation was $12,817, compared to $12,422 for community college graduates – in other words, UW graduates earned $395 (3.1%) more than community college graduates. The difference was even more substantial for graduates from 2011/12, 2012/13, & 2013/14, as the median quarterly wage for UW graduates was $13,867 compared to $12,686 for community college graduates – meaning UW graduates earned $1,181 (8.5%) more than community college graduates. As shown in Figure 1, the difference in wages between nurses with two- and four-year degrees is growing; the question is why.

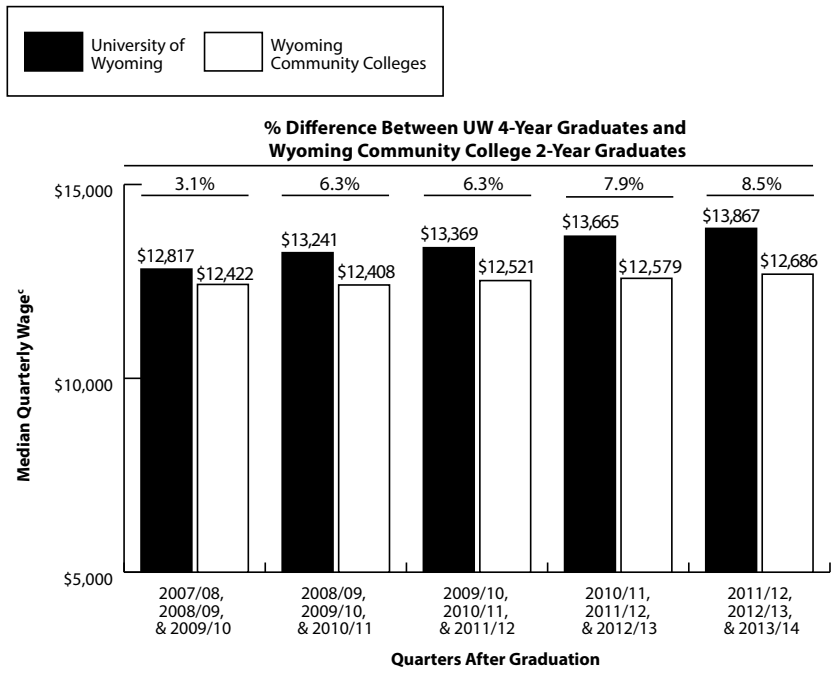
- Does this difference influence an individual's decision whether to pursue a bachelor's or associates in nursing?
- Do employers in the health care industry value a bachelor's degree more than an associate's degree?
- Is age a factor in the difference in wages?
- Do nurses with a bachelor's degree work more hours than nurses with an associate's degree?

The increased emphasis on earning a bachelor of science degree in nursing (BSN) is not new and has recently gained momentum with evidence-based practices within the field of nursing becoming dominant (Harris, 2014). R&P conducted a survey in 2008 to examine the factors associated with a nurse's decision to further her or his education and go back to school. The chief arguments for increasing the educational level of the

Table 1: Selected 2-, 4-, and 6-Digit Classification of Instructional Programs (CIP) Codes for Health Professions & Related Programs (CIP 51)

	CIP Code	Description
2-Digit	51	Health Professions & Related Programs
4-Digit	5102	Communication Disorders Sciences and Services
	5106	Dental Support Services and Allied Professions
	5138	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing
6-Digit	513801	Registered Nursing/Registered Nurse

Source: Classification of Instructional Program Codes (https://nces.ed.gov/pubs2002/cip2000/).



[a]Classification of Instructional Programs.
[b]States with which Research & Planning has data sharing agreements: Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, Ohio, Oklahoma, South Dakota, Texas, and Utah.
[c]Nominal dollars.
Source: WDQI Warehouse Tabulations.

Figure 1: Median Quarterly Wage for Registered Nursing/Registered Nurse (CIP[a] 513801) Graduates from the University of Wyoming (UW; BA/BS) and Wyoming Community Colleges (WCCC; 2-Year Occupational Track) Working in Wyoming and 11 Partner States[b] Four Quarters After Graduation by Year of Graduation (3-Year Aggregate), 2007/08 to 2013/14

nation's nurses are to enable them to care for an increasingly diverse population and to contribute to the research and scientific community. According to the results of the survey, the most frequently cited barriers to returning to school or furthering one's education were educational costs, work commitments, age, and the thought of becoming a full-time student again (Harris, 2014).

In order to meet the present and future demands in the nursing profession, those individuals who already have an associate of science in nursing (ASN) may need to pursue their BSN in order to fill the required vacancies and attain a sufficient level of education (Harris, 2014). The barriers of time constraints, financial limitations, motivation, and work commitments for someone currently employed in the nursing profession may be similar to someone looking into their future of postsecondary education. Educational institutions and organizations are making changes to help nurses returning to school or looking at the field of nursing for the first time be better prepared to advance within the health care industry.

The Wyoming Center for Nursing and Health Care Partnerships (WCNHCP) and the Action Coalition for the State of Wyoming work to strengthen the nursing workforce to meet the health needs of the people. In its September 2016 newsletter, WCNHCP introduced ReNEW, a new way of looking at nursing education in Wyoming (Sholty, 2016). The goal of this initiative is to collaborate with UW and the Wyoming community colleges that offer associate's degrees in nursing to extend an alternative to the current traditional four-year BSN. Students could attend three years at a community college and then continue with one year of distance education through UW so that students would not have to relocate. Students who wish to attend UW as freshmen would go through the same curriculum. This alternative gives students education options while furthering workforce marketability.

The health care industry is complex and continually advancing and changing. This article has provided evidence that registered nurses with a bachelor's degree receive higher earnings on average than those with an associate's degree, as dictated by Wyoming's market. As the need for education and training required to stay with the advancements in health care increases, organizations such as WCNHCP are working to collaborate with education institutions to remove some barriers to returning to school or in deciding postsecondary pathways.

References

McGrath, C. (2016). Postsecondary opportunities in Wyoming and 11 other states for University of Wyoming and community college graduates. Ed. Michael Moore. Retrieved from http://doe.state.wy.us/LMI/education_we_connect/we_connect_outcomes.htm

Harris, P. (2014). Nurses Returning to School: Motivation and Job Satisfaction as a Buffer between Perceived Employer Discouragement and Time Constraints. Retrieved September 15, 2016, from http://doe.state.wy.us/LMI/nursing/2014/Nurses_Returning_to_School.pdf

Sholty, M (2016, September). ReNEW: Eliminating Barriers to Higher Education. WCNHCP Newsletter, September 2016.

Wyoming Unemployment Rate Unchanged at 5.7% in July 2016

by: David Bullard, Senior Economist

The Research & Planning section of the Wyoming Department of Workforce Services reported that the state's seasonally adjusted[1] unemployment rate was unchanged from June to July at 5.7%. Wyoming's unemployment rate was significantly higher than its July 2015 level of 4.3% and significantly higher than the current U.S. unemployment rate of 4.9%. Seasonally adjusting state unemployment rates allows for comparability across all states and with the U.S.

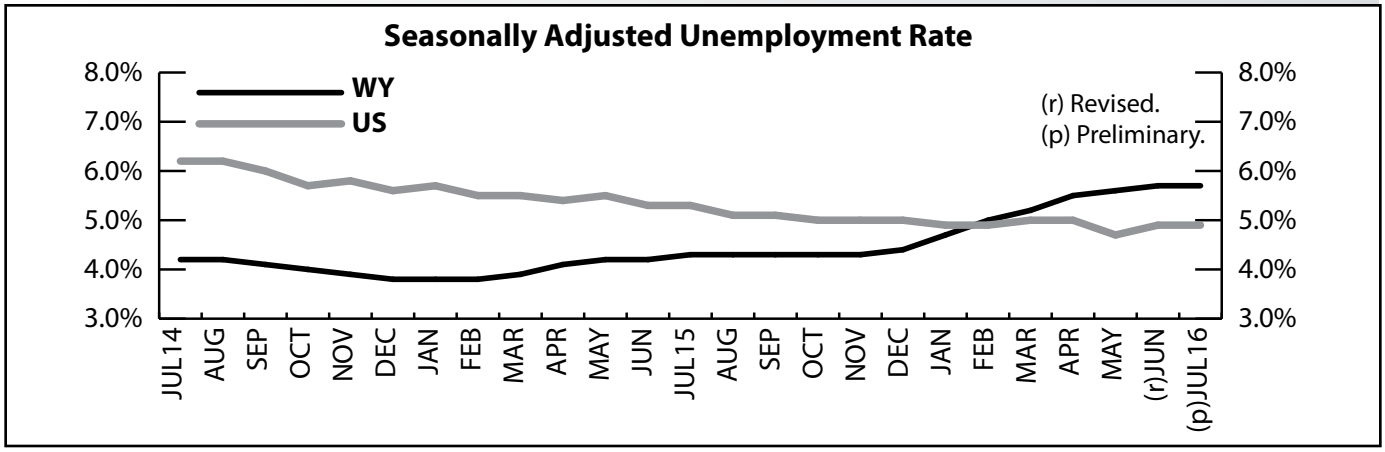
On the other hand, Wyoming experienced its normal over the month unemployment rate decrease. Employment often increases in July in many industry sectors including leisure & hospitality, construction, and professional & business services. The largest unemployment rate decreases were seen in Lincoln (down from 4.5% to 3.9%), Big Horn (down from 5.3% to 4.7%), Weston (down from 5.8% to 5.3%), Uinta (down from 6.2% to 5.7%), and Teton (down from 2.6% to 2.1%) counties. Niobrara County's unemployment rate rose very slightly from 3.4% to 3.5% and Sublette County's unemployment rate was unchanged at 5.7%.

From July 2015 to July 2016, unemployment rates rose in most counties. The two exceptions were Teton County, where unemployment fell from 2.2% to 2.1% and Lincoln County where unemployment was unchanged from a year earlier (3.9%). The largest increases occurred in Campbell (up from 3.8% to 7.5%) and Converse (up from 3.4% to 6.5%) counties.

In July 2016, eight counties had unemployment rates that were higher than the statewide not seasonally adjusted average of 5.2% and 15 counties had lower unemployment rates. The highest unemployment rates were found in Campbell (7.5%), Natrona (7.3%), Fremont (7.1%), and Converse (6.5%) counties. The lowest unemployment rates were reported in Teton (2.1%), Niobrara (3.5%), Goshen (3.5%), and Albany (3.5%) counties.

Total nonfarm employment (not seasonally adjusted and measured by place of work) fell from 297,200 in July 2015 to 288,900 in July 2016, a decrease of 8,300 jobs (or –2.8%; a statistically significant decrease).

1 Seasonal adjustment is a statistical procedure to remove the impact of normal regularly recurring events (such as weather, major holidays, and the opening and closing of schools) from economic time series to better understand changes in economic conditions from month to month.



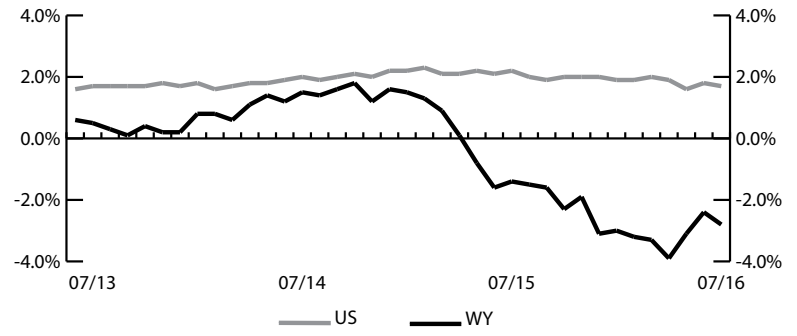
Current Employment Statistics (CES) Estimates and Research & Planning's Short-Term Projections, July 2016

by: David Bullard, Senior Economist

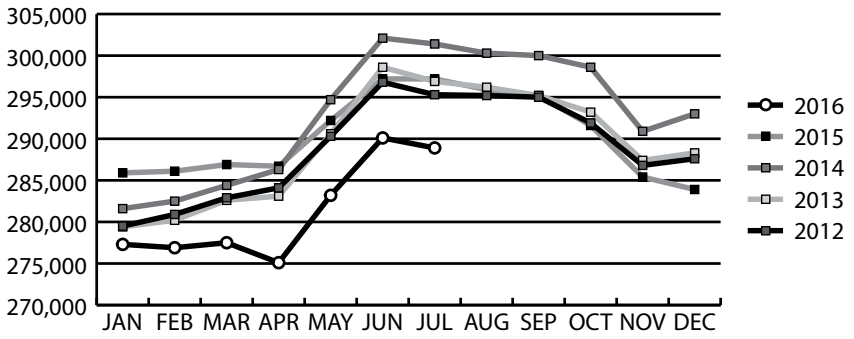
Industry Sector	Research & Planning's Short-Term Projections	Current Employment Statistics (CES) Estimates	N Difference	% Difference
Total Nonfarm	**288,798**	**288,900**	**102**	**0.0%**
Natural Resources & Mining	18,482	18,900	418	2.2%
Construction	23,922	23,000	-922	-4.0%
Manufacturing	9,393	9,800	407	4.2%
Wholesale Trade	8,837	8,200	-637	-7.8%
Retail Trade	32,319	32,200	-119	-0.4%
Transportation & Utilities	14,455	14,300	-155	-1.1%
Information	3,830	3,600	-230	-6.4%
Financial Activities	11,023	10,800	-223	-2.1%
Professional & Business Services	18,788	19,400	612	3.2%
Educational & Health Services	26,715	27,000	285	1.1%
Leisure & Hospitality	42,358	43,400	1,042	2.4%
Other Services	10,049	10,500	451	4.3%
Government	68,627	67,800	-827	-1.2%

Projections were run in August 2016 and based on QCEW data through March 2016.

Nonagricultural Employment Growth (Percentage Change Over Previous Year)



Wyoming Nonagricultural Wage and Salary Employment



State Unemployment Rates July 2016 (Seasonally Adjusted)

State	Unemp. Rate
Puerto Rico	11.4
Alaska	6.7
Nevada	6.5
New Mexico	6.4
Louisiana	6.3
Arizona	6.0
Mississippi	6.0
District of Columbia	5.9
Illinois	5.8
Washington	5.8
Alabama	5.7
Connecticut	5.7
West Virginia	5.7
Wyoming	**5.7**
Pennsylvania	5.6
California	5.5
Rhode Island	5.5
New Jersey	5.2
Oregon	5.2
South Carolina	5.2
Georgia	5.0
Oklahoma	5.0
Kentucky	4.9
United States	**4.9**
Ohio	4.8
Florida	4.7
Missouri	4.7
New York	4.7
North Carolina	4.7
Indiana	4.6
Texas	4.6
Michigan	4.5
Delaware	4.3
Maryland	4.3
Tennessee	4.3
Montana	4.2
Wisconsin	4.2
Iowa	4.1
Kansas	4.1
Massachusetts	4.1
Arkansas	3.9
Maine	3.9
Minnesota	3.9
Utah	3.9
Colorado	3.8
Idaho	3.8
Virginia	3.7
Hawaii	3.5
Vermont	3.2
Nebraska	3.1
North Dakota	3.1
New Hampshire	2.9
South Dakota	2.8

Wyoming Nonagricultural Wage and Salary Employment

by: David Bullard, Senior Economist

	Employment in Thousands			% Change Total Employment	
	Jul 16	Jun 16	Jul 15	Jul 16 Jun 16	Jul 16 Jul 15
CAMPBELL COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**27.0**	**27.2**	**28.7**	**-0.7**	**-5.9**
TOTAL PRIVATE	22.0	21.7	23.8	1.4	-7.6
GOODS PRODUCING	9.4	9.2	10.8	2.2	-13.0
Natural Resources & Mining	6.4	6.4	7.4	0.0	-13.5
Construction	2.5	2.3	2.7	8.7	-7.4
Manufacturing	0.5	0.5	0.7	0.0	-28.6
SERVICE PROVIDING	17.6	18.0	17.9	-2.2	-1.7
Trade, Transportation, & Utilities	5.8	5.7	5.9	1.8	-1.7
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.7	0.7	0.7	0.0	0.0
Professional & Business Services	1.6	1.6	1.8	0.0	-11.1
Educational & Health Services	1.1	1.1	1.1	0.0	0.0
Leisure & Hospitality	2.4	2.4	2.5	0.0	-4.0
Other Services	0.8	0.8	0.8	0.0	0.0
GOVERNMENT	5.0	5.5	4.9	-9.1	2.0

	Employment in Thousands			% Change Total Employment	
	Jul 16	Jun 16	Jul 15	Jul 16 Jun 16	Jul 16 Jul 15
SWEETWATER COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**22.9**	**23.2**	**23.8**	**-1.3**	**-3.8**
TOTAL PRIVATE	18.8	18.5	19.8	1.6	-5.1
GOODS PRODUCING	7.4	7.4	8.1	0.0	-8.6
Natural Resources & Mining	4.4	4.4	5.0	0.0	-12.0
Construction	1.6	1.6	1.7	0.0	-5.9
Manufacturing	1.4	1.4	1.4	0.0	0.0
SERVICE PROVIDING	15.5	15.8	15.7	-1.9	-1.3
Trade, Transportation, & Utilities	4.8	4.7	5.0	2.1	-4.0
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.8	0.8	0.9	0.0	-11.1
Professional & Business Services	1.0	1.0	1.1	0.0	-9.1
Educational & Health Services	1.3	1.3	1.3	0.0	0.0
Leisure & Hospitality	2.6	2.5	2.5	4.0	4.0
Other Services	0.7	0.6	0.7	16.7	0.0
GOVERNMENT	4.1	4.7	4.0	-12.8	2.5

	Employment in Thousands			% Change Total Employment	
	Jul 16	Jun 16	Jul 15	Jul 16 Jun 16	Jul 16 Jul 15
TETON COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**23.8**	**23.0**	**23.2**	**3.5**	**2.6**
TOTAL PRIVATE	21.4	20.3	20.9	5.4	2.4
GOODS PRODUCING	2.6	2.6	2.3	0.0	13.0
Natural Resources, Mining & Construction	2.4	2.4	2.1	0.0	14.3
Manufacturing	0.2	0.2	0.2	0.0	0.0
SERVICE PROVIDING	21.2	20.4	20.9	3.9	1.4
Trade, Transportation, & Utilities	3.3	3.2	3.3	3.1	0.0
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	1.0	1.0	1.0	0.0	0.0
Professional & Business Services	2.1	2.1	2.1	0.0	0.0
Educational & Health Services	1.3	1.2	1.2	8.3	8.3
Leisure & Hospitality	10.4	9.5	10.2	9.5	2.0
Other Services	0.5	0.5	0.6	0.0	-16.7
GOVERNMENT	2.4	2.7	2.3	-11.1	4.3

State Unemployment Rates July 2016 (Not Seasonally Adjusted)

State	Unemp. Rate
Puerto Rico	12.6
New Mexico	7.1
Louisiana	6.9
Mississippi	6.5
Nevada	6.5
Arizona	6.3
District of Columbia	6.2
Alaska	6.1
Pennsylvania	6.1
California	5.9
Alabama	5.8
Oregon	5.7
Washington	5.7
Connecticut	5.6
Illinois	5.6
New Jersey	5.6
Rhode Island	5.6
West Virginia	5.5
Georgia	5.4
Michigan	5.4
South Carolina	5.4
Kentucky	5.2
Missouri	5.2
Oklahoma	5.2
Wyoming	**5.2**
Florida	5.1
Texas	5.1
United States	**5.1**
New York	5.0
North Carolina	5.0
Kansas	4.9
Tennessee	4.9
Ohio	4.8
Maryland	4.6
Delaware	4.5
Indiana	4.4
Arkansas	4.3
Wisconsin	4.1
Iowa	4.0
Massachusetts	4.0
Virginia	4.0
Montana	3.9
Utah	3.9
Maine	3.7
Minnesota	3.7
Colorado	3.6
Idaho	3.6
Nebraska	3.5
Hawaii	3.4
Vermont	3.4
New Hampshire	2.9
North Dakota	2.8
South Dakota	2.5

Economic Indicators

by: David Bullard, Senior Economist

The Baker Hughes rig count for Wyoming rose from 7 in June to 8 in July.

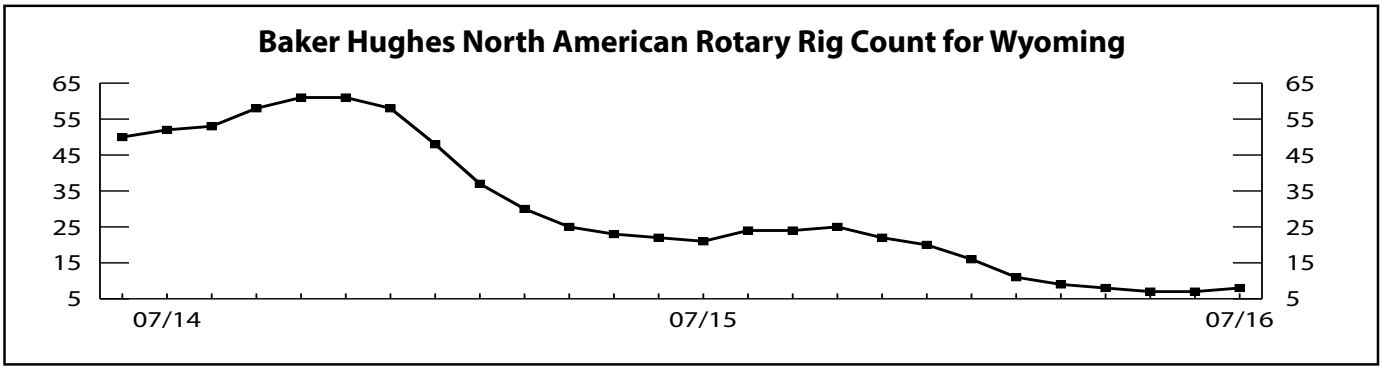
	Jul 2016 (p)	Jun 2016 (r)	Jul 2015 (b)	Percent Change Month	Year
Wyoming Total Nonfarm Employment	**288,900**	**290,100**	**297,200**	**-0.4**	**-2.8**
Wyoming State Government	14,700	14,900	15,000	-1.3	-2.0
Laramie County Nonfarm Employment	46,700	46,900	47,800	-0.4	-2.3
Natrona County Nonfarm Employment	39,700	40,200	41,500	-1.2	-4.3
Selected U.S. Employment Data					
U.S. Multiple Jobholders	7,190,000	7,059,000	6,997,000	1.9	2.8
As a percent of all workers	4.7%	4.6%	4.7%	N/A	N/A
U.S. Discouraged Workers	591,000	502,000	668,000	17.7	-11.5
U.S. Part Time for Economic Reasons	6,157,000	6,119,000	6,511,000	0.6	-5.4
Wyoming Unemployment Insurance					
Weeks Compensated	21,856	29,440	17,456	-25.8	25.2
Benefits Paid	$9,047,466	$12,277,637	$7,055,061	-26.3	28.2
Average Weekly Benefit Payment	$413.96	$415.34	$404.16	-0.3	2.4
State Insured Covered Jobs[1]	277,502	282,226	275,426	-1.7	0.8
Insured Unemployment Rate	2.8%	3.1%	2.3%	N/A	N/A
Consumer Price Index (U) for All U.S. Urban Consumers					
(1982 to 1984 = 100)					
All Items	240.6	241.0	238.7	-0.2	0.8
Food & Beverages	247.3	247.2	246.6	0.0	0.3
Housing	244.9	244.3	239.1	0.3	2.4
Apparel	123.0	125.5	122.6	-1.9	0.3
Transportation	197.1	200.3	207.2	-1.6	-4.9
Medical Care	464.6	462.5	446.8	0.4	4.0
Recreation (Dec. 1997=100)	117.4	117.6	116.4	-0.2	0.9
Education & Communication (Dec. 1997=100)	138.8	138.9	137.6	-0.1	0.9
Other Goods & Services	423.4	422.9	415.4	0.1	1.9
Producer Prices (1982 to 1984 = 100)					
All Commodities	187.3	187.4	193.9	-0.1	-3.4
Wyo. Bldg. Permits (New Privately Owned Housing Units Authorized)					
Total Units	155	176	203	-11.9	-23.6
Valuation	$43,010,000	$55,120,000	$57,024,000	-22.0	-24.6
Single Family Homes	134	171	181	-21.6	-26.0
Valuation	$41,627,000	$54,386,000	$54,790,000	-23.5	-24.0
Casper MSA[2] Building Permits	14	20	24	-30.0	-41.7
Valuation	$3,334,000	$4,496,000	$6,094,000	-25.8	-45.3
Cheyenne MSA Building Permits	44	41	76	7.3	-42.1
Valuation	$7,426,000	$7,531,000	$12,204,000	-1.4	-39.2
Baker Hughes North American Rotary Rig Count for Wyoming	8	7	21	14.3	-61.9

(p) Preliminary. (r) Revised. (b) Benchmarked.

[1]Local Area Unemployment Statistics Program estimates.

[2]Metropolitan Statistical Area.

Note: Production worker hours and earnings data have been dropped from the Economic Indicators page because of problems with accuracy due to a small sample size and high item nonresponse. The Bureau of Labor Statistics will continue to publish these data online at http://www.bls.gov/eag/eag.wy.htm.



Wyoming County Unemployment Rates

by: Carola Cowan, BLS Programs Supervisor

In July 2016, the lowest unemployment rates were reported in Teton (2.1%), Niobrara (3.5%), Goshen (3.5%), and Albany (3.5%) counties.

	Labor Force			Employed			Unemployed			Unemployment Rates		
REGION	Jul 2016	Jun 2016	Jul 2015	Jul 2016	Jun 2016	Jul 2015	Jul 2016	Jun 2016	Jul 2015	Jul 2016	Jun 2016	Jul 2015
County	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)
NORTHWEST	**49,726**	**50,339**	**50,770**	**47,074**	**47,476**	**48,584**	**2,652**	**2,863**	**2,186**	**5.3**	**5.7**	**4.3**
Big Horn	5,676	5,792	5,861	5,412	5,485	5,622	264	307	239	4.7	5.3	4.1
Fremont	19,845	20,536	20,396	18,434	19,048	19,286	1,411	1,488	1,110	7.1	7.2	5.4
Hot Springs	2,451	2,494	2,455	2,336	2,367	2,366	115	127	89	4.7	5.1	3.6
Park	17,453	17,215	17,638	16,790	16,482	17,057	663	733	581	3.8	4.3	3.3
Washakie	4,301	4,302	4,420	4,102	4,094	4,253	199	208	167	4.6	4.8	3.8
NORTHEAST	**53,563**	**54,188**	**54,535**	**50,436**	**50,823**	**52,555**	**3,127**	**3,365**	**1,980**	**5.8**	**6.2**	**3.6**
Campbell	25,139	25,148	26,028	23,265	23,171	25,049	1,874	1,977	979	7.5	7.9	3.8
Crook	3,906	3,993	3,874	3,734	3,803	3,762	172	190	112	4.4	4.8	2.9
Johnson	4,415	4,488	4,414	4,209	4,274	4,230	206	214	184	4.7	4.8	4.2
Sheridan	16,194	16,530	16,335	15,527	15,780	15,746	667	750	589	4.1	4.5	3.6
Weston	3,909	4,029	3,884	3,701	3,795	3,768	208	234	116	5.3	5.8	3.0
SOUTHWEST	**61,604**	**61,516**	**62,547**	**58,728**	**58,338**	**60,138**	**2,876**	**3,178**	**2,409**	**4.7**	**5.2**	**3.9**
Lincoln	8,766	8,986	8,663	8,424	8,580	8,324	342	406	339	3.9	4.5	3.9
Sublette	4,565	4,836	4,720	4,303	4,560	4,504	262	276	216	5.7	5.7	4.6
Sweetwater	21,549	21,758	22,393	20,181	20,276	21,363	1,368	1,482	1,030	6.3	6.8	4.6
Teton	17,157	16,436	17,060	16,795	16,009	16,682	362	427	378	2.1	2.6	2.2
Uinta	9,567	9,500	9,711	9,025	8,913	9,265	542	587	446	5.7	6.2	4.6
SOUTHEAST	**80,372**	**80,778**	**82,831**	**77,268**	**77,280**	**79,998**	**3,104**	**3,498**	**2,833**	**3.9**	**4.3**	**3.4**
Albany	19,284	19,712	19,555	18,617	18,923	18,930	667	789	625	3.5	4.0	3.2
Goshen	7,174	7,230	7,271	6,924	6,962	7,045	250	268	226	3.5	3.7	3.1
Laramie	47,720	47,349	49,544	45,812	45,211	47,788	1,908	2,138	1,756	4.0	4.5	3.5
Niobrara	1,389	1,401	1,384	1,340	1,353	1,341	49	48	43	3.5	3.4	3.1
Platte	4,805	5,086	5,077	4,575	4,831	4,894	230	255	183	4.8	5.0	3.6
CENTRAL	**57,508**	**58,167**	**60,115**	**53,656**	**54,018**	**57,522**	**3,852**	**4,149**	**2,593**	**6.7**	**7.1**	**4.3**
Carbon	8,452	8,823	9,201	8,103	8,433	8,920	349	390	281	4.1	4.4	3.1
Converse	8,076	8,390	8,252	7,550	7,819	7,975	526	571	277	6.5	6.8	3.4
Natrona	40,980	40,954	42,662	38,003	37,766	40,627	2,977	3,188	2,035	7.3	7.8	4.8
STATEWIDE	**302,773**	**304,987**	**310,796**	**287,163**	**287,934**	**298,796**	**15,610**	**17,053**	**12,000**	**5.2**	**5.6**	**3.9**
Statewide Seasonally Adjusted										5.7	5.7	4.3
U.S.										5.1	5.1	5.6
U.S. Seasonally Adjusted										4.9	4.9	5.3

Prepared in cooperation with the Bureau of Labor Statistics. Benchmarked 03/2016. Run Date 08/2016.

Data are not seasonally adjusted except where otherwise specified.

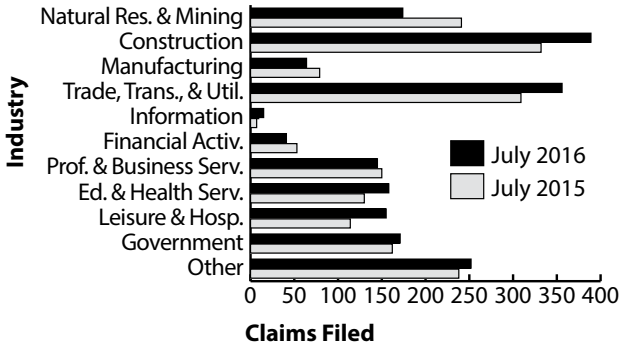
(p) Preliminary. (r) Revised. (b) Benchmarked.

Wyoming Normalized[a] Unemployment Insurance Statistics: Initial Claims

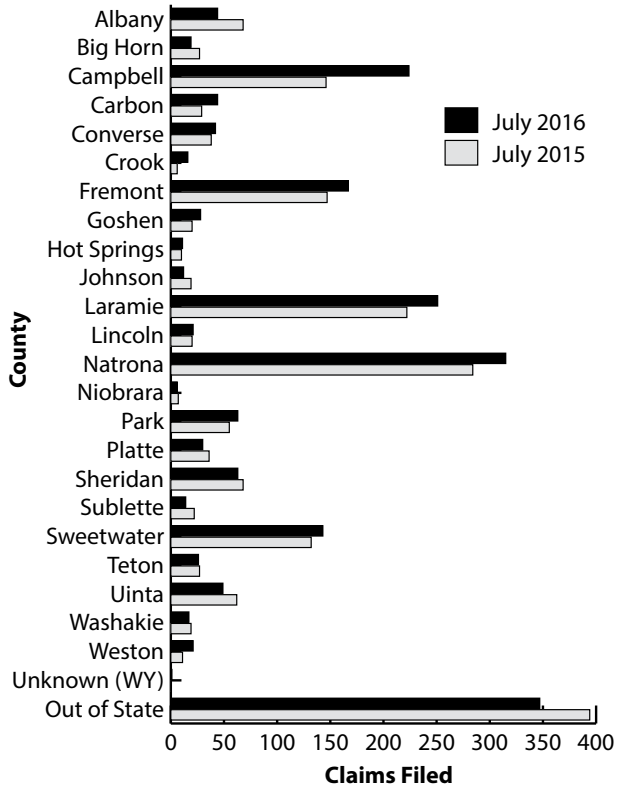
by: Sherry Wen, Principal Economist

Initial claims increased 5.7% (107 claims) from July 2015. Claims in the mining sector decreased by 33.1% (-78 claims) over the year.

Initial Unemployment Insurance Claims by Industry, July 2016



Initial Unemployment Insurance Claims by County, July 2016



Initial Claims

	Claims Filed			Percent Change Claims Filed	
	Jul 16	Jun 16	Jul 15	Jul 16 Jun 16	Jul 16 Jul 15
Wyoming Statewide					
TOTAL CLAIMS FILED	**1,975**	**2,411**	**1,868**	**-18.1**	**5.7**
TOTAL GOODS-PRODUCING	628	940	653	-33.2	-3.8
Natural Res. & Mining	174	323	241	-46.1	-27.8
Mining	158	310	236	-49.0	-33.1
Oil & Gas Extraction	21	17	33	23.5	-36.4
Construction	389	493	332	-21.1	17.2
Manufacturing	64	122	79	-47.5	-19.0
TOTAL SERVICE-PROVIDING	923	1,004	814	-8.1	13.4
Trade, Transp., & Utilities	356	370	309	-3.8	15.2
Wholesale Trade	95	103	68	-7.8	39.7
Retail Trade	186	151	122	23.2	52.5
Transp., Warehousing & Utilities	75	116	119	-35.3	-37.0
Information	15	14	7	7.1	114.3
Financial Activities	41	44	53	-6.8	-22.6
Prof. and Business Svcs.	145	135	150	7.4	-3.3
Educational & Health Svcs.	158	223	130	-29.1	21.5
Leisure & Hospitality	155	154	114	0.6	36.0
Other Svcs., exc. Public Admin.	46	58	45	-20.7	2.2
TOTAL GOVERNMENT	171	154	162	11.0	5.6
Federal Government	19	25	24	-24.0	-20.8
State Government	14	16	20	-12.5	-30.0
Local Government	137	112	117	22.3	17.1
Local Education	35	56	34	-37.5	2.9
UNCLASSIFIED	252	312	238	-19.2	5.9
Laramie County					
TOTAL CLAIMS FILED	**251**	**245**	**221**	**2.4**	**13.6**
TOTAL GOODS-PRODUCING	85	92	65	-7.6	30.8
Construction	62	47	43	31.9	44.2
TOTAL SERVICE-PROVIDING	141	128	131	10.2	7.6
Trade, Transp., & Utilities	49	51	38	-3.9	28.9
Financial Activities	7	8	11	-12.5	-36.4
Prof. & Business Svcs.	24	12	45	100.0	-46.7
Educational & Health Svcs.	25	28	14	-10.7	78.6
Leisure & Hospitality	22	14	11	57.1	100.0
TOTAL GOVERNMENT	14	16	14	-12.5	0.0
UNCLASSIFIED	9	8	9	12.5	0.0
Natrona County					
TOTAL CLAIMS FILED	**315**	**431**	**284**	**-26.9**	**10.9**
TOTAL GOODS-PRODUCING	93	186	108	-50.0	-13.9
Construction	45	80	31	-43.8	45.2
TOTAL SERVICE-PROVIDING	198	219	160	-9.6	23.8
Trade, Transp., & Utilities	71	86	68	-17.4	4.4
Financial Activities	7	8	8	-12.5	-12.5
Prof. & Business Svcs.	26	24	27	8.3	-3.7
Educational & Health Svcs.	43	42	28	2.4	53.6
Leisure & Hospitality	32	31	15	3.2	113.3
TOTAL GOVERNMENT	12	12	7	0.0	71.4
UNCLASSIFIED	10	12	7	-16.7	42.9

[a]An average month is considered 4.33 weeks. If a month has four weeks, the normalization factor is 1.0825. If the month has five weeks, the normalization factor is 0.866. The number of raw claims is multiplied by the normalization factor to achieve the normalized claims counts.

Wyoming Normalized[a] Unemployment Insurance Statistics: Continued Claims

by: Sherry Wen, Principal Economist

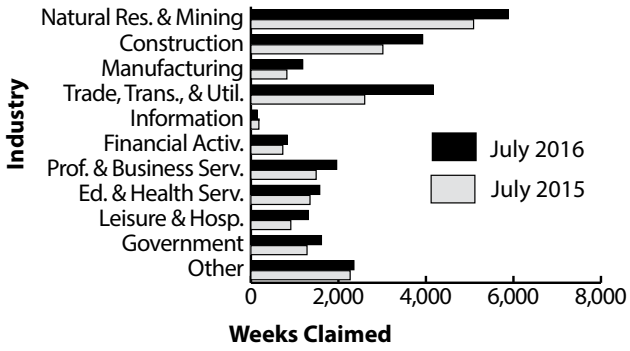
Over the year, the number of unique claimants with continued claims increased 49.5% (2,388 workers). Total continued weeks claimed increased by 26.3% (5,336 weeks claimed).

Continued Claims

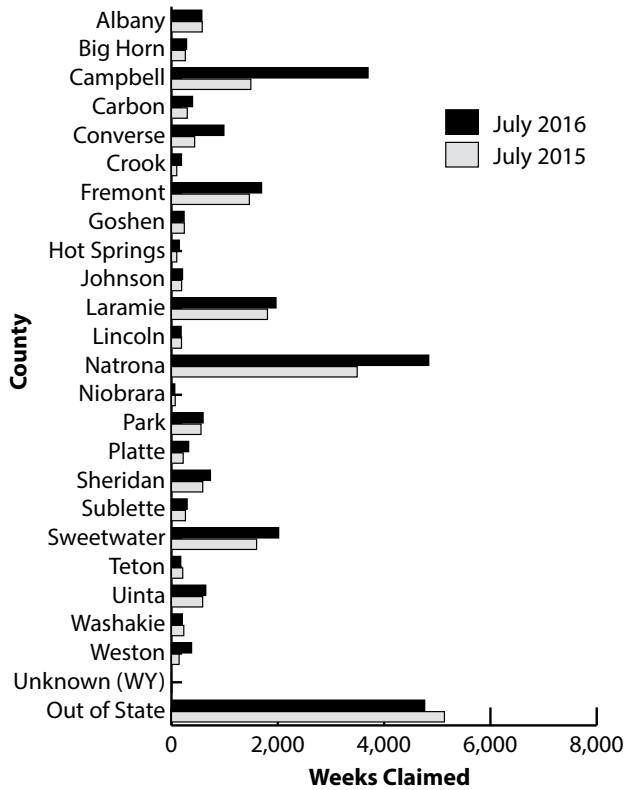
	Claims Filed			Percent Change Claims Filed	
	Jul 16	Jun 16	Jul 15	Jul 16 Jun 16	Jul 16 Jul 15
Wyoming Statewide					
TOTAL WEEKS CLAIMED	**25,610**	**28,868**	**20,274**	**-11.3**	**26.3**
TOTAL UNIQUE CLAIMANTS	7,212	7,112	4,824	1.4	49.5
Benefit Exhaustions	610	548	419	11.3	45.6
Benefit Exhaustion Rates	8.5%	7.7%	8.7%	0.8%	-0.2%
TOTAL GOODS-PRODUCING	10,990	13,035	8,929	-15.7	23.1
Natural Res. & Mining	5,880	7,036	5,089	-16.4	15.5
Mining	5,758	6,903	5,015	-16.6	14.8
Oil & Gas Extraction	517	617	474	-16.2	9.1
Construction	3,925	4,595	3,016	-14.6	30.1
Manufacturing	1,184	1,402	822	-15.5	44.0
TOTAL SERVICE-PROVIDING	10,652	11,865	7,794	-10.2	36.7
Trade, Transp., & Utilities	4,166	4,748	2,601	-12.3	60.2
Wholesale Trade	1,503	1,641	766	-8.4	96.2
Retail Trade	1,307	1,298	783	0.7	66.9
Transp., Warehousing & Utilities	1,356	1,809	1,052	-25.0	28.9
Information	142	148	182	-4.1	-22.0
Financial Activities	829	923	729	-10.2	13.7
Prof. & Business Services	1,960	2,228	1,491	-12.0	31.5
Educational & Health Svcs.	1,573	1,326	1,351	18.6	16.4
Leisure and Hospitality	1,310	1,735	912	-24.5	43.6
Other Svcs., exc. Public Admin.	664	749	521	-11.3	27.4
TOTAL GOVERNMENT	1,612	1,632	1,283	-1.2	25.6
Federal Government	216	252	219	-14.3	-1.4
State Government	189	208	202	-9.1	-6.4
Local Government	1,206	1,170	860	3.1	40.2
Local Education	400	279	269	43.4	48.7
UNCLASSIFIED	2,354	2,334	2,268	0.9	3.8
Laramie County					
TOTAL WEEKS CLAIMED	**1,966**	**2,165**	**1,806**	**-9.2**	**8.9**
TOTAL UNIQUE CLAIMANTS	**573**	**537**	**445**	**6.7**	**28.8**
TOTAL GOODS-PRODUCING	532	586	432	-9.2	23.1
Construction	264	329	264	-19.8	0.0
TOTAL SERVICE-PROVIDING	1,135	1,268	1,053	-10.5	7.8
Trade, Transp., and Utilities	361	433	328	-16.6	10.1
Financial Activities	81	79	87	2.5	-6.9
Prof. & Business Svcs.	222	244	212	-9.0	4.7
Educational and Health Svcs.	247	224	240	10.3	2.9
Leisure & Hospitality	135	166	90	-18.7	50.0
TOTAL GOVERNMENT	195	194	209	0.5	-6.7
UNCLASSIFIED	102	116	111	-12.1	-8.1
Natrona County					
TOTAL WEEKS CLAIMED	**4,839**	**5,462**	**3,494**	**-11.4**	**38.5**
TOTAL UNIQUE CLAIMANTS	**1,353**	**1,333**	**815**	**1.5**	**66.0**
TOTAL GOODS-PRODUCING	2,094	2,494	1,764	-16.0	18.7
Construction	571	755	349	-24.4	63.6
TOTAL SERVICE-PROVIDING	2,530	2,772	1,576	-8.7	60.5
Trade, Transp., and Utilities	1,160	1,315	578	-11.8	100.7
Financial Activities	173	226	159	-23.5	8.8
Professional & Business Svcs.	358	405	318	-11.6	12.6
Educational & Health Svcs.	373	330	214	13.0	74.3
Leisure & Hospitality	238	254	126	-6.3	88.9
TOTAL GOVERNMENT	130	109	71	19.3	83.1
UNCLASSIFIED	83	86	83	-3.5	0.0

[a]An average month is considered 4.33 weeks. If a month has four weeks, the normalization factor is 1.0825. If the month has five weeks, the normalization factor is 0.866. The number of raw claims is multiplied by the normalization factor to achieve the normalized claims counts.

Continued Unemployment Insurance Claims by Industry, July 2016



Continued Unemployment Insurance Claims by County, July 2016



Wyoming Department of Workforce Services, Research & Planning
P.O. Box 2760
Casper, WY 82602

Official Business
Penalty for Private Use $300
Return Service Requested

PRSRT STD
US POSTAGE PAID
CASPER WY
PERMIT NO. 100