

# Administrative Records Sharing Between LMI Offices; Advancing the Cause

A Report from the January 2014 LMI  
Sub-Committee

December 2014

National Association of State Workforce Agencies

January 2014 Sub-Committee Members:  
Montana, Nebraska, South Dakota, Wyoming

## NASWA Subcommittee Report, December 2014

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Administrative Records Sharing Between LMI Offices; Advancing the Cause

A Report from the January 2014 LMI Sub-Committee

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The January 29, 2014 Meeting Report for the Labor Market Information Committee conference call reflects the fact that a sub-committee was formed to identify “Cross-State Data Sharing Practices and Recommendations.” Sub-committee members from Montana, Nebraska, South Dakota, and Wyoming’s LMI offices participated in several conference calls. A representative of New Jersey participated in one conference call. A draft version of this report was introduced without committee discussion to the LMI Committee at its November 6-7, 2014 meeting in Denver. Recommendations were not presented. Insofar as a new sub-committee was formed relating to administrative records, the January sub-committee determined to present its findings and recommendations for consideration by the full LMI Committee at its earliest convenience.

Administrative records can be useful for statistical purposes to improve program administration. As such, administrative records are a strategic asset. This paper proposes capitalizing on this strategic asset through inter-state data sharing.

State LMI offices are located in workforce agencies authorized to operate programs that generate administrative data under U.S. Department of Labor (DOL) oversight. These administrative data include labor exchange, Unemployment Insurance (UI) employer and worker records, including UI claims, and often, training records developed with federal and state funds. All state workforce offices operate under common federal regulations relating to security, confidentiality, and appropriate use of these administrative data. The position of LMI offices within these state agencies requires that they develop domain-unique knowledge about these administrative records. In addition, LMI offices are required to understand how administrative records systems respond to the economy as an organizational imperative. The organizational position of LMI offices represents a unique opportunity to exploit the nation-wide system of administrative records from employment and training programs to improve program administration. Of equal importance, under WIOA, are the linkages of these state agencies to the domain of state and local education.

The question of whether or not training and employment programs produce benefits (e.g. expedited re-employment of UI claimants), or merely reflect the economy is central to the implementation of federal

and state workforce initiatives. Separating training from economic effects means comparing earnings outcomes for training participants to comparison groups of comparable individuals who do not receive training across the business cycle and over the course of career development. (WRIS does not allow for the tracking of comparison groups.) Unbiased tracking of outcomes over meaningful segments of the business cycle (see Appendix A p. A25-A29) and careers requires the capacity to track individuals across states. The sub-committee finds, then, that inter-state data sharing between LMI offices is an essential component of the capacity to support the evaluation of employment, training, and under WIOA, educational programs.

As illustrated later in Appendix A, inter-state data sharing agreements are essential to answering a range of important questions such as: Are we retaining our well educated youth? Do dislocated workers find work here upon completion of re-training? Do UI claimants become re-employed within our borders? And, under WIOA: How are inter-state regional economies using training provider resources for economic success? (How do we validate inter-state regional occupation projections without data sharing agreements?) Most LMI offices are not prepared to respond quickly to economic development, or legislative proposals, environmental impacts, or security issues that span novel inter-state geographic regions. An example of one regional development is documented in Appendix B. Finding: Inter-state data sharing agreements represent an investment in the capacity of states to adapt to unanticipated change.

Despite the essential function of inter-state data sharing and its critical role in the state LMI infrastructure, the subcommittee could identify fewer than 20 states involved in any inter-state data sharing agreements. Many of those agreements are held by the states who prepared this report. It is unclear at this point to what extent the challenges to the development of agreements are a function of technical capacity, a lack of operational expertise, or the complexity of developing and executing agreements, or some other factor(s). What is evident is that successful implementation of WIOA depends on having at least regional agreements in place. Therefore, the sub-committee finds that a way must be found to mitigate these challenges to facilitate both program evaluation and regional LMI systems.

Congress encourages cooperative agreements between states to improve employment and training program outcomes (see WIA section 191(b)). In addition, DOL has traditionally supported the provision of UI records to public officials in the performance of their duties, "Since the 1970s, the Department's guidance to States has recognized this exception, which allows for a variety of uses of confidential UC

information that the Department believes are beneficial ... program assessment (for example, of WIA and Vocational Education programs), and research.”<sup>i</sup> Moreover, WIOA requires program evaluation (see Excerpts). Clearly, there is consensus at the federal level supporting the benefits of the secure sharing of UI records between public officials in the performance of their duties. The sub-committee finds, however, that there is no institutional framework in place among the states supporting the efficient establishment of UI administrative data sharing agreements between state LMI offices for research and evaluation purposes.

The purpose of LMI is to enhance the efficiency of the labor market through improved decision making among all parties in the labor market. The use of UI administrative records to accomplish this goal means: using administrative (UI) data to enhance employment security for job seekers and reduce employer tax burden. To facilitate this practice, the Employment and Training Administration promulgated rules at 20 CFR Part 603 to ensure appropriate use of UI records for enforcement purposes, i.e. by requiring that State UI Agencies provide wage records information to the administrators of means-tested programs such as TANF, SNAP, subsidized housing etc., and for statistical or research purposes.

WIOA left in-tact the provisions of WIA guaranteeing that administrative records acquired by state LMI offices restricting the use of administrative records to statistical purposes. Therefore, the subcommittee finds that Congress continues to support statistical use of administrative records, and that DOL has produced the necessary standards in Federal Code (20 CFR Part 603) to which state law must conform. States have the incentive -- improved program administration -- and the statutory opportunity to engage in inter-state data sharing.

Federal Code advances the opportunities to use UI administrative records for statistical purposes and WIOA ensures that the only use that LMI offices can make of them is for statistical purposes. Moreover, WIOA encourages inter-state data sharing in a variety of ways. As identified in the Excerpts from WIOA that follow, states are required to track participant progress not only through the employment and training process, but through the formal education system and into the workforce. WIOA also creates the opportunity for the delivery of workforce and education services at the inter-state level as well as continuing the mandate for evaluation. All of these functions require the use of LMI. The question is one of the extent to which LMI operations become part of the substance of these functions or remain on the sidelines providing descriptive statistics.

The benefits of data sharing extend beyond expanding the capacity to address each state's critical questions about the workforce development system. Data sharing can lead to enhanced opportunities to analyze research strategies and findings between states, encourage replication of research as a key to enhancing the quality of evaluations, and encourage the development of joint solutions to common problems. Systematically obtaining these benefits and strengthening relationships between states requires steps to foster the development of opportunities for inter-state data sharing agreements and incorporating a process for monitoring the impact of this initiative.

The sub-committee's recommendation to the LMI Committee focuses on mitigating the complexity of developing and executing data sharing agreements between LMI offices. The sub-committee requests that the following be submitted to the Board of NASWA:

The LMI Committee recommends that the Board charter a small number of LMI directors (n=3 to 5), an equal number of Executive Directors or UI Directors, and State counsel chartered to: develop a NASWA endorsed generic inter-state data sharing agreement that would incorporate standards for adding state specific modifications found in statute and / or regulation; and solicit the input of ETA (and potentially obtain certification from the Secretary that the generic agreement meets or exceeds the requirements of 20 CFR Part 603), BLS, and other affected and interested parties. The charter should have as its goal the reduction of barriers to inter-state agreements through adoption of a model, generic, agreement form. An initiative to make inter-state data sharing between LMI offices more efficient should be accompanied by a formal endorsement of the Board indicating its support for cooperation between states as a valued mechanism toward meeting the goals of implementing WIOA.

Finally, the sub-committee recommends that the current LMI committee assign to one of its current sub-committees the task of exploring and reporting on the value of intra- as well as inter-state data sharing agreements extending beyond the UI system. Some states avoid the necessity of conducting household surveys by obtaining demographics from drivers' license files. Other states, including those with WDQI grants, have incorporated education and social service administrative data into their research strategies. In a sense, these efforts precede the requirements of section 122. The sub-committee should be asked to address the question of how state experience in the use of administrative records could be transferred to others most effectively.

<sup>1</sup> Part VIII Department of Labor, Employment and Training Administration, 20 CFR Part 603 Federal-State Unemployment Compensation Program (UC); Confidentiality and Disclosure of State UC Information; Final Rule. Federal Register Vol. 71, No. 187, September 27, 2006 p. 56836.

SELECTED EXCERPTS from the WORKFORCE INNOVATION AND OPPORTUNITY ACT (WIOA)

HR 803 (WIOA)

Section 102 Unified State Plan.

(C) STATE OPERATING SYSTEMS AND POLICIES.—The unified State plan shall describe the State operating systems and policies that will support ...

(iv)(II) how ...[the lead State agencies]... will use the workforce development system to assess the progress of participants that are exiting from core programs in entering, persisting in, and completing postsecondary education, or entering or remaining in employment;

Section 106 Workforce Development Areas

(a) REGIONS---

(1) IDENTIFICATION.--- Before the second full program year ... a State shall identify regions in the State ...

(2) TYPES OF REGIONS.--- For purposes of this Act, the State shall identify---

(C) which, of the regions described in subparagraph (B), are interstate areas contained within 2 or more States, and consist of labor market areas, economic development areas, or other appropriate contiguous subareas of those States.

(c) REGIONAL COORDINATION.---

(1) REGIONAL PLANNING.--- The local boards ... in each planning region described in subparagraph (B) or (C) of subsection (a)(2) shall engage in a regional planning process that results in---

(C) the development and implementation of sector initiatives for in-demand industry sectors or occupations for the region;



(D) the collection and analysis of regional labor market data (in conjunction with the State);

Section 116 Performance Accountability System.

(e) EVALUATION OF STATE PROGRAMS.---

(1) IN GENERAL.--- Using funds authorized under a core program ... the State, in coordination with local boards .... and the State agencies responsible for the administration of the core programs, shall conduct ongoing evaluations of activities carried out ... under such programs. The State ... shall conduct the evaluations in order to promote ... methods for continuously improving core program activities ... to achieve ... performance ... and high-level outcomes from the workforce development system. The State shall coordinate the evaluations with the evaluations provided for by the Secretary of Labor and the Secretary of Education...

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## Advantages of Data Sharing Agreements

The Employment and Training Administration's 2013 Congressional Budget Justification specifies that it encourages the system to develop improved labor market information to businesses, including information on available workers and their skill levels to meet the workforce needs of employers. Additionally, the Department will "encourage States to make greater use of State-collected administrative data from the workforce investment system including UI, employment service programs, and One-Stop Career Center participant data and data collected by cooperating education and human services agencies to expand the information available about the characteristics of the workforce."

To meet those goals, a budget request of \$730,842,000 was submitted, of which "not less than \$30 million be provided for targeted reemployment services to beneficiaries of unemployment insurance."

Careful implementation of this investment requires that the data collected be accurate, timely, relevant, and complete. Data-sharing agreements between LMI shops have the potential to improve each of these important traits. Workforce data, like the workers themselves, ebb and flow without regard to geographic boundaries such as state or county lines. As a result, a thorough examination of workforce data needs to be conducted in context, through a holistic approach that recognizes the interconnections between states that exist as a result of worker movement. This document provides several examples of the benefits of data-sharing agreements.

According to a news release, Wyoming's 0.6% population growth rate was the state's weakest since 2001, and slower than neighboring states. Despite the state's energy led economic recovery since early 2010, out-of-state residents were still hesitating to move in, mainly due to the gradual improvement of job opportunities and slow housing market in the rest of the nation. "During the past couple of years, Wyoming attracted only a portion of immigrants as it did before 2010 from states like California and Michigan. On the other hand, many workers with mining skills relocated to other states where energy exploration was more active such as North Dakota, Oklahoma, and Pennsylvania," the news release stated.<sup>1</sup> The hallmark of the West, and youth in particular, is geographic movement.

As the Table 1 cohort analysis demonstrates, Wyoming experienced substantial outflow of younger workers to other states from 2000 to 2011. In 2000, there were 7,492 18-year-old workers employed in the state. By 2011, less than half (45.2%) of those same workers remained working in Wyoming. By industry, the decline was particularly sharp in leisure & hospitality (-86.4%) and retail trade (-77.2%). A notable exception to that trend was seen in natural resources & mining, which saw an increase over that period as workers moved to mining from other industries. Workers may flow from one state to another for a variety of reasons, including local economic conditions, the prevalence (or lack) of job opportunities, and/or educational opportunities.

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<sup>1</sup> Wyoming Department of Administration and Information, Economic Analysis Division. (2011, December). *Wyoming's 2011 population grew the slowest in 10 years*. (Press Release). Retrieved from: [http://eadiv.state.wy.us/pop/POP\\_NEWSRLSE11.pdf](http://eadiv.state.wy.us/pop/POP_NEWSRLSE11.pdf)

## Moving, but where?

**Table 1: Industry and Interstate Movement of Workers Who Were Age 18 and Working in Wyoming in 2000**

2000 COHORT = 7,325 WORKING 18-YEAR-OLDS Age: 18 → 29

	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
<b>Remained in Wyoming</b>	Natural Resources & Mining	237	379	338	314	357	396	467	441	495	438	440	447
	Construction	502	597	560	528	478	465	457	442	414	369	352	312
	Manufacturing	254	224	197	203	195	179	183	166	138	115	110	112
	Wholesale Trade, Transp., & Utils.	135	175	198	227	245	249	268	257	251	244	237	241
	Retail Trade	1,707	1,351	1,031	905	762	640	552	561	458	432	409	387
	Information	133	82	71	76	81	63	48	59	67	56	50	47
	Financial Activities	159	177	183	178	177	169	160	170	161	164	153	136
	Professional & Business Services	483	418	402	377	293	277	300	276	274	269	269	255
	Educational Services	220	163	150	190	252	249	204	235	242	273	270	285
	Health Care & Social Assistance	338	390	448	443	504	498	480	490	475	473	471	451
	Leisure & Hospitality	2,635	1,580	1,134	918	806	666	556	481	449	431	387	346
	Other Services Exc. Public Admin.	192	150	149	149	142	133	134	127	118	132	129	134
	Public Administration	324	283	246	221	204	205	182	192	211	230	221	207
	Nonclassified Industry	6	11	12	10	12	11	12	9	10	14	19	8
	<b>Total, Wyoming</b>	<b>7,325</b>	<b>5,980</b>	<b>5,119</b>	<b>4,739</b>	<b>4,508</b>	<b>4,200</b>	<b>4,003</b>	<b>3,906</b>	<b>3,763</b>	<b>3,640</b>	<b>3,517</b>	<b>3,368</b>
<b>% of 2000 Cohort</b>	<b>100.0%</b>	<b>81.6%</b>	<b>69.9%</b>	<b>64.7%</b>	<b>61.5%</b>	<b>57.3%</b>	<b>54.6%</b>	<b>53.3%</b>	<b>51.4%</b>	<b>49.7%</b>	<b>48.0%</b>	<b>46.0%</b>	
<b>Working in Other States<sup>1</sup></b>	Alaska	0	12	19	25	34	32	35	28	26	32	36	31
	Colorado	0	170	246	276	329	379	408	423	452	422	435	405
	Idaho	0	29	38	56	71	80	96	86	91	76	65	65
	Montana	0	63	118	127	160	175	185	170	162	154	150	127
	Nebraska	0	27	44	64	68	69	70	61	62	69	70	70
	New Mexico	0	8	13	17	17	25	26	29	30	26	30	29
	Oklahoma	0	11	21	19	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	21	36	30	35	42
	South Dakota	0	50	77	107	113	115	94	83	72	81	81	63
	Texas	0	50	68	77	92	98	109	113	122	117	129	122
	Utah	0	120	165	177	207	224	224	253	252	234	221	200
	<b>Total, All Other</b>	<b>0</b>	<b>540</b>	<b>809</b>	<b>945</b>	<b>1,091</b>	<b>1,197</b>	<b>1,247</b>	<b>1,267</b>	<b>1,305</b>	<b>1,241</b>	<b>1,252</b>	<b>1,154</b>
	<b>% of 2000 Cohort</b>	<b>0.0%</b>	<b>7.4%</b>	<b>11.0%</b>	<b>12.9%</b>	<b>14.9%</b>	<b>16.3%</b>	<b>17.0%</b>	<b>17.3%</b>	<b>17.8%</b>	<b>16.9%</b>	<b>17.1%</b>	<b>15.8%</b>
	<b>Total Workers</b>	<b>7,325</b>	<b>6,520</b>	<b>5,928</b>	<b>5,684</b>	<b>5,599</b>	<b>5,397</b>	<b>5,250</b>	<b>5,173</b>	<b>5,068</b>	<b>4,881</b>	<b>4,769</b>	<b>4,522</b>
<b>% of 2000 Cohort</b>	<b>100.0%</b>	<b>89.0%</b>	<b>80.9%</b>	<b>77.6%</b>	<b>76.4%</b>	<b>73.7%</b>	<b>71.7%</b>	<b>70.6%</b>	<b>69.2%</b>	<b>66.6%</b>	<b>65.1%</b>	<b>61.7%</b>	

<sup>1</sup>States participating in data-sharing agreement with Wyoming.

<sup>2</sup>Data for Oklahoma for 2004, 2005, and 2006 not available.

Data: Tony Gover, Chief Economist. Tab e: Phil Ellsworth, Information Specialist. 3/9/2012

## Origins and Destinations: Nurses

**Table 2: An Example of the Use of Interstate and Intrastate Administrative Data to Determine Origin, Destination, and Average Quarterly Wages for a Specific Occupation**

ORIGIN (Base Year Minus One)	Number Working	Average Quarterly Wage	Average Quarterly Wage of Those Entering	ALL RNs WORKING IN WYOMING HOSPITALS		Average Quarterly Wage of Those Leaving	DESTINATION (Base Year Plus One)		Average Quarterly Wage
				Number (Base Year)	Average Quarterly Wage		Number Working	Average Quarterly Wage	
Other State	74	\$7,729	\$8,476	2,152	\$9,554	\$8,686	Other State	52	\$9,815
Unknown Origin	105	Unknown	\$7,017			\$6,759	Unknown Destination	118	Unknown
Wyoming Other Industry	196	\$6,794	\$8,865			\$7,558	Wyoming Other Industry	196	\$6,794
Wyoming Hospitals	1,777	\$9,572	\$9,756			\$9,880	Wyoming Hospitals	1,869	\$10,400

## Commuting and Health Care

The Wyoming Department of Workforce Services' Research & Planning (R&P) section compared the demographics of selected health care professions and the commuting behavior of the people who work in those professions to serve two purposes:

- To provide a description of health care professional employment characteristics and associated behaviors;
- To demonstrate R&P's ability to synthesize data from several sources to provide a robust description of worker behavior.



The advantages of licensing data for analysis rest in the capacity to link them to other administrative databases on a longitudinal basis suitable for modeling and prediction.

## Origin, Destination, and Average Wage of RNs in Wyoming Hospitals

In 2003, R&P compared registered nurses (RNs) who worked in Wyoming hospitals in 1998, 1999, and 2000 to identify where – geographically and by industry – the nurses worked, and what their average wages were. Among the study's findings:

- Of the 2,152 RNs working in Wyoming hospitals in 1999, 1,777 had been working in Wyoming hospitals the year before, and 1,869 were doing so the year after.
- There were 196 hospital RNs who had moved from an industry in Wyoming other than hospitals in 1998.
- Prior to working in Wyoming hospitals in 1999, 74 were working in another state with which Wyoming had a data-sharing agreement.
- After working in Wyoming hospitals in 1999, 52 were found working in other states in 2000.
- For those who either came to work in Wyoming hospitals in 1999 from another state or another industry, the average quarterly wage increased.
- Average wages increased for those who went from Wyoming hospitals to work in another state, but did not increase for those who went to work in another industry.

## Aspen Institute

A yearlong effort by the Aspen Institute was conducted to highlight the need to improve student learning and graduation rates in community colleges.

- The purpose was to analyze data collected on community colleges to determine the following critical elements of student success:
  - Student learning
  - Degree completion and transfer
  - Equity
  - Employment/earnings after college

The project was spearheaded by Jobs for the Future's John Dorrer, a workforce development expert who most recently spent eight years at the Maine Department of Labor, closely working with employment and earnings data and matching student records to support community college research efforts.

The project reviewed employment and earning outcomes for students at Lake Area Technical Institute (LATI) in Watertown, S.D.:

- Wage analysis was conducted using the South Dakota Unemployment Insurance (UI) wage data. In addition, the South Dakota Department of Labor and Regulation contacted four states with which it has data sharing agreements. Three states, Montana, Nebraska, and Wyoming, agreed to run the requested data match for the 2005 and 2010 LATI graduates, which provided additional information regarding outcomes for those students who obtained employment in other states.
- Matching of student records for spring 2010 graduates with state wage records.
- Additional wage records analysis was conducted, beginning with third quarter 2010 and ending with second quarter of 2011, depicting the period of labor market entry and career start-up.
- In addition to data from the class of 2010, data pertaining to spring 2005 graduates for the purpose of capturing longer-term labor market outcomes were requested. This analysis examined employment and earnings outcomes for those students during 2006, 2008, 2010, and 2011 (first and second quarters).



### Idaho's example

One question that arose during the field work of the Idaho Legislative Office of Performance Evaluations was whether postsecondary graduates are staying in Idaho after completion of their education.<sup>2</sup>



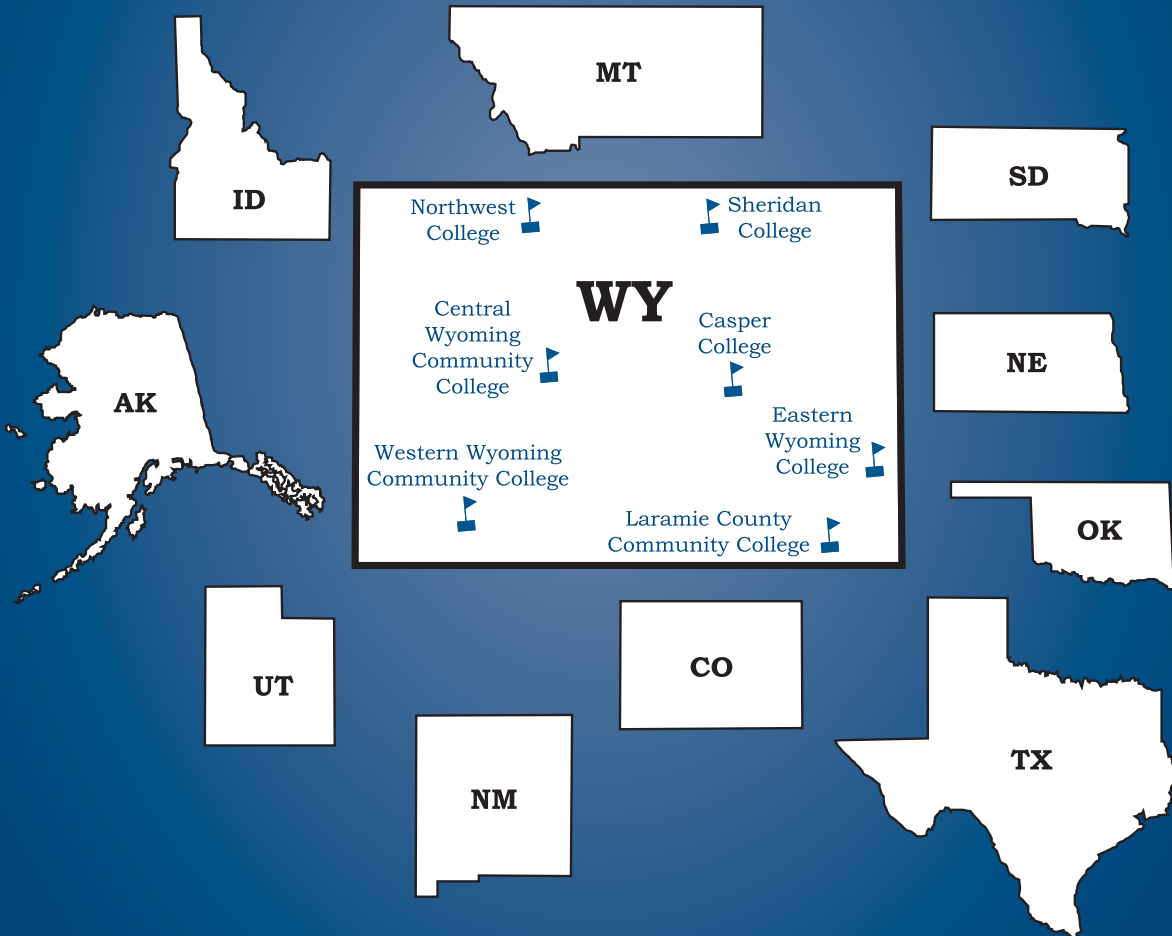
“Currently, Idaho has no formal statewide agreements among the Board of Education, the postsecondary institutions, and the Department of Labor to determine where students are employed once they finish their postsecondary education. As we have mentioned, ACS data measures current residents of Idaho, not graduates of Idaho’s postsecondary institutions. With an eventual plan to align the K–12 statewide longitudinal data system with the postsecondary education system and the workforce system, the board is linking these three systems so that graduates can be tracked into the workforce.

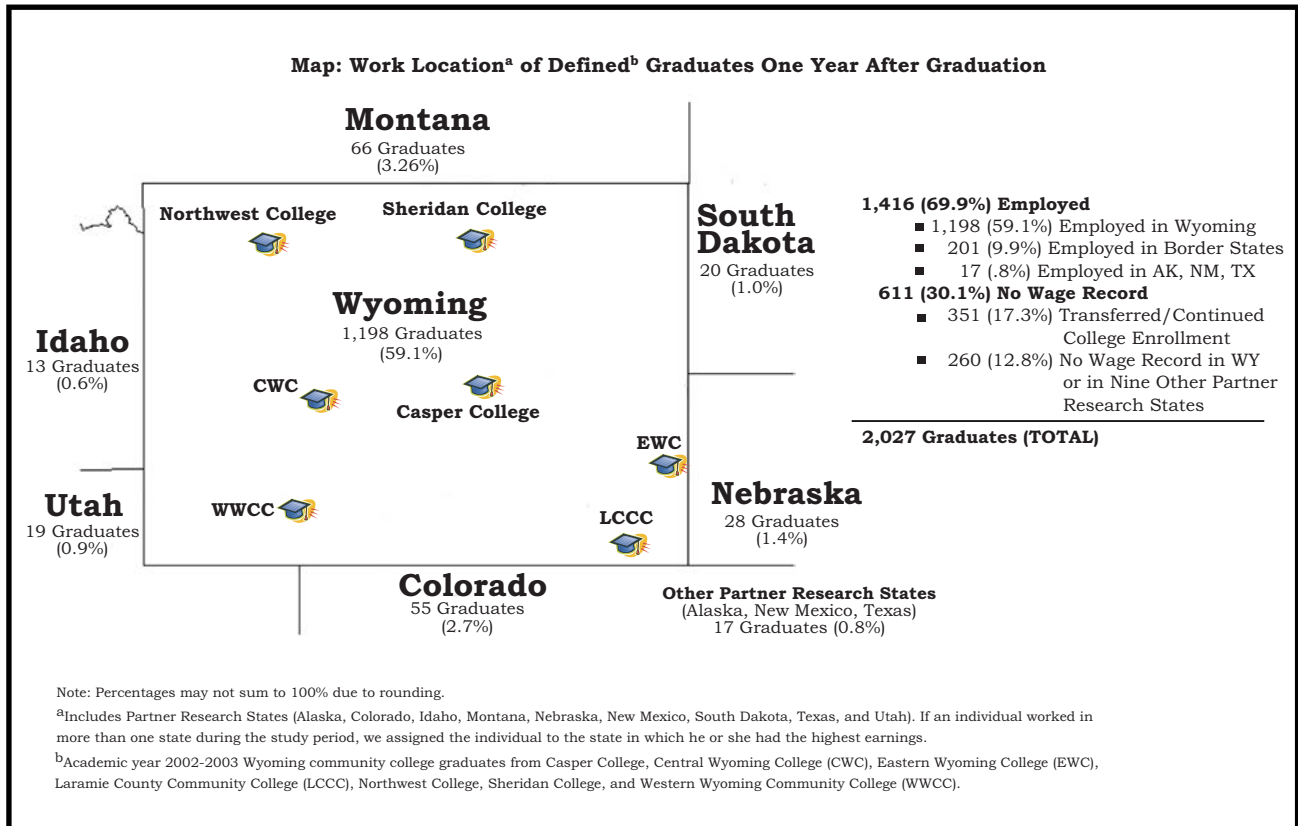
“In order to link postsecondary education and employment information in advance of any longitudinal data system, the creation of a data sharing partnership would need to be established among the institutions of postsecondary education, the Idaho Department of Labor, and other states to track where graduates get jobs and whether their occupations align with their field of study. This partnership would allow educators, employers, and policymakers to better track Idaho graduates for analysis of job placement and compensation information. Some of the potential uses of this data include tracking students of a particular education program to find out whether they are finding work in Idaho or whether they need to go outside of Idaho. The data also could help find out whether graduates of a particular education program are securing jobs or whether they are receiving unemployment benefits.”

<sup>2</sup> Idaho Legislature. (2012). Reducing Barriers to Postsecondary Education, Report 12-01. Office of Performance Evaluations. Boise, Idaho: State of Idaho. Retrieved from <http://www.legislature.idaho.gov/oep/publications/reports/r1201.pdf>

WYOMING DEPARTMENT OF EMPLOYMENT

# Wyoming Community College Graduates' Labor Market Outcomes 2005: An Administrative Records Approach





followed by Educational Services (201 jobs; 13.2%). These industries employed the most graduates in partner research states as well. Manufacturing and Information employed the fewest number of graduates with 2.1% and 2.3%, respectively.

Figures 5 and 6 (pages 15 and 16, respectively) show jobs worked by industry based on whether students earned an occupational or an academic degree. The figures show very different employment avenues for the two types of degree earners. Health Services employed the most occupational graduates (33.3%). Education, on the other hand, employed the most graduates with an academic degree (19.3%). The number of jobs worked in

Construction was identical for both degree types (3.7%).

### Employing Firms

A total of 1,446 Wyoming firms employed graduates (see Table 9, page 17). The majority of firms were service-providing (82.2%), while 17.3% were goods-producing. The largest percentage of employers were in the Leisure & Hospitality industry (17.1%) followed by Retail Trade (14.6%), Professional & Business Services (11.2%) and Health Care (9.4%). Among goods-producing firms, the largest percentage of employers were in Construction (8.2%).

(Text continued on page 14)





# The Benefits of Data Sharing:

Data Sharing Agreements Help a South Dakota Technical Institute Earn National Honors



## The Benefits of Data Sharing: Data Sharing Agreements Help a South Dakota Technical Institute Earn National Honors

In December 2011, the Aspen Institute's Community College Excellence program named Lake Area Technical Institute (LATI) in Watertown, S.D., as one of the top five two-year schools in the nation. LATI repeated the feat in 2013 and placed in the top four two-year institutions. Each year, LATI earned "finalist with distinction" honors, and the Aspen Institute awarded the LATI \$100,000 for program support. Analysis of employment and earnings was a key component the Aspen Institute examined when making its selections.

The \$1 million Aspen Prize for Community College Excellence recognizes high achievement and performance among America's community colleges. The goal, as stated on the [Aspen Institute's website](#), is "to honor excellence, stimulate innovation, and clearly define what success looks like for community colleges. The Prize rewards community colleges for outstanding performance and improvements over time, and should incentivize scaling of effective strategies for improved program completion, transition to 4-year institutions, learning outcomes, and employment outcomes."

With this goal in mind, the Aspen Institute rigorously reviews two-year colleges in the U.S. and awards up to five institutions for their exceptional student outcomes in four areas: student learning, certificate and degree completion, employment and earnings, and high levels of access and success for minority and low-income students.

Aspen's analysis of employment/earnings after college involved the collection and review of labor outcomes. The Labor Market Information Center (LMIC) of the South Dakota Department of Labor (DLR) conducted the employment and earnings wage records analysis using the standard methodology provided by the institute.

For the inaugural prize competition in 2011, LMIC used South Dakota Unemployment Insurance (UI) wage data to conduct the wage analysis for LATI graduates. In addition, the DLR contacted the four states with which it had data sharing agreements. Montana, Nebraska and Wyoming agreed to run the requested data match for LATI graduates. Tables showing the labor market outcomes for LATI's 2005 and 2010 graduates who were matched to South Dakota, Montana, Nebraska and Wyoming wage records are included in this report.

For the 2013 Aspen Prize for Community College Excellence competition, LMIC matched 2006 and 2011 LATI graduates to South Dakota wage records and Wage Record Interchange System (WRIS) 2. WRIS2, which allows states to exchange wage records for program reporting, expanded the number of states included in the wage analysis, therefore providing more comprehensive results. The tables for the labor market outcomes for LATI's 2006 and 2011 graduates are also included in this report and include a list of the states that participated in WRIS2 at the time of the analysis.

While several components factored into which handful of community colleges the Aspen Institute selected to share the prize, employment/earnings analysis played a vital role. From improving a school's likelihood to be recognized nationally for its achievements to analyzing the effectiveness of training programs and educational pathways for graduates, sharing data across state lines to track students as they migrate throughout the U.S. is vital. It gives states the ability to deliver more comprehensive information, which in turn provides an increasingly accurate picture of what works and what needs improvement.

## Labor Market Outcomes for Lake Area Technical Institute

2005 and 2010 Graduates

Matched to South Dakota, Montana, Nebraska and Wyoming Wage Records

**Table 1: Standard Labor Market Outcomes Based On State Wage Records Matching for Graduates May-June 2010 for Aspen Prize Finalist Colleges**

Employment and Earnings Indicators	2010 3rd Qtr	2010 4th Qtr	2011 1st Qtr	2011 2nd Qtr
Employed Status (Percent)	73%	71%	70%	71%
Continuous Employed- 3rd Qtr 2010 to 2nd Qtr 2011 (Percent)	100%	92%	87%	84%
Total Quarterly Earnings	\$1,842,363.62	\$1,949,104.50	\$1,813,276.19	\$2,142,181.67
Average Weekly Earnings	\$393.67	\$429.60	\$403.13	\$469.47
Average Weekly Earnings as Percent of Average Weekly State Wage	60%	65%	61%	71%

**Table 2: Longitudinal Analysis of Standard Labor Market Outcomes Based On State Wage Records Matching for Graduates May-June 2005 for Semi Finalist Colleges**

Employment and Earnings Indicators	2006 All Qtrs	2008 All Qtrs	2010 All Qtrs	2011 1st and 2nd Qtrs
Employed Status (Percent)	83%	79%	75%	72%
Continuous Employed- 3rd Qtr 2010 to 2nd Qtr 2011 (Percent)	100%	89%	81%	77%
Total Quarterly Earnings	\$1,678,641.51	\$2,139,716.96	\$2,299,090.61	\$2,361,833.46
Average Weekly Earnings	\$390.11	\$524.18	\$591.48	\$635.24
Average Weekly Earnings as Percent of Average Weekly State Wage	59%	79%	90%	96%

Source: Labor Market Information Center, SD Department of Labor and Regulation, October 2011.

## Labor Market Outcomes for Lake Area Technical Institute

2006 and 2011 Graduates

Matched to South Dakota Wage Records and WRIS2

**Table 1: Standard Labor Market Outcomes Based On State Wage Records Matching for Graduates May-June 2011 for Aspen Prize Finalist Colleges**

Employment and Earnings Indicators	2011 3rd Qtr	2011 4th Qtr	2012 1st Qtr	2012 2nd Qtr
Employed Status (%)	79%	77%	78%	77%
Continuous Employed- 3rd Qtr 2011 to Quarter of Reference (%)	100%	93%	88%	85%
Total Quarterly Earnings	\$1,769,619	\$1,897,298	\$1,819,817	\$2,021,802
Average Weekly Earnings	\$474	\$521	\$493	\$553
Average Weekly Earnings as a Percent of Average Weekly State Wage	71%	78%	74%	83%

Note: Total number of graduates for May and June 2011 was 365.

**Table 2: Longitudinal Analysis of Standard Labor Market Outcomes Based On State Wage Records Matching for Graduates May-June 2006 for Aspen Prize Finalist Colleges**

Employment and Earnings Indicators	*2007 All Qtrs	*2009 All Qtrs	2011 All Qtrs	2012 1st and 2nd Qtrs
Employed Status (%)	78%	75%	81%	74%
Continuous Employed - 2007 to Quarter of Reference (%)	100%	89%	84%	78%
Total Quarterly Earnings	\$1,361,345	\$1,523,177	\$2,004,329	\$1,995,333
Average Weekly Earnings	\$453	\$525	\$640	\$691
Average Weekly Earnings as a Percent of Average Weekly State Wage	68%	78%	95%	103%

Note: Total number of graduates for May and June 2006 was 298.

\*No WRIS2 data available. The 2007 and 2009 analysis includes South Dakota wage records only.

Note: States participating in WRIS2 include: AR, ID, IL, IN, KY, LA, MD, MN, MO, MS, NE, NJ, NV, OK, OR, PA, RI, SD, TN, TX, UT, WY

Source: Labor Market Information Center, SD Department of Labor and Regulation, November 2012.

# Reducing Barriers to Postsecondary Education

Evaluation Report  
January 2012

Office of Performance Evaluations  
Idaho Legislature



Report 12-01

## *Reducing Barriers to Postsecondary Education*

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Department of Labor and Idaho's public postsecondary institutions to track nursing school graduates. The Department of Labor is then able to determine the percentage of graduates working in Idaho's health care industry six months after graduation, their average earnings, and their geographic employment profile. Additionally, the department cross-matched records with Board of Nursing licensure records to determine the percentage of graduates receiving a first-time Idaho license. The data produced by the Department of Labor has been useful to the Board of Nursing in making program decisions and has benefited the individual postsecondary institutions for their reaccreditation process.

### ***Data Sharing Efforts in Other States***

The Wyoming Department of Workforce Services is able track graduates of its statewide community college system to determine whether these graduates are employed in the state of Wyoming. It has also entered into agreements with ten states, including Idaho, to find out where its community college graduates are employed. The Wyoming graduate tracking system allows educators and policymakers to track college graduates and determine where graduates find employment, whether in state or out of state. Decisions can then be made to find out whether programs are serving the local and regional needs of businesses and industry, and whether justifying, expanding, or contracting certain education programs are needed.

Idaho can partner with neighboring states to share existing education and employment data.

Formalizing a partnership between Idaho's Department of Labor and the postsecondary institutions is a step that could be implemented immediately with minimal economic cost by taking advantage of existing data. Postsecondary institutions can submit the names of their yearly graduates to the department, and the department can determine how many graduates are employed in Idaho, their industry, and other relevant data that educators and policymakers could use. The department could then enter into agreements with neighboring states to share similar data. If the Idaho postsecondary graduates were classified by the field of their degree, policymakers could also gather data on how specific programs fair in employment placement efforts. Ultimately, this partnership would provide educators, employers, and policymakers the most relevant, timely information on whether Idaho graduates are finding work in their field of study and whether Idaho is successfully retaining college graduates or losing them to neighboring states. This information would also help in formulating policies on program expansion or redirection of resources and could link graduate outcomes within the context of the state job supply.<sup>7</sup>

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<sup>7</sup> Idaho is in the beginning stages of a pilot program coordinated by WICHE to exchange student and workforce data among four states beginning in 2012. The states that are a part of this program are Idaho, Oregon, Washington, and Hawaii.

# Monitoring School District Human Resource Cost Pressures

A Report to  
the Wyoming  
Joint Appropriations  
Interim Committee and  
the Joint Education  
Interim Committee



Research & Planning  
Wyoming DWS

**Fall 2013**

## Box 1: Wyoming Lags Behind Surrounding States in Job Growth

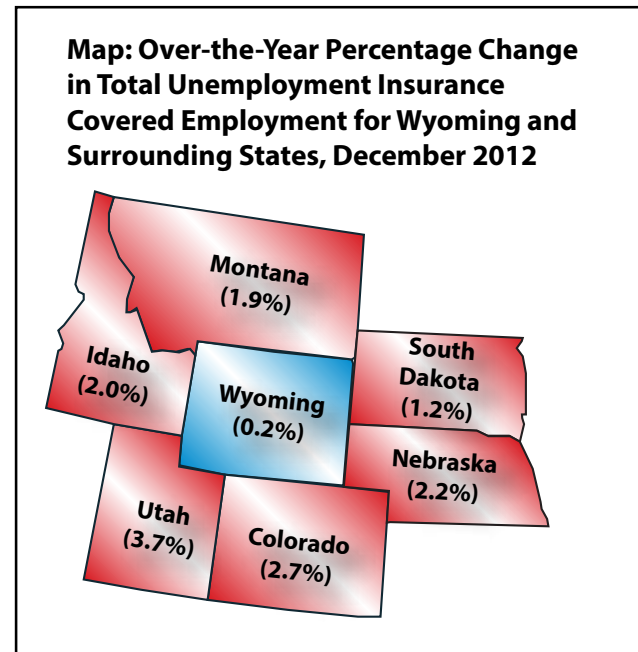
by: David Bullard, Senior Economist, and Michael Moore, Research Analyst

Based on the most recent Unemployment Insurance (UI) covered wage and salary employment estimates, job growth in surrounding states like Colorado and Utah is outpacing job growth in Wyoming.

During the second half of 2012, the over-the-year percentage change in employment in Wyoming was lower than that of all surrounding states (Colorado, Idaho, Montana, Nebraska, South Dakota, and Utah) and the U.S. (see **Map**). In December 2012, Utah (3.7%) and Colorado (2.7%) experienced the greatest increase in UI covered wage and salary employment compared to December 2011. States with large urban areas – such as Colorado and Utah – experienced the most growth, while more rural states experienced a slow, steady increase in employment.

Job growth in Wyoming, its surrounding states, and the U.S. from 2005 to 2012 is shown in **Figure 1**. The Great Recession lasted from December 2007 to June 2009 (NBER, 2010), and most states entered the recession several months before Wyoming. Before the Great Recession, Wyoming's job growth was generally higher than its surrounding states. During 2008, high oil and natural gas prices spurred energy development in Wyoming, while holding back economic growth in the nation as a whole.

During the recession, a sharp drop in energy prices caused larger job losses in Wyoming than were seen in most surrounding states. Wyoming added jobs at a healthy pace early in the recovery, but in the second half of 2012 job growth slowed to very low levels. It is clear that Wyoming's



job growth has been lagging behind other states in the region.

**Figure 2** shows Wyoming's average annual unemployment rate and its employment-to-population ratio from 2005 to present. Before the recession, as employment was increasing, the unemployment rate fell to 2.8% in 2007. Then, as workers lost their jobs during the recession, the employment to population ratio fell (down from 70% to 65%) and the unemployment rate rose, hitting 7.0% in 2010.

In the recent recovery the unemployment rate has steadily decreased, while the employment to population ratio has remained largely flat. It seems that a large part of the decrease in the unemployment rate is related to people dropping out of the labor force, rather than returning to work.

(Text continued on page 10)

Table 3-4a: Public School Contracted Individuals in All Occupations who Leave District Contracts by Destination State and Industry for Combined 2010/11 & 2011/12

Destination	Total			≤34			35-54			55+		
	N	Contract	Average Wage	N	Contract	Average Wage	N	Contract	Average Wage	N	Contract	Average Wage
<b>Total</b>	<b>4,868</b>	<b>\$33,547</b>	<b>\$27,422</b>	<b>1,449</b>	<b>\$26,731</b>	<b>\$28,166</b>	<b>1,815</b>	<b>\$30,758</b>	<b>\$31,017</b>	<b>1,604</b>	<b>\$42,861</b>	<b>\$20,544</b>
<b>Wyoming</b>	<b>2,924</b>	<b>\$32,090</b>	<b>\$26,863</b>	<b>959</b>	<b>\$26,580</b>	<b>\$28,109</b>	<b>1,181</b>	<b>\$29,904</b>	<b>\$30,641</b>	<b>784</b>	<b>\$42,123</b>	<b>\$19,648</b>
Nat. Res. & Mining (11, 21)	91	\$19,554	\$51,601	35	\$18,119	\$55,716	43	\$15,193	\$54,171	13	\$37,842	\$32,024
Construction (23)	48	\$25,942	\$27,196	19	\$22,710	\$27,269	22	\$25,155	\$28,339	7	\$37,187	\$23,410
Manufacturing (31, 32, 33)	37	\$18,941	\$38,963	18	\$17,964	\$40,176	15	\$16,482	\$40,925		\$32,560	\$26,146
Wholesale Trade, Trans., & Util. (22, 42, 48, 49)	83	\$17,409	\$33,684	25	\$14,564	\$36,330	41	\$19,871	\$35,860	17	\$15,656	\$24,548
Retail Trade (44, 45)	113	\$21,235	\$20,420	37	\$16,532	\$20,278	53	\$18,441	\$21,885	23	\$35,237	\$17,271
Information (51)	25	\$21,461	\$24,874	9	\$16,291	\$30,087	9	\$18,610	\$30,986	7	\$31,773	\$10,312
Financial Activities (52, 53)	65	\$17,693	\$25,863	27	\$14,024	\$25,947	30	\$15,982	\$29,841	8	\$36,489	\$10,665
Prof. & Business Services (54, 55, 56)	111	\$26,601	\$21,738	31	\$18,400	\$26,166	52	\$20,944	\$23,767	28	\$46,186	\$13,068
Public Schools, Ed. Services (6111-3)	1,521	\$38,775	\$23,897	455	\$33,027	\$26,155	545	\$37,399	\$28,250	521	\$45,234	\$17,371
Ed. Services (61)	126	\$33,731	\$29,604	49	\$33,125	\$33,454	51	\$32,830	\$32,367	26	\$36,640	\$16,928
Health Care & Social Assist. (62)	363	\$26,421	\$30,261	130	\$20,880	\$28,556	171	\$26,137	\$31,418	62	\$38,822	\$30,648
Leisure & Hospitality (71, 72)	112	\$21,720	\$15,855	47	\$22,493	\$14,790	46	\$20,390	\$17,504	19	\$23,025	\$14,501
Other Svcs. Exc.	61	\$26,829	\$25,685	18	\$19,662	\$19,644	27	\$30,352	\$32,850	16	\$28,946	\$20,389
Public Admin. (81)												
Public Admin. (92)	167	\$28,261	\$41,179	59	\$21,248	\$34,302	75	\$27,138	\$46,193	33	\$43,349	\$42,081
Nonclassified (99)		\$15,042	\$4,500					\$15,042	\$4,500			
<b>Other States</b>	<b>400</b>	<b>\$37,668</b>	<b>\$31,504</b>	<b>169</b>	<b>\$32,538</b>	<b>\$28,488</b>	<b>181</b>	<b>\$39,254</b>	<b>\$33,466</b>	<b>50</b>	<b>\$49,267</b>	<b>\$34,592</b>
Nat. Res. & Mining (11, 21)	6	\$15,337	\$45,922		\$13,225	\$53,276		\$23,860	\$45,405		\$15,264	\$17,024
Construction (23)	7	\$40,320	\$36,158		\$30,008	\$27,338		\$54,069	\$47,917			
Manufacturing (31, 32, 33)	6	\$17,905	\$34,701		\$13,997	\$29,441		\$12,673	\$30,224		\$40,090	\$59,434
Wholesale Trade, Trans., & Util. (22, 42, 48, 49)	14	\$19,733	\$29,024		\$8,064	\$15,788	10	\$17,816	\$28,853		\$30,013	\$34,006
Retail Trade (44, 45)	19	\$22,514	\$21,498	6	\$18,512	\$19,660	9	\$15,354	\$27,727		\$44,626	\$10,240
Information (51)		\$52,675	\$54,865					\$52,675	\$54,865			
Financial Activities (52, 53)	10	\$26,410	\$56,311		\$26,067	\$8,876	6	\$26,414	\$57,290		\$27,411	\$192,744
Prof. & Business Services (54, 55, 56)	19	\$34,837	\$33,071	11	\$31,600	\$32,467	6	\$17,706	\$15,663		\$104,036	\$88,613
Public Schools, Ed. Services (6111-3)	121	\$46,190	\$33,437	50	\$41,659	\$32,188	55	\$49,193	\$35,532	16	\$50,030	\$30,141
Ed. Services (61)	101	\$44,769	\$36,145	44	\$35,382	\$31,755	45	\$49,594	\$40,506	12	\$61,097	\$35,888
Health Care & Social Assist. (62)	42	\$29,170	\$23,619	19	\$24,658	\$21,802	17	\$28,682	\$23,880	6	\$44,836	\$28,636
Leisure & Hospitality (71, 72)	26	\$28,691	\$16,293	11	\$27,629	\$12,662	14	\$30,626	\$20,056		\$13,294	\$3,544
Other Svcs. Exc.	12	\$20,301	\$16,406	7	\$16,957	\$18,716		\$27,820	\$11,730		\$13,636	\$18,949
Public Admin. (81)												
Public Admin. (92)	14	\$32,401	\$30,599	6	\$34,700	\$32,496	6	\$28,501	\$33,403		\$37,203	\$16,496
Nonclassified (99)		\$71,103	\$11,160					\$71,103	\$11,160			
<b>Unknown</b>	<b>1,544</b>	<b>\$35,240</b>		<b>321</b>	<b>\$24,127</b>		<b>453</b>	<b>\$29,590</b>		<b>770</b>	<b>\$43,196</b>	

Blank cells indicate data suppression due to confidentiality (a count of less than 5).

\*Teachers = All Primary, Secondary, and Special Education Teachers (SOC 25-2000).



Table 3-4b: Public School Contracted for All Teachers who Leave District Contracts by Destination State and Industry for Combined 2010/11 & 2011/12

Destination	Total			≤34			35-54			55+		
	N	Contract	Average Wage	N	Contract	Average Wage	N	Contract	Average Wage	N	Contract	Average Wage
<b>Total</b>	<b>1,389</b>	<b>\$54,990</b>	<b>\$31,173</b>	<b>461</b>	<b>\$46,946</b>	<b>\$33,749</b>	<b>414</b>	<b>\$53,856</b>	<b>\$36,252</b>	<b>514</b>	<b>\$63,117</b>	<b>\$21,210</b>
<b>Wyoming</b>	<b>825</b>	<b>\$53,675</b>	<b>\$31,113</b>	<b>308</b>	<b>\$46,741</b>	<b>\$34,459</b>	<b>269</b>	<b>\$53,437</b>	<b>\$36,743</b>	<b>248</b>	<b>\$62,544</b>	<b>\$20,849</b>
Nat. Res. & Mining (11, 21)	13	\$49,159	\$46,586	5	\$38,173	\$45,296		\$43,451	\$53,619	5	\$63,570	\$43,657
Construction (23)	7	\$55,597	\$19,546		\$47,684	\$28,357		\$52,251	\$19,823		\$70,814	\$6,051
Manufacturing (31, 32, 33)		\$69,463	\$26,218					\$58,695	\$33,760		\$80,230	\$18,675
Wholesale Trade, Trans., & Util. (22, 42, 48, 49)	6	\$52,199	\$31,586		\$52,188	\$34,867		\$57,906	\$39,499		\$35,104	\$1,288
Retail Trade (44, 45)	13	\$52,810	\$22,321		\$41,386	\$33,963		\$48,921	\$28,710	6	\$62,372	\$11,364
Information (51)		\$53,625	\$25,696					\$53,625	\$25,696			
Financial Activities (52, 53)		\$55,030	\$13,405		\$37,389	\$4,424		\$45,400	\$30,397		\$68,666	\$9,400
Prof. & Business Services (54, 55, 56)	15	\$57,172	\$20,334		\$44,947	\$34,105	5	\$55,908	\$25,604	7	\$63,315	\$10,668
Public Schools, Ed. Services (6111-3)	606	\$54,525	\$31,363	221	\$47,424	\$35,836	189	\$54,238	\$36,185	196	\$62,806	\$21,671
Ed. Services (61)	56	\$46,792	\$30,612	28	\$41,326	\$32,200	20	\$47,292	\$34,126	8	\$64,674	\$16,268
Health Care & Social Assist. (62)	51	\$47,266	\$33,188	17	\$42,944	\$33,444	25	\$50,247	\$37,110	9	\$47,152	\$21,809
Leisure & Hospitality (71, 72)	10	\$56,500	\$21,714	8	\$55,540	\$16,549		\$64,649	\$74,188		\$56,023	\$10,559
Other Svcs. Exc.	15	\$54,313	\$28,451	5	\$45,480	\$18,389	7	\$51,409	\$42,724		\$75,810	\$11,918
Public Admin. (81)												
Public Admin. (92)	25	\$59,088	\$37,061	11	\$52,755	\$34,122	7	\$64,399	\$58,975	7	\$63,728	\$19,763
Nonclassified (99)												
<b>Other States</b>	<b>151</b>	<b>\$50,968</b>	<b>\$31,501</b>	<b>80</b>	<b>\$46,751</b>	<b>\$31,017</b>	<b>54</b>	<b>\$53,751</b>	<b>\$33,804</b>	<b>17</b>	<b>\$61,972</b>	<b>\$26,466</b>
Nat. Res. & Mining (11, 21)												
Construction (23)		\$44,900	\$1,260		\$44,900	\$1,260	0					
Manufacturing (31, 32, 33)												
Wholesale Trade, Trans., & Util. (22, 42, 48, 49)		\$60,783	\$28,926					\$57,700	\$9,482		\$63,865	\$48,370
Retail Trade (44, 45)		\$52,980	\$11,619		\$48,327	\$8,162		\$39,500	\$24,924		\$62,047	\$6,694
Information (51)		\$48,949	\$91,392					\$48,949	\$91,392			
Financial Activities (52, 53)		\$46,838	\$8,462		\$46,838	\$8,462	0					
Prof. & Business Services (54, 55, 56)	5	\$39,419	\$30,878		\$38,154	\$33,724		\$44,479	\$19,496			
Public Schools, Ed. Services (6111-3)	66	\$51,733	\$30,885	32	\$47,607	\$33,344	27	\$53,845	\$32,520	7	\$62,447	\$13,335
Ed. Services (61)	45	\$50,772	\$39,095	28	\$46,862	\$35,145	12	\$55,670	\$42,812	5	\$60,916	\$52,292
Health Care & Social Assist. (62)	12	\$48,429	\$24,302	7	\$41,831	\$27,104		\$54,757	\$22,183		\$69,305	\$13,167
Leisure & Hospitality (71, 72)	6	\$53,539	\$15,705		\$52,433	\$3,494		\$54,645	\$27,916			
Other Svcs. Exc.		\$51,891	\$10,589		\$57,466	\$16,349		\$46,316	\$4,828			
Public Admin. (81)												
Public Admin. (92)	6	\$53,263	\$32,028		\$52,115	\$30,462		\$53,598	\$37,016		\$54,550	\$20,196
Nonclassified (99)												
<b>Unknown</b>	<b>413</b>	<b>\$59,087</b>		<b>73</b>	<b>\$48,027</b>		<b>91</b>	<b>\$55,158</b>		<b>249</b>	<b>\$63,765</b>	

Blank cells indicate data suppression due to confidentiality (a count of less than 5).

\*Teachers = All Primary, Secondary, and Special Education Teachers (SOC 25-2000).

# TRENDS

## Nursing in Wyoming, Part Three: Net Flow of Employment

by: *Tony Glover, Senior Research Analyst*

“While the net flow still shows more RNs entering Wyoming than leaving, it appears that within the next few years these trends will converge with the number of exits equaling the number of entries.”

In Part Three of our “Nursing in Wyoming” series,<sup>1</sup> we explore two issues related to the flow of Registered Nurses (RNs) inside and outside of Wyoming’s labor market. First, we demonstrate the flow of labor by focusing on RNs working in Wyoming hospitals in 1999. We attempt to answer the questions, Where did they come from? and Where did they go? Section I uses data from our Interstate Wage Records<sup>2</sup> database. Section II returns our focus to all RNs working in Wyoming over the past decade. It demonstrates that due to a decrease of new RNs entering and an increase in those leaving our labor market, Wyoming could soon face a statewide nursing shortage.

RNs who worked in Wyoming hospitals (SIC 806)<sup>4</sup> in 1999. We then determined their state and industry origin in 1998 and, likewise, their labor market destination in 2000. In 1999, 375 RNs began working in Wyoming hospitals. Of these, 74 (19.7%) had an origin in one of the seven states<sup>5</sup> with which Wyoming has a data sharing agreement. In this analysis, the seven

(Text continued on page 3)

### Section I

Figure 1<sup>3</sup> (see page 3) was created by first restricting our analysis to the 2,152

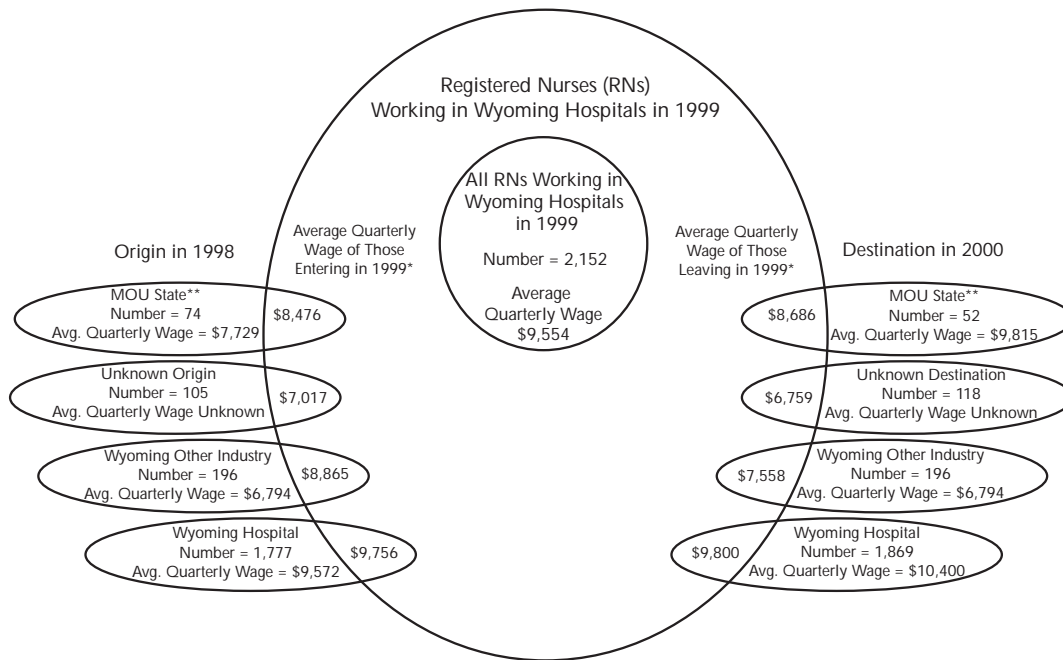
#### Attention: Readers

Due to circumstances beyond our control, the Initial and Continued Unemployment Insurance Claims data is not included in this month’s issue. Please look for the return of this regular feature next month. We are sorry for any inconvenience. - *ed.*

### IN THIS ISSUE:

<b>Nursing in Wyoming, Part Three: Net Flow of Employment</b>	<b>1</b>
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<b>Employment Outcomes for [Nebraska] College Graduates</b>	<b>10</b>
<b>A Preview of Our New Projections Publication</b>	<b>13</b>
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Figure 1: Origin, Destination, and Average Quarterly Wage of Registered Nurses Working in Wyoming Hospitals in 1999



\*RNs entering are not necessarily the same RNs leaving.  
\*\*States with which Wyoming has data sharing agreements.

states are referred to as Memorandum of Understanding (MOU) states. Those entering Wyoming from MOU states increased their average quarterly wage from \$7,729 in 1998 to \$8,476 in 1999. Conversely, from 1999 to 2000, we see that 52 RNs left employment in Wyoming hospitals for employment in one of our MOU states and increased their average quarterly wage from \$8,686 in 1999 to \$9,815 in 2000. The majority of RNs entering employment in Wyoming hospitals from another state in 1999 were classified as “unknown origin.” Similarly, a majority of those leaving the state were not found in MOU states and are identified as “unknown destination.” These workers remain an enigma that may be cleared up with cooperation of additional states (i.e., Montana and California). However, we do

know that those who leave tend to have more nursing experience.<sup>6</sup>

The largest group (52.3%) of RNs entering the hospital industry in 1999 worked in another Wyoming industry in 1998. This group is dominated by RNs with three or more years of experience who have transitioned from other health care industries, particularly nursing care facilities and offices & clinics.<sup>7</sup> Furthermore, a sizeable portion (39.9%) of those leaving hospital employment in 2000 had a destination of another industry within Wyoming in 2000.

## Section II

In this section we expand our analysis to all licensed RNs working in all Wyoming

# **Laramie County and Colorado Worker Commuting Pattern Analysis**

**A Report to the Cheyenne Metropolitan Planning Organization**



**July 1, 2008  
Research & Planning  
Wyoming Department of Employment  
Tom Gallagher, Manager  
Douglas W. Leonard, Senior Economist**

**P.O. Box 2760  
Casper, WY 82602  
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<http://doe.state.wy.us/lmi>**

Figure 1: Commuting Pattern Data Flow Diagram

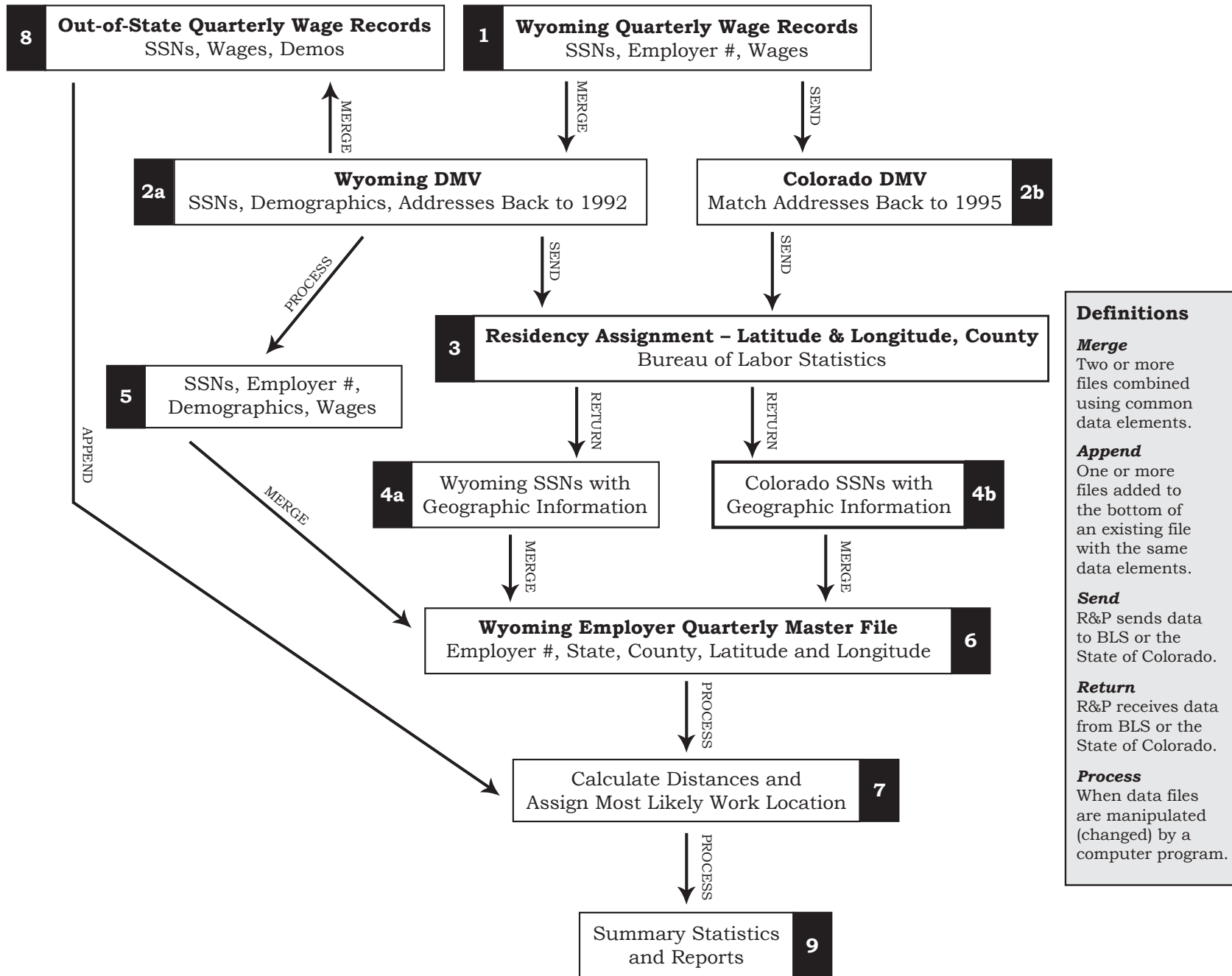
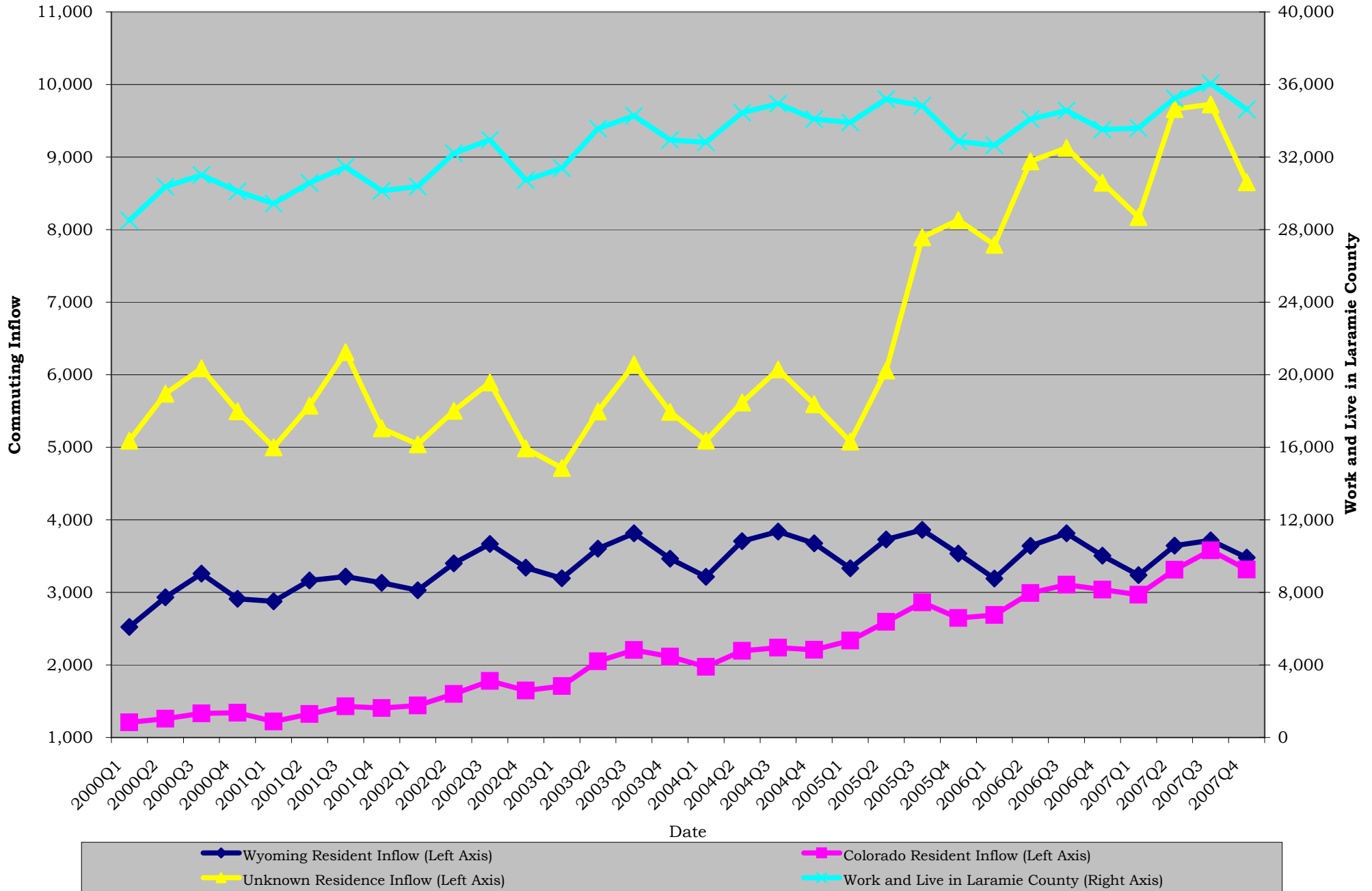


Figure 2: Laramie County Flow Components (Outflow Excluded)





# Sioux City MSA (IA-NE-SD) Laborshed Analysis

A Study of Workforce Characteristics

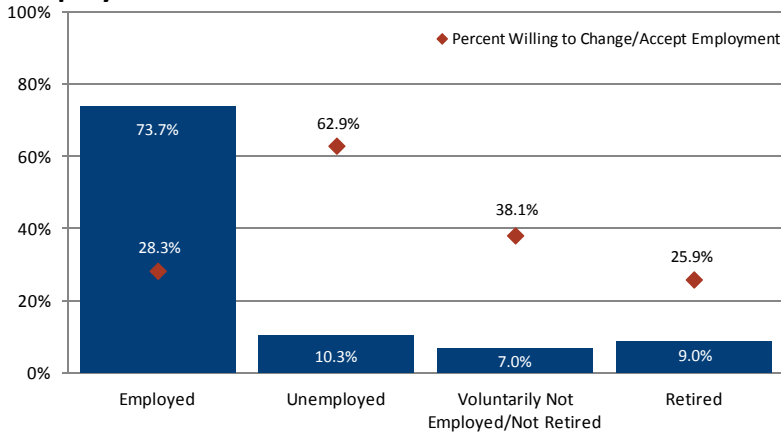
2012



## Laborshed Studies

A Laborshed is defined as the area or region from which an employment center draws its commuting workers. To determine the approximate boundaries of the Siouxland Laborshed area, local employers supplied the ZIP code listings of where each of their employees reside. This Laborshed analysis addresses underemployment, the availability and willingness of current and prospective employees to change employment within the workforce, current and desired occupations, wages, hours worked and distance willing to commute to work.

### Employment Status\*



\*Employment status is self-identified by the survey respondent. The unemployment percentage above does not reflect the unemployment rate published by the U.S. Bureau of Labor Statistics, which applies a stricter definition.

**Total Potential Labor Force: 203,963 (entire Laborshed Area)**

**Estimated Number of Individuals Very Likely or Somewhat Likely to Change or Accept Employment (53,000)**

- 43,358 Employed
- 2,765 Unemployed
- 2,370 Voluntarily Not Employed, Not Retired
- 4,507 Retired

### Underemployment

The underemployed are composed of individuals who are working fewer than 35 hours per week but desire more hours; who are working at wages equal to or less than the national poverty level; and/or who are working in positions that do not meet their skill or education levels, or worked for higher wages at previous employment.

- 2.0% Inadequate hours (867 people)
- 4.5% Mismatch of skills (1,951 people)
- 1.0% Low income (434 people)
- 6.2% Total estimated underemployment (2,688 people)

Individuals may be underemployed for more than one reason, but are counted only once for total estimated underemployment.

### Industrial Classification of the Employed

Industry	% of Laborshed	# of Employed	% Employed	% Willing to Change Employment	% Unemployed
Education	20.3%	30,515	82.0%	23.3%	2.2%
Healthcare & Social Services	15.9%	23,901	86.4%	24.6%	4.5%
Manufacturing	12.8%	19,241	70.8%	34.8%	10.8%
Wholesale & Retail Trade	11.1%	16,686	60.6%	37.5%	12.1%
Public Administration & Government	7.8%	11,725	71.8%	32.1%	7.7%
Finance, Insurance & Real Estate	7.0%	10,522	73.5%	36.0%	2.9%
Transportation, Communication & Utilities	6.7%	10,071	80.0%	20.8%	13.3%
Professional Services	5.6%	8,418	60.6%	30.0%	21.2%
Agriculture, Forestry & Mining	5.0%	7,516	90.0%	11.1%	10.0%
Personal Services	4.2%	6,313	62.5%	26.7%	8.3%
Construction	2.2%	3,307	57.1%	25.0%	42.9%
Entertainment & Recreation	1.1%	1,654	*	*	*
Active Military Duty	0.3%	451	*	*	*

\* Insufficient survey data/refused

Survey respondents from the Siouxland Laborshed area were asked to identify the industry in which they are currently working. The largest concentration of workers are employed in the education industry.

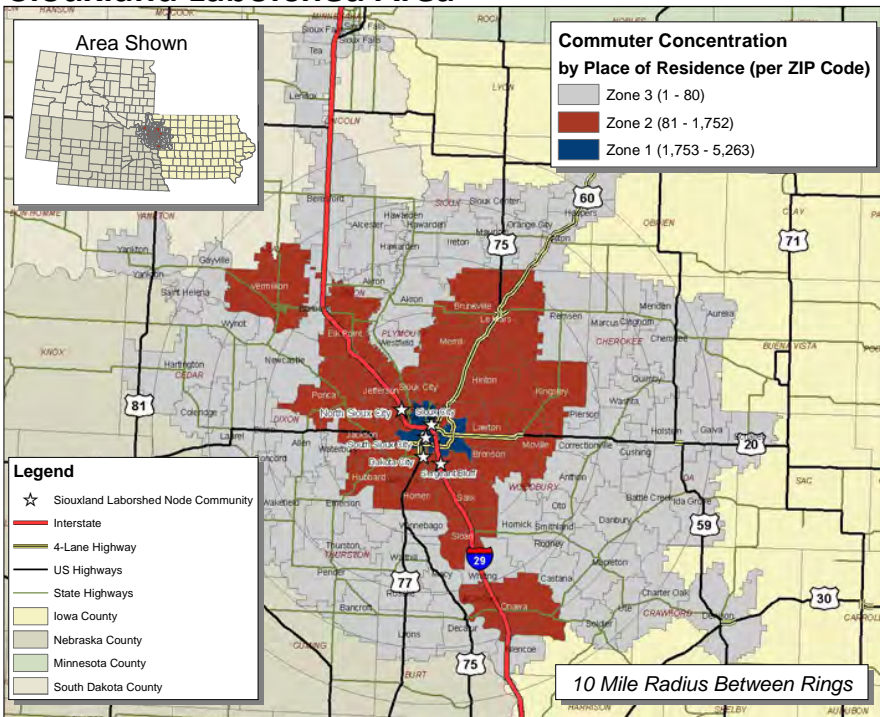
### Quick Facts

(Employed - willing to change employment)

- 11.3% are working multiple jobs
- Currently working an average of 41 hours per week
- Average age is 45 years old
- 30.6% currently working within the professional, paraprofessional & technical occupational category followed by 17.7% within the production, construction & material handling occupational category
- Most frequently identified job search sources:
  - Internet
    - [www.monster.com](http://www.monster.com)
    - [www.careerbuilder.com](http://www.careerbuilder.com)
  - Local/Regional newspapers
    - *Sioux City Journal*
    - *The Argus Leader* - Sioux Falls, SD
  - Networking through friends, family and acquaintances
  - Local IowaWORKS Centers



## Siouxland Laborshed Area



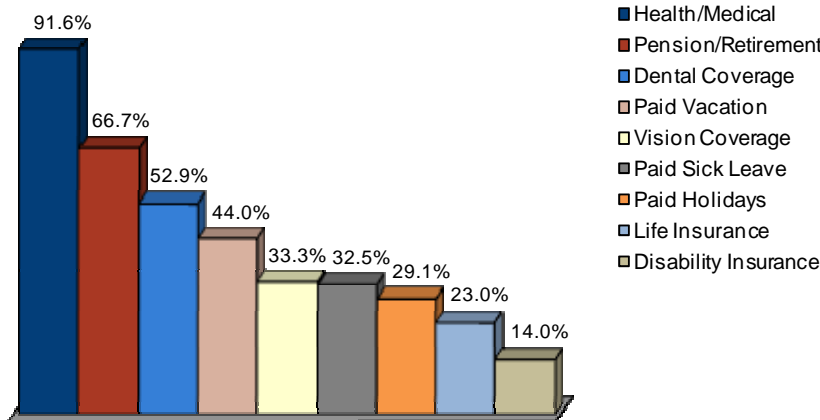
## Commuting Statistics

The map at the left represents commuting patterns into Siouxland with the concentration per ZIP code represented in the legend.

Those who are willing to change/accept employment in the Siouxland Laborshed area are willing to commute an average of 22 miles one way for employment opportunities.



## Benefits Currently Offered



The survey provides the respondents an opportunity to identify employment benefits they currently are offered. The chart at left provides the percentage of responses from those that are currently employed. The top nine benefits are shown.

The majority (74.8%) of respondents state they are currently sharing the cost of health/medical insurance premiums with their employer. However, 18.4 percent indicate their employer pays the entire cost of insurance premiums.

## Education and Median Wage Characteristics by Industry

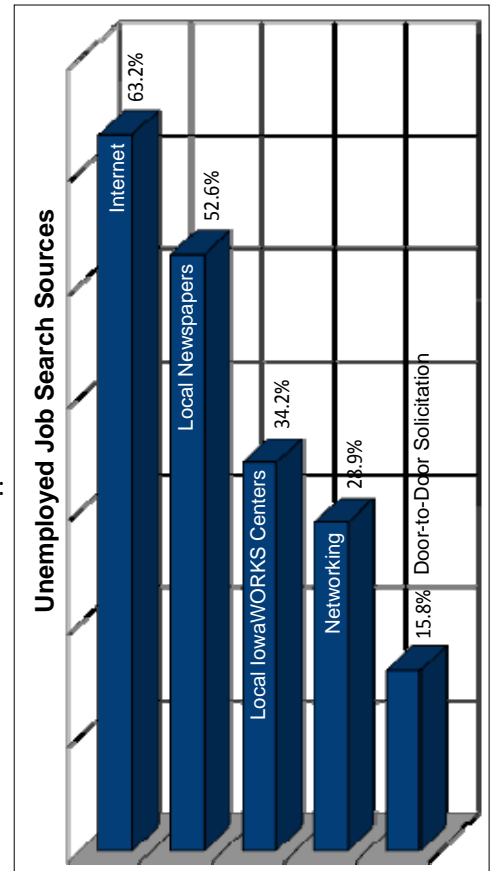
Industry	Education			Median Wages	
	Some Level Beyond High School	Associate Degree	Undergraduate Degree or Higher	Salary Wages (per year)	Non Salary Wages (per hour)
Agriculture	60.0%	10.0%	35.0%	\$45,000	*
Construction	71.4%	21.4%	7.1%	*	\$15.00
Manufacturing	69.2%	15.4%	33.9%	\$64,500	\$15.41
Transportation, Communication & Utilities	73.3%	30.0%	16.7%	\$51,000	\$24.00
Wholesale & Retail Trade	59.1%	13.6%	13.7%	\$50,000	\$9.00
Finance, Insurance & Real Estate	76.5%	11.8%	50.0%	\$55,000	\$13.20
Healthcare & Social Services	80.3%	16.7%	39.4%	\$66,250	\$15.61
Personal Services	70.8%	8.3%	29.2%	\$35,000	\$8.00
Entertainment & Recreation	*	*	*	*	*
Professional Services	54.5%	9.1%	39.4%	\$68,500	\$10.00
Public Administration & Government	61.5%	20.5%	28.2%	\$42,250	\$16.85
Education	84.3%	3.4%	78.7%	\$53,000	\$12.50

This table includes all respondents without consideration of employment status or willingness to change/enter employment.

\*Insufficient survey data/refused

**Unemployed - Those Willing to Enter/Re-enter Employment**

- An estimated 2,765 unemployed individuals are willing to accept employment
- Average age is 46 years old
- 51.3% are female; 48.7% are male
- Education:
  - 43.6% have an education beyond high school
  - 5.1% are trade certified
  - 7.7% have an associate degree
  - 18.0% have an undergraduate degree
- Estimated wage range to attract the upper 66-75% qualified hourly wage applicants is \$10.00 to \$11.25/hr. with a median of the lowest wage of \$9.00
- Willing to commute an average of 21 miles one way for the right opportunity
- 66.7% expressed interest in seasonal and 56.4% in temporary employment opportunities
- 46.2% expressed interest in working varied shifts (2nd, 3rd & split)
- Would prefer to enter employment that offers the following benefits:
  - Health/medical insurance - 71.9%
  - Paid vacation - 43.8%
  - Pension/retirement options - 40.6%
  - Dental coverage - 31.2%
  - Paid holidays - 21.9%
  - Vision coverage - 18.8%
  - Paid sick leave - 15.6%
  - Paid time off - 12.5%
  - Life insurance - 6.2%
  - Disability insurance - 3.1%
  - Prescription drug coverage - 3.1%
- 63.6% indicated they are seeking employment offers where the employer/employee share the cost of medical insurance premiums.



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**For more information regarding the Siouxland Laborshed Analysis, contact:**

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# A DECADE LATER: TRACKING WYOMING'S YOUTH INTO THE LABOR FORCE

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Presented by Tony Glover  
January 9, 2013

Research & Planning  
Wyoming Department of Workforce Services

<http://doe.state.wy.us/LMI>  
[http://doe.state.wy.us/LMI/A\\_Decade\\_Later\\_Presentation.pdf](http://doe.state.wy.us/LMI/A_Decade_Later_Presentation.pdf)



Research & Planning  
Wyoming DWS



# About the Research

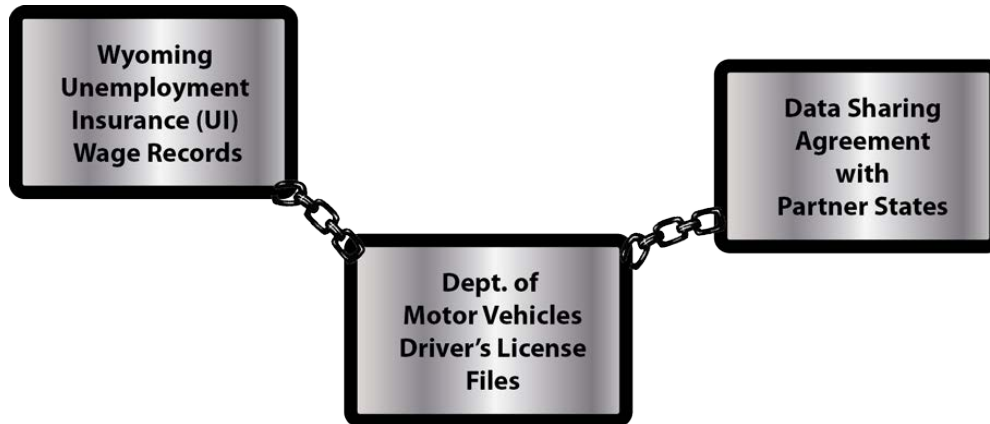
## *A Decade Later: Tracking Wyoming's Youth into the Labor Force*

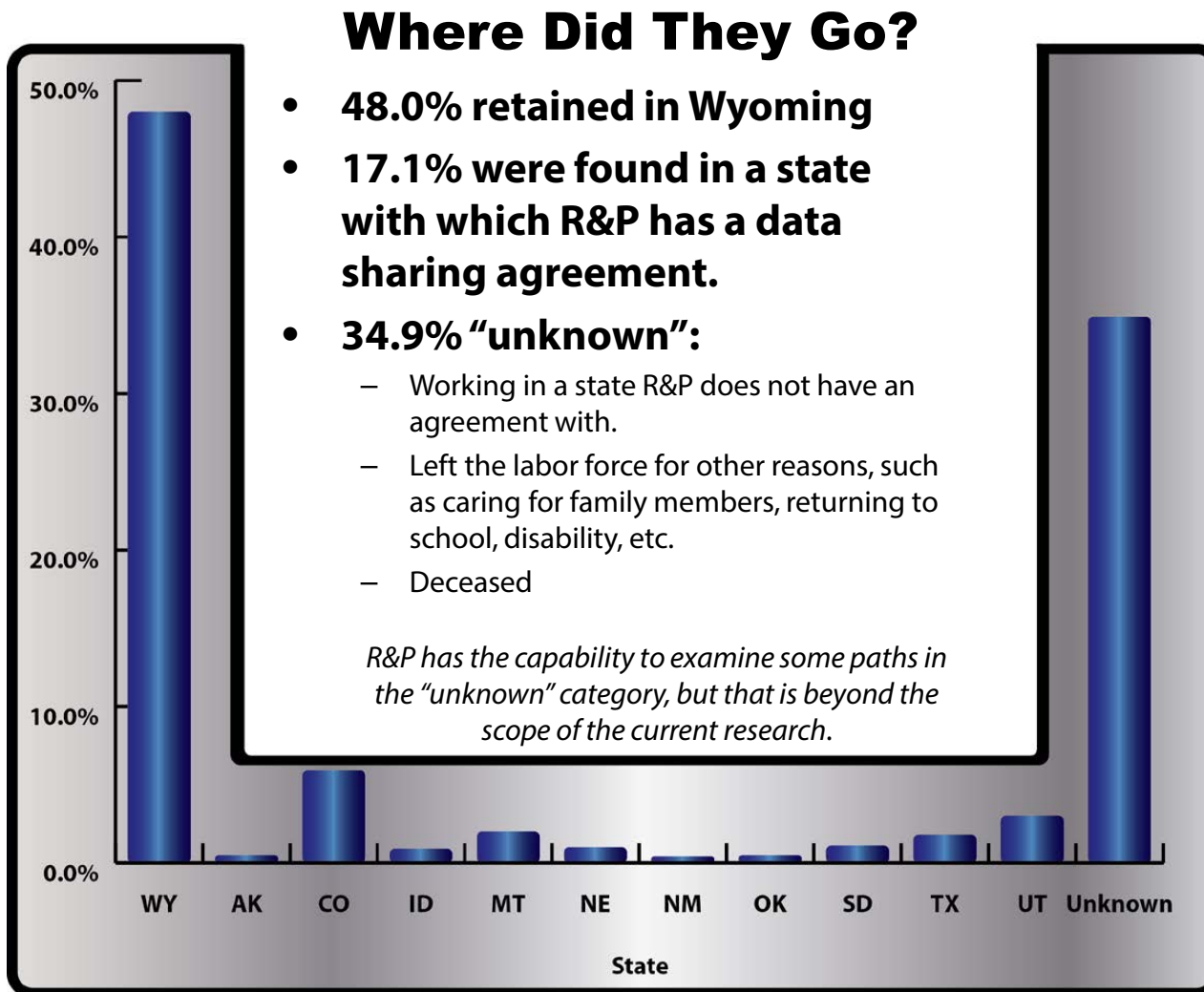
[http://doe.state.wy.us/LMI/w\\_r\\_research/A\\_Decade\\_Later.pdf](http://doe.state.wy.us/LMI/w_r_research/A_Decade_Later.pdf) (publication)

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### Administrative Databases

R&P is able to track Wyoming youth across time by linking several administrative databases





**Figure 2: Percentage of Wyoming 18-Year-Olds from 2000 Found Working in Wyoming and States with Data-Sharing Agreements in 2010**

The Recent Labor Market Downturn as a Natural Experiment: The Use of Unemployment  
Insurance (UI) Claimants in Program Evaluation Research and Workforce Agency Service

Delivery: Part I.

Patrick W. Harris

Principal Analyst

Department of Workforce Services

Research & Planning

Draft 8-14-14

## Abstract

On the one hand, increasing the maximum number of weeks an individual can claim benefits has been shown to increase the time spent unemployed which can have negative consequences on the unemployment rate (Rothstein, 2011). On the other hand, an extension of Unemployment Insurance (UI) benefits allows the unemployed worker enough time to search for suitable employment with higher wages that better matches their knowledge and skills (Kahn, 2011). Using UI claims data before, during, and after the recent economic downturn, we found that the length of UI benefit collection affects the likelihood of leaving Wyoming's labor market. Further, we found that when faced with the possibility of collecting extended UI benefits, extended benefits have little effect a person's work search intensity. We discuss workforce agency initiatives and program evaluation implications.

According to the National Bureau of Economic Research (NBER, 2010), the recent national economic downturn lasted from December 2007 to June 2009.<sup>1</sup> From 2005 to 2013, the amount of Unemployment Insurance (UI) benefits paid varied across the nation. In Wyoming, the UI trust fund was able to remain solvent after it paid out \$665.5 million between 2005 and 2013, while several states borrowed money from the federal government to pay UI benefits to their citizens. The research presented here is part one of a three part series examining UI claimants prior, during, and after the recent downturn. In this first part, we examine people who exit Wyoming's labor market (leavers) after UI benefit collection. Part II will examine the characteristics of those claimants who will use the UI system again in the future (repeat claimants). Part III will examine UI benefit duration and re-employment outcomes after UI benefit collection.

The purpose of this three part series is two-fold. First, in order to conduct successful and useful workforce program evaluation, UI claimant behavior should be understood in terms of individual labor market histories and the economic conditions when a claimant collects UI benefits. From a program evaluation standpoint, comparing groups across time will lead to bias due to unobserved heterogeneity (unobserved characteristics) between claimants, and capturing these characteristics allows for stronger program evaluation research. Second, the financial and human resources of workforce agencies are limited, and focusing on claimants who are likely to benefit from services should be a primary goal.

The results in this article suggest that claimants behave differently depending on both economic and individual characteristics which will influence workforce agency service direction. The three articles in this series explore UI claimant behavior in times of differing economic

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<sup>1</sup> The NBER does not publish state-level estimates of economic downturns. According to the Quarterly Census of Employment and Wages (QCEW) which collects a quarterly census from employers on wages and employment, Wyoming experienced an economic downturn beginning in 2009Q1 through 2010Q2.

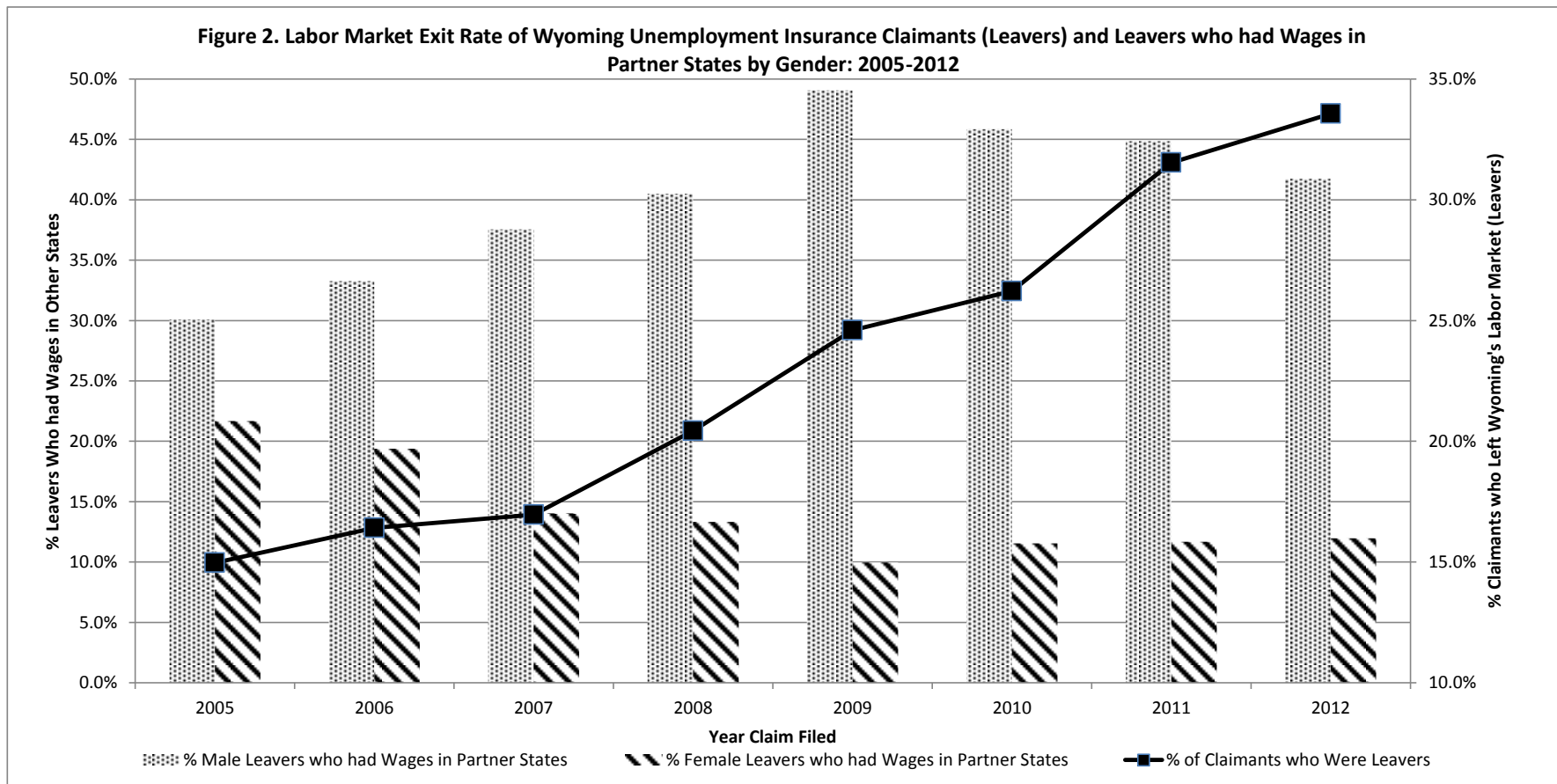


conditions and the effects of large-scale policy changes that affect the labor force (e.g., extended benefits).

A key responsibility of state workforce agencies is to assist unemployed individuals in finding work during unemployment. From a policy and statistical standpoint, the time period examined in this article (2005 to 2012) provides a unique evaluation of the UI system and the effectiveness of state workforce agency services due to the high degree of variability in the number and length of UI benefit collection. Specifically, this time period includes a period of economic expansion (2005Q1 to 2008Q4), economic downturn (2009Q1 to 2010Q2), and gradual economy recovery (2010Q3 to 2012Q4). During these periods, policy changes to the UI system were implemented in response to the change in economic conditions. Due to the variability in the use of UI prior, during, and after the recent economic downturn, many authors deem it a natural experiment (Kahn, 2011; Rothstein, 2011). A natural experiment is one way to evaluate large-scale policy changes and their effects on labor market activity (van Ours & Vodopivec, 2006). A natural experiment is one where clusters of individuals are exposed to treatment or control conditions that are determined by nature or laws and not induced by a researcher.

In this article, we examine the number of Wyoming's UI claimants who leave Wyoming's labor market after UI benefit collection (leavers). We defined **leavers** as those claimants who do not appear in Wyoming wage records again after the quarter they began receiving benefits. The **leaver rate** is the number of leavers divided by the total number of UI claimants. In order to understand the interstate migratory patterns of individuals collecting Wyoming UI benefits, we examine the number of leavers who appeared in partner states' wage records.

Table 1. Labor Market Exit Rate of Wyoming Unemployment Insurance Claimants and Employment in Partner States by Gender: 2005-2012.							
Year Claim Filed	Total UI Claimants	Total Number of Claimants who Left Wyoming's Labor Market (Leavers)	% of Claimants who Were Leavers	Number of Male Leavers who had Wages in Partner States	% Male Leavers who had Wages in Partner States	Number of Female Leavers who had Wages in Partner States	% Female Leavers who had Wages in Partner States
2005	2,464	369	15.0%	111	30.1%	80	21.7%
2006	3,204	526	16.4%	175	33.3%	102	19.4%
2007	3,738	634	17.0%	238	37.5%	89	14.0%
2008	5,511	1,126	20.4%	456	40.5%	150	13.3%
2009	14,968	3,682	24.6%	1,806	49.0%	367	10.0%
2010	9,650	2,530	26.2%	1,160	45.8%	292	11.5%
2011	7,026	2,216	31.5%	994	44.9%	259	11.7%
2012	6,519	2,188	33.6%	913	41.7%	262	12.0%
<b>Total</b>	<b>53,080</b>	<b>13,271</b>	<b>25.0%</b>	<b>5,853</b>	<b>44.1%</b>	<b>1,601</b>	<b>12.1%</b>





BOOM

## SD conference offers how to benefit from ND oil

SEPTEMBER 30, 2014 4:00 PM • BY CARSON WALKER THE ASSOCIATED PRESS

South Dakota's oil and gas production is a fraction of North Dakota's, though the organizer of a conference this week in Spearfish said the southern neighbor could prosper if companies step up to supply much-needed products and services to the burgeoning oil patch.

"It's literally like the gold boom rush of the start of the Black Hills' explosive growth," said Branden Bestgen, also the Sturgis City Council president. "But it's with an oil boom."

He said the Black Hills Bakken and Investor Conference, which runs Wednesday and Thursday, was first held two years ago as a general introduction to the potential for South Dakota to play more of a role in North Dakota, which is now second only to Texas in oil production.

This year's gathering will include specifics on how business owners can tap the energy markets and expand that segment of South Dakota's economy, which is largely based on agriculture and tourism, Bestgen said.

One of the presenters will be Patric Galvin, president of South Dakota Proppants in Hill City, which is investing \$66 million to mine sand that's well suited for fracking. He plans to start operating by late 2016, employ 330 people from the Black Hills region and truck the sand to nearby mines in Wyoming and North Dakota, he said.

"This sand is a rare and unique find. There's no suitable sand in North Dakota," Galvin said.

Jeff Zarling with the Williston, North Dakota, marketing firm Dawa Solutions Group said the state's growing population brings added need for all services, not just those related to petroleum, such as medical and retail. For example, one out-of-state dental group set up a practice in the oil patch and the dentists rotate in every two weeks, he said.

Business owners should stick with what they know because there are huge challenges to operate in North Dakota such as housing, cost of labor and transportation, Zarling said.

"The opportunity is large, but you don't just show up and punch your lottery ticket," he said.

Those high operating costs in North Dakota are why more manufacturers are setting up in South Dakota, Bestgen said.

South Dakota does have oil and gas reserves, but they'll likely remain mostly untapped until new technology comes along and probably never rival North Dakota, said Derric Iles, state geologist with the state Department of Environment and Natural Resources in Vermillion. The state in 2013 hit the highest annual production since it started in 1954, just over 1.8 million barrels of oil.

"North Dakota produces that amount of oil in less than two days," he said. **NASWA Report B2**



# U.S. Gas Boom Turns Global as LNG Exports to Shake Up Market

By Christine Buurma and Chou Hui Hong - Oct 1, 2014

The U.S. natural gas boom is poised to go global as the government approves projects that will export the fuel to buyers from [Tokyo](#) to [New Delhi](#).

Dominion Resources Inc.'s Cove Point terminal in [Maryland](#) won authorization Sept. 29 from the U.S. Federal Energy Regulatory Commission to ship liquefied natural gas around the world. It's the fourth export project to win permission and the first outside the [Gulf of Mexico](#). Construction will cost between \$3.4 billion and \$3.8 billion, Dominion said yesterday.

Advances in drilling techniques including hydraulic fracturing have pushed U.S. natural gas [output](#) to a record every year since 2011 and made the country the world's largest producer. U.S. supplies will compete with cargoes from Qatar and [Australia](#), two of the biggest exporters, shifting global movements of the super-chilled fuel.

"In our projections the U.S. becomes a significant LNG exporter, taking the bronze medal after Qatar and Australia," Laszlo Varro, head of gas, coal and electricity markets at the [International Energy Agency](#), said in an interview in Berlin yesterday. "As North American LNG flows to [Japan](#) and [Korea](#), the Japanese and Koreans will buy less LNG from Qatar. Qatar will want to do something with that gas."

Surging U.S. gas production from [shale formations](#) including the Marcellus deposit in Appalachia has sent prices tumbling 69 percent from a peak in 2008. Marketed gas output will advance 5.3 percent this year to an all-time high of 73.93 billion cubic feet a day, according to U.S. Energy Information Administration projections.

## First Exporter

Cheniere Energy Inc. is set to be the first company to export gas produced from the U.S. shale boom. The company's Sabine Pass export terminal under construction in [Cameron Parish, Louisiana](#), may ship its first LNG cargoes to overseas customers as early as next year, the company has said.

BG Group agreed to buy about a third of the annual 16 million tons of LNG from the Sabine Pass

terminal, which also sold the fuel to companies including Korea Gas Corp., Gas Natural SDG SA and Gail [India](#) Ltd., Cheniere said.

[Asia](#) is a prime market for low-cost U.S. supplies, with LNG demand for the region set to climb about 36 percent from 2013 to 2020, according to Rafael McDonald, director of global gas and LNG at IHS CERA, an energy consulting company in Cambridge, [Massachusetts](#). Asia consumed 75 percent of the world's LNG last year, data from the [International Group](#) of Liquefied Natural Gas Importers show.

## 20-Year Contracts

A U.S. LNG cargo sent to Japan today would cost about \$10.50 per million British thermal units, including marketing and transportation costs, McDonald said by phone yesterday. Japan paid an average of \$15.58 per million Btu for shipments from Australia in June, government data show.

LNG into northeast Asia was little changed at \$14.70 in the week ended Sept. 29, according to the Energy Intelligence Group's World Gas Intelligence publication today. Natural gas for November delivery on the [New York Mercantile Exchange](#) rose 0.3 percent to \$4.132 per million Btu at 11:16 a.m.

Sumitomo Corp., Japan's third-largest trading house, and Tokyo Gas Co. will buy gas from the Cove Point terminal under 20-year contracts. Japan's LNG imports jumped to a record after the 2011 meltdown at the Fukushima Dai-Ichi nuclear plant.

"Asia is the growth market," McDonald said by phone yesterday. "U.S. LNG will bring security of supply and diversification of supply sources for the region."

## Indian Imports

India is building LNG receiving terminals in anticipation of U.S. cargoes, R.K. Garg, finance director at Petronet LNG Ltd., India's biggest importer of LNG, said by phone yesterday.

Gail India Ltd., the nation's largest gas distributor, said in June that it is offering LNG supplies from the U.S. tied to the American benchmark as an alternative to its oil-linked contracts. Asia's LNG contracts traditionally are tied to oil, making them vulnerable to increases in crude prices.

U.S. exports may also be destined for [Europe](#), especially if severe winters cause prices to jump, McDonald said.

North American LNG exports to Japan and Korea may displace supplies from [Qatar](#), prompting Qatar to divert cargoes to Europe, the IEA's Varro said.

"U.S. LNG will definitely lead to a more competitive and more saturated European gas market, even if

the actual quantities in Europe will not be very large,” he said.

## Global Trade

Worldwide, LNG trade will rise by 40 percent to 450 billion cubic meters (16 trillion cubic feet) by 2019, the [IEA](#) said in its medium-term gas market report in June.

U.S. LNG exports will probably climb to about 8.5 billion cubic feet a day of gas in 2020, IHS CERA’s McDonald said, or about 1.8 percent of global demand.

While the U.S. won’t begin exporting gas until late next year, the prospect of rising North American supply is already having an impact as the market anticipates increased competition, Catriona Scott, a London-based senior energy analyst at Interfax Europe Ltd.’s Global Gas Analytics, said by phone yesterday.

“You have suppliers like Qatar looking to balance their portfolios and positioning themselves to be able to offer Asian buyers much more flexible supply options from a pricing perspective,” Scott said. “This will be another step in that change.”

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# Oil boom's employees, jobs spread to Black Hills

KEVIN BURBACH Associated Press | Posted: Monday, November 17, 2014 5:45 am

SPEARFISH, S.D. (AP) — Ryan Lambert wants to reap the benefits of the booming Bakken oil region of western North Dakota — but he doesn't want to live there.

"Do my time and get out, that's about how I play it," Lambert said, standing in the kitchen of his Spearfish home on one of his two-week breaks last month.

Lambert is one of a growing number of oil-field workers who make their living in the Bakken but live in the scenic Black Hills, one of the closest population centers to the oil patch that's benefiting — directly and indirectly — from the highly lucrative boom.

Real estate agents say there's a housing shortage in the region as workers and retirees buy up homes. Local officials say commercial and residential projects are on the rise. And businesses looking to cater to oil-patch companies are setting up shop in Spearfish and Belle Fourche, hoping to get the business without the headaches.

"You hate to ... make your star brighter by making the other guy's black, but in some sense, the disadvantages of the boom there have (contributed) to the opportunities down here," said Doug Cole, who started Black Hills Fiberglass more than two years ago in Belle Fourche.

Cole, a retired legislator and construction worker, said it was a smart business decision to base his company that makes 400-gallon fiberglass oil and water tanks out of the Black Hills, which is about 300 miles from key oil cities in the region, namely Williston.

The lower costs of land, construction and materials are more enticing in South Dakota and Cole said he doesn't have to worry about trying to compete with inflated oil field-wages offered by other companies in town.

Other companies, like Texas-based Permian Tank, have followed Cole's lead and set up shop in Belle Fourche in the city's industrial rail park, which they hope will attract businesses looking to service the



## Oil boom's employees, jobs spread to Black Hills

In this Sept. 30, 2014 photo, Ryan Lambert talks about working two-week rotations in the western North Dakota oil patch at his home in Spearfish, S.D. Lambert is among a growing number of oil patch workers who are choosing to live in the scenic Black Hills in South Dakota instead of the the hectic boomtowns in North Dakota. (AP Photo/Kevin Burbach)



surrounding oil region.

Sandy Donahue, a real estate agent who's lived in the Black Hills for decades, said the influx of workers and retirees fleeing North Dakota's oil boom has been great for business and market prices. Donahue said a two-bedroom home in Spearfish that would go for around \$150,000 three years ago is now selling for more than \$200,000. She said the city is seeing a shortage of homes under \$300,000.

She estimated that 15 to 20 percent of her clients either work in North Dakota or are leaving it.

Lambert, who works around 90 hours a week in and around Killdeer, North Dakota, said he just wants to return to the peace and quiet of Spearfish after the chaos of the boom region.

"It's bad enough being up there for two weeks, dealing with all the traffic and all the people," he said.

Carlos Gallegos, who works overseeing well preparation for Exxon Mobile, echoed Lambert's sentiments this week.

Gallegos, who moved to the Black Hills three ago after working for BP in Wyoming, pulls seven-day stints in Williston while his wife and two kids live in Spearfish. He said he keeps his family away from the boom towns because of the people they can attract.

"A felon can get out of prison and haul water and make \$80,000 a year," he said.

"In Spearfish ... I know my family's safe. But in Williston, you never know who your neighbor is."



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## Life in the Boom

# A year in North Dakota: Stories of people and change



Floor hand Ray Gerrish worked to make repairs on a drilling rig outside Watford City, one of nearly 200 towering rigs in the Bakken.

Behind the oil industry's gaudy numbers, you'll find countless dreamers, schemers and in between.

Recommend { 18 } Tweet { 14 } share +

Story by **Curt Brown**

t the end of a feverish fifth year, it's easy to paint North Dakota's oil portrait by numbers: Production is inching toward a million barrels a day, up seven times what it was in 2008.

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Photography by  
**Jim Gehrz**

# A

Thousands of workers have poured in to staff 200 rigs, drilling 2 miles deep to tap a projected 7 billion barrels buried in the shale. The state has vaulted ahead of Alaska, trailing only Texas and the Gulf of Mexico in oil extraction. Its once-shrinking population is now growing faster than any other state and its coffers are laced with a \$1.6 billion surplus.

Behind all those gaudy numbers, you'll find countless dreamers and schemers, truck drivers and schoolteachers, frackers and land agents spread across the vast prairie. We'd like to introduce a few more as we wind up our series exploring the state's transformation as a player in the world's energy race.

## 'Everyone kind of caters to you'

It's Saturday night at Cattails bar on Main Street. A fracker from Utah sings "Free Bird," karaoke-style. Oil-field workers clink shot glasses. And concrete mixer driver Michelle Bean strokes her cue at the pool table, starting another game of 8-ball with her housemate, dump truck driver Sonya Adams.

Nothing goes in.

"That shot was like a woman," she says. "All bust, no balls." Bean, 41, sips Crown Royal and Red Bull to stay alert after working nearly 90 hours this week, pouring concrete for roads, sidewalks and oil pads. Sunday is her day off. She came out to the Bakken in February, fleeing a bad breakup in the woodsy country near Leavenworth, Wash.

"I miss the trees," she says. "And the guys to girls ratio is a little unbalanced."

Being female in the North Dakota oil fields, Bean and Adams say, isn't as bad as the horror stories they hear about leers at the Wal-Mart and harassment around every corner. Unofficial counts say there are 10 men for every woman working in western North Dakota.

"It's not too bad because everyone kind of caters to you," Bean says. "Nobody's messed with me and it's all been respectful."

Knife River Corp., a 5,000-employee construction giant based in Bismarck, provides the women with a five-bedroom house they share with another truck driving woman named Betty. They earn \$24 an hour plus a \$50 per diem and Knife River deducts \$600 a month for the housing. Adams, 40, left a divorce and 9-year-old son back in southern Idaho.

Her parents, Richard and Tina Yelton, have come up from Arizona. Her dad is her truck boss and her mom drives a 10-wheel end dump truck just like she does.

"Women are definitely outnumbered," she says, but even that has improved from when she arrived two years ago. "They're learning we work just as hard and do just as a good a job."

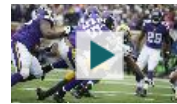
## 'What we do is investigate, negotiate and argue'

he back seat of Vern Stiller's silver Mercedes SR5 SUV is littered with maps, a hard hat, work gloves and an extra carton of Pall Mall cigarettes.

There are 180,000 miles on the odometer, with 80,000 more piling up yearly. He's driven 330 miles today and it's still early afternoon.



**NASWA Report 89**  
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**Access Vikings: Run defense needs to improve in a hurry**



**Access Vikings: Barr likely out Sunday; Hodges would fill in**

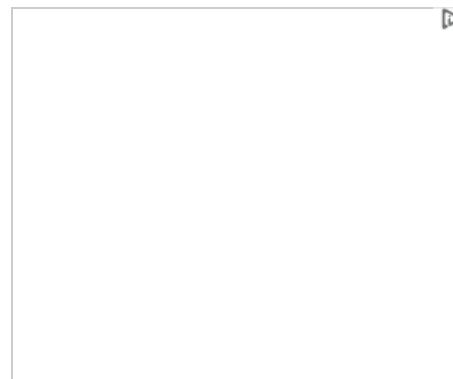


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“That’s a lot of ass time,” said Stiller, 70. “I drive around, smoke cigarettes, drink coffee, talk smart and write checks.”

His voice is pure gravel, his neck tan and weathered. You can’t tell he’s got an artificial leg under his bluejeans, a remnant of a busted ankle and frostbite from five decades working on oil fields in Texas, Oklahoma, Wyoming and now North Dakota.

“They call us land men,” he said. “What we do is investigate, negotiate and argue.”

As middle man between the oil companies and ranchers in western North Dakota, Stiller searches courthouses for titles and figures out who owns the mineral rights. Then he greases the deal, acquiring rights of way easements for pipelines to move the oil and natural gas from this remote landscape to a world thirsting for fuel.

“I do love making deals,” said Stiller.

He’s been married four times, lives in Billings, Mont., but spends most of his time in a friend’s Airstream trailer at the Tobacco Garden campground 20 miles northwest of here.

“I’ve retired three times but needed something to do,” he said. “I make more money than a medical doctor or an engineer, which is hard to imagine.”

As he steers his Mercedes through the canyon country known as the Little Missouri Breaks, he spots a prominent landowner — Bill Jorgenson of the Bar U Ranch. They talk on the road about 15 miles of potential pipeline that one of Stiller’s clients would like to put on Jorgenson’s property.

“Anyway you can work it out,” Stiller says in parting, lighting another Pall Mall and driving off past another well pad tucked in a hillside.

**NASWA Report B10**

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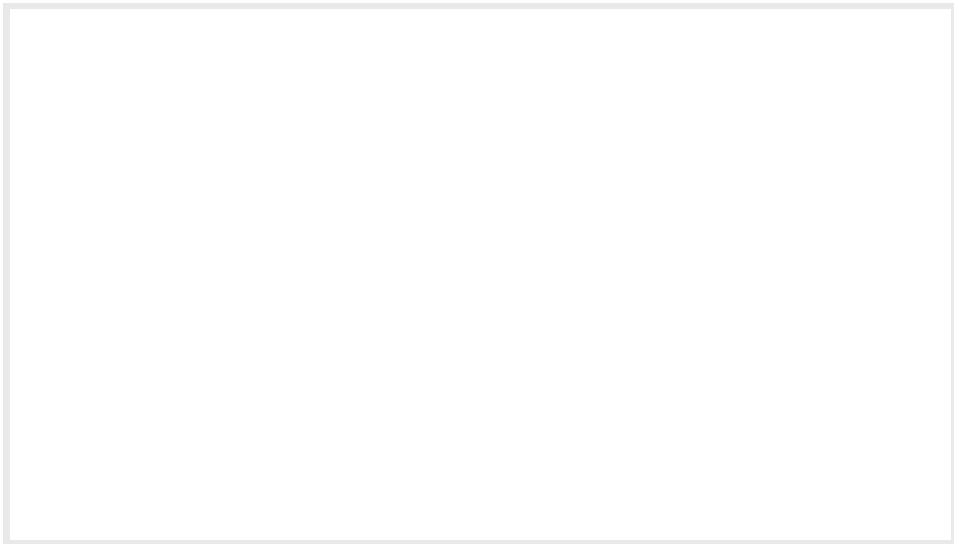
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**Following a dream as music teacher in N.D.:** Nathan Kroshus moved from Minnesota to the Bakken oil region as he follows his passion to be a music teacher.

**'It's an opportunity for me'**

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athaniel Kroshus didn’t come here for high wages or to escape his past. He’s here chasing his passion.

The 31-year-old from Grand Rapids, Minn., loves to teach music. But a dearth of music-teaching jobs in budget-wracked schools back home sent him nearly 600 miles west in 2012 with his fiancée, Trisha, their cat, Gulliver, and Juno, a gray-eyed white Husky.



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"I knew the experience would be like hell," said Nate, a whitecap in this historic wave of migration making North Dakota the fastest-growing state. "But I didn't really realize how hellish till I got here."

He was sitting on a couch last spring, eating Noodle Roni with mock chicken and a salad that Trisha, a vegetarian from Medford, Minn., just prepared. They were paying \$1,800 a month for one-third of a trailer at the Hexco man camp, 400 square feet of space down a snaking dirt road north of Williston.

The place had no address. The sink and shower leaked. The microwave outlet didn't work "and the walls are so thin, we cannot only hear the kid next door, we can follow what TV shows he's watching," Trisha said.

"I knew it would be expensive, but didn't believe it would be this expensive," she said. "I thought there would be older ladies with rooms to rent. There are not. This place is a cave and the space is so crowded, we want to kill each other."

Instead, they returned to Trisha's home near Owatonna on summer break and got married in Hastings.

Trisha kept her "fingers crossed that a call would come with a job in Minnesota," but when that didn't happen, she shrugged.

They headed back to the Bakken, where hotels and apartment buildings had sprung up in and around Williston nearly as fast as oil rigs — a building boom within an oil boom.

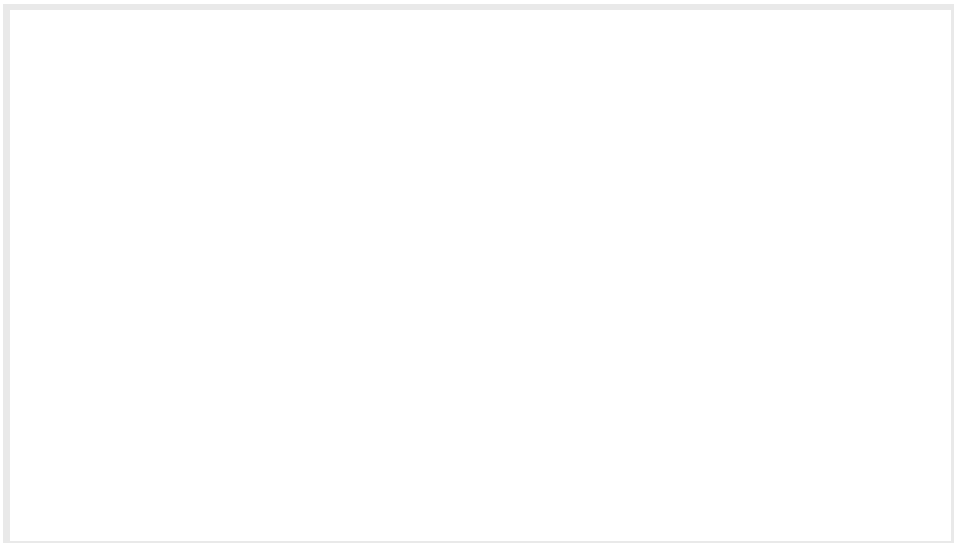
Their new apartment building opened in August near Williston's almost-done, \$70 million recreation center. Their top-floor apartment is 728 square feet — nearly twice as roomy as their man-camp cave, It rents for a third less, \$1,250, including the \$100 fee for Gulliver and Juno.

Nate's salary, meanwhile, has jumped nearly 20 percent to \$50,400.

"The perception is everyone's rich out here, but I'm still making about half the median salary of \$88,000," he said. "But it's an opportunity for me, and I am excited to share the lifelong gift of music."

Trisha has landed a support job at a school here.

"It's better," she said. "But it's still Williston."



**Split-second decision:** Spencer Logan, a fracking site safety lead, recalls a fatal accident on a fracking site.

**Plenty of danger with the paychecks**

**NASWA Report B11**

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**S**pencer Logan was in Hour 16 of his day as a Halliburton safety lead on a hydraulic-fracturing site. It was raining, cold and “the site was just a mud hole and I was just concerned about getting the hell out of there.”

He failed to look up and see a wire line still on, which should have prompted him to open a valve and release 4,500 pounds of pressure. The screw-up left live explosives — known as guns — 4 miles down in the ground, costing his company “lots of money” and nearly getting him fired after four years working his way up the Halliburton ladder.

“I was in too big a hurry,” said Logan, 45, who grew up in Red Wing and lives in California when he’s not fracking for oil in North Dakota.

He’s just glad no one got hurt.

“There are chemicals and explosives, lots of high pressure and so many different things that can get you killed that you’d better know what you’re doing before you step on a site.”

Of the 70 death investigations the Occupational Safety and Health Administration has conducted in North and South Dakota since Oct. 1, 2009, more than half (37) have stemmed from the oil fields of western North Dakota.

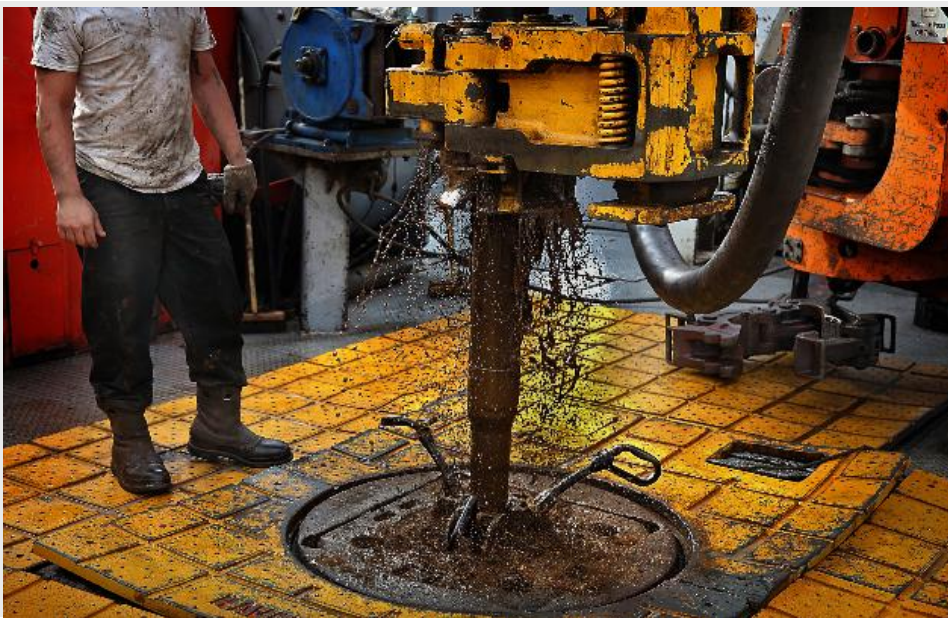
Logan remembers one of those deaths with an overwhelming tinge of sadness.

Mike Krajewski, a 49-year-old father of three daughters from Duluth, was killed when a pipe from a high-pressure line fell and struck his head while fracking in January. OSHA fined Halliburton \$14,000 — the first time the oil-field servicing giant has been cited with workplace safety violations in North Dakota.

“I always wondered why he just didn’t look up,” recalled Logan, who witnessed what he called a “tragedy.” He knew Krajewski personally as “a great friend.

“He thought it was time to go out there and bleed off the fluid from the joints so it would slowly flow out,” Logan said. “He just didn’t look up and see the wire line on there. It’s all about being in a hurry. The thing flew up like a rocket as soon as he opened it up, and he got flown into the wellhead and it crushed the back of his head.

“It’s just a reminder how dangerous this work can be.”



Men work around the clock at a rig near Watford City, where the drilling

floor is slick with grease and oil.

### 'I hope I'm out here another 20 years'

**I**t's 6:40 a.m. and a dramatic flaming sunrise illuminates the hilly prairie around "Raven Rig No. 1," one of nearly 200 towering oil rigs drilling around the clock, every day, in western North Dakota.

Billy Peterson and Ivan Welch greet you with a cram course in the nomenclature, the distinct language of an oil rig. Peterson, 36, is the tool pusher, a not-so-lofty title for the rig boss. Welch is the company man, in charge of the site.

The other 20 crew members living in trailers around the 152-foot-tall rig include rock hounds (geologists), derrick hands, mud hands, drillers, floor hands, motor hands and directional drillers (who take umbrage when mistaken for rock hounds).

"Go on up," Peterson says.

So you climb a 31-foot ladder, slick from dew and grease, to the rig floor — a slippery metallic beehive of activity offering a view that stretches for miles. Sparks fly and an acrid smell comes from the burnt steel cable being soldered and unsnaked to prepare for today's drilling.

Scott Berreth, a 35-year-old derrick hand from Billings, Mont., steps into a harness and is hoisted up like a circus acrobat, using a wrench to bang things in place some 10 stories up at the rig's crown. Soft light filters in on a series of dangling black pipes, hanging like oversized salami in a deli.

When everything is ready, a huge overhead piece of machinery swings into place. Floor hands Ray Gerrish from Utah and Texan - Russell Girsh slather the pipes with grease and connect them.

Grinding noise from the drill brake signals that drilling is underway, spinning a drill bit 2 miles deep in the Three Forks formation below the North Dakota prairie. The drill bit will eventually twist and veer off horizontally.

When the holes are set in a few weeks, the entire rig will be lifted on its four feet and moved one-third of a mile, making two turns, to its next drilling site.

Then dozens of fracking trucks will come in and pound in water, chemicals and round silica sand from Wisconsin and Minnesota, exploding the shale for oil extraction. Eventually, pumps come in and pull the oil out and deposit it into tanks until trucks and trains move it to fuel-thirsty consumers.

The scene, with rigs drilling holes before frack operators get the crude flowing, repeats itself at roughly 200 sites across the prairie — producing nearly a million barrels a day.

"I hope I'm out here another 20 years," says Peterson, who works two weeks on and two weeks off, returning to six kids a dozen-hour drive away in Wyoming. He's been working on drilling rigs since he was hired as a maintenance roustabout at 17.

"When the days are going good, I ain't got a whole lot to do and might even take a nap," the tool pusher says. "When days are going bad, I can be up for three days straight.

"It's good for us workwise, and good for the country," he says. "Maybe we can start making some money off this stuff instead of buying it all the time."

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