

The Road to Work: Commuting in Wyoming



and what it means for
**Economic
Development**
**Community
Planning**
**Policy
Making**
**Resource
Use**
**Employee
Recruiting**

Executive Summary

Last year, the Wyoming Workforce Development Council in partnership with the Wyoming Department of Workforce Services and the Wyoming Department of Employment launched an effort to gather information about the movement of Wyoming's workers. Our first publication examined worker movement among Wyoming's counties. Now, we are pleased to present this report that details worker movement among states.

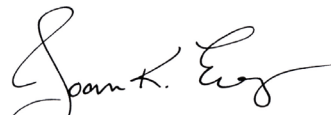
Wyoming's economic indicators continue to suggest substantial future demand for more labor during this period of economic growth. Business owners, policy makers, and economic developers work diligently to craft strategies to fill the vacancies Wyoming has, but finding the labor pools to fill those jobs is becoming more and more difficult. This report seeks to provide information to these groups about another potential source of labor.

In the first publication, this partnership examined the question, "What can we find out about workers who live in one county but work in a different county within Wyoming's borders?" Now, the partnership has examined, "What can we find out about workers who originated in one state and are now working in Wyoming?" As can be seen in the following pages and online, the answer to this question shows where people are moving from and the industries that are attracting them to our state. Knowing the origin of workers allows business owners, policy makers, and economic developers to explore these areas as potential sources of labor.

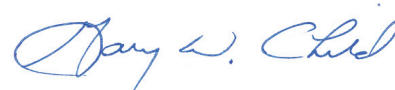
We expect that you may have questions related the data presented in this publication and in the more detailed data sets online at www.wyowdc.org. These questions can be addressed by contacting Wyoming Department of Employment, Research & Planning at (307) 473-3807. For additional information regarding the Wyoming Workforce Development Council, please contact (307) 777-5629 or visit www.wyowdc.org. For more information on the Wyoming Department of Workforce Services, please contact 877-WORK-WYO or visit www.wyomingworkforce.org.



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Inflows to Wyoming by State of Origin for Workers Lacking a Wyoming Driver's License

by: Douglas W. Leonard, Senior Research Analyst

Commuting data can be useful for business owners, policy makers, and economic developers, among others. For example, recognizing which counties have a greater inflow or outflow of workers can help identify housing needs and available sources of labor, while pointing to factors that can affect local infrastructure and services. To learn more about where the state's labor force lives and

works, the Research & Planning section of the Wyoming Department of Employment developed a commuting pattern data model, in cooperation with the Wyoming Workforce Development Council. The model uses

wage records to determine a person's place of employment as well as driver's license records from the Wyoming Department of Transportation to determine place of residence.

Key Findings

- The majority of the increase in commuting inflows since 2003 is due to people who lack a Wyoming driver's license.
- Wyoming exports people to California, so large inflows from California are consistent with Internal Revenue Service tax return data.
- County Inflows can be examined at the industry level by state of origin.
- Inflows from out of state are much more pronounced in border counties.

Map: Wyoming Counties and County Seats



Figure 1 displays the estimated state of origin flows on a **statewide** basis. Notice that the single largest component of inflow is Wyoming. This indicates large numbers of people born in Wyoming who subsequently left the state but returned for work during the specified period. Hereafter we refer to these workers as **repatriates**. The WY flow component, while steady during last several years, increased markedly beginning in 2004. This increase coincides with more rapid economic expansion in the state. California constitutes the second largest component and exhibits a smaller if not similar trend than the repatriates. Of Wyoming's neighboring states, Colorado had the largest inflow component.

Figure 1: Top State of Origin Inflows to Wyoming for Workers without Wyoming Driver's Licenses, Four Quarter Moving Averages

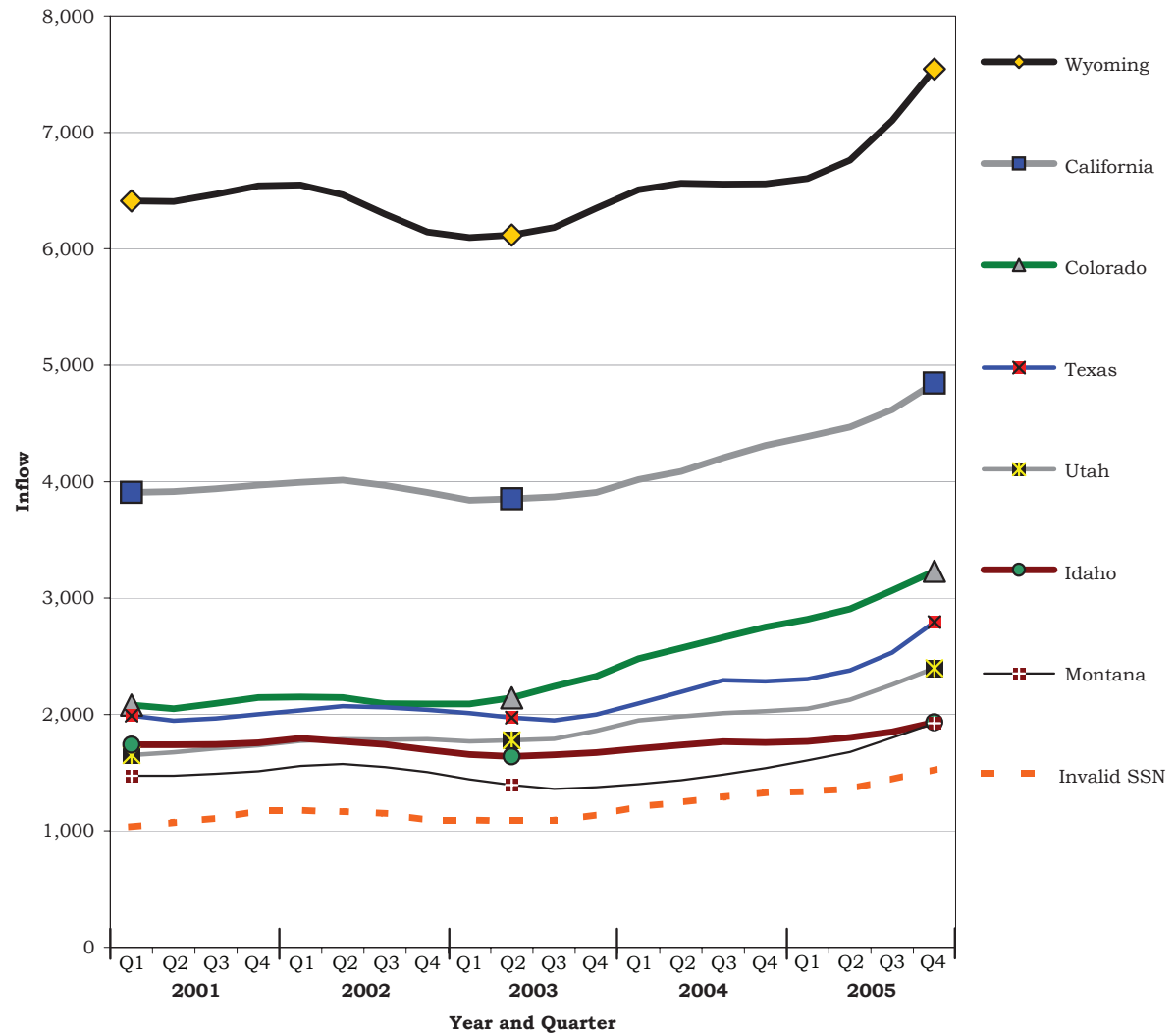
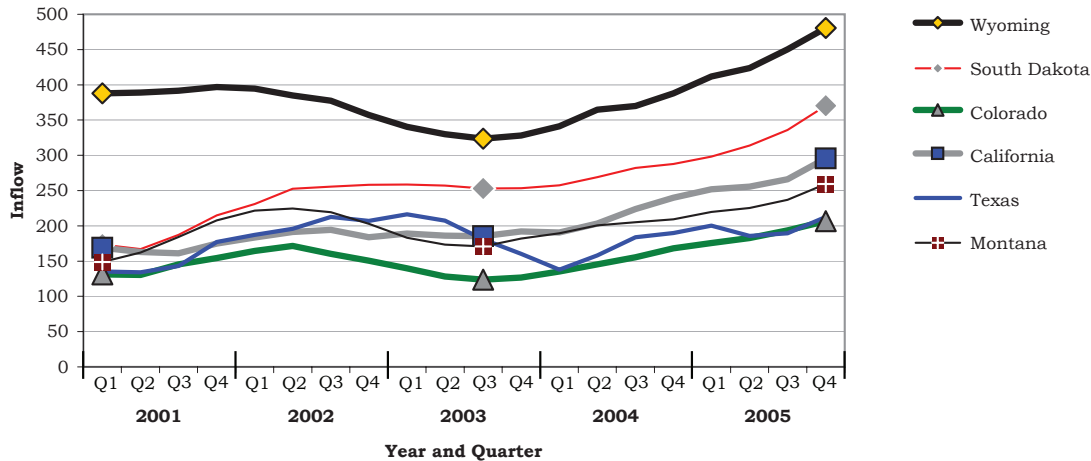


Figure 2: Top State of Origin Inflows to Campbell County for Workers without Wyoming Driver's Licenses, Four-Quarter Moving Averages



Campbell County's inflow profile (see Figure 2) has some distinct differences when compared to the statewide chart. First, the individual flow components increase at a faster rate, indicating faster economic growth than statewide. Second, the proximity of South Dakota appears to account for the relatively large inflow of workers from that state. However, the number of workers with a California-sourced social security number increased in recent years. Workers with Texas social security numbers figure predominantly not only in Campbell County, but all counties in the state where the minerals industry is dominant.

Figure 3: Top State of Origin Inflows to Laramie County for Workers without Wyoming Driver's Licenses, Four-Quarter Moving Averages

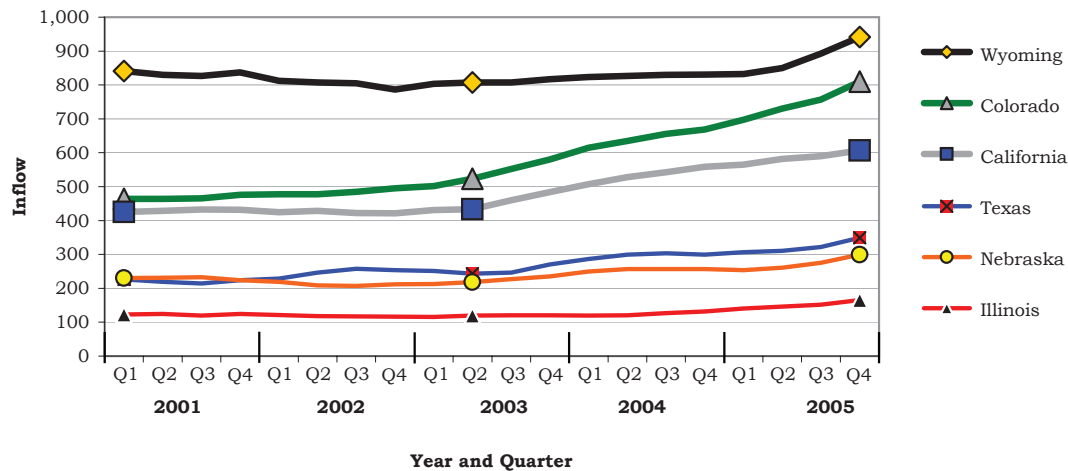
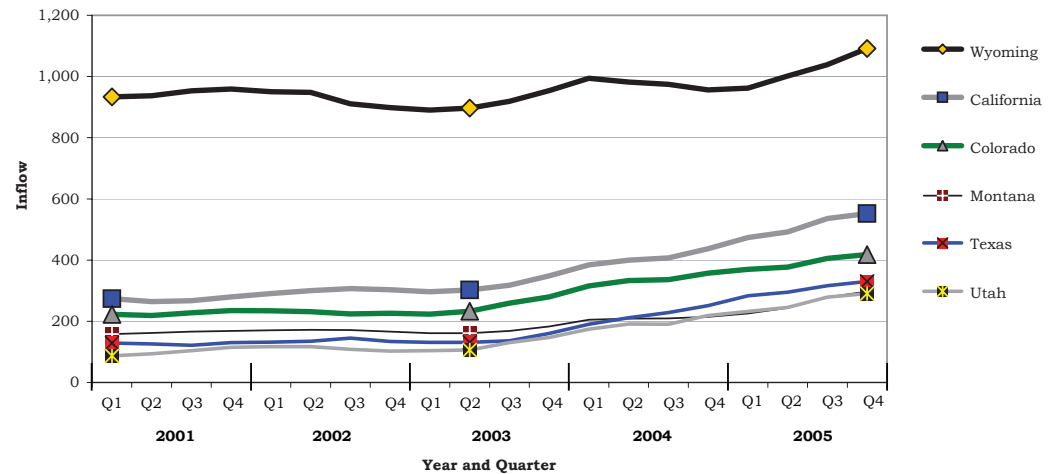


Figure 3 shows the estimated sources of origin for inflowing **Laramie County** workers lacking a Wyoming driver's license. Although repatriates represent the largest inflow component, inflow from Colorado-sourced workers increased steadily since first quarter 2003. During most of this time, the rate of inflow from Colorado increased faster than that of repatriates. California-sourced inflow also increased markedly but at a slower rate than that from Colorado. Also of note is the small-but-increasing level of inflow because of Illinois-sourced social security numbers.

Natrona County inflows differ considerably from either Campbell or Laramie counties. First, there is a considerably larger difference between the flows of repatriates to Natrona County than for other states of origin. Second, the inflows from other states of origin are much more compressed. The nature of the industrial structure of Natrona County likely contributes to this difference, as does its location. *Interior* counties (those that do not border another state) likely would have a different profile than counties which are *exterior* (border another state). Consequently, the recruitment strategies for businesses located in Natrona County may be more successful if focused primarily on repatriates and potential repatriates rather than on workers sourced from other states.

Figure 4: Top State of Origin Inflows to Natrona County for Workers without Wyoming Driver's Licenses, Four-Quarter Moving Averages



Although **Sweetwater County's** largest inflow component is repatriates, its border location contributes to the amount of flow sourced from Utah. In addition, unlike Natrona County, inflows to Sweetwater County due to Texas- and Utah-sourced social security numbers are much larger. However, the inflow of California-sourced social security numbers is similar in magnitude to that of Natrona County.

Figure 5: Top State of Origin Inflows to Sweetwater County for Workers without Wyoming Driver's Licenses, Four-Quarter Moving Averages

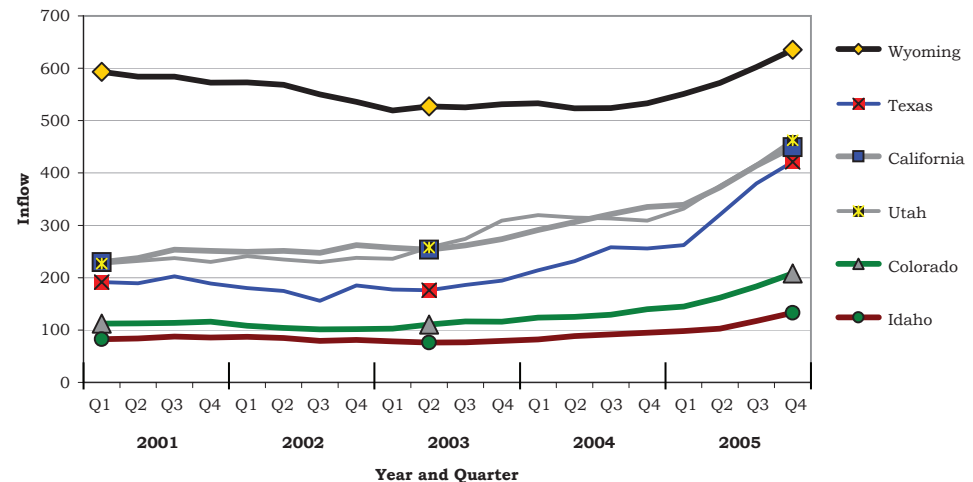
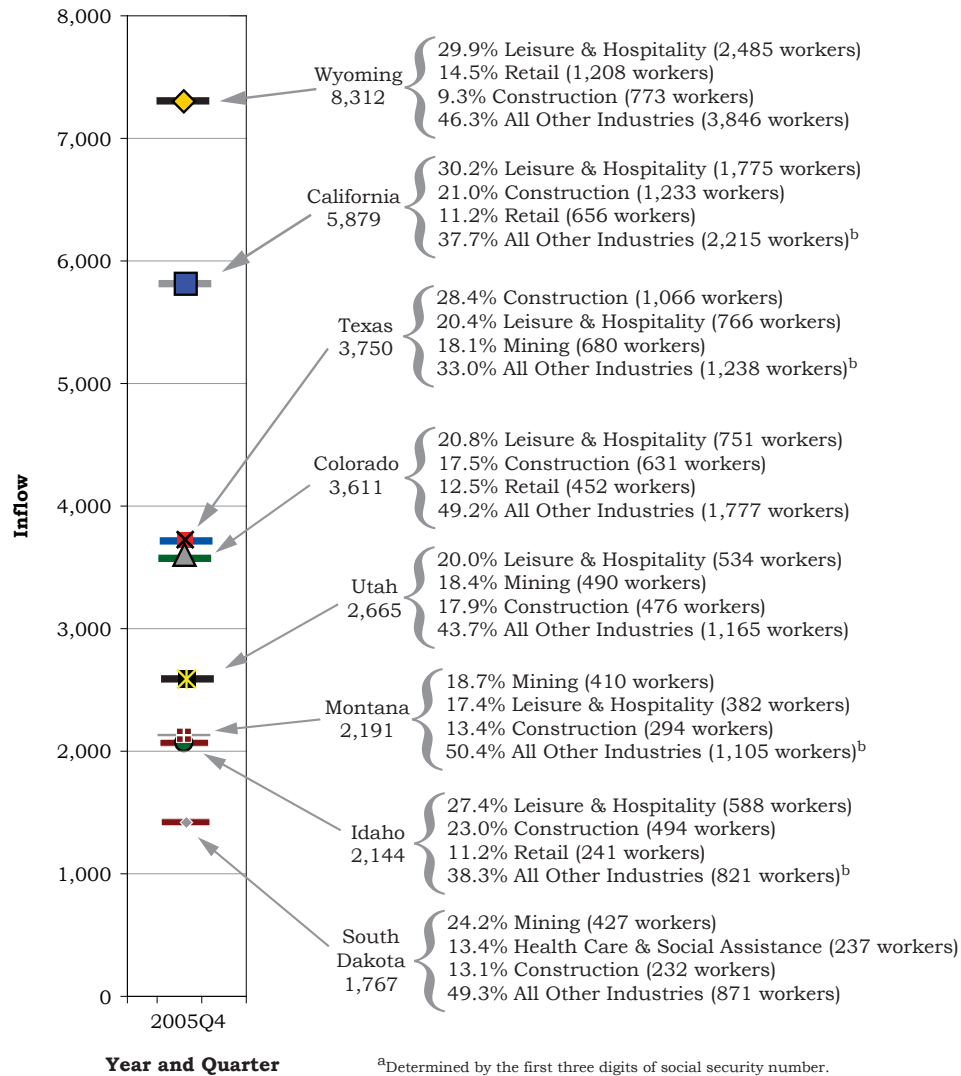
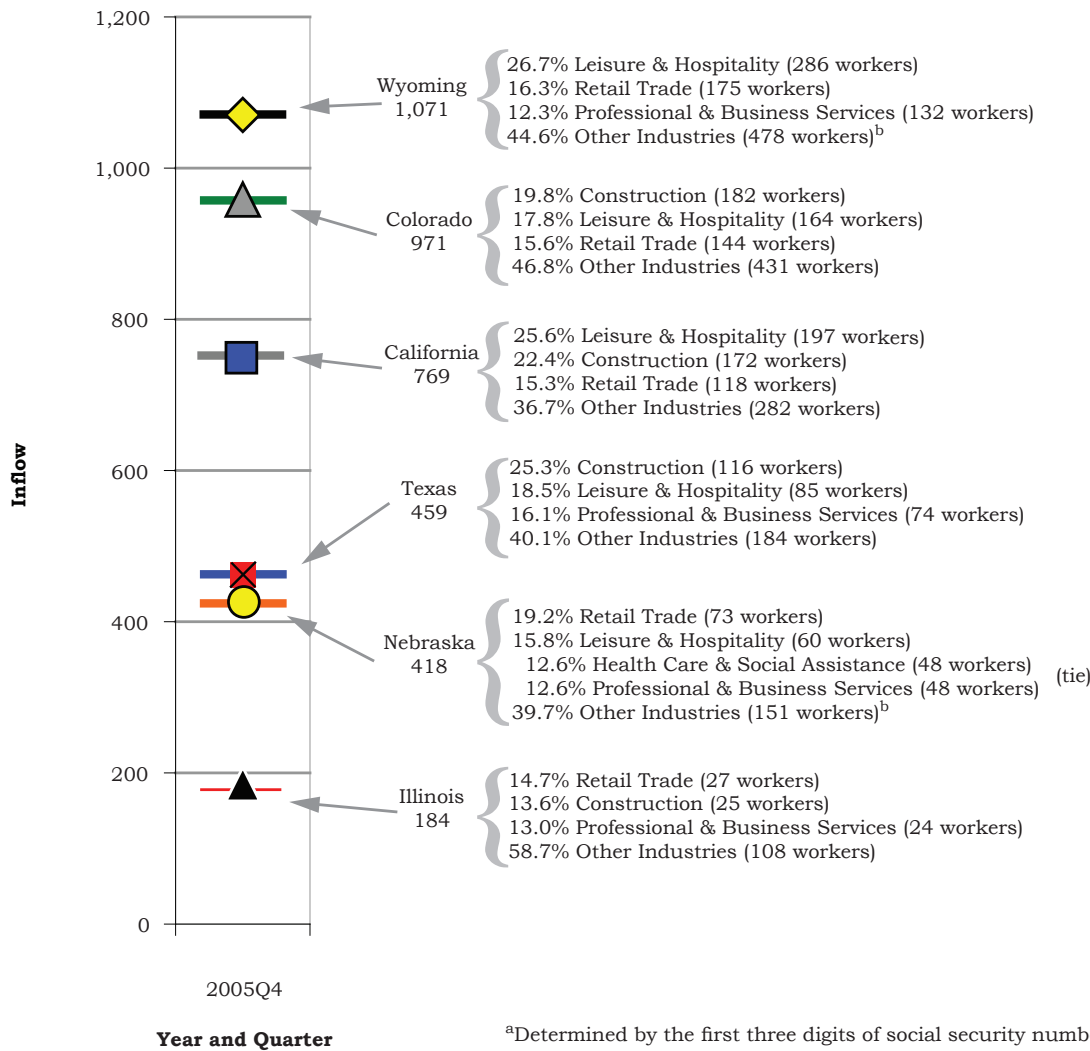


Figure 6: Distribution by Industry for Inflow Into **Wyoming** by State of Origin^a of Workers Who Do Not Have a Wyoming Driver's License, Fourth Quarter 2005



This figure shows the **statewide** commuting inflows by state of origin. As Figure 6 illustrates, the most popular industry destination for inflowing workers appears to be leisure & hospitality. Leisure & hospitality is the most popular destination for five of the eight states displayed (Wyoming, California, Colorado, Utah, and Idaho). Workers from Texas were most often employed in construction, while those from Montana and South Dakota were most likely to be working in mining.

Figure 7: Distribution by Industry for Inflow Into **Laramie County** by State of Origin^a of Workers Who Do Not Have a Wyoming Driver's License, Fourth Quarter 2005



For industry distributions by states of origin for **other Wyoming counties**, see <http://doe.state.wy.us/LMI/commute.htm>

Figure 7 shows the next level of detail for inflowing commuters to **Laramie County** in fourth quarter 2005. The industry distribution of inflows by state of origin for fourth quarter 2005 provides insight into which industries these commuters work. Wyoming expatriates and workers from California were most likely to work in leisure & hospitality (26.7% and 25.6%, respectively), while those from Colorado and Texas most likely worked in construction (19.8% and 25.3%, respectively). Workers from Nebraska and Illinois commuting to Laramie County were most often employed in retail trade businesses (19.2% and 14.7%, respectively).

Table: Estimated Distribution of Employment for Laramie County Construction Workers Without a Wyoming Driver's License

| Occupation Description | Average Wage | Employment |
|---|---------------------|-------------------|
| Construction and Extraction Occupations | \$15.84 | 758 |
| Office and Administrative Support Occupations | \$11.71 | 93 |
| Installation, Maintenance, and Repair Occupations | \$18.07 | 85 |
| Transportation and Material Moving Occupations | \$14.78 | 61 |
| Management Occupations | \$33.58 | 46 |
| Production Occupations | \$16.87 | 33 |
| Business and financial Operations Occupations | \$25.21 | 12 |
| Architecture and Engineering Occupations | \$27.95 | 4 |
| Sales and Related Occupations | \$15.67 | 4 |
| Building and Grounds Cleaning and Maintenance Occupations | \$10.40 | 3 |
| Computer and Mathematical Occupations | \$32.34 | 2 |
| Life, Physical, and Social Science Occupations | \$29.37 | 1 |
| Legal Occupations | \$62.99 | 1 |
| Protective Service Occupations | \$14.06 | 1 |

The Table illustrates in additional detail the **Laramie County** data shown in Figure 7. This example shows the estimated distribution of employment by occupation and wages for inflowing construction workers. The distribution shows that 758 of the construction workers commuting to Laramie County in fourth quarter 2005 held construction and extraction-related jobs and earned \$15.80 per hour.

Methods & Limitations

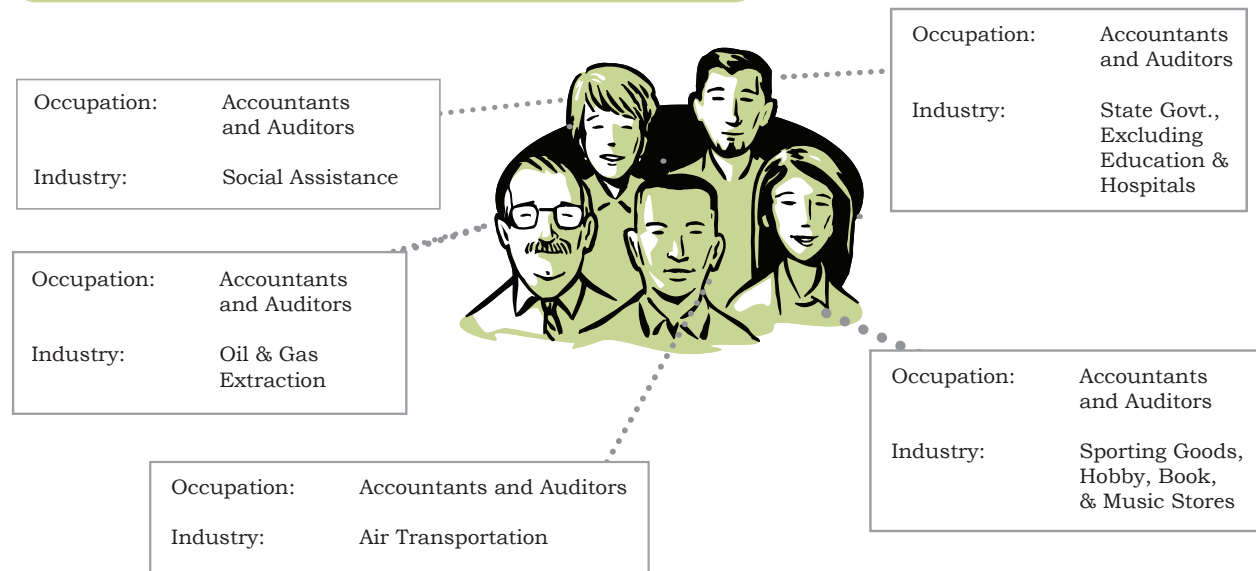
A review of the results of the first iteration of the commuting pattern data model revealed a large contingent of people working in the state who lacked Wyoming driver licenses. To identify the source of these workers, Research & Planning (R&P) devised a strategy whereby these workers' geographic sources could be estimated using the first three digits of each social security number. Using the first three digits of the social security number provides an estimate of worker sources when used in the context of the commuting pattern data model. However, it does have some limitations. First, the estimated geographic sources based on social security number may not be the location of residence prior to entering Wyoming. Second, some social security numbers contain invalid values as identified by the Social Security Administration. We assume that at least some of these identify labor activity of illegal aliens within the state.

A brief analysis of states of origin for these workers follows

Industries and Occupations

Occupation: A set of activities or tasks that employees are paid to perform. Employees that perform essentially the same tasks are in the same occupation, whether or not they work in the same industry.

Industry: A group of establishments that produce similar products or provide similar services.



Example 1. An IT specialist who works for a police agency would be counted under police agencies, not IT companies.

Example 2. If a report shows 100,000 workers in the Electrical Contracting industry, this does not mean that there are 100,000 people who work as electrical contractors. These firms may employ accountants, receptionists, and other workers who would be included in the 100,000 total.

Source: Bureau of Labor Statistics.

given the aforementioned caveats. This analysis focuses on Figures 1 (Statewide, page 4), 2 (Campbell County, page 5), 3 (Laramie County, page 5), 4 (Natrona County, page 6), and 5 (Sweetwater County, page 6). Users can download a complete set of charts from <http://doe.state.wy.us/LMI/commute.htm>. Each chart displays a four-quarter moving average of inflows by state of origin. The four-quarter moving average for a reference quarter is the average value of the previous four data points. For example, first quarter 2001 would be the average of first quarter 2000 through fourth quarter 2000. The top states of origin were chosen according to the magnitude of their inflow values in fourth quarter 2005 (2005Q4). Economic developers in Wyoming can use this data to assist recruiting efforts in other states. If workers already migrate to Wyoming for work, it is reasonable to assume that others will follow if their experiences are pleasant. Conversely, states of origin that exhibit minimal inflows are less desirable recruiting locations.

Additional Resources

Research & Planning

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Casper, WY 82604
(307) 473-3807
doerd_r&p_web@state.wy.us

R&P Commuting Patterns Data website

<http://doe.state.wy.us/LMI/commute.htm>

Previous Research by R&P

Commuting Pattern Data Model Methodology and County-Level Output Tables

http://doe.state.wy.us/LMI/commuter_flow_2007.pdf

On the Road in Wyoming: Using Commuting Data to Examine Worker Patterns

<http://doe.state.wy.us/LMI/0507/a1.htm>

Wyoming Worker Commuting Patterns Study

<http://www.wyowdc.org/docs/CommutingPatternsStudy.pdf>

Wyoming Workforce Development Council – Partners

<http://wyowdc.org/council/partners.aspx>

Department of Workforce Services – Resources

<http://wyomingworkforce.org/resources/index.aspx>

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