



TWO WAY  
TRAFFIC



## Wyoming Workers Commuting Patterns Study

# Executive Summary

In the spring of 2006, the Wyoming Workforce Development Council and Department of Workforce Services launched an effort to gather information about the movement of Wyoming's workers. As the unemployment rate continued to decline, and economic indicators suggested substantial future demand for more labor, it became clear to the two organizations that information on labor availability within Wyoming would become increasingly important in developing strategies to meet the growing demand.

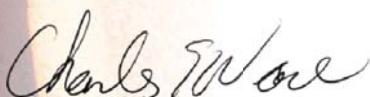
The Council and Department engaged the Department of Employment's Research & Planning section to examine the question, "What is it that we can find out about workers who live in one county but work in a different county in Wyoming?" To offer examples of how this data can be useful, the Council produced this document. Additionally, a series of tables are available for each county at [www.wyowdc.org](http://www.wyowdc.org). These tables quantify the estimated inflow and outflow of workers.

The data generated from the *Wyoming Worker Commuting Patterns Study* identify relationships between where people choose to live and where they choose to work, as evidenced by employer/employee transactions. As Wyoming's economic growth continues, worker commuting will likely increase and it may well be that a portion of demand for labor in one county can be met by strategically engaging residents from other counties and states.

Strengths of the data include precise location of workers (geomapping), cross verification of wage record data and the rigor that accompanies any work done by Research & Planning. The full methodology is included with the tables located at the above referenced website. The online tables are formatted to examine each county, its inflow of workers, outflow of workers and the potential wage flow that follows these workers to their county of residence. Essentially, place of residence (collected from Department of Transportation drivers' license records) has been plotted against place of employment (as reported in wage records).

While results of this work are now being made available, it is noted that this work has raised a wide array of questions, at the same time providing a wealth of information for those engaged in a variety of community development and planning. The Wyoming Workforce Development Council and the Department of Workforce Services believe that the information as presented will help project planners, economic developers and policy makers to understand how Wyoming's communities are being used and impacted by commuting workers.

We expect that you may have questions related to this data, including industry relationships with the commuting workforce, trend analysis across a variety of factors, etc. These questions can be addressed by directly contacting 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](http://www.wyowdc.org).



Charlie Ware, Chairman  
Wyoming Workforce Development Council



Joan Evans, Director  
Wyoming Department of Workforce Services

# Introduction

## Exploring Commuter Data: An Illustrative Analysis

The Wyoming Workforce Development Council and Department of Workforce Services have a responsibility to address workforce issues. Recognizing that the growing labor needs of Wyoming affect communities in several ways, examining commuter behavior may assist in identifying solutions. In the course of examining commuter data, it is apparent that this information has multiple applications. This document represents examples of how commuter data can be useful in addressing workforce issues. Additional information is available upon request or by other arrangement with the Department of Employment's Research & Planning Section at (307) 473-3807.

With this data, planners can enhance their knowledge of road usage. By understanding the nature and frequency of worker travel patterns, for instance, better decisions can be made with respect to highway design and maintenance schedules. Counties and municipalities can similarly benefit from understanding which local arteries will bear the burden of this incoming traffic, by examining the source of inflowing workers. Also, with this data, local governments, community developers, and service agencies can understand the economic potential gains and losses of wages earned in their locale by understanding the volume of dollars available to circulate in their community.

Commuter data and related data can also play a key role in understanding the potential for housing development or alternate strategies in meeting workforce housing needs. For instance, a community which can not build fast enough or chooses not to build may benefit by strategically supporting the act of commuting from other counties. In order to facilitate understanding of the following pages, please review the following key concepts:

**Commuters** - Commuters are represented by the number of transactional relationships between unique employees and employers, who reside in different Wyoming counties. Residence is evidenced by Department of Transportation Drivers License record listed residences (for employees) and geographic locations listed by employers in their tax records with the Department of Employment.

**Inflow** - The number of transactional relationships in a base county, where the employer is located in the base county and the employee resides in a different Wyoming county.

**Outflow** - The number of transactional relationships in a base county, where the employee resides in the base county and the employer is located in a different Wyoming county.

**Base County** - The perspective from which inflow and outflow data are arranged. In this study, each of Wyoming's twenty-three counties have inflow and outflow data tables as base counties.

**Transactional Relationship** - Transactional Relationships are depicted as relationships where a worker receives a wage from an employer. It is possible, in the case of a worker who works more than one job, to have multiple relationships per worker.

**Unknown** - Unknown is a category which represents a quantity of commuters for which no known residence is identified in the Wyoming Department of Transportation's driver records. It is believed that a great percentage of these workers reside in other states.

**Net Flow** - Net Flow is the net combined effect of inflow and outflow of commuter labor. Netflow characterizes whether a county is predominately a source or destination of commuter labor.

# Section I:

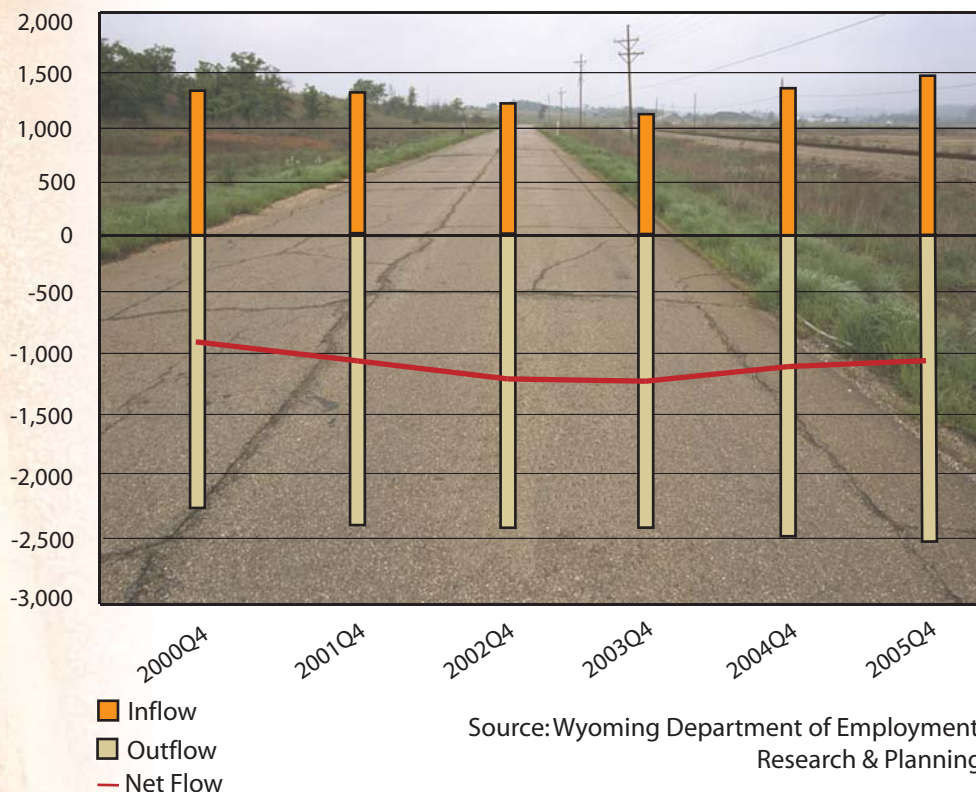
## Counties As a Labor Source to Other Counties

Converse County realizes a net labor outflow (Figure 1, Net Flow). Observations and potential implications of this situation include:

- ◆ Housing in Converse County may be more economical than in the communities where commuters work.
- ◆ Attractive wages in other communities draw workers out of Converse County.
- ◆ Available occupations in Converse County may not match commuting worker skill sets.
- ◆ Retail and real estate may offer development opportunities within Converse County.
- ◆ Commuters are at risk to relocate closer to their work location.
- ◆ Converse County benefits from earnings of commuters in addition to the wages paid within the County.

Converse County has more workers than jobs. As long as Wyoming continues to experience economic expansion, Converse County will likely benefit from the existing net labor outflow situation. For long-term economic development purposes, Converse County may want to consider developing jobs that match the skill sets of commuters where feasible. Existing occupations within the County may be at risk if wages continue to be more attractive in other communities. In the short-term, Converse County may want to advertise its benefits as a “bedroom” community. Major transportation arteries are critical to Converse County’s economy.

Figure 1 -- Converse County Community Flows, 2000Q4 to 2005Q4



# Section II:

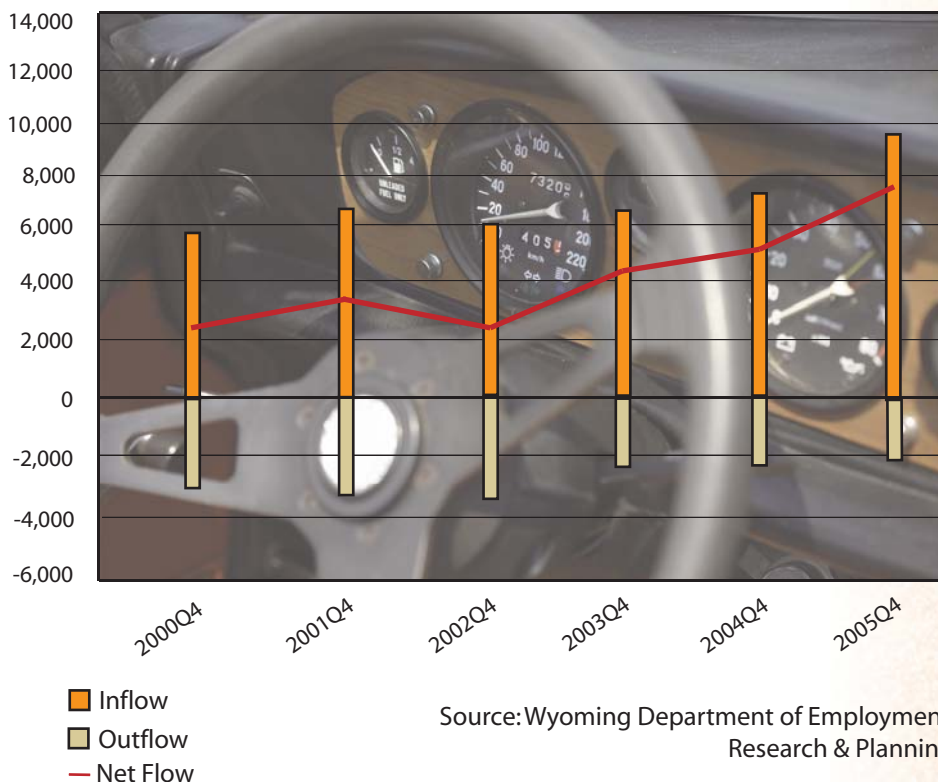
## Counties Reliant on the Labor Resources of Other Counties

Campbell County realizes a net labor inflow (Figure 2, Net Flow). Observations and potential implications of this situation include:

- ◆ Housing in Campbell County may be more expensive and or less available than in the communities where commuters live.
- ◆ Attractive wages in Campbell County draw workers out of other communities.
- ◆ Available occupations in Campbell County match skill sets of workers from other counties.
- ◆ Retail, service and real estate may offer development opportunities within Campbell County but are in competition with higher paying occupations.
- ◆ Commuters might choose to relocate to Campbell County if housing were available.
- ◆ Campbell County loses benefits from earnings of commuters.

Campbell County has more jobs than workers. Campbell County may want to consider housing initiatives which make it easier or more affordable for workers to relocate or establish permanent residence. As an alternative, Campbell County may benefit from mass transportation opportunities to import workers. Campbell County may consider economic diversification options, which would add to the value of establishing a residence within the county. As economic development opportunities increase in other locations and commuting becomes less attractive, Campbell County may experience greater workforce challenges. Just as in Converse County, major transportation arteries are critical to Campbell County's economy.

Figure 2 -- Campbell County Commuting Flows, 2000Q4 to 2005Q4



# Section III:

## Commuting: Infrastructure Implications

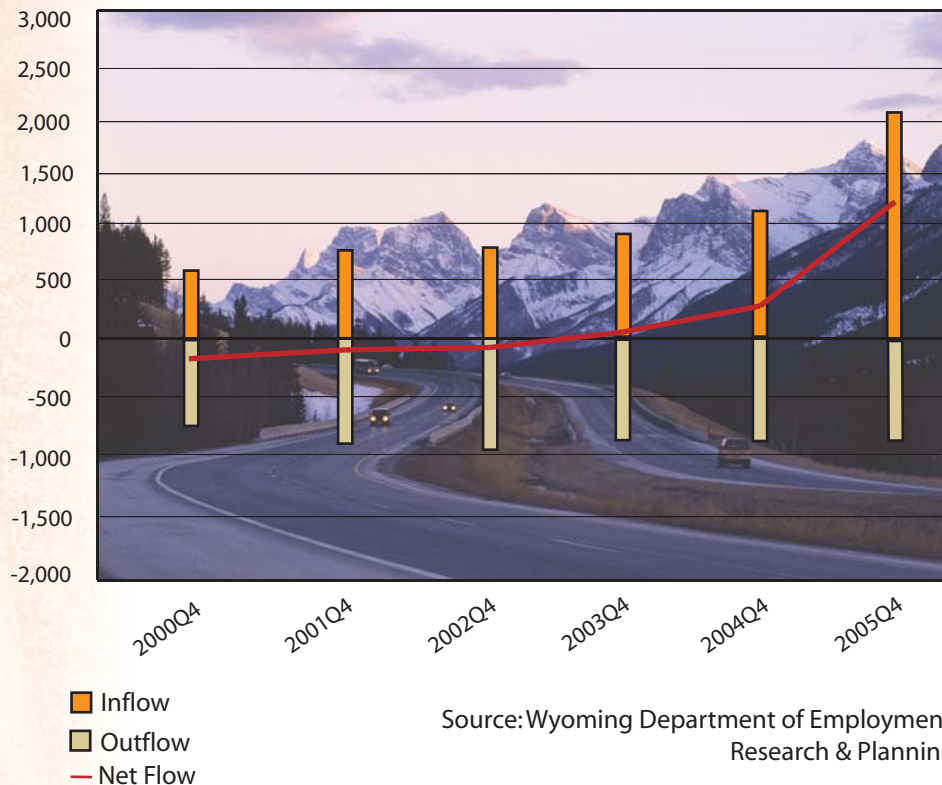
Sublette County realizes a net labor inflow (Figure 3, Net Flow). There are situations where employees live in the same county as the employer, but the job site is located in another county, which results in understated commuter data results. This is believed to be the case in Sublette County.

Observations and potential implications of this situation include:

- ◆ Certain portions of the state roadways may be experiencing much higher usage than originally anticipated.
- ◆ Demands on municipal resources (water, sewer, trash, etc.) are impacted.
- ◆ Wildlife and range management resources are affected.
- ◆ Communities impacted by rapid economic growth will benefit from enhanced commuter studies.
- ◆ It is important to assure that communications, roadways, health services, recreational access, etc., accompany remote areas opening up to economic development.
- ◆ Access in general becomes a management problem for multiple entities.

Enhanced study of inter-county commuter patterns can have a variety of benefits. Without concise information, finding solutions to problems such as commuter safety is difficult. Coupled with other information, the siting of large projects may be enhanced. To adequately address state infrastructure implications, additional research into inter-county commuter habits would benefit counties affected by these situations.

Figure 3 -- Sublette County Commuting Flows, 2000Q4 to 2005Q4



Source: Wyoming Department of Employment, Research & Planning

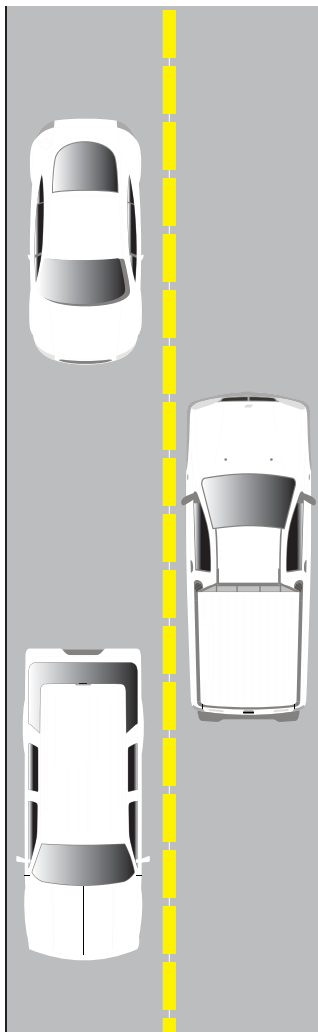
# Section IV: Earnings Information

Converse County potentially gains from dollars earned in other localities (Figure 4). By adding an earnings variable to commuter data, the economic impact of commuting workers becomes more clear. In Converse County, for example, a benefit is potentially gained; a look at the data tables for other counties will demonstrate potential loses or gains. This information can be utilized in economic development strategy and planning to enhance the quality of life for individuals working in the county while residing in another. Economic developers may choose to benefit on ways to capture wages leaving their communities.

Figure 4 -- Flow of Commuter Earnings

Workers commuting FROM Converse County to other counties earned \$22.31 million in total wages in fourth quarter 2005.

**NOW  
ENTERING  
CONVERSE  
COUNTY:  
\$22.31  
MILLION**



Workers commuting TO Converse County from other counties earned \$8.52 million in total wages in fourth quarter 2005.

**NOW  
LEAVING  
CONVERSE  
COUNTY:  
\$8.52  
MILLION**

Source: Wyoming Department of Employment,  
Research & Planning

# Section V: Seasonal Work and Commuting

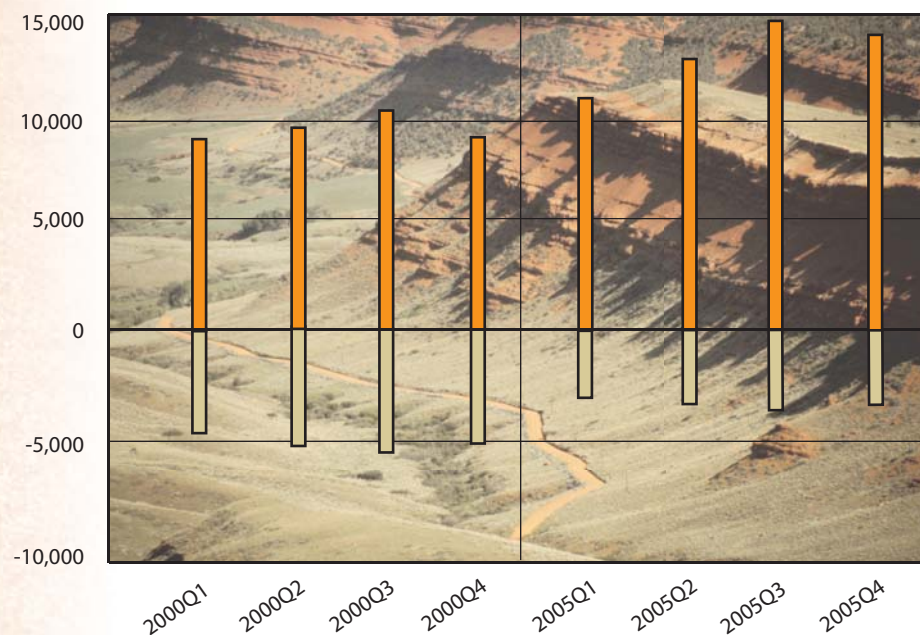
Natronna County commuter data provides a good representation of the effects of seasonal employment on commuting. (Figure 5)

Observations and potential implications of this situation include:

- ◆ Natronna County's commuting patterns are affected by peaks and valleys in labor demand.
- ◆ Natronna County is impacted by seasonal operations, such as road, school and residential construction projects.
- ◆ Natronna County's seasonal effects are becoming more pronounced.
- ◆ Natronna County's infrastructure, particularly temporary housing and services, must adapt to fluctuating needs.
- ◆ Natronna County's economic development plans may want to consider actions that ultimately provide more full-time, year-round jobs.

Commuting can be an answer to large-scale, one-time projects. However, the likelihood of commuting workers permanently relocating is limited by fewer year-round, continuous employment opportunities. Commuters are often the most recently hired employees and the first to be laid off if the economy contracts; when economic trends again improve, Natronna County employers may be challenged to find employees. Large fluctuations in workers may affect housing prices, as housing sales realize rapid turnover. Providing short-term housing options may buffer the effects on housing prices and availability. Figure 5 shows that Natronna County's economy is realizing growth, as fewer workers are leaving and more workers are commuting into the county.

Figure 5 -- Inflow to and Outflow from Natronna County, 2000Q1 to 2005Q4



■ Inflow  
■ Outflow

Source: Wyoming Department of Employment,  
Research & Planning

# Section VI:

## Wyoming County Inflow Map

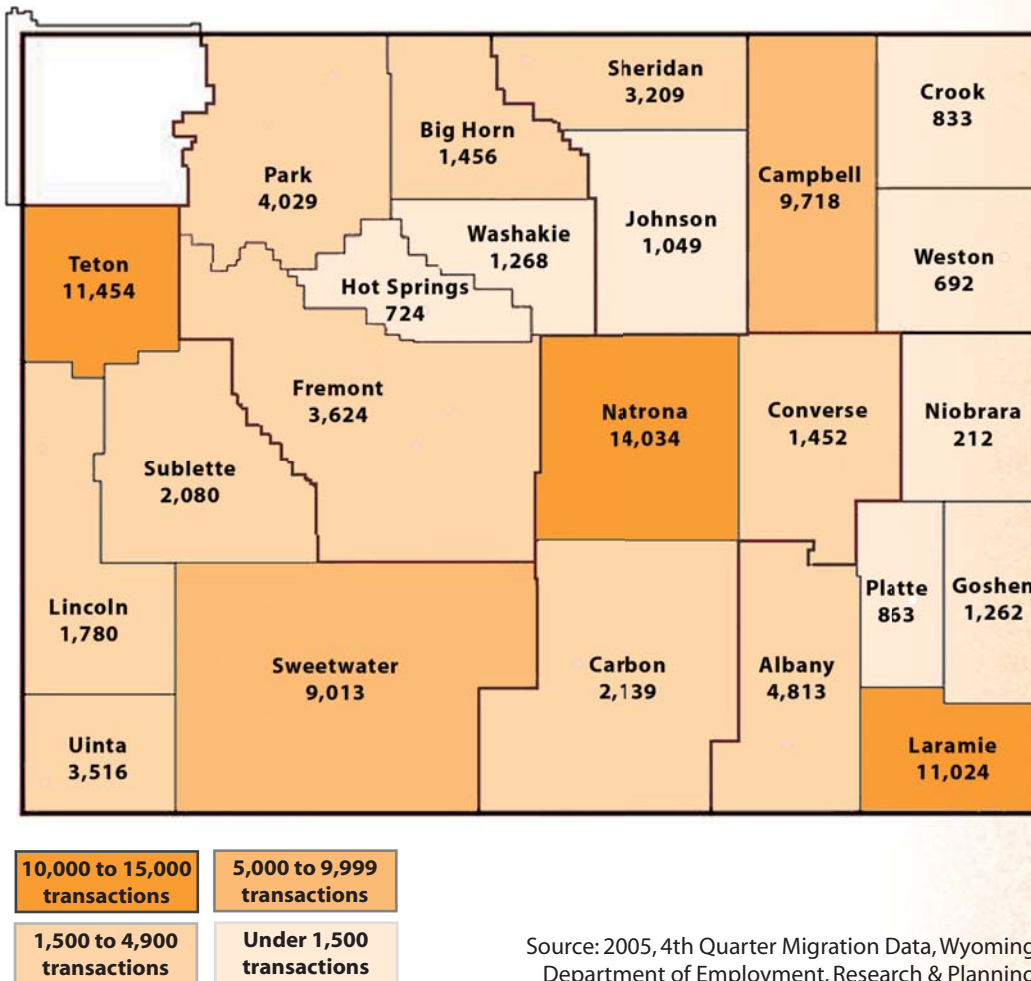
Figure 6 provides the number of commuter inflow transactions for each Wyoming county.

Statewide commuting inflows highlight three key areas of large inflow:

- ◆ Teton County,
- ◆ The extractive industry corridor that includes Sweetwater County, Natrona County and Campbell County, and
- ◆ Laramie County.

The reasons for high net inflow are likely different for these three key areas. Teton County's inflow is driven by seasonal services and a limited resident workforce. Sweetwater County's, Natrona County's and Campbell County's inflow is driven by the current high demand for energy products. Laramie County's inflow is affected by the county's connection to the Rocky Mountain Front Range and Colorado's economy.

Figure 6 -- Wyoming County Inflow Map, 2005Q4



Source: 2005, 4th Quarter Migration Data, Wyoming Department of Employment, Research & Planning

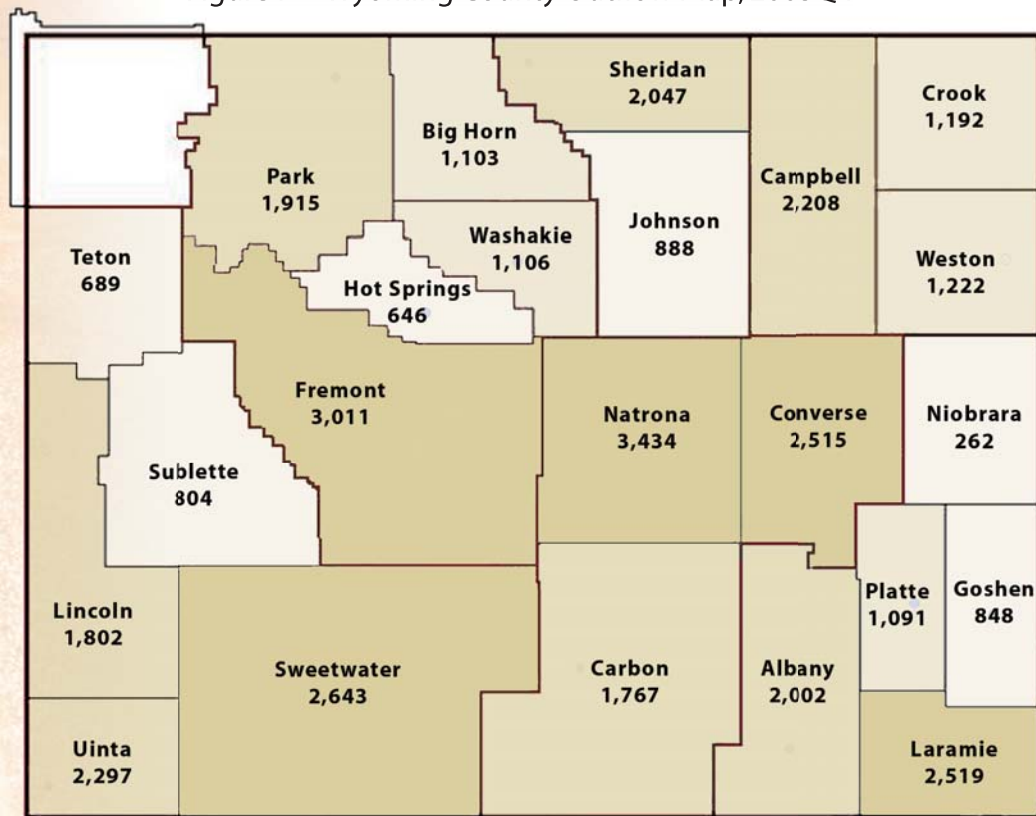
# Section VII:

## Wyoming County Outflow Map

Figure 7 provides the number of commuter outflow transactions for each Wyoming county.

Statewide commuting outflows reflect a different pattern than that in commuting inflows. Counties close to the extractive industry corridor identified in Figure 6 appear to be realizing benefits from wages generated by the current high demand for energy products.

Figure 7 -- Wyoming County Outflow Map, 2005Q4



More than 2,500 transactions	2,499 to 1,500 transactions
1,499 to 1,000 transactions	Under 1,000 transactions

Source: 2005, 4th Quarter Migration Data, Wyoming Department of Employment, Research & Planning

# Section VIII:

## Suggestions and Questions, Future Analysis and Research Potential

The findings in this document are representative of the data available in the Wyoming Workforce Commuter Patterns Study. Additional studies that would enhance this data include inter-state commuting patterns, industry profiles and demographic profiles. However, there are many uses for this data as it exists, including:

### Economic Developers:

- ◆ Analyze infrastructure needs (i.e., housing, utilities, etc.)
- ◆ Entice potential employers
- ◆ Identify a source of available skilled labor, even in counties with low unemployment rates (i.e. analyze commuter patterns by industry to identify available worker skill sets and wages paid.)
- ◆ Provide direction for community decisions (i.e., recognize benefits of bedroom community status)

### Emergency Preparedness:

- ◆ Analyze the potential spread of disease
- ◆ Evacuation planning strategies
- ◆ Health care services
- ◆ Law enforcement planning

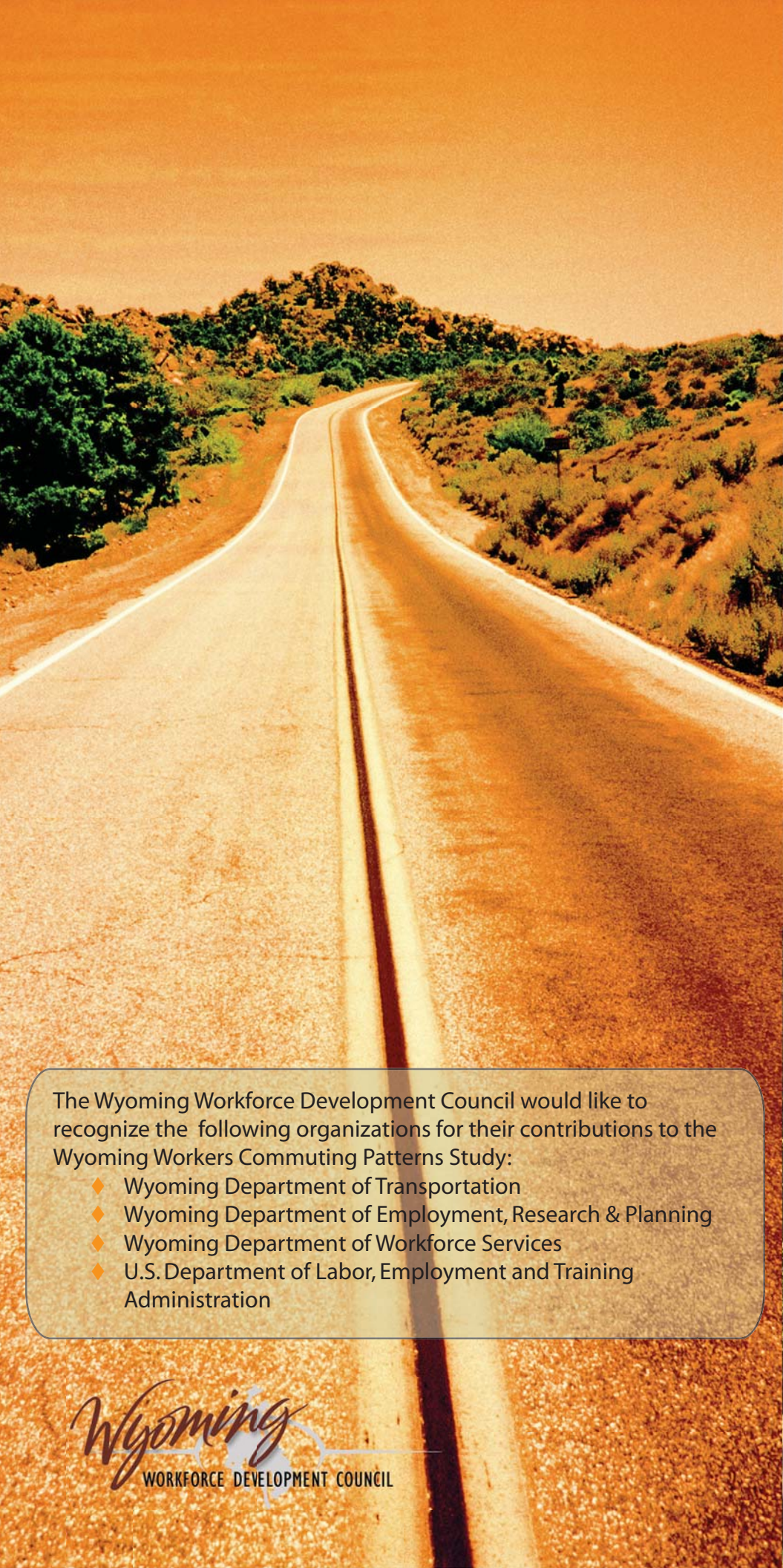
### Road and Travel Considerations:

- ◆ Traffic accident trend analysis
- ◆ Roadway maintenance
- ◆ Road capacity needs
- ◆ Roadway services (hotels, gas stations, etc.)

### State and County Government

- ◆ Tax flow estimations
- ◆ Planning for school districts
- ◆ Planning for government services

To discuss further uses of this data or other research topics, or for information on the data, visit the Wyoming Workforce Development Council's website at [www.wyowdc.org](http://www.wyowdc.org) or by contacting Research & Planning at (307) 473-3807.



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The Wyoming Workforce Development Council would like to recognize the following organizations for their contributions to the Wyoming Workers Commuting Patterns Study:

- ◆ Wyoming Department of Transportation
- ◆ Wyoming Department of Employment, Research & Planning
- ◆ Wyoming Department of Workforce Services
- ◆ U.S. Department of Labor, Employment and Training Administration

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WORKFORCE DEVELOPMENT COUNCIL