

An Economic Profile of Montana in 2008

by

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November 24, 2008

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EXECUTIVE SUMMARY

Montana does not have just one economy. While there are common features, economic conditions and capacities to adapt to new economic conditions vary widely across the state. This report has four objectives.

First, we present a portrait of the Montana economy in 2008. We distinguish between the 14 Boot counties and the remaining 42 Balance counties (see Map 1 on page 55). For decades, Boot counties have experienced rapid population and employment growth, while Balance counties have lost population and seen slower job growth. The service and professional economic sectors are increasingly important, although the agriculture, mining, and state and federal governments continue to be important sources of income in many counties. Non-wage investment and retirement income is one of the larger “industries” in both Boot and Balance counties. All counties compete in an active market for people, with nearly 10 percent of the average county’s population migrating each year. Population increases and decrease are mostly due to migration, not natural causes. Boot counties attract people, while most Balance counties lose them. Recreation and tourism is one of Montana’s major industries, but the benefits are concentrated in a few counties. Seventy percent of out-of-state tourists visit Yellowstone and Glacier National Parks and three quarters of all out-of-state tourists’ expenditures are made in only seven counties.

Second, we review the recent literature on the sources of economic success in the West. Linkages between employment and people work both ways. Jobs attract people and people attract jobs. Natural and human amenities play critical roles, especially in areas with high natural amenities. There is strong evidence that an educated workforce is needed to attract many types of industry, foster innovation, and build small business success. Rural areas experience higher barriers to economic success than urban areas, but perhaps these barriers are lower in Montana counties with outstanding natural amenities and adjacent to small and medium size cities. A USDA study finds rural counties which have focused on tourism and recreational development have been more successful than other counties and have enjoyed higher employment and earnings growth, lower poverty rates, and improvements in other social conditions.

Third, we examine Montana and its counties in terms of a new growth paradigm developed by the Federal Reserve Bank of Kansas City. By this paradigm, success in rural areas depends on a skilled workforce, lifestyle amenities, access to capital and information, and innovation. By most of the Bank’s Regional Asset Indicators, Boot counties appear to be poised for economic growth. Balance counties lag in a skilled and creative workforce. All Montana counties lack information and transportation infrastructure and access to financial capital, although many are strong in human amenities.

Finally, we use what we have observed to suggest policies to promote Montana’s economic success. Education and training to enhance workforce skills provide prospects for maintaining and attracting high-skill industry and fostering small business. Hurdles due to Montana’s rural character can be mitigated by capitalizing on existing small and medium cities, fostering existing natural and human amenities, and developing education, information, and transportation infrastructure through inter-county cooperation. Montana’s recreation and tourist attractions represent an important niche, but further development will require expanding their geographic and seasonal scope and promoting complementary activities. Attracting migrants and retaining residents with various income sources will promote economic diversity. Retiree’s, the self-employed, professionals, and those inclined to live in or return to Montana for family reasons will be attracted by employment opportunities as well as the promise of amenities such as better schools, less crime, and Montana’s scenic beauty.

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INTRODUCTION

Economies in U.S. Western states are rapidly evolving. While some rural areas have seen recent economic declines, others have experienced booming populations, employment, and prosperity. These differences in economic successes present important questions. Why have some areas experienced success, while other areas have not? What do we know about promoting economic growth that can be used to help lagging areas? Are there lessons to be learned from prospering areas? This report addresses these questions, as they relate to Montana.

Just as there are both declining and prospering rural areas in the U.S., Montana's Governor Brian Schweitzer has noted "have" and "have not" counties in Montana. Fourteen Boot counties, spatially configured to form a cowboy boot, have enjoyed prosperity driven by high tech industry growth, and expanding service/professional sector (Turner, 2006) (see Map 1).¹ The remaining 42 Montana counties, referred to here as Balance counties, have generally experienced decline, including less employment growth, flatter incomes, and declining populations (Governor's Office of Economic Development, 2007, Turner, 2006). Between 1969 and 2004, for example, population in the Boot grew by 82.1 %, while the Balance population declined by 6.2% (Turner, 2006). Similarly, 74% of jobs created in Montana during 2005-2006 were in the Boot counties (Governor's Office of Economic Development, 2007).

It is important to understand differences between the Boot and Balance counties because these differences highlight the tensions and challenges in Montana's economic future. Also, successful development strategies should arguably be tailored to reflect the economic, geographic, and demographic differences between the two regions.²

The report unfolds as follows. In Section II, we present a portrait of the current state and recent evolution of the Montana economy. Next, we review the recent literature on the sources of

¹ Boot counties are Broadwater, Flathead, Gallatin, Granite, Jefferson, Lake, Lewis and Clark, Missoula, Park, Powell, Ravalli, Stillwater, Sweet Grass, and Yellowstone.

² Unfortunately, it is not possible to compare Boot and Balance counties in some of the following analysis. This is because public data provided by the Bureau of Economic analysis often will not disclose the number of employees in some sectors at the county level. These "missing values" make comparisons across counties or groups of counties problematic, although at the state level the data are complete.

economic change in the West and evidence on what makes for economic success. We focus on population migration and business mobility, natural and other amenities, human capital and education, and agglomeration economies. In Section IV, we examine Montana and its counties in terms of a new growth paradigm developed by the Federal Reserve Bank of Kansas City. Finally, we use what we have observed to suggest policies promoting Montana's economic success.

II. MONTANA'S ECONOMY TODAY

Economies are volatile and Montana's economy is no different. A number of economic indicators signal both a change in the state's economy and the economic health of specific communities in the West. These indicators include the rapidly expanding professional and service sector, the increasingly important role that recreation and tourism play, the rise of small businesses and other entrepreneurial endeavors and the growing importance of retirees and non-labor income.

II.1 Population, Employment, and Unemployment Trends

Figure 1 gives a broad overview of Montana's economic growth. Since 1969, Montana's population has increased from about 700,000 to over 900,000, and the workforce (those employed full or part-time) has doubled. The high unemployment rates experienced in the stagflation and recessions of the 1980's have fallen to historic low levels of about 3% by 2007.

Figures 2 and 3 display the same information as Figure 1, but distinguishes between Boot and Balance counties. Population in Boot counties has nearly doubled, while the workforce has grown by nearly 300%. As with Montana overall, the average unemployment rate in the Boot has been on a downward trend since 1989 and now stands at about 3%.

The picture is quite different in Balance counties, as shown in Figure 3. Population has actually fallen from 380,000 to 350,000, while the workforce has increased about 40%. Unlike the Boot, unemployment rates stayed high in the 1990's, not falling consistently until 2001.

Unemployment in the Balance tends to be slightly higher than the Boot, most recently about 3.5%.

II.2 The Changing Economic Mix

Over the past quarter-century, the U.S. economy as a whole has shifted from extractive and primary manufacturing industries to service and professional businesses, a trend that is also evident in Montana.

Figure 4 illustrates this trend by showing the relative contribution of various industries to Montana's total employment. The professional and service sector's share of total employment has grown from 17.5% in 1969 to nearly 38% in 2006 (the latest data available). Two other sectors—Finance, Insurance, and Real Estate (FIRE) and Construction—have increased in relative importance, from about 6.5% in 1969 for FIRE to 7.7% in 2006 and 4.9% to 8.5% for construction.³ This has been accompanied by a decline in the proportion of employment in other industries, notably retail trade, manufacturing, and mining. The mining sector, for example, employed 2.4% of Montana's workforce in 1969, but 1.4% in 2006.

In order to not identify individual businesses, the U.S. Department of Commerce does not release some data on employment in various industries at the county level. These non-disclosure data entries prevent a comparison of the proportional contribution of various sectors at the county level for Boot and Balance counties. However, USDA's Economic Research Service (ERS) does provide a typology of economic dependency. This typology is based on the complete data available to ERS researchers. Table 1 provides the definitions used and the ERS classifications of all Montana counties.

³ Some of the changes shown in Figure 4 are due to changes in the economic reporting. Beginning with the ratification of the North American Free Trade Agreement in 2000, industries are classified according to the North American Industrial Classification System (NAICS). A direct comparison between NAICS and the Standard Industrial Codes it replaced is not always possible. Nevertheless, the increasing importance of the professional and service sector relative to the extractive and manufacturing industries is clear for Montana, as well as the rest of the U.S.

Twenty five of Montana's 56 counties are farming dependent, with 15% or more of personal income derived from agriculture. All but two agricultural counties are Balance counties. All agriculture dependent counties but one (Granite) are located in the eastern part of the state. Ten counties, including three Boot counties, are classified as federal and state government dependent, with over 15% of personal income derived from federal or state government employment.

Four counties are classified as mining dependent, with 15% or more of personal income derived from this sector. Jefferson, a Boot county, is the site of the Pegasus gold mine near Jefferson City and the Golden Sunlight Mine near Whitehall. Stillwater County contains two mines owned by the Stillwater Mining Company, producing platinum group metals. Rosebud and Bighorn counties contain extensive coal mining operations. These mines employ from 100 to 4999 workers (Yahoo Hot Jobs).

Six counties are classified as service dependent, with 45% or more of personal income derived from service sector employment. These include the Boot counties of Flathead, Park, and Yellowstone. Notably there are no Montana counties with 25% of income derived from manufacturing. Wood products industries, such as sawmills, plywood mills, and pulp mills, are in the manufacturing sector. An examination of individual counties where data are completely disclosed suggests that the wood products industry is relatively unimportant, even in counties where this industry has traditionally had a high profile. For example, in Flathead and Missoula counties, earnings in the wood products industry accounted for 1% and 3% of 2006 total personal earnings, respectively. All manufacturing accounted for 3% and 4.6% of 2006 personal earnings, respectively.

It is apparent that the professional and service sector is increasingly important in nearly all Montana counties, as it is in the rest of the nation. A common misperception about the professional and service sector is that it includes only low-paying jobs. This is not necessarily the case. As illustrated in Figure 5, several high paying professional occupations such as computer

programmers, lawyers, financial advisors, doctors, nurses, and engineers are classified as part of this sector. For example, generally high-skilled and high-wage professional and technical service employees comprise 16% of this sector.⁴

II.3 Makeup of Personal Income, Including Investment and Retirement Income

A broad-brush picture of recent trends in personal income in Montana indicates a decrease in the relative importance of income from extractive industries (mining and logging) and agriculture and an increase in the importance of the professional and service industries. As shown in Figure 6, extractive industry income accounts less than 5% of total personal income in Montana, with a slight downward trend since 1969. The relative contribution of farming and ranching income is more volatile, but has been less than 3% since 2000. Conversely, the contribution of professional and service income has risen from less than 20% in 1969 to 28% in 2006, with a generally upward trend.

Figure 6 also shows the percentage of income derived from non-wage sources. The change in the composition of economic activity, increases in income, and demographic changes have resulted in an upward trend in the proportion of total personal income derived from non-wage sources, largely investment and retirement income. In 1969, investment and retirement income represented 22% of total personal income in Montana. After peaking at over 35% in the 1980's, these income sources have remained relatively steady, contributing 32% of Montana's total personal income in 2006. This makes investment and retirement income one of the top "industries" in the state.

Figures 7 and 8 show these trends for Boot and Balance counties, respectively. Balance counties show a slightly higher reliance on non-wage income, approximately 35%, compared to the Boot county average of about 30%. The percentage contribution of investment and retirement income has remained roughly stable since the mid 1980's in both Boot and Balance counties.

⁴ Note that the FIRE sector is included in the professional and service sector in Figure 5, whereas it was shown separately in Figure 4 for illustrative purposes.

II.4 Population Change and Migration

Montana's population grew from 902,195 in April 2000 to about 957,861 in July 2007, an overall increase of 6.2 percent, or slightly less than 1% per year (U.S. Census Bureau, 2008b). The overall figures mask three important components of population change.

First, there are substantive differences across Montana counties in population growth. Most (34 of 56) Montana counties lost population from 2000 to 2007. In some cases these losses were large by any standard--Treasure (-24%), Sheridan and Daniels (-18%), Liberty (-17%), Prairie (-13%) and Judith Basin and Chouteau (-12%). Boot counties' population growth averaged 8.6% from 2000-2007, while Balance counties lost an average 6.7%. Some Boot counties showed substantial gains: Ravalli (12%), Missoula and Jefferson (10%), while only one Boot county lost population (Powel, -1%). All Balance counties lost population, with the exceptions of Madison and Sanders with 8% population gains.

Second, while population growth in the state averages less than 1%, a much higher percentage of Montanans moves each year. US Bureau of Census collects data on the number of people moving out of each county (out-migrants) and the number of people moving into each county (in-migrants) (U.S. Census Bureau, 2000). In-migration minus out-migration is referred to as net-migration. Table 2 shows in-migration, out-migration, and net-migration from 1995-2000 as a percentage of each county's 2000 population. Montana counties averaged 20% in-migration, with Boot and Balance counties averaging 26% and 18%, respectively. Out-migration averaged 24% for all counties, with Boot counties averaging 23% and Balance counties 24%.

Although total population flux (out-migration plus in-migration) is slightly higher in Boot counties (averaging 9.8% per year), compared to Balance counties (averaging 8.4% per year), there are notable exceptions. For example, population flux in the Balance counties of Beaverhead, Golden Valley, and Petroleum equaled or exceeded 59% over the five year period. This shows more movement of people in these counties than in the high flux Boot counties of Gallatin (55%) and Park (52%).

From 1995-2000, net-migration averaged -4% for all Montana counties, +3% for Boot counties and -4% for Balance counties. Negative net-migration contributed substantively to population declines in many Balance counties. In five years, Carter County lost 20% of its population to net-migration, while Garfield, Philips, and McCone lost between 12 and 16% each. Alternatively, nearly all Boot counties and a few Balance counties gained from net-migration Madison (3%), Lake (6%) and Broadwater (7%).

The third subtlety hidden by looking only at gross population change is the components of population change. There are two major components: Natural change (birth minus deaths) and net-migration. For the latest figures available (July 2006 to July 2007), Montana's population increased by 11,066. This was composed of a natural change of 4,328 (12,393 births minus 8,065 deaths) and net-migration of 6,747 (U.S. Census Bureau, 2008a). Columns 5-7 of Table 2 give natural change and net migration for Montana counties and net-migration for 2006-2007 as a percentage of each county's 2006 population. The 56 Montana counties averaged -1% net-migration, but Boot counties averaged 1.2%. Nearly all Balance counties lost population due to net-migration, averaging -.5%.

Comparing natural change to net-migration reveals that net-migration is the dominant driver of population change. In 50 of 56 counties, net migration exceeds natural change in absolute value. Population changes have a dramatic effect on economic growth. An examination of recent trends reveals that all Montana counties compete in an active market for people seeking and choosing locations for living, working, and playing. However, it seems that success in this competition for people varies considerably across the counties of the state.

II.5 Recreation and Tourism

Recreation and tourism is important to Montana, both as a prominent component of Montanans lifestyles and a source of economic activity. In 2006, 49% of Montanans participated in trail sports (day hiking, back packing and rock climbing) the most popular outdoor recreation activity.

Forty eight percent and 46% took part in wildlife viewing and camping activities, respectively.

Participation rates in other outdoor activities are also high, as shown in Table 3.

Also, tens of thousands of outdoor recreationists visit the state each year, attracted by its outstanding natural beauty, world class fly fishing, wildlife, and other natural amenities. The Outdoor Recreation Foundation estimates that outdoor recreation activity has a \$2.5 billion impact on the Montana's economy, 9.4 percent of gross state product (Outdoor Industry Foundation, 2006).

A recent survey done for the U.S. Fish and Wildlife Service (U.S. Department of Interior and U.S. Department of Commerce, 2006) reports activity days and expenditures of fishermen, hunters, and wildlife watchers in Montana for 2006. As reported in Table 4, 8.1 million wildlife-related recreational days were spent in Montana, 70% percent of these by Montana residents. The most popular recreational activity is wildlife watching, with over 3 million activity days, over half by Montana residents.⁵ Over 2.9 million days were spent fishing, 70% by Montana residents, and 2.1 million days were spent hunting, 74% by Montana residents.

Also as shown in Table 4, nearly \$1 billion dollars (\$913 million in 2006 dollars) were spent on wildlife-related recreation in Montana, 41% spent by wildlife watchers, 34% by hunters, and 25% by anglers. Spending patterns differ across recreational types. Spending by wildlife watchers are dominated by trip-related expenditures, with 80% of all dollars spent on food, lodging, and transportation. Conversely, hunters spent 47% of their dollars on equipment related items and 10% on "other" items including magazines, memberships, land leasing and ownership, licenses and tags. Anglers spent two-thirds of their \$226 million on travel, 27% on equipment, and 7 percent on "other".

⁵ Maine and Montana had the highest wildlife watching participation rates in the nation, with 56% and 55% respectively. For survey purposes wildlife watching is defined as "closely observing, feeding, and photographing wildlife, visiting public parks around the home because of wildlife, and maintaining plantings around the home for the benefit of wildlife....Secondary or incidental participation, such as observing wildlife while doing something else, is not included...(p.36)"U.S. Department of Interior, Fish and Wildlife Service., and U.S. Department of Commerce, U.S. Census Bureau. "2006 National Survey of Fishing, Hunting, and Wildlife Associated Recreation."

A closely related industry in Montana is the tourism industry, although not all tourists are outdoor recreationists, or visa versa. In 2005, over 10 million out-of-state tourists visited Montana and spent an estimated \$2.75 billion. The total economic impact of this industry is \$3.9 billion, with over \$1 billion in personal income, an estimated 46,000 jobs, \$377 million in federal tax revenues, and \$211 million in state and local tax revenues (Grau, et al., 2006). Tourist spending went for a variety of goods and services: fuel (28%), restaurants (21%), retail sales (16%), hotels (9%), groceries (8%), automobiles (5%), guide services (4%), camping (2%), fees (2), services (1%), and gambling (1%) (Institute for Tourism and Recreation Research, 2006). Of these categories, only camping and guide services can be directly associated with outdoor recreation, although others (e.g. gasoline) play a substantial role in many outdoor recreation activities.

The outdoor recreation component of Montana's tourism industry is also evident in Montana's top attractions. Tourists were asked to name the Montana attraction that provided the primary reason for visiting the state (Grau, et al., 2006). Yellowstone National Park led the list, with 22% of visitors naming it first. Other natural features were also high on the list: mountains/forests (18%), Glacier National Park (14%), open space/uncrowded areas (13%); wildlife/fish (7%) and rivers (2%).⁶

Table 5 presents the estimated expenditures by tourists for each Montana county. The dollars tourists spend are especially important in a few Montana counties and the counties receiving the higher shares are generally locations of extensive outdoor recreation. To roughly measure the importance of tourism to each county, Table 5 also the percentage of total tourist expenditures in each county and expenditures per county resident. Tourist expenditures are spread unevenly throughout Montana counties. Just seven Montana counties account for over

⁶ The ten most popular tourist destinations are Yellowstone and Glacier National Parks, Little Bighorn Battlefield, Fort Peck Lake, National Bison Range, Museum of the Rockies, Lewis and Clark Interpretive Center, Big Hole Battlefield, Lewis and Clark Caverns, and Pompey's Pillar (Grau, K., M. Bruns-Dubois, and N. Nickerson. "The Economic Review of the Travel Industry in Montana: 2006 Biennial Edition." Institute for Tourism and Recreation Research, December.

75% of total tourist expenditures Beaverhead (4.3%), Cascade (5.4%), Flathead (10.8%), Gallatin (20.7%), Missoula (10.9%), Park (7.6%), and Yellowstone (15.2%)). The 14 Boot counties receive 29 percent of tourist expenditures, with only three Balance counties receiving substantive shares of the tourist dollars (Beaverhead (4.3%), Cascade (5.4%) and Silverbow (3.6%).⁷

An alternative measure of the importance of tourist expenditures is spending per county resident. Per capita tourist expenditures are listed in the third column of Table 5. Beaverhead County and Park County lead the state with \$14,000 per year or more tourist expenditures per county resident. Thirteen counties have per capita expenditures exceeding \$3000, including five Boot counties (Flathead, Gallatin, Missoula, Park, and Yellowstone) and eight Balance counties (Beaverhead, Carbon, Custer, Glacier, Madison, Mineral, Silverbow, and Toole).

III. WHAT CONTRIBUTES TO ECONOMIC SUCCESS?

III.1 Theory

Community economic growth is a complex process involving natural and human resource endowments, technological change, and social and political institutions. Understanding these factors can help explain observed differences in the economic progress of different regions and, more importantly, guide communities in developing strategies that balance the costs and benefits of economic growth.

U.S. counties have had widely varying growth and decline experiences. In the last three decades, some rural communities, especially those tied to the primary commodity sectors, have lagged in employment, population, and income growth. Others have grown rapidly with their own challenges of congestion, loss of open space and farmland, and stresses on infrastructure (Carruthers and Vias, 2005). These same differences are seen in Montana's Boot and Balance counties (Turner, 2006). Explanations for differences between Boot and Balance counties are part of the long-standing "jobs versus people" debate (Partridge and Rickman, 2003). Do

⁷ This unequal distribution of spending is consistent with the preponderance of Yellowstone and Glacier National Parks in tourists' top destinations. The two parks accounted for 77% of total destinations in 2005; the next three most popular destinations accounted for less than 8% (Ibid.)

counties grow because businesses are there to create jobs and then people follow? Or are people attracted to a place for reasons not related to employment and jobs follow? In favor of the “jobs then people” view is the argument that a region contains a certain mix of industries, depending on what its natural endowments can support and other factors. Regions may ebb and wane with the fortunes of those industries. Coal and oil towns boom when fossil energy demand increases and decline when demand falls or cheaper fuel sources are found. In addition, critical masses of firms or industries might create invention and productivity hotspots, especially in urban areas (Glaeser, et al., 2001, Krugman, 1991). Still others emphasize the importance of creating concentrations of human capital, fostering increased invention and productivity (Romer, 1994).

Conversely, Roback articulated a theory in which people decide where to live at least partially in response to location-specific amenities (Roback, 1982). Under this “people then jobs” view, amenities serve as magnets, attracting people who relocate to desirable locations. The talents and spending of these migrants stimulate new and existing businesses. Firms are attracted to the workforce comprised of those who have demonstrated their willingness to accept lower wages or higher housing prices in return for higher amenities (Roback, 1982). Amenity-attracted migrants also expand the demand for existing and new businesses.

This theory has been adapted descriptively to describe conditions in amenity-rich areas of the U.S. (Deller, et al., 2001, McGranahan, 1999, von Reichert and Rudzitis, 1992), especially the western U.S. (Power, 2006). In these adaptations, there are three types of amenities: natural amenities such as extensive open land, wildlife, blue-ribbon fisheries; recreation-related amenities, such as ski-areas and dude ranches; and community amenities. These amenities are often site-specific and not easily matched by urban areas or other regions.

III.2. Evidence

The weight of empirical evidence suggests that the “jobs then people” or “people then jobs” argument ends in a draw. There is solid evidence that amenities, including natural amenities, do play a role in attracting workers, other migrants, and businesses. However, it is also clear that

workers will respond to new labor demand by re-locating to take jobs, especially high-wage jobs. It is likely the relative importance of the two factors varies temporally, geographically, and demographically.

Numerous studies by regional economists have demonstrated the interaction between jobs and people. In fact, one of the most common empirical methods for studying this issue is known as a *regional adjustment model*. In these models, migration (usually net-migration) is affected by the growth in employment, while employment growth is affected by the changes in net-migration. In other words, net-migration and employment are simultaneously determined (Carlino and Mills, 1987, Carruthers and Vias, 2005, Duffy-Deno, 1998, Lewis, et al., 2003, Lewis, et al., 2002). The results of these studies usually confirm this simultaneous relationship. For example, a recent study of counties in the Rocky Mountain west finds strong evidence for “...[a]positive feedback between population and employment growth, even when other determining factors are controlled for...(p.43)” (Carruthers and Vias, 2005). Another study of Intermountain states found statistical evidence that population and employment are jointly determined, concluding that “*employment is more attractive to population than population is to employment (p.122)*”(Duffy-Deno, 1998). In other words, the “jobs then people” effect is stronger than the “people then jobs” effect, but both are important.

More recent work uses state-of-the art time series statistical methods to analyze regional changes in employment and migration over time (Partridge and Rickman, 2003). The findings support both the “jobs then people” and the “people then jobs” arguments, with their relative importance varying over time and geography. The authors summarize: “*Labor demand shocks [jobs] are found to be more important on average than migration innovations in determining state employment fluctuations, indicating that people are slightly more likely to be following jobs than the converse. Yet, labor-supply shocks [migration] in total...account for a majority of employment fluctuations on average. By region, Sunbelt states are more influenced by labor-force migration shocks, but labor demand shocks are paramount in Rustbelt, Farm Belt, and*

Energy states (p.96)”(Partridge and Rickman, 2003). Interestingly, the authors find that employment changes in Colorado and Montana are most affected by migration “*likely due to their natural amenity-attractiveness (p.92)*”.

There are three major implications finding a two-way street between jobs and people. First, traditional economic development strategies, focusing entirely on job creation, address only part of the picture. If the presence of people can create jobs, new market demands, and investment opportunities, then a region’s successful economic development strategy will aim to make it a desirable place to live. The more we know that a community depends on natural and other amenities to attract migrants and retain residents, the more important this becomes.

Second, if jobs and people travel both directions, it is important to understand the role amenities play in this traffic. The evidence suggests that amenities play five different roles: 1) Amenities play an important role in decisions made by in-migrants. Several studies have documented the importance of amenities in the decisions made by in-migrants (Beale and Johnson, 1998, Judson, et al., 1999, Lorah and Southwick, 2003, McGranahan, 1999, Rudzitis, 1999, Shumway and Davis, 1996).⁸ Yet these studies suggest geographic and demographic differences. A 1998 survey of Montanan residents found various amenities and escape from disamenities to be important for 20-50 percent of respondents (Sylvester, 1999).⁹ Conversely, a 2001 survey of migrant to Great Plains counties found family and jobs to be the dominant motivations, with amenities low on the list (Sylvester and von Reichart, 2001). In the same vein, von Reichert and Sylvester found that family ties were the important for migrating or return migrating to Montana, followed by employment, “other reasons” and environmental quality (Von

⁸ For a review of this literature and an annotated bibliography see Marcouiller, D., J. Clendenning, and R. Kedzior. "Natural Amenity-Led Development and Rural Planning." *Journal of Planning Literature* 16, no. 4(2002): 515-542.

⁹ Sylvester (1999) reports nearly half of Montana residents cited the disamenities of urban life (congestion, crime, pollution) as a reason for staying in or moving to Montana. Those most concerned included recent migrants, with higher education and income. Forty percent cited environmental amenities (mountains, lakes, trees, open spaces) and 20% cited outdoor recreation opportunities (hunting, fishing, camping, skiing, snowmobiling, skydiving) as important for their decision to move to or stay in Montana.

Reichart and Sylvester, 1998). However, this study also shows that motivations vary by the destination and origin of the migrant. Environmental quality is a dominant reason for moving for those migrating to counties such as Ravalli, Missoula, Flathead, and Gallatin, but very much less so for those moving to other counties.¹⁰ 2) As discussed above, the high-skill pool of in-migrants or residents, who have expressed their willingness to take lower pay in return for amenities, may attract businesses (Graff, 2005)¹¹ 3) Some amenities may attract businesses by providing direct production inputs for recreation and other amenity-based industries. Guide services and other businesses serving fishers, rafters, and bird watchers are common examples. 4) Some entrepreneurs, especially those who are spatially footloose, may locate their businesses in areas with high amenities (Compton, et al., 1997, Johnson and Rasker, 1993). 5) Amenities also attract retirees and others with non-wage income, including investment income (Nelson, 1999). These new residents may spur economic growth by their demands for goods and services and the new businesses they may create (Deller, 1995, Nelson, 1999).

The third implication of the two way street is the importance of knowing what is meant by amenities and how they can be influenced. It is important to understand the role that natural amenities play, especially in western states with a high proportion of public land.

Early researchers used rather narrow measures of amenities, such as climate, topography, and water bodies (McGranahan, 1999). Although these researchers find clear evidence that population growth and/or net migration increases with temperate climates and variations in topography, and access to water, there is little that policy makers can do to shape these amenities.

Other researchers have examined a broader class of amenities. One popular term is rural amenities, defined as "*the hedonic, or pleasurable, aspects associated with natural and man-made features of rural areas, including wilderness, agricultural landscapes, historic structures,*

¹⁰ See Maps 5 and 6 in Von Reichart, C., and J. T. Sylvester. "Motives for Migration: A Study of Montana Newcomers." *Montana Business Quarterly* Winter(1998).

¹¹ Graff (2005) finds that businesses in the Greater Yellowstone Region rely on in-migrants attracted by natural amenities for a supply of employees. However, we know of no confirming studies in locations outside of amenity-rich areas.

and cultural traditions (p. 516)” (Marcouiller, et al., 2002), while another refers to recreational amenities (Beale and Johnson, 1998). A review of the literature suggests, “...[N]atural amenities and their related recreational and residential developments play a role in understanding the economic, social, and environmental characteristics of rural areas. [But]...there are further needs to improve the knowledge base and [span] the wide gap between academic understanding and application to real-world rural situations (p518)”.

Other researchers use a richer mix of natural and other amenities, such as acreage lands available for public use, wildlife refugia, parks, etc., numbers and types of recreation facilities, miles of trails, and others. In fact these studies have such an abundance of amenity measures that they must use statistical means to collapse them to a manageable number. One of the most comprehensive of these studies finds strong evidence that amenities affect employment and population growth, but the effect of any single amenity cannot be discerned (Deller, et al., 2001). Conversely, another study using extensive amenity measures finds generally insignificant amenity-based associations with population growth, job growth in the retail and service sectors, or per capita income (Kwang-Koo, et al., 2005). However, this study analyzed only counties in the Upper Great Lakes Region.

Finally, a few studies have specifically addressed whether policies that dedicate public land for conservation purposes, rather than commodity production, promote or discourage employment growth, net migration, or wage growth (Duffy-Deno, 1998, Lewis, et al., 2003, Lewis, et al., 2002). These authors find little evidence of substantive or statistically significant effects, although Duffy-Deno does find for a subset of intermountain counties that Wilderness areas managed by the U.S. Forest Service do promote population density, and, because of simultaneous determination, have a small positive effect on employment (p.131).

One possibility for unifying these varied results is that amenity affects vary over geographic space. For example, what is considered desirable in one region (e.g. a temperate winter) could be considered undesirable in another (e.g. a region known for winter skiing). In

fact, this is the finding of (Partridge, et al., 2006), who find, for example, employment change is positively associated with a varied topography (hills and mountains) in western, but not eastern, counties. For access to water for recreation, they find “...[F]avorable employment effects in most of the West...[but] small marginal impacts on job growth in the rural Eastern U.S. and Texas (p.13)”(Partridge, et al., 2006).

III.3 Human Capital and Education

There is nearly universal agreement that a skilled work force is essential for a region’s economic success.¹² Theory suggests that education builds human capital, and enhances worker productivity, improves so-called soft skills,¹³ and improves prospects for the process and product inventions that drive technological progress. More highly educated workers are less likely to become unemployed and quicker to find work when they do encounter unemployment.

Empirical studies are universal in their findings that education is a prominent driver of economic success, whether success is defined as increases in income, employment, or other measures and whether the entities studied are nations, states, counties, or cities. Two recent studies contain typical findings (Higgins, et al., 2006, Rupasingha, et al., 2002).¹⁴ Each has taken a comprehensive approach to explaining differences in the economic success of over 3000 U.S. counties, using the latest statistical methods. Rupasingha et al. find that the percentage of a

¹² There are some limited exceptions. One the finding that a high proportion of college graduates is associated with decreased employment growth in parts of the eastern U.S. However, they find a positive effect on employment growth in all areas west of the Mississippi (Partridge, M. D., et al. "The Geographic Diversity of U.S. Nonmetropolitan Growth Dynamics: A Geographically Weighted Regression Approach." *Land Economics* forthcoming(2006). Another exception is the finding that a more educated workforce is inversely associated with employment growth in the service sector, while positively associated with employment growth in the manufacturing sector Green, G. P., A. Fleschmann, and T. M. Kwong. "The Effectiveness of Local Economic Development Policies in the 1980's." *Social Science Quarterly* 77, no. 3(1996): 609-625.

¹³ Soft skills include such worker’s characteristics as work ethic, courtesy, teamwork, self-discipline, self-confidence, conformity to prevailing norms, and language proficiency. Research has shown that soft skills are important predictors of labor market success (Eldridge, B. "The Growing Need for Soft Skills." *Montana Economy at a Glance* (2006).

¹⁴ See also Fattma and Paulsen (2004) for a state-level study concluding “...the initial cumulative investment in the higher education of a state’s workforce in 1990 had a positive effect, of both statistical and practical significance, on the subsequent growth in a state’s workforce productivity between 1990 and 1999 (p. 87)”.

county's population over age 25 with a bachelor's degree is a key variable explaining differences in per capita income growth between 1990 and 1997 (Rupasingha, et al., 2002).

Higgins, et al. statistically explain variations in income growth over the last two decades across 3058 counties and find that the percentage of a county's population with a bachelor's degree or higher is one of the most important and most statistically significant variables explaining a county's income growth path. In addition, higher income growth is associated with a higher percentage of the population with a high school diploma. Income growth is lower in counties with a higher percentage of the population with 11 years or less of education (Higgins, et al., 2006).

One way in which a more highly educated workforce contributes to success, is by acting as a magnet for firms seeking locations for new and/or expanded facilities. This may be especially important in decisions relating to high-skill industries. A recent study of the location decisions of high-technology firms in industries as varied as drugs, communications equipment, and aircraft parts found that new businesses were more likely to relocate to counties with a higher proportion of its population (25 years of age and older) who have graduated from high school (Woodward, et al., 2006).

Investment in education may pay dividends in another way as well. Research and development activity at universities have been shown to lead to increased innovative activity, such as patents and laboratory startups, in adjacent areas (Acs, et al., 1992, Anselin, et al., 1997, Sivitanidou and Sivitanides, 1995). However, these studies find the affected distances are generally less than 50 miles and none of the studies have focused on rural areas, so their application to Montana may be limited (Woodward, et al., 2006).

Rural areas rely disproportionately on small businesses and education is likely to be a key to successful entrepreneurship (Acs and Armington, 2003, Low, et al., 2005). Discussing the importance of education for small business success, Low et al. state: "*College degrees are often related to entrepreneurship because education increases the knowledge and critical thinking*

skills so vital to the success of an entrepreneur. Research has shown that the skills necessary for entrepreneurship are teachable. Thus, proprietors who create the most value are more likely to have a college degree (p. 73)”(Low, et al., 2005)

III.4 Agglomeration

So-called “new growth theory” argues that technological change is the main driver of economic progress and technological change occurs from within. This does not bode well for Montana’s economic success, especially in its more rural areas. These models predict that growth will continue to cluster in cities, given the historical location of large-scale production, continually decreasing transportation costs, and increasing returns to knowledge, and the increasing returns inherent to complex production processes with high fixed costs.

The empirical evidence supports these predictions. For example, a comparison of income growth from 1990-1997 found that U.S. metropolitan counties grow faster than rural counties (Rupasingha, et al., 2002) and a comparison of metropolitan and non- metropolitan counties in finds generally lower rates of economic growth in the latter counties (Higgins, et al., 2006). A most recent study finds that “*rural county job growth is dependent on proximity to an urban center, even as small as 10,000, confirming that greater distance from an urban center is a major deterrent to job growth for most counties outside a metro area (p.16)*”(Partridge, et al., 2006). Another study has found that areas with lower geographic densities of manufacturing and service establishments are at a disadvantage in attracting new high-skill industry facilities (Woodward, et al., 2006).

However, other studies find that non-metropolitan counties that are adjacent to metropolitan counties may be experiencing faster growth than either metropolitan counties or rural counties. These findings suggest that rural and natural amenities do play a role in economic growth, but the role may be limited spatially. The push-pull relationship between the advantages of agglomeration and peoples’ preferences for natural and rural amenities are important for less populated areas like Montana and ripe for economic research (Weber, 1998).

III.5 Recreation and Tourism

The dollars associated with Montana's tourism and recreation industries are impressive. The \$2.2 billion spent in Montana by out-of-state tourists in 2005 is just slightly smaller than the combined earning of the transportation and manufacturing sectors in the same year.¹⁵ Similarly, the nearly \$1 billion in annual expenditures by resident and non-resident wildlife watchers, anglers, and hunters is five times the combined earnings and proprietors' incomes in Montana's agricultural sector. These income streams are especially important to many of Montana's rural areas. Attracting and maintaining these income streams represent an opportunity to take advantage of the niche market provided by Montana's abundant open spaces, wildlife populations, and world-class fisheries.

A recent USDA study suggests that rural counties whose economies are more focused on recreation and tourism have performed better by several measures of economic success. This study classified recreational counties on the basis of their dependence on recreation-related industries (i.e. entertainment and recreation, accommodations, eating and drinking places, and real estate) and the importance of seasonal or occasional use housing (Beale and Johnson, 1998). By these measures USDA identified 311 rural, recreational counties, including the following counties in Montana: Beaverhead, Carbon, Flathead, Gallatin, Glacier, Lewis and Clark, Madison, Park, and Sweetgrass (Beale and Johnson, 1998).¹⁶

The study statistically compared the economic performance of recreation counties with that of other counties. The findings are summarized as follows: "*Rural tourism and recreational development results in generally improved socio-economic well-being, though significant variations were observed for different types of recreational counties. Rural tourism and recreational development leads to higher employment growth rates and a higher percentage of working-age residents who are employed. Earnings and income levels are also positively*

¹⁵ BEA reports earnings of \$1.167 billion in transportation and \$1.153 billion in manufacturing

¹⁶ Yellowstone National Park is also included with non-metropolitan recreational counties

affected. Although the cost of living is increased by higher housing costs, the increase offsets only part of the economic advantage. Rural tourism and recreation development results in lower poverty rates and improvements in other social conditions, such as local educational attainment and health (p. iii).”(Reeder and Brown, 2005).

An earlier study used an alternative measure, but made similar findings. Defining a county with one scenic-based business as “moderately scenic” and a county with more than one scenic-based industry as “extensively scenic”, the study found that extensively scenic counties added jobs at an annual rate of 3% in the 1990’s compared with 1.7% for moderately scenic and 1.4% for other counties (Henderson and McDaniel, 1998).¹⁷

III.6 Institutions and Social Capital

Non-economists have long argued that other social factors are important for economic success. Recently economists have come to at least consider the importance of institutional factors determining economic outcomes. Nobel Prize winner Douglas North describes institutions as “rules of the game”, the laws and norms by which society lives and the mechanisms that enforce social rules and norms (North, 1990, Weber, 1998). An economic area with amenable institutions will be able to achieve greater economic success because it can effectively disseminate information, use resources, and overcome barriers of mistrust and other failures.

Researchers have struggled to define and measure institutions but have focused on a concept known as social capital. A representative definition of social capital is: “*The networks of relationships among persons, firms, and institutions in a society together with associated norms of behavior, trusts, cooperation, etc. that enable a society to function effectively*” (Deardorff). A recent analysis has attempted to measure the effect of social capital on the relative economic performance (Rupasingha, et al., 2002). They measure social capital as the population density of social organizations, including civic and social, business, religious, labor, professional, and political. This study’s finding include: “...[S]ocial and institutional factors do matter in

¹⁷ The study did not address the issue of statistically significant differences.

economic growth in the United States, and a key reason why economic growth rates differ across communities is that the social and institutional dimensions also differ across these communities (p. 153)”(Rupasingha, et al., 2002).

IV. FEDERAL RESERVE BANK OF KANSAS CITY’S REGIONAL ASSET INDICATORS

The Center for the Study of Rural America (CSRA) of the Federal Reserve Bank of Kansas City speaks of economic conditions in rural America as follows: *“Regions are facing rapidly evolving pressures from today’s global economy. The old rules of the game, where traditional assets such as cheap land and labor determined a region’s success or failure no longer apply. Instead, new categories of assets are shaping economic prospects—assets like workforce skills, lifestyle amenities, access to capital and information, and innovative activity. Finding new pathways to tap these assets makes economic success much easier (p. 61)*”(Low, et al., 2005).

As a first step, CSRA has developed a set of measures of regional assets, entitled Regional Asset Indicators (RAI’s). RAI’s are based on what is known about the drivers of economic growth in rural areas of the U.S. According to the CSRA, these indicators provide *“...new, forward-looking metrics that regions can use to better understand their economic assets and help inform private, public, and nonprofit regional development strategies.”*

While each RAI shares the deficiencies of any indicator in attempting to collapse a complex and dynamic process into a single number, as a group RAI’s are intended to represent a comprehensive set of indicators of the ability of a rural area to meet the challenges of an increasing competitive and globalized economy, where ideas and innovation, not commodity production will be the keys to economic success. RAI’s also have the virtue of shifting our attention from outdated arguments about economic growth strategies focused on creating new extractive jobs to new strategies reflecting the realities of a knowledge-based economy with highly mobile labor, financial capital, and intellectual property. This section will describe 9 of

the 12 RAI's and present their values for all Montana counties, as well as Boot, Balance, and Montana-wide averages.¹⁸

IV.1 Skill Surplus

Success in regional economies is often driven by high-skilled industries employing high-skilled workers. In the last two decades, high-skill industries have grown considerably faster than the overall U.S. economy. These industries were largely responsible for increasing levels of innovation and economic growth (Moore, 2005). One means of attracting these industries into an area is to have a readily available supply of skilled workers. CSRA has developed a RAI to measure the availability of skilled workers based on the concept of underemployment.

Underemployment occurs when a worker is not fully utilizing her skills in her current job and signals that a surplus of skilled workers is available. This surplus may attract high-skill industries or underemployed workers may put their own skill surpluses to use by starting their own businesses (Moore, 2005).

CSRA measures underemployment as Skill Surplus—the difference between the supply of high-skilled workers (those with a college or post-graduate degree) and the demand for high-skilled workers across all occupations. A Skill Surplus of, say, 10% means that ten percent of the county's workforce is underemployed and potentially available for more highly skilled, and higher wage, jobs. A negative Skill Surplus means that there is greater demand for high-skilled workers than can be met with the county's current workforce.

The second column of Table 6 presents the Skills Surplus RAI for all Montana counties as well as Montana, Boot, and Non-Boot averages. Table 6 shows that Montana's skilled labor supply slightly exceeds labor demand with an average Skill Surplus of 0.5, across all counties. Nationwide about 20% of non-metro counties have positive Skill Surplus (Moore, 2005).

However, there are major differences between Boot and Balance counties. Skills Surplus for

¹⁸ The RAI's are in eight categories with a single indicator per category, except as noted: innovation, creative workforce, infrastructure, wealth (3 indicators), financial, underemployment, entrepreneurship (3 indicators), and human amenities.

Boot counties average 3.43, while for Balance counties the average is -1.03. The latter statistic suggests that Balance counties will have a difficult time attracting high-skill industry, while the Skill Surplus in many Boot counties will encourage new businesses and job growth.

There are marked exceptions, however. Some Balance counties exhibit large Skill Surpluses, including Madison (7.2), Beaverhead (7.0), and Judith Basin (4.1). If Skill Surplus is an accurate predictor of growth, these counties are poised for growth. Conversely, some Boot counties have small or even negative values, including Stillwater (1.0), Broadwater (-0.8), Yellowstone (-1.0), and Powell (-3.7).

There is a link between Skill Surplus, population growth, and natural amenities in Montana and other Rocky Mountain states, as described by Moore (2005):

“In the 1990’s, population and employment grew faster in underemployed counties than in rural America as a whole. Such growth suggests these underemployed counties were already taking some advantage of their skills surplus. The best performers were in areas rich in natural amenities, such as the Rocky Mountain region. Demand for high-skill labor increased in these places throughout the decade. Interestingly, the increased demand was not quite strong enough to offset the inflows of high-skill workers, resulting in increased skill surpluses by 2000. This apparent “brain-gain” may have been fueled by a resurgent interest in natural amenities and enhanced quality of life. And the existing high-skill pool allowed key industries to take root and grow with the new infusions (p. 3)”

Moore (2005) continues with the lesson to be drawn from these observations:

“Today’s surplus of skills, however, may become tomorrow’s deficit. Eventually, local labor markets will tend to balance the supply and demand of skills, either through the growth of new high-skill industries or through the departure of high-skill workers. Underemployed regions need not accept the latter outcome. High-skill workers are attracted by quality of life factors, such as natural amenities, and may choose to start businesses in places where these factors are abundant. Consequently, communities that determine to build on existing natural, cultural, and

social amenities will achieve the most success in retaining and using their high-skill workers (p.4).”

IV.2 Human Amenities

One of CSRA’s RAI’s is a broad measure of amenities. The Human Amenities Index is composed of immutable natural features, such as water bodies, topographical contrasts, and moderate climates (McGranahan, 1999), but also includes healthcare access, innovation, recreation areas, restaurants, and scenic amenities (Center for the Study of Rural America, 2006a).¹⁹

CSRA summarizes the importance of Human Amenities as follows:

“Human amenities may benefit current residents’ well-being and future economic growth. Indeed there is a positive correlation between employment growth and income growth and the human amenity asset indicator. Regions can develop regional economic development objectives—such as tourism, high-technology industries, businesses, or entrepreneurs—that go hand-in-hand with available assets and partner with each other to reduce deficits in important assets (p.2).”

The third column of Table 6 presents the Human Amenities Index for all Montana counties. Montana counties average 30.9, slightly higher than the U.S. county average of 29. Across the U.S. counties with no towns of more than 10,000 residents typically have the lowest Human Amenities Index. However, largely rural Montana counties rank the same as U.S. metropolitan counties with at least one city of 50,000 or more.

Montana counties in the Boot generally have higher Human Amenities than Balance counties. Boot counties average 30.9 with notable counties such as Flathead (40), Gallatin (39.7), Glacier (39.1), and Park (38), while Balance counties average 28.5, with notable low-ranked

¹⁹ Healthcare access is measured as the percentage of healthcare professions in the total labor force; innovation is measured as patents per capita; recreation areas is measured as the distance to the nearest national park; restaurants is measured as the number of local entertainment and dining facilities; scenic amenities are measured using a United States Department of Labor natural amenity index. See Center for the Study of Rural America (2006) for details.

counties such as Phillips (19.8) and Daniels (20.3). However, there are notable high-ranked Balance counties as well: Carbon (38.9), Teton (36.7), Pondera (35.0), and Sanders (34).

IV.3 Entrepreneurship

Entrepreneurs are an important part of regional economies, especially in rural communities. In U.S. counties containing only small towns, nearly one quarter of all workers are self-employed. In Montana, 30% of all workers are self-employed. Although much of the discussion of economic development strategies focuses on jobs paying wages, it is also important to consider the self-employment sector.

CSRA expects that the presence of a large and prosperous small business sector will contribute to prosperity, stability, and income growth. CSRA explains: “*Entrepreneurs create local jobs, wealth, and growth—and are themselves innovative users of other regional assets and resources. ...[E]ntrepreneurial firms benefit their community simply by enhancing the local quality of life ...[and]generate significant additions to regional jobs and wealth...help wealth and a higher tax base...bring a competitive advantage to rural regions by identifying and exploiting assets ...[and]are themselves assets to their region (p.2)*”(Low, 2004).

CSRA has developed two RAI's to measure entrepreneurship, Breadth and Depth.²⁰ Breadth is the number of non-farm self-employed persons as a percentage of the non-farm workforce. Depth is the average earnings of the non-farm, self-employed workforce. Breadth is a measure of the diversity and importance of small business in rural areas while depth measures value added created by these small business owners. “*Depth of entrepreneurship differs from breadth in that it examines the value of entrepreneurial activities, rather than simply the number of entrepreneurs. While many small entrepreneurs enhance a region's quality of life, it is the high-value entrepreneurs that fuel economic growth.(p.3)*”(Low, 2004).

²⁰ CSRA has also developed a third Regional Asset Indicator for entrepreneurship. However, there are many missing values for Montana counties and we do not discuss it further here.

Table 6 presents both Breadth and Depth for Montana counties. As measured by Breadth, many Montana counties have extraordinary levels of entrepreneurship, with 36-54 percent of the workforce self-employed in Carbon, Carter, Chouteau, Garfield, Golden Valley, Granite, Jefferson, Meagher, Petroleum, Treasure, and Wibaux counties. Overall, there does not appear to be any substantive difference between Boot and Balance counties, averaging 31 and 29 percent, respectively. However, a strong difference emerges with regard to Depth. The average Montana self-employed person earns \$14,856 annually, but much more in the Boot counties (\$17,477) than in Balance (\$13,346).

IV.4 Creativity

Creative workers increase a regions' economic prosperity because the higher level of human capital increases productivity, fosters innovative ideas, and creates new methods, products, and services, and even entire industries. CSRA has developed an RAI measuring the presence of creative workers in a county. Creative Workers is measured as the share of a county's workforce involved in designing or creating new applications, relationships, systems, or products. Creative Workers tries to measure something more than human capital, often measured by education levels. For example, scientists, lawyers, and artists are counted, while technical, and legal support staff, teachers, and healthcare professionals are excluded (Center for the Study of Rural America, 2006c).

Table 6 presents the Creative Workers indicator for all Montana counties. Montana counties average 15.5% Creative Workers, compared to a national average 17% percent for all counties, 21% for counties with medium size town counties, and 14% for small town counties. Boot counties average 20.5%, while Balance counties average 13.2%. The Creative Workers indicator is notably high in four Boot counties: Gallatin (30%), Lewis and Clark (27%), Jefferson (26%) and Missoula (26%). The RAI is notably low in the Balance counties: Carter, Golden Valley, Petroleum, Prairie, and Wibaux (all 8% or less).

IV.5 Infrastructure

Infrastructure supporting the transportation of goods and services and communication of information is vital for regional economic growth. CSRA measures transportation and communication Infrastructure at the county level using i) state and local highway expenditures in 2002; ii) the annual number of commercial aircraft take-offs in 2003; and iii) the number of high-speed internet providers in 2003 (Center for the Study of Rural America, 2006b). Table 7 gives the Infrastructure RAI for Montana counties.

Compared to the rest of the nation, Montana counties generally rank low in Infrastructure. Montana counties average 3.82, compared with a U.S. average of 7 and a U.S. rural county average of 5.3. At 4.3, Boot counties average slightly higher than Balance counties, averaging 3.5. Several Boot counties have high Infrastructure, including Gallatin (9.1), Lewis and Clark (7.7), and Missoula (7.2). In addition, some notable Balance counties also rank high within Montana, especially Silverbow (8.3), Fallon (7.2), and Wibaux (6.7).²¹

IV.6. Wealth

Wealth, in various forms, contributes to economic growth in two ways (Low, 2005a). First, wealth as a pool of savings is available to capitalize new and existing businesses. Second, wealth contributes to stability in consumer demand because many forms of wealth do not fluctuate as much as wage income. CSRA has constructed three RAI's of regional wealth at the county level: the median residential home value, the average value per acre of agricultural land, and the per capital receipts of investment income in the form of interest, dividends, and rental income. Table 7 presents these RAI's for Montana counties.

There are marked differences between Boot and Balance counties in two measures of wealth, home value and agricultural land value. There does not appear to be a difference in per capital dividends, interest, and rental income. The median home value is higher in Boot counties,

²¹ There also appears to be a relationship between the perceived small business climate and infrastructure. Chatman, et al. (2008) find a strong correlation between perceptions of communities' entrepreneurial climate and high-speed internet access.

lead by Gallatin county (\$140,000) and Ravalli county (\$134,000), with the average for Boot counties of \$109,000. The median home value in Balance counties averages \$61,486.

IV.7 Financial Services

Local banking services and assets also play a critical role in the economic growth of rural communities. Banking deposits are a key asset in funding loans to high-value entrepreneurs, a critical component of regional prosperity, and the services of hometown banks are unique. Because hometown banks have better access to local information (including personal contracts), they can reduce the costs and risks of lending to local businesses (Low, 2005b).

CSRA has developed a RAI, Deposit Depth, for local banking services and assets. Deposit Depth is defined as the sum of county bank deposits divided by county population and then divided by county per capita income. A Deposit Depth equal to one, has average deposits equal to the county's average annual income.

Table 7 gives the Deposit Depth for all Montana counties for 2002 and 1980 and the change in deposit depth between these years. For the entire U.S., counties with a small town core have an average Deposit Depth of .62, roughly comparable to Montana counties with an average of .59. In 2002, Boot counties average .46, slightly less than Balance counties (.55). Nationwide, Deposit Depth has fallen in rural counties and increased in metro counties. In Montana, Deposit Depth has declined in all but six counties. This suggests that, in nearly all Montana counties , *“...[T]he pool of local capital available for rural businesses is shrinking over time (p. 2)”*(Low, 2005b).

V. THE PATHS TO MONTANA'S ECONOMIC SUCCESS

In the discussion above, we have outlined the state of Montana's economy and discussed what is known about the pathway to economic success. Much of our discussion, especially the summaries of extant evidence, has highlighted predominately rural areas in the Intermountain West and the Rockies, i.e. areas similar to Montana. In addition, we examined the Center for

Rural America's development of RAI's to predict economic success and identify deficiencies that can potentially be rectified to improve the chance of success. Throughout our discussion, we distinguished between Montana's Boot and Balance counties and identified areas where there appear to be substantive differences.

V.1. Skilled Workforce

A universal finding is that a region experiences more economic success when it has a skilled workforce. Workforce skills can be augmented by well-educated in-migrants, but well-designed, well-funded, and adaptive systems of education (k-12, and college) and work force development (lifelong learning) are essential for economic prosperity. Compared to the U.S. as a whole, Montana's population has a higher percentage of the population with a high school diploma or better (87.2% versus 80.4% for the U.S.), yet it lags the U.S. in terms of college degrees. While 23.7% of Montanan's possess a Bachelor's degree or higher and 7.2% holds an advanced degree, the comparable numbers for the U.S. are 24.4% and 8.9%, respectively. The differences are even greater when one compares Montana to Washington, one of the major destinations of Montana's out-migrants. In Washington, 27% percent of residents possess a college degree or higher, while 9.3% percent hold an advanced degree. Maps 2 and 3 show high school and college level attainments for Montana counties.

As shown in Maps 2 and 3, there is considerable variation in workforce education across the state, and Boot counties generally exceed Balance counties. The preponderance of evidence suggests that counties with low education levels are unlikely to successfully compete in contests to attract new or expanding businesses or to maintain high value small businesses. Low education levels necessarily reduce Skill Surplus, thus weakening what CSRA argues is a magnet for high-skill industries.

V.2. Urban and Rural Areas

The preponderance of evidence suggests that economic growth is more easily achieved in and near urban areas. Thus, Montana's preponderance of small towns and cities will present a

challenge to economic growth strategies. Five recommendations follow from this observation. First, have realistic expectations. It is unlikely that incomes and economic growth will be as high, on average, in Montana as in highly urbanized areas, such as Puget Sound. Many choosing to live in Montana have accepted reduced economic opportunity as the price of enjoying Montana's many amenities. Second, capitalize on the urban areas that do exist. In Montana, even smaller cities (populations of 10,000 or less) may serve as magnets for people and businesses. Counties adjacent to Montana's larger cities obtain some spillover effects in the form of business and population growth. The attraction of these Montana cities, large and small, can be enhanced by paying attention to their broadly-defined amenities, including unique cultural backgrounds, natural features, and recreational opportunities. Third, develop cooperative institutions that combine the talents, resources and amenities of two or more counties. CSRA discusses several of these cooperative ventures. Fourth, some of the disadvantages of Montana's rural areas may be mitigated by targeted public, private, or philanthropic investments. Likely targets are the CSRA's Infrastructure RAI, which focused on roads, air transportation, and internet capabilities. Fifth, protect and enhance the amenities of existing urban areas. Some public policies have been shown to mitigate the sprawl effects of population increases. For example, spending public dollars on transportation is found to increase sprawl (decrease population densities) in Rocky Mountain counties, while public spending on sewerage appears to reduce sprawl and increase employment density (Carruthers and Vias, 2005).

V.3 Recreation and Tourism

As discussed above, recreation and tourism is already an important industry in Montana and, given Montana's rich endowments, may represent an opportunity for Montana to capitalize on natural amenities not easily reproduced by other regions.

However, promoting recreation also poses some serious challenges to some communities. First, recreation may not always be complementary with traditional land uses, including mining, logging, and some agriculture. Proposed expansions of extractive industries must be carefully

balanced against the possible loss of recreation and tourism based dollars at risk because of lost amenities.²² Second, as Table 5 shows, tourism expenditures are very unevenly spread throughout the state. Promoting tourism and recreation in areas that are not already enjoying some success in this industry will remain a challenge. Third, recreational activity tends to be seasonal. To some extent, communities may surmount this disadvantage by developing complementary counter-seasonal recreation (e.g. mountain biking in ski areas). Fourth, the income streams from recreation may be larger and more stable if developed in conjunction with other amenities. Generally urging rural areas to capitalize on abundance natural amenities, Henderson cautions *“Tourists, even wildlife recreationists, often prefer places with amenities beyond scenic landscapes. They eat at restaurants, sleep in hotels, and visit night spots. As a result a growing number of hunting resorts that combine entertainment and wildlife are beginning to dot the landscape. To help draw customers, many of these resorts also offer off-season activities and promote other types of recreation in the region. They clearly show that rural places with a rural identity that embraces both entertainment and wildlife amenities are probably in the best position to capture wildlife recreationists dollars (p. 2)”* (Henderson, 2004). Fifth, recreation and tourism jobs are likely to be more seasonal and lower paid than jobs in some other sectors. However, this does not mean that these jobs are inherently bad (Dillon, 2000). Many of these entry-level jobs are available to younger workers and help these workers to develop the technical and soft skills that lead to more highly paid jobs. The seasonal variation in these jobs is also more predictable than the variation in other unstable sectors and the part-time work often fits the family, professional, and recreational preferences of these workers. Finally,

²² For a discussion of this balance in potential mining towns in the West see Thompson, J. "Reluctant Boomtown." *High County News*, February 18, 2008.

some of the higher pay found in other sectors is due to more dangerous or unpleasant working conditions in these industries (Loomis, et al., 2007).²³

V.4 Diverse Income Sources

The sources of income in Montana are more diverse than we generally realize. Earnings from investment and retirement income comprise about 30-35% of total personal income, with a slightly higher percentage in Balance counties. In addition, a high percentage of residents in many Montana counties are self-employed. Many Montana counties are heavily dependent on agriculture and are thus subject to the vicissitudes of international commodity markets. A diversity of income sources probably enhances economic and community stability.

A diversity of income sources requires attracting in-migrants and retaining residents with various income sources. The evidence suggests retirees moving to rural areas are strongly motivated by amenities. Recent articles addressed to retired persons are promoting such unlikely places as Fargo, North Dakota and Elko, Nevada, based partly on the natural amenities available (Mahoney and Edmondson, 2008).

Just as importantly, the decisions of young, well-educated professionals to *“move to new places are not based on strictly economic considerations, such as wage levels and employment opportunities, but rather on perceived improvements in the quality of life new residences offer. The promise of better schools, less crime, and scenic beauty attract relatively well-off individuals and families... When these people move to an area, they bring with them both financial and human capital that can stimulate local economic development (p.34)”*(Nelson, 1999).

Small businesses are an important source of rural incomes and income stability. Self-employed business persons are often free to locate where they please. Small business has grown faster in rural areas with high levels of natural amenities and other high quality of life features (Low, et al., 2005). Public policy can affect the success of small business. Investments in

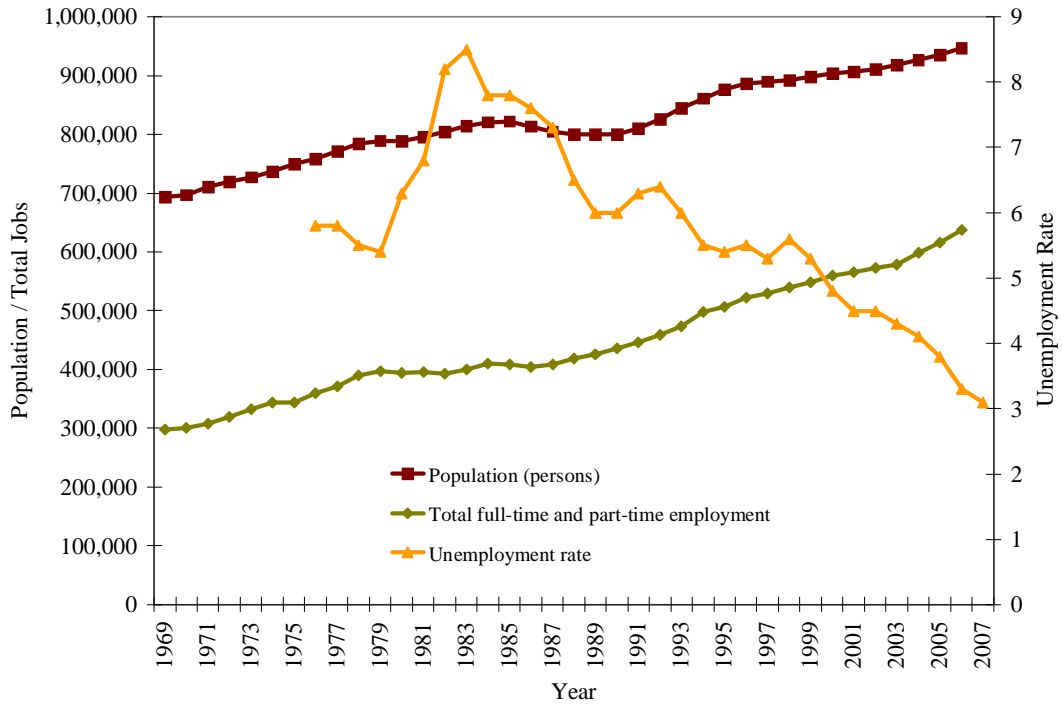
²³ There is also some evidence that self-employed persons in the recreation and tourism industry make twice as much as wage workers in this industry (Dillon, T. "Employment and Wages: The Travel Industry in Montana." University Travel Research Program, University of Montana, July

education can help foster profitable small businesses, both by teaching entrepreneurial skills and providing an educated workforce as some of these businesses grow (Low, et al., 2005).²⁴ Public and private investments in infrastructure can also be used to promote small business success and the Infrastructure RAI suggests that many Montana counties are lacking in this area.

²⁴ Recall also that large-scale economic development projects can adversely impact small businesses by increasing local wage rates and living costs and making it difficult for small businesses to attract or retain workers (Loomis, J., J. Kerkvliet, and S. Weiler. "Are High Wage Jobs Hazardous to Your Health? The Myth that Attracting High Paying Extractive Industry Jobs Is a Desirable Economic Development Strategy." *Western Economic Forum* 6, no. 2(2007): 10-14.).

Figure 1

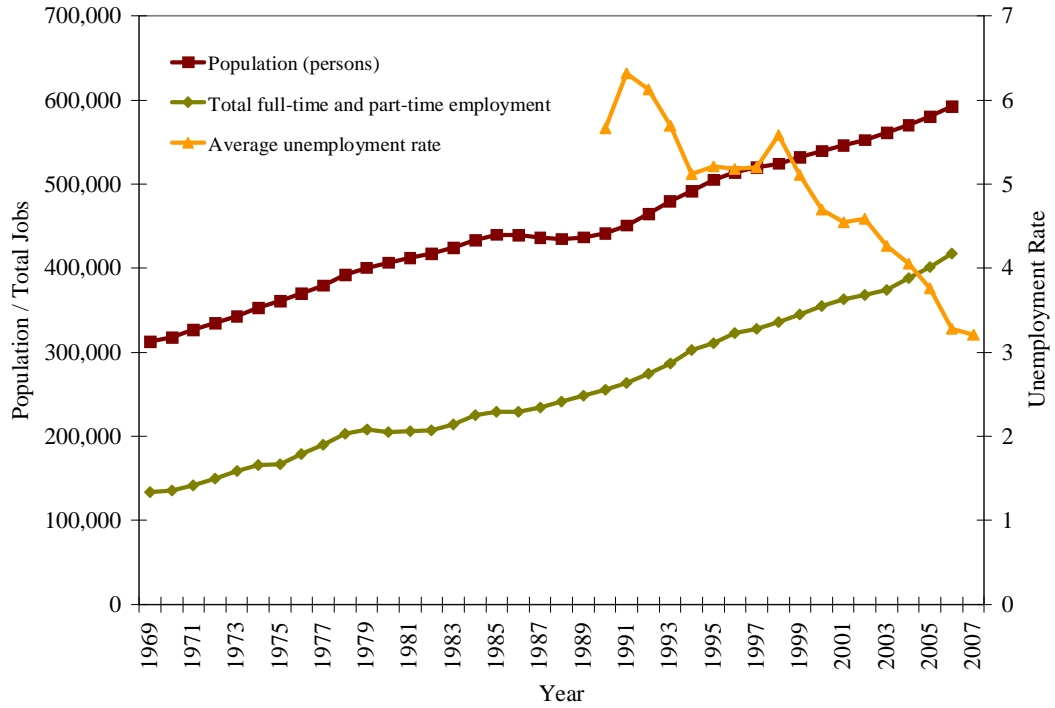
Population, Employment and Unemployment in Montana



Sources - Unemployment: Bureau of Labor Statistics, U.S. Department of Labor
(Data earlier than 1990 are not available)
Population and Employment: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce
(2006 data are the most recent available)

Figure 2

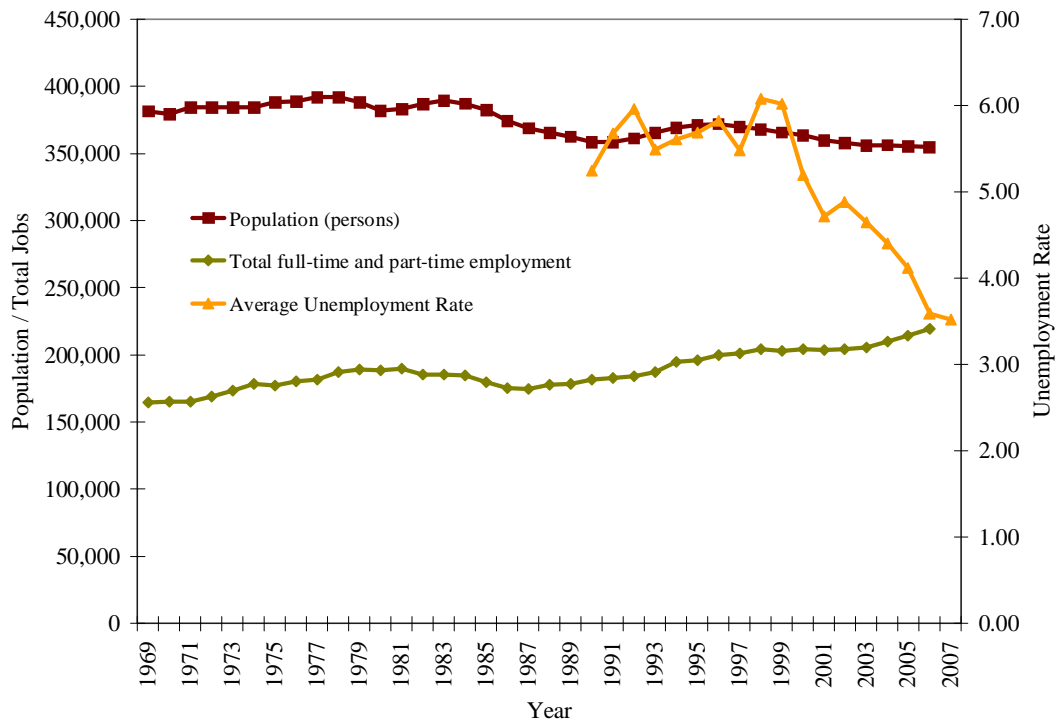
Population, Employment and Unemployment in Montana's Cowboy Boot Counties



Sources - Unemployment: Bureau of Labor Statistics, U.S. Department of Labor
 (Data earlier than 1990 are not available)
 Population and Employment: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce
 (2006 data are the most recent available)

Figure 3

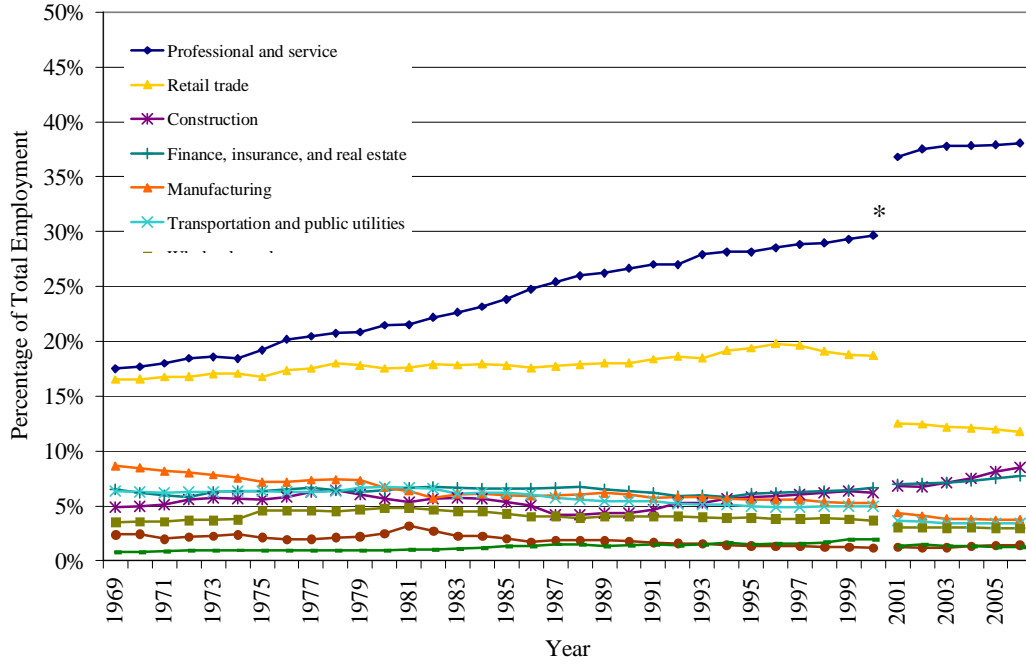
Population, Employment and Unemployment in Montana's Balance Counties



Sources - Unemployment: Bureau of Labor Statistics, U.S. Department of Labor
 (Data earlier than 1990 are not available)
 Population and Employment: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce
 (2006 data are the most recent available)

Figure 4

Trends in Employment in Montana

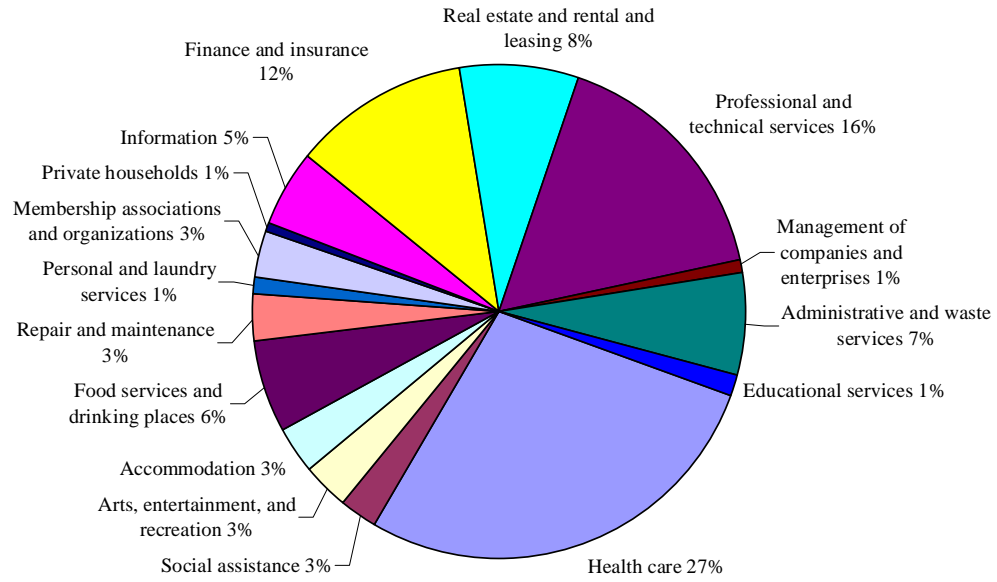


* In order to show the long-term trend, the figure is based on data collected through the Standard Industry Classification (SIC) system, which was used through 2000, and the North American Industry Classification System (NAICS), which has been used since 2001. The switch in classification systems is shown by the breaks in the graph.

Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce (2006 data are the most recent available)

Figure 5

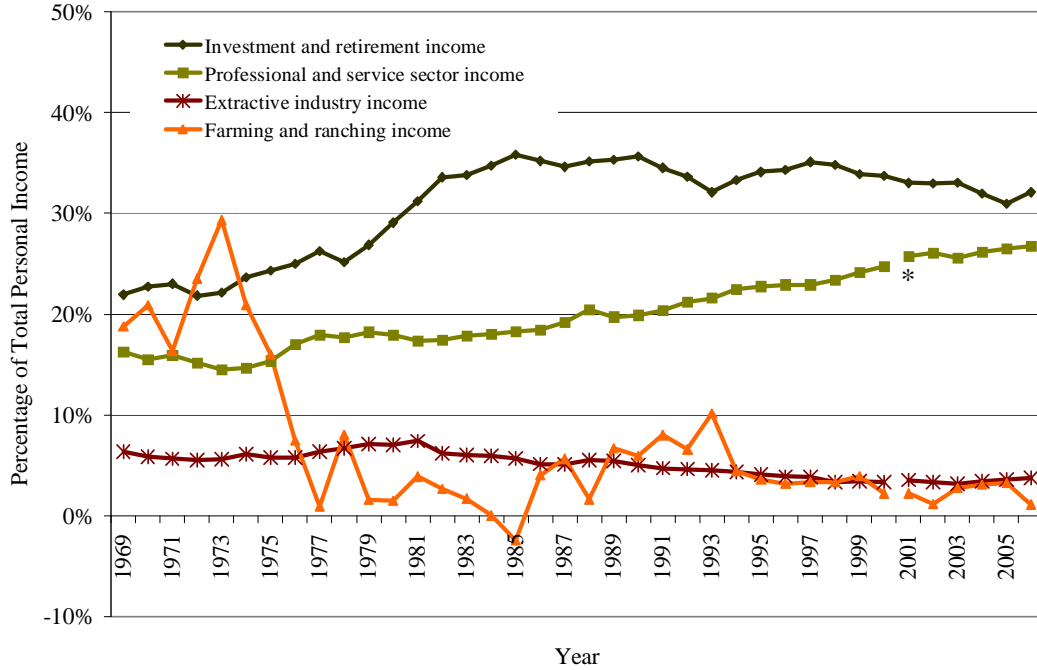
Income from Professional & Service Sector Occupations in Montana (2006)



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce (2006 data are the most recent available)

Figure 6

Trends in Personal Income in Montana

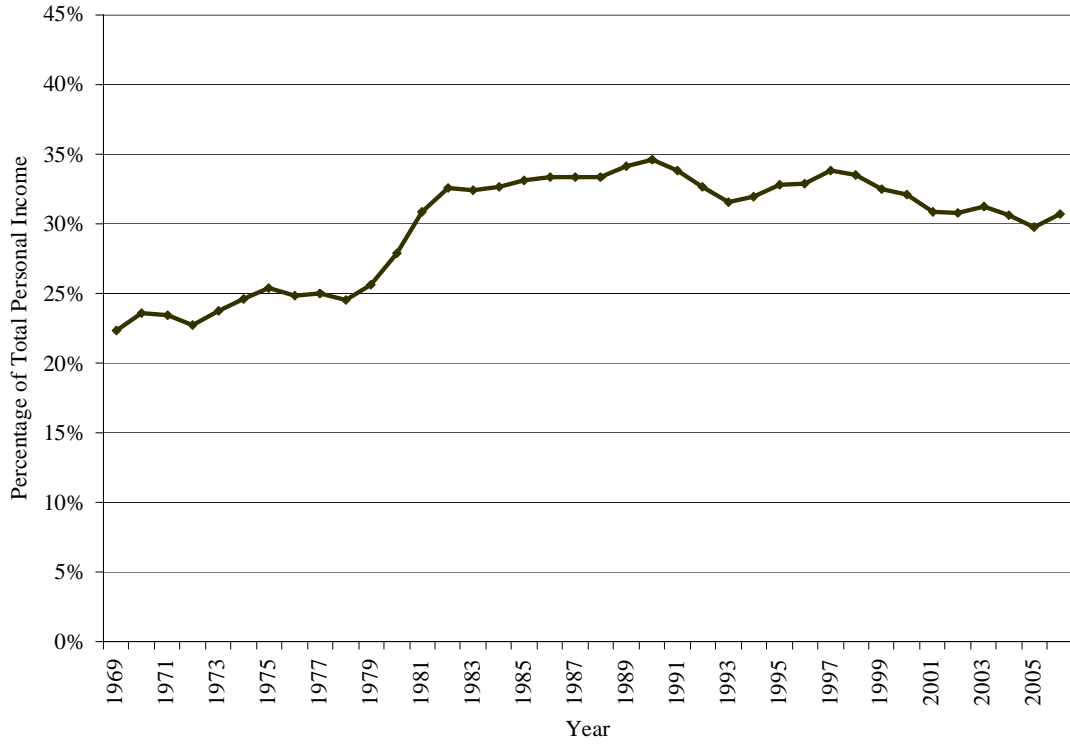


* In order to show the long-term trend, the figure is based on data collected through the Standard Industry Classification (SIC) system, which was used through 2000, and the North American Industry Classification System (NAICS), which has been used since 2001. The switch in classification systems is shown by the breaks in the graph.

Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce (2006 data are the most recent available)

Figure 7

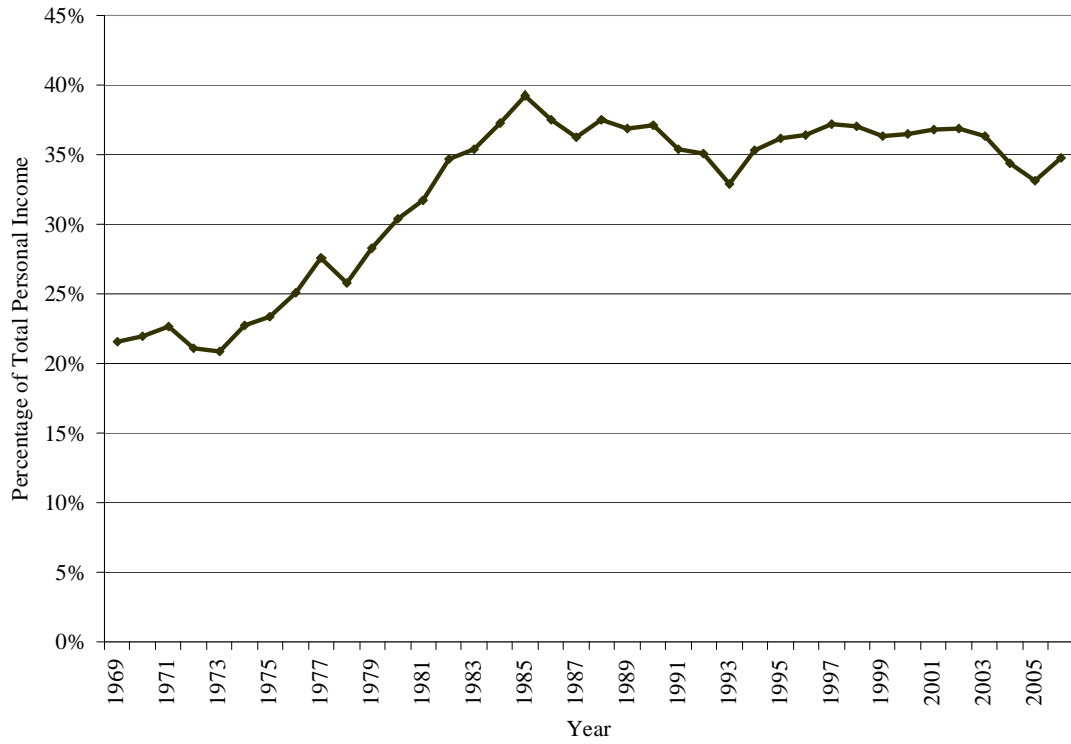
Trends in Investment & Retirement Income in Montana's Cowboy Boot Counties



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce
(2006 data are the most recent available)

Figure 8

Trends in Investment & Retirement Income in Montana's Balance Counties



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce
(2006 data are the most recent available)

Table 1 Economic Dependency Typology		
County Dependency	Definition	Montana Counties included
Farming	15% or more of labor and self-employed earnings from farming 1998-2000	Blaine, Carter, Chouteau, Daniels, Fallon, Garfield, Golden Valley, Granite*, Judith Basin, Liberty, McCone, Madison, Meagher, Petroleum, Phillips, Pondera, Powder River, Prairie, Sheridan, Sweetgrass*, Teton, Treasure, Valley, Wheatland, Wibaux
Mining	15% or more labor and self-employed earnings from mining 1998-2000	Big Horn, Rosebud, Jefferson*, Stillwater
Manufacturing	25 percent or more of earnings from manufacturing 1998-2000	none
Federal/State Government	15% or more of earnings from State or Federal government 1998-2000	Beaverhead, Custer, Cascade, Deerlodge, Gallatin*, Glacier, Lewis and Clark*, Lincoln, Mineral, Powell*
Services	45% or more of earnings from retail trade, finance, insurance, real estate, and services 1998-2000.	Carbon, Flathead*, Missoula*, Park*, Silverbow, Yellowstone*
Nonspecialized	Did not meet dependency threshold for any of the above.	Broadwater*, Dawson, Fergus, Hill, Lake*, Ravalli, Richland, Roosevelt, Sanders, Toole
Source: (Economic Research Service, 2005)		
*Indicates Boot county		

County	In-migration as a Percentage of 2000 Population	Out-migration as a Percentage of 2000 Population	Net migration as a Percentage of 2000 Population	Natural Increase-July 2006-July 2007	Net migration-July 2006-July 2007	Net migration as a Percentage of July 2006 Population
Beaverhead	26	38	-11	5	-56	.6
Big Horn	15	20	-5	180	-111	-.9
Blaine	13	20	-7	81	-96	-.15
Broadwater*	27	21	+7	-8	93	.21
Carbon	25	23	+2	-8	24	.2
Carter	15	34	-20	3	-6	.5
Cascade	20	26	-6	399	-519	-.6
Chouteau	22	22	-1	-8	-3	-.1
Custer	18	24	-6	15	62	.6
Daniels	12	22	-9	-5	-48	-.28
Dawson	19	23	-4	4	1	0.0
Deerlodge	18	23	-4	-37	39	.4
Fallon	16	24	-9	19	27	.1
Fergus	18	23	-6	-37	-18	-.2
Flathead*	21	19	+1	462	1738	2.1
Gallatin*	31	24	+7	777	2108	2.5
Garfield	12	29	-16	10	0	0.0
Glacier	12	17	-5	149	-183	1.4
Golden Valley	25	34	-9	6	14	1.3
Granite*	25	26	-1	11	-38	1.3
Hill	19	24	-5	162	-29	-.2
Jefferson*	30	27	+3	31	206	1.9
Judith Basin	19	24	-5	1	-82	-3.9
Lake*	23	18	+6	201	-168	-.6
Lewis and Clark*	22	20	+2	273	711	1.2
Liberty	14	22	-8	-8	-35	-1.9
Lincoln	19	22	-2	-22	241	1.3
McCone	15	27	-12	1	-2	.1
Madison	26	23	+3	-12	247	3.4
Meagher	18	25	-6	8	-26	-1.4
Mineral	27	33	-6	12	-84	-2.1
Missoula*	26	24	+3	557	1014	1.0
Musselshell	23	26	-3	-9	38	.9
Park*	23	29	-6	15	193	1.2
Petroleum	25	34	-9	5	-29	-.6
Phillips	13	26	-13	-1	-22	-.6
Pondera	18	20	-3	26	-34	-.6
Powder River	20	23	-4	-3	-34	-2.0

Table 2.
In-Migration, Out-Migration, and Net Migration 1995-2000 and 2007

County	In-migration as a Percentage of 2000 Population	Out-migration as a Percentage of 2000 Population	Net migration as a Percentage of 2000 Population	Natural Increase-July 2006-July 2007	Net migration-July 2006-July 2007	Net migration as a Percentage of July 2006 Population
Powell*	29	30	-1	-10	8	.1
Prairie	19	50	-31	-3	-13	-1.2
Ravalli*	28	18	+10	77	483	1.2
Richland	14	18	-4	-4	91	1.0
Roosevelt	10	23	-13	115	-233	-2.3
Rosebud	17	35	-18	102	-45	-.5
Sanders	25	29	-4	-8	140	1.3
Sheridan	12	18	-6	-38	3	.1
Silverbow	17	20	-3	16	-56	-.2
Stillwater*	28	23	+5	42	126	1.5
Sweet Grass*	25	20	+5	4	114	3.1
Teton	20	20	+1	21	-4	-.1
Toole	21	24	-3	-7	-31	-.6
Treasure	21	28	-8	3	-24	-3.5
Valley	16	23	-7	-13	-15	-.2
Wheatland	16	22	-6	7	14	.7
Wibaux	17	15	+3	-4	13	.7
Yellowstone*	18	18	0	773	1043	.8
Montana Average	20	24	-4			-.1
Boot Average	26	23	+3			1.2
Balance Average	18	24	-4			-.5
Source: (U.S. Census Bureau, 2008a)						
*Indicates county is in the Boot						

Table 3 Montanan's Outdoor Recreation Participation		
Activity	Number of Participants	Percent of Population
Bicycling (paved and not paved roads)	239448	33
Camping	329205	46
Fishing	205004	27
Hunting	167110	22
Paddling	171387	24
Snow Sports (non motorized)	133293	19
Trail (non motorized)	352206	49
Wildlife Viewing	362000	48
Source: (Outdoor Industry Foundation, 2006) See also: (Southwick Associates Inc., 2007)		

Table 4 Hunting, Fishing, and Wildlife Watching In Montana: Activity Days and Expenditures in 2005						
Total Days	Resident Days	Non-Resident Days	Total Expenditures	Trip-Related Expenditure	Equipment Related Expenditures	Other Expenditures
Hunting						
2,142,000	1,783,000	359,000	\$310,541,000	\$132,808,000 (42%)	\$144,951,000 (47%)	\$32,782,000 (10%)
Fishing						
2,927,000	2,357,000	569,000	\$226,348,000	\$149,800,000 (66%)	\$59,938,000 (27%)	\$16,610,000 (7%)
Wildlife Watching						
3,081,000	1,578,000	1,503,000	\$376,451,000	\$302,625,000 (80%)	\$54,631,000 (15%)	\$19,195,000 (5%)
All Activities						
8,150,000	5,718,000	2,431,000	\$913,339,000	\$585,233,000 (64%)	\$259,521,000 (28%)	\$68,587,000 (8%)
Source: (U.S. Department of Interior and U.S. Department of Commerce, 2006). Expenditures and percentages subject to rounding error.						

Table 5
Out-of-State Tourists' Expenditures

County	Total Expenditures (millions of 2005 dollars)	Percentage of Montana Total Tourist Expenditures	Tourist Expenditures per County Resident
Beaverhead	126.5	4.3	14417
Big Horn	26.8	.9	2098
Blaine	5.6	.2	844
Broadwater*	2.2	.1	486
Carbon	67.8	2.3	6955
Carter	<.01	0	0
Cascade	156.2	5.4	1909
Chouteau	0.65	0	122
Custer	34.3	1.2	3073
Daniels	1.0	0	569
Dawson	17.9	.6	2097
Deerlodge	3.8	.1	417
Fallon	.52	0	198
Fergus	9.5	.3	844
Flathead*	314.0	10.8	3803
Gallatin*	602.0	20.7	7455
Garfield	.37	0	319
Glacier	68.2	2.3	5085
Golden Valley	.27	0	241
Granite*	4.13	.1	1426
Hill	12.61	.4	777
Jefferson*	6.08	.2	563
Judith Basin	1.06	0	497
Lake*	32.80	1.1	1172
Lewis and Clark*	68.85	2.4	1184
Liberty	.34	0	175
Lincoln	26.05	.9	1393
McCone	<.1	0	0
Madison	49.52	1.7	6980
Meagher	1.58	.1	827
Mineral	27.24	.9	6897
Missoula*	316.95	10.9	3100
Musselshell	2.17	.1	496
Park*	220.06	7.6	13955
Petroleum	<.01	0	0
Phillips	1.03	0	255
Pondera	2.95	.1	494
Powder River	2.71	.1	1592
Powell*	8.31	.3	1194

Table 5
Out-of-State Tourists' Expenditures

County	Total Expenditures (millions of 2005 dollars)	Percentage of Montana Total Tourist Expenditures	Tourist Expenditures per County Resident
Prairie	.04	0	34
Ravalli*	31.31	1.1	797
Richland	15.41	.5	1706
Roosevelt	4.60	.2	441
Rosebud	3.35	.1	366
Sanders	9.98	.3	929
Sheridan	4.06	.1	1164
Silverbow	105.21	3.6	3209
Stillwater*	12.03	.4	1445
Sweet Grass*	9.18	.3	2518
Teton	2.05	.1	337
Toole	39.10	1.3	7380
Treasure	1.42	0	2036
Valley	7.78	.3	1104
Wheatland	.89	0	440
Wibaux	1.21	0	1313
Yellowstone*	444.35	15.2	3254
Montana Average			3114
Boot Average			3052
Balance Average			1906
Source: (Institute for Tourism and Recreation Research, 2006)			

Table 6
Montana Counties' Regional Asset Indicators

County	Skill Surplus	Human Amenities	Breath of Entrepreneurship	Depth of Entrepreneurship	Creative Workforce	Infrastructure
Beaverhead	7.0	34.4	0.28	17145	18	1.9
Big Horn	-3.5	33.0	0.17	9263	11	2.5
Blaine	-2.9	22.0	0.30	18453	13	4.2
Broadwater*	-0.8	31.3	0.31	10139	15	1.6
Carbon	-3.0	38.9	0.39	12599	20	2.7
Carter	-10.1	24.6	0.41	13742	8	4.8
Cascade	-4.8	32.6	0.18	25204	21	4.2
Chouteau	-0.3	26.1	0.36	10527	12	3.7
Custer	-0.1	29.8	0.22	13727	15	5.5
Daniels	-6.8	20.3	0.31	15527	17	2.6
Dawson	-3.2	28.1	0.19	8533	17	4.4
Deerlodge	0.3	33.3	0.24	13537	15	1.6
Fallon	-3.2	30.3	0.25	16602	14	7.2
Fergus	0.1	27.7	0.30	20099	18	2.7
Flathead*	3.3	40.0	0.28	18796	21	3.9
Gallatin*	13.2	39.7	0.25	20308	30	9.1
Garfield	-3.3	24.7	0.37	17762	6	2.5
Glacier	-3.4	39.1	0.19	14832	17	3.9
Golden Valley	-3.9	25.0	0.54	7000	8	2.6
Granite*	5.1	29.0	0.51	13058	14	4.1
Hill	0.8	27.1	0.19	14148	16	2.6
Jefferson*	5.7	32.7	0.47	17019	26	3.1
Judith Basin	4.1	25.4	0.31	10783	12	4.7
Lake*	2.3	37.4	0.29	12994	17	1.3
Lewis and Clark*	8.4	33.4	0.19	21839	27	7.7
Liberty	2.6	28.1	0.33	8434	13	4.6
Lincoln	-1.8	31.9	0.35	16051	18	3.0
McCone	-5.0	25.9	0.28	10065	12	3.5
Madison	7.2	36.0	0.41	17567	18	2.3
Meagher	3.9	31.5	0.40	15724	14	3.9
Mineral	-1.8	30.9	0.38	12757	17	2.7
Missoula*	3.5	32.6	0.19	29517	26	7.2
Musselshell	2.5	32.9	0.35	9256	11	1.7
Park*	4.0	38	0.34	13502	21	3.5
Petroleum	-6.2	36.3	0.56	6645	4	5.4
Phillips	-1.3	19.8	0.29	14169	12	3.0
Pondera	1.0	35.0	0.24	14694	18	3.8
Powder River	-4.4	26.6	0.38	13986	11	5.4
Powell*	-3.7	31.1	0.29	12932	14	2.2
Prairie	-4.2	27.6	0.31	8097	8	3.0
Ravalli*	2.5	28.3	0.35	19358	22	5.9

Table 6
Montana Counties' Regional Asset Indicators

County	Skill Surplus	Human Amenities	Breath of Entrepreneurship	Depth of Entrepreneurship	Creative Workforce	Infrastructure
Richland	0.2	32.6	0.24	14792	15	5.8
Roosevelt	-3.2	25.9	0.19	10049	14	2.0
Rosebud	-0.6	30.9	0.16	9874	14	2.2
Sanders	0.2	34.0	0.35	13086	16	2.9
Sheridan	0.9	25.2	0.25	13056	13	4.5
Silverbow	2.9	33.1	0.19	34821	23	8.3
Stillwater*	1.0	32.4	0.26	12858	15	4.0
Sweet Grass*	4.5	33.1	0.37	16893	16	1.8
Teton	2.6	36.7	0.31	20774	15	2.1
Toole	0.9	33.1	0.24	19580	13	3.0
Treasure	3.0	26.1	0.37	13308	10	2.9
Valley	-0.5	27.5	0.24	12917	15	4.1
Wheatland	-5.0	29.1	0.34	11208	12	2.2
Wibaux	-3.5	34.4	0.39	6844	8	6.7
Yellowstone*	-1.0	35.3	0.18	25474	24	5.2
Montana Average	0.5	30.9	0.30	14856	15.5	3.8
Boot Average	3.4	33.8	0.31	17477	20.5	4.3
Balance Average	-1.0	28.5	0.29	13346	13.2	3.5

County	Median Home Value	Average Value of Ag. Land	Per Capita Dividends, Interest, and Rental Income	Bank Deposit Depth 2002	Bank Deposit Depth 1980	Change in Change Deposit Depth 1980-2002
Beaverhead	86300	191	5.57	0.522	0.864	-0.396
Big Horn	59300	208	2.58	0.366	0.511	-0.283
Blaine	55000	207	3.91	0.459	0.855	-0.464
Broadwater*	84100	282	4.26	0.384	0.568	-0.324
Carbon	109700	464	6.54	0.303	0.641	-0.528
Carter	51900	152	6.28	0.623	0.838	-0.257
Cascade	89600	363	5.07	0.365	0.533	-0.316
Chouteau	70000	391	6.34	0.738	0.971	-0.240
Custer	62800	159	5.02	0.853	0.984	-0.133
Daniels	46500	255	7.04	0.476	0.847	-0.438
Dawson	58700	193	3.98	0.619	0.780	-0.207
Deerlodge	70800	163	3.78	0.450	0.531	-0.153
Fallon	52100	236	5.5	0.997	0.840	0.186
Fergus	70800	303	5.50	0.681	0.926	-0.265
Flathead*	118600	153	5.27	0.442	0.531	-0.167
Gallatin*	140000	530	5.22	0.440	0.629	-0.300
Garfield	49000	121	2.43	0.747	0.721	0.036
Glacier	60100	294	5.73	0.336	0.467	-0.280
Golden Valley	58400	207	5.73	0.153	na	na
Granite*	83300	182	4.77	0.395	0.542	-0.272
Hill	74600	297	5.33	0.595	0.665	-0.106
Jefferson*	127700	223	4.06	0.161	0.195	-0.176
Judith Basin	62600	336	6.58	0.748	0.852	0.122
Lake*	120900	781	3.99	0.434	0.524	-0.171
Lewis and Clark*	105800	185	4.82	0.424	0.430	-0.014
Liberty	59800	325	6.65	0.607	0.749	-0.189
Lincoln	79000	58	3.47	0.295	0.361	0.181
McCone	45600	182	4.86	1.923	0.704	1.730
Madison	116300	269	6.39	0.093	0.574	-0.838
Meagher	68400	242	5.30	0.568	0.653	-0.131
Mineral	87000	41	3.68	0.344	0.376	-0.085
Missoula*	128700	235	4.50	0.432	0.411	0.050
Musselshell	64300	223	3.84	0.691	0.722	-0.042
Park*	99200	373	5.15	0.617	0.648	-0.048
Petroleum	51000	140	4.87	na	na	na
Phillips	56500	130	5.39	1.045	0.99	0.055
Pondera	72000	385	5.27	0.623	0.948	-0.343
Powder River	59700	163	5.26	0.604	0.710	-0.149

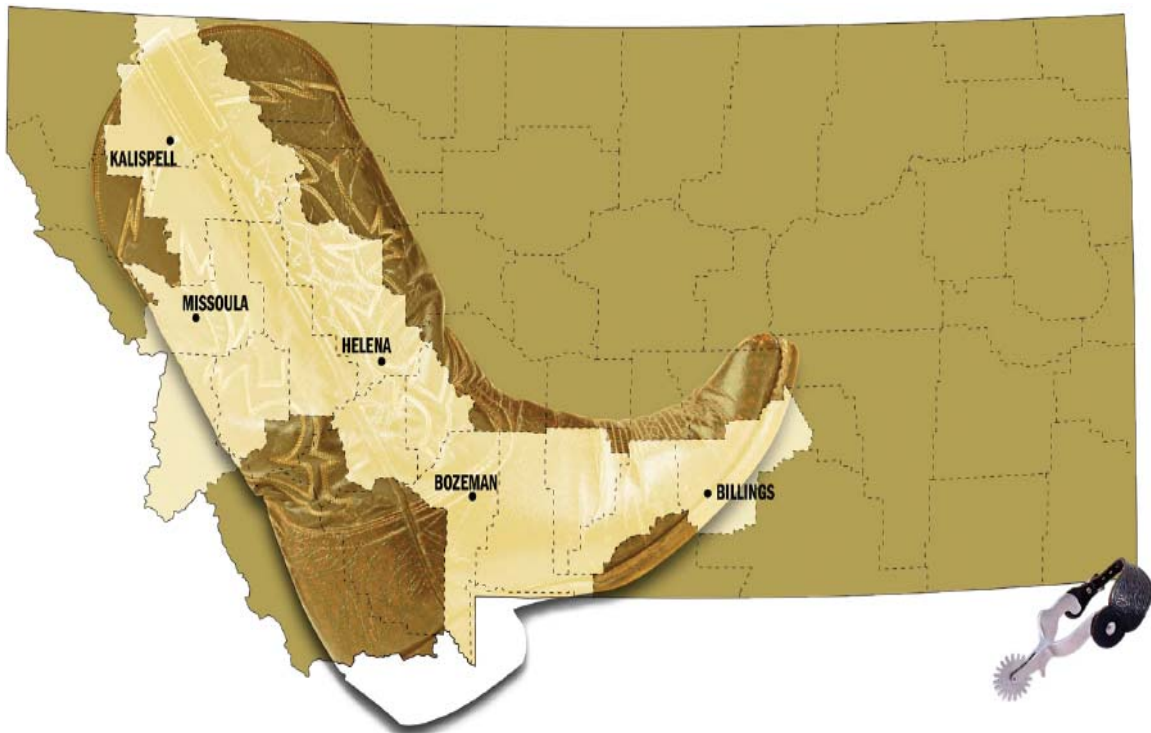
Table 7
Montana Counties' Regional Asset Indicators

County	Median Home Value	Average Value of Ag. Land	Per Capita Dividends, Interest, and Rental Income	Bank Deposit Depth 2002	Bank Deposit Depth 1980	Change in Change Deposit Depth 1980-2002
Powell*	76000	261	3.77	0.495	0.425	-0.164
Prairie	39400	125	6.38	1.282	1.143	0.122
Ravalli*	134700	472	4.83	0.515	0.521	-0.012
Richland	59200	282	4.52	0.628	0.794	-0.209
Roosevelt	47600	294	2.95	0.575	1.177	-0.512
Rosebud	55900	144	3.11	0.348	0.524	-0.335
Sanders	89800	255	3.77	0.596	0.510	0.170
Sheridan	44100	303	7.21	1.128	1.146	-0.016
Silverbow	73600	190	4.23	0.464	0.511	-0.091
Stillwater*	103200	378	5.48	0.375	0.642	-0.415
Sweet Grass*	107900	414	7.93	0.849	1.041	-0.185
Teton	77400	346	5.76	0.708	0.554	0.279
Toole	59400	307	4.64	0.818	0.937	-0.127
Treasure	45500	237	5.62	0.497	0.694	-0.284
Valley	59200	166	6.23	0.671	0.991	-0.323
Wheatland	54800	267	4.73	0.635	0.642	-0.011
Wibaux	51500	223	4.80	0.442	0.967	-0.542
Yellowstone*	97200	524	4.62	0.428	0.601	-0.289
Montana Average	75584	265	5.01	0.59	0.70	-0.15
Boot Average	109092	357	4.90	0.46	0.55	-0.15
Balance Average	61486	224	4.82	0.61	0.72	-0.14

Source: (Center for the Study of Rural America, 2004)

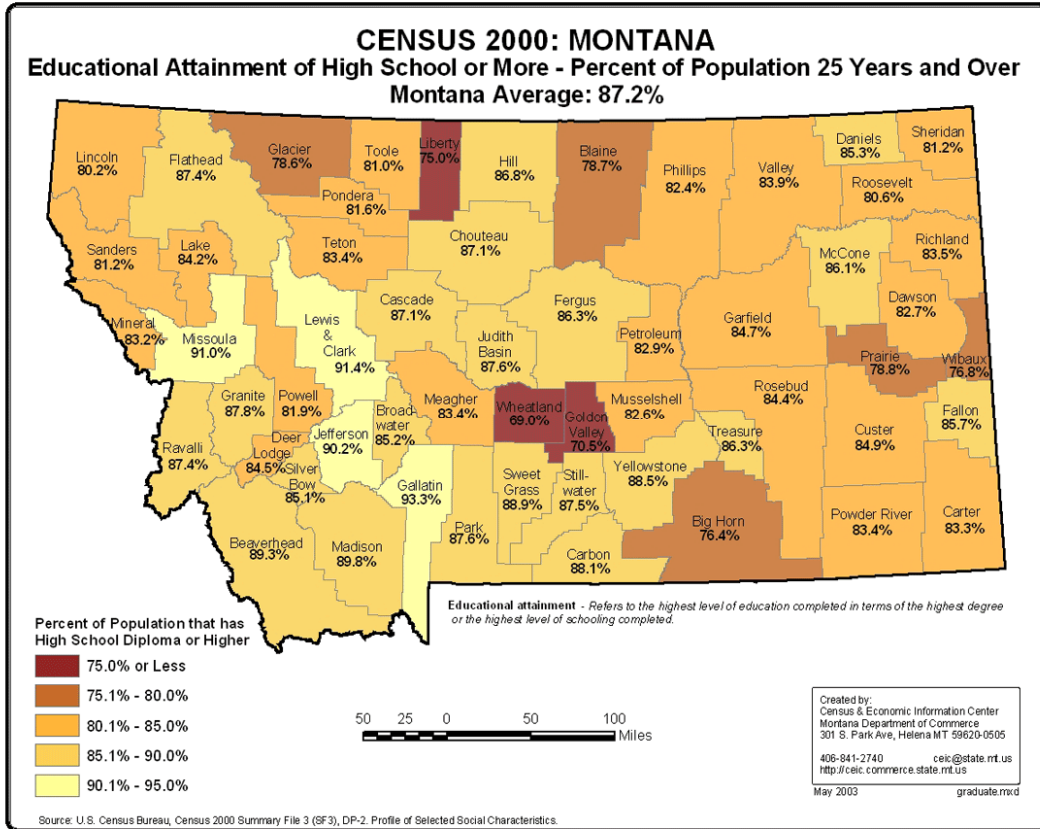
*Indicates county is in the Boot

Map 1

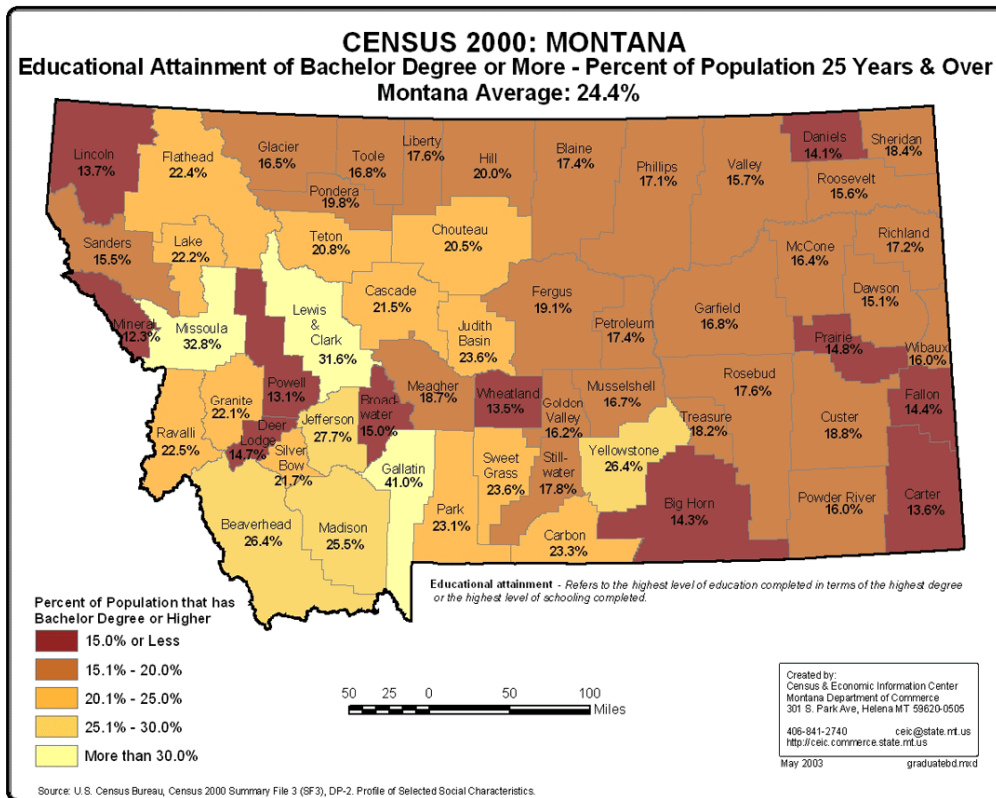


Source: Montana Governor's Office of Economic Development

Map 2



Map 3



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