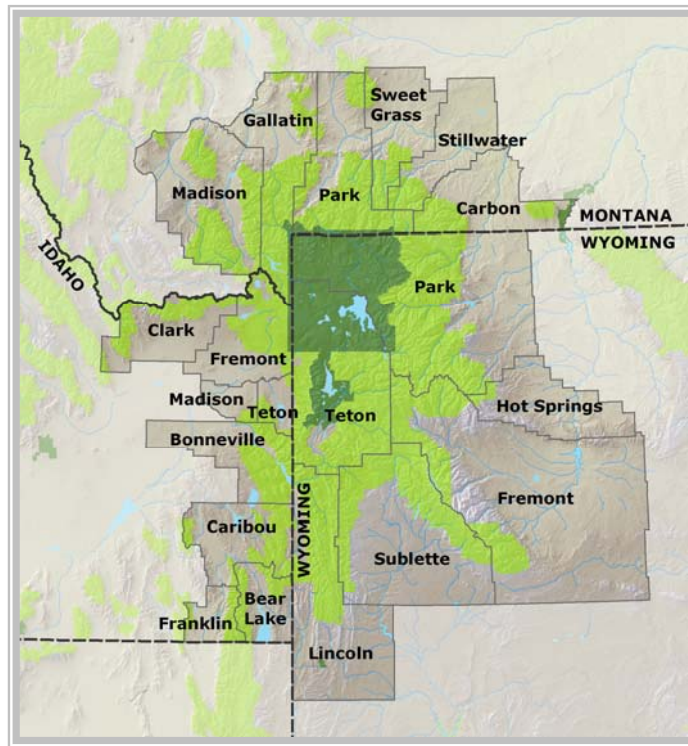


# THE ECONOMY OF THE GREATER YELLOWSTONE REGION

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## LONG-TERM TRENDS AND COMPARISONS TO OTHER REGIONS OF THE WEST



A report to the  
National Parks Conservation Association (NPCA)

by:

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## Table of Contents

	PAGE
Introduction	3
Data and Methods Used	4
Economic and Demographic Trends Greater Yellowstone Region	5
Economic Profile of Yellowstone “Gateway” Counties	8
Comparison of Economic Performance Between Yellowstone “Gateway” Counties and Greater Yellowstone Region	10
Comparison of Economic Performance Between Yellowstone “Gateway” Counties with Gateway Community Peers Outside the Greater Yellowstone Region	12
Comparison of Economic Performance Between Western Gateway Communities and Non-Gateway Communities in the West	13
Comparison of Economic Performance Between Greater Yellowstone Region and Selected Fast-Growing Metropolitan Areas in the West	15
Conclusions	18

## Introduction

This report represents one of four studies produced for the National Parks and Conservation Association that were used to create the publication *Gateways to Yellowstone*. The objective of this report was to analyze the economy of the 20 counties of Idaho, Montana and Wyoming that constitute the Greater Yellowstone region, and to compare its economic performance to other parts of the West.

The first section describes the economic and demographic trends in the region over the last three decades. We follow this with a description of the economy of the six counties that serve as the gateway to Yellowstone and Grand Teton National Parks. Comparisons are offered between the Greater Yellowstone region and the gateway counties, as well as with other parts of the West.

A number of comparative economic indicators were used:

- Population Growth (Annualized rate, 1970-2003)
- Employment Growth (Annualized rate, 1970-2003)
- Personal Income Growth (Adjusted for Inflation, Annualized rate, 1970-2003)
- Non-labor Income Share of Total in 2003
- Median Age
- Per Capita Income (2003)
- Average Earnings Per Job (2003)
- Education Rate (% of population 25 and over who have a college degree)
- Employment Specialization
- Ratio Rich/Poor (Number of households that made under \$30K for every household that made over \$100K.)
- Housing Affordability (100 or above means that the median family can afford the median house.)
- Government share of Total employment
- Unemployment Rate in 2004

The Greater Yellowstone region is vast and complex and, as the following sections show, the economy is robust and growing. However, it is growing in ways that are very different from the past. Whereas thirty years ago, agriculture was a significant employer and the source of much of the growth, today this sector has diminished in both relative and absolute terms. In the 1980s wood products and mining were significant employers in many counties; today these industries are significant in only a handful of places. The bulk of the growth in the region has instead been from two predominant sources: service employment, and employment closely associated with the fast growth of non-labor income sources, such as retirement and investment income. Residential construction is one of the rapidly growing industries, as is small-scale manufacturing, biotech, engineering, and a number of other so-called “service” industries. Consistent with an aging population, the health care sector is today also a major employer.

The analysis in this report is a summary of several detailed socioeconomic profiles that were produced. These profiles are available for download as PDF files, and their web location is indicated at the beginning of each section.

## Data and Methods Used

Data for this profile were obtained from four sources:

- Regional Economic Information System (REIS CD-ROM) of the Bureau of Economic Analysis, U.S. Department of Commerce.
- Bureau of Labor Statistics, U.S. Department of Labor.
- County Business Patterns, Bureau of the Census, U.S. Department of Commerce.
- Bureau of Census, U.S. Department of Commerce.

These four databases were accessed by producing custom socioeconomic profiles, using the **Economic Profile System** (EPS) software, and then identifying in each profile key economic performance indicators. Additional analysis was performed in Excel on those indicators, in particular when comparing the performance of one region against the other.

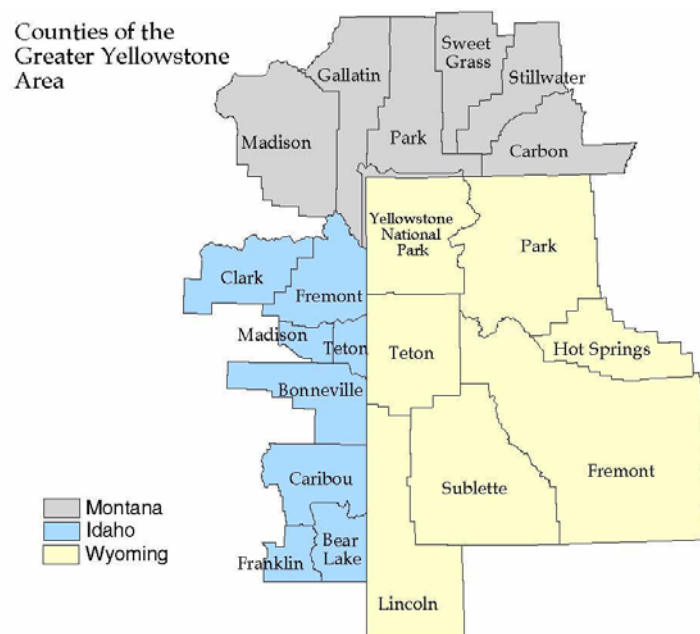
EPS is designed to allow any user to automatically and efficiently produce a detailed socio-economic profile using the spreadsheet program Microsoft Excel. Each profile contains tables and figures that illustrate long-term trends in population; employment and personal income by industry; average earnings; business development; retirement and other non-labor income; commuting patterns; and agriculture. EPS was developed by the Sonoran Institute, in partnership with the Bureau of Land Management, as a tool to assist public land managers, planners, elected officials, and citizens. EPS is free and exists in the public domain.

Note: all figures in dollars terms have been adjusted for inflation and are expressed in real terms.

## Economic and Demographic Trends of the Greater Yellowstone Region

Often our perception of the economy is based on history and tradition, and on what we see as we drive through town. If a community was established as a tourist town, or a mining or farming town, and this history is reflected in the architecture and the oral traditions of the place, then we all too often assume that the economy of today must be much like it was in the past. A good place to start, therefore, is with a detailed description of the economy over time. This section shows how the economy of the region has changed, from 1970 to 2003 (at the time of this writing, the latest reliable published statistics were available for up to 2003).

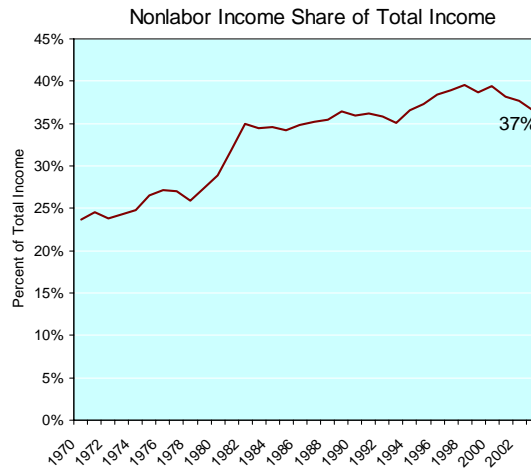
The map below shows the 20 counties of Idaho, Montana and Wyoming that constitute the Greater Yellowstone region. For this section we aggregated economic and demographic information for all 20 counties to produce an aggregate profile. This profile can be found at <http://www.npca.org/northernrockies/gateway> by the file name `EPS_Agg_GYE.pdf`.



Highlights from the profile show the following (page numbers refer to pages in the downloadable PDF profile):

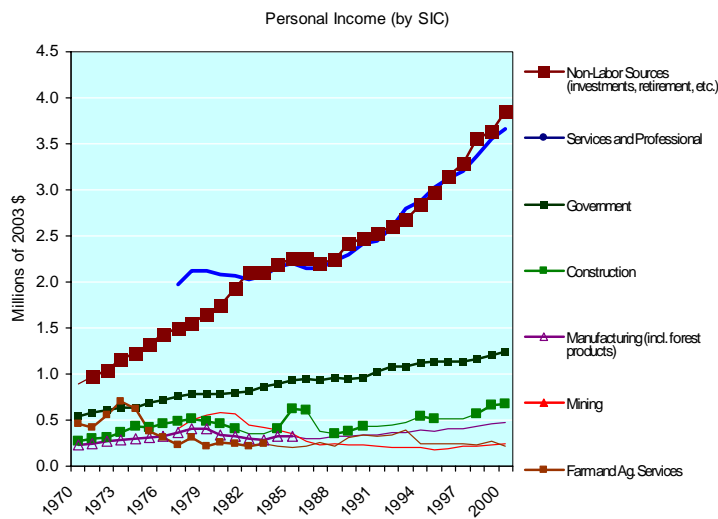
- Compared to the nation the region is growing faster in terms of population, employment, personal income and per capita income (see page 24). The region is younger and more educated. The economy is very diverse (see also page 22). Average earnings per job are slightly higher than the rest of the country. The unemployment rate is lower, and housing is less slightly less affordable.
- When recovering from recessionary periods, the region outpaces the surrounding states and the nation, in terms of population growth (page 3), employment (page 7), personal income (page 12), and earnings per job (page 14).
- Housing is affordable in general (page 5), but has been getting less so over time.

- Non-labor income – money earned from investments, dividends, interest and rent – is about 43% of total personal income, down slightly in the last years (page 10; largely due to a rapid rise in employment (page 27)

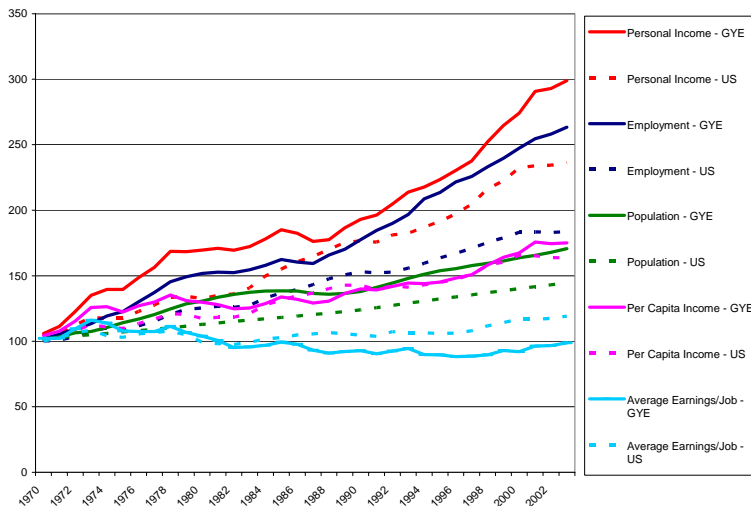


- Welfare is a small component of the economy: 7.1% of all Transfer Payments; less than 1% of total personal income in 2003 (page 11). Most of the growth in non-labor income has been from dividends, interest and rent, or “money from investments”
- Government employment has been stable in terms of the number of government employees per 100 people. Most of the growth that has been in government has been in state and local government (page 13).
- Average wages per job have increased steadily since the late 1990s, which runs counter to the national trend (page 14). Per capita income is also rising (includes non-labor income).
- Many new firms have been created (pages 16-18): most of them small, with fewer than 20 employees (page 18), many in “services,” retail and construction (page 16).
- Unemployment rates in the region are lower than the surrounding states and the nation (page 19) but there is seasonality (page 19, lower graph), indicating somewhat of a dependence on summer and winter tourism.
- Net farm income has declined since the short-lived boom period when wheat prices were at a historic high (page 20, early 1970s). That outlier aside, net farm profits have held steady throughout the late 1980s and 1990s.
- The region area is very diverse (page 22) compared to other counties in the country.
- Non-labor income has added stability to the ups and downs of labor income (page 23)
- Employment trends show a long-term, 32-year, rise in services and professional sectors; a mixture of low-wage and high-wage jobs (page 27)

- Historical trends in personal income (page 29) show the fastest source of new income is non-labor income (mostly retirement and money earned from investments), followed by services and professional. These two together accounted for 99% of the net growth in personal income from 1980 to 2000



With the exception of average earnings per job, the region (GYE, or Greater Yellowstone Ecosystem) is outperforming the rest of the country in terms of growth in real personal income, employment, population, and per capita income:



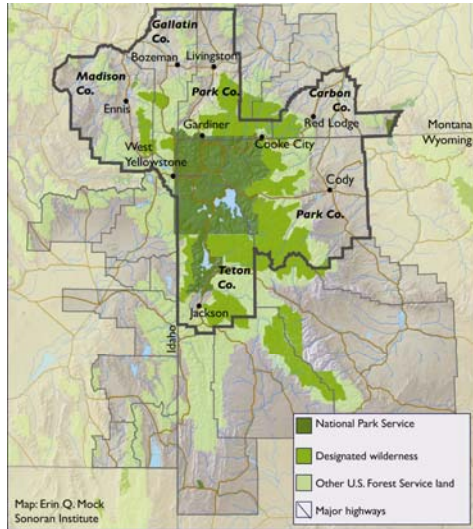
Note: indexed to 1970=100 in order to show figures in different terms (e.g., employment and income) on the same graph.

### Conclusion

In the last three decades the economy of Greater Yellowstone has changed significantly. Whereas much of the personal income in the past was dependent on agriculture and resource extraction, today less than two percent of total personal income is derived from farming and ranching, 2.5 percent is from mining and energy development, and less than one percent is from the wood products industry. In contrast, earnings in the service and professional industries, ranging from engineers to hotel maids, make up 38 percent of personal income. Another 40 percent is from non-labor sources, such as retirement and investment income. These sources, together with construction and government, constitute 98 percent of the economy today.

## Economic Profile of Yellowstone “Gateway” Counties

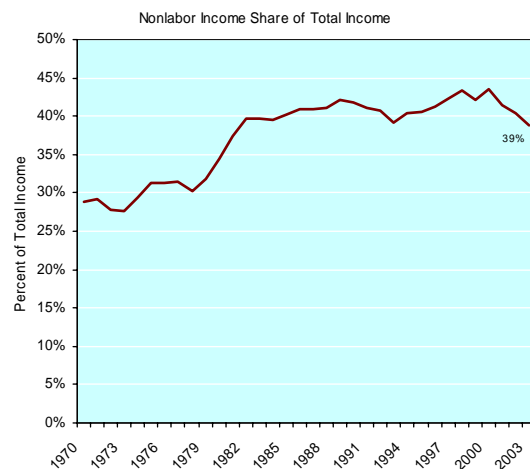
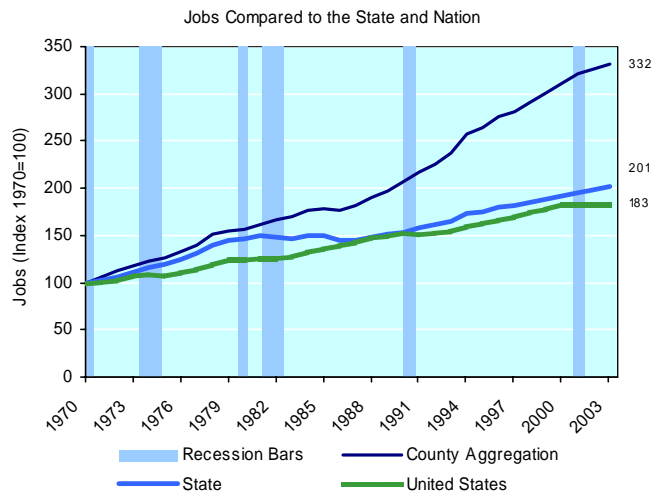
Of particular interest to the National Parks and Conservation Association (NPCA) is the economic role of communities that are “gateways” to national parks. The most common way to think about gateway communities is as tourist towns; as entry point to a national park where one might stop for the night, but a meal or two, and perhaps a few souvenirs. As this section shows, the economy of gateway communities is much more complex than simply providing relatively low-wage tourism services.



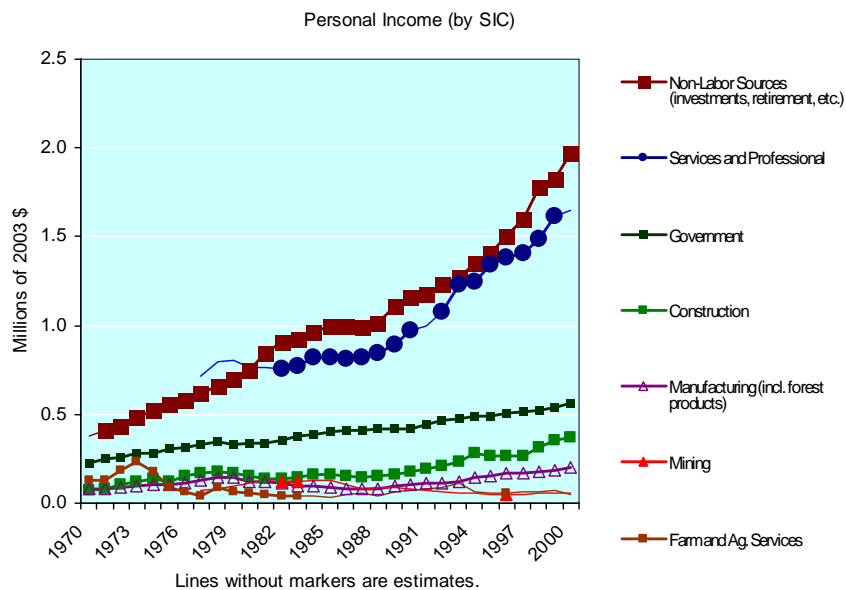
NPCA has defined the following six counties in the region as being gateways to Yellowstone and Grand Teton national parks: Madison, Gallatin, Park and Carbon Counties, Montana; Park and Teton Counties, Wyoming. An aggregate profile of the counties found at <http://www.npca.org/northernrockies/gateway> by the file name EPS\_Agg\_GYE\_Gtwy.pdf.

The profile shows the following highlights:

- From 1970 to 2003 population grew by 71,934 people, a 91% increase in population.
- The population has gotten slightly older since 1990. The median age in 2000 is 35.7 years, up from 32.9 years in 1990.
- Over the last 33 years job growth in Yellowstone Gateway counties has outpaced that of the state and the nation.
- In the last 33 years, non-labor sources grew at an annual rate of 5.0%, outpacing labor sources which grew at a 3.6% rate.
- 38.9% of total personal income in 2003 was from non-labor sources.



- Average earnings per job, adjusted for inflation, have risen from \$28,218 in 1970 to \$28,820 in 2003.
- Per capita income, adjusted for inflation, has risen from \$16,624 in 1970 to \$32,683 in 2003.
- In 2004, the unemployment rate was 3.6%, compared to 4.2% in the state and 5.5% in the nation.
- The education rate (% of population 25 and over who have a college degree) is high: 34.3%, compared to 14.5% for the nation.
- In 2003 personal income from people employed in service and professional industries accounted for 36% of total. Non-labor sources accounted for 43% of total. By comparison, farm and ranch income was less than one percent of total, and mining and energy development income was 1.2% of total.



## Conclusion

The six Gateway counties to Yellowstone and Grand Teton national parks show the same trends as the Greater Yellowstone region as a whole: fast growth of services and professional industries and non-labor income sources, and relative decline in industries that historically were more important than they are today, such as mining and agriculture. It is important to note, however, that these traditional industries have not disappeared, and they are still a part of the economy. The important lesson is that economy is much more diverse than it was in the past, and therefore also more resilient.

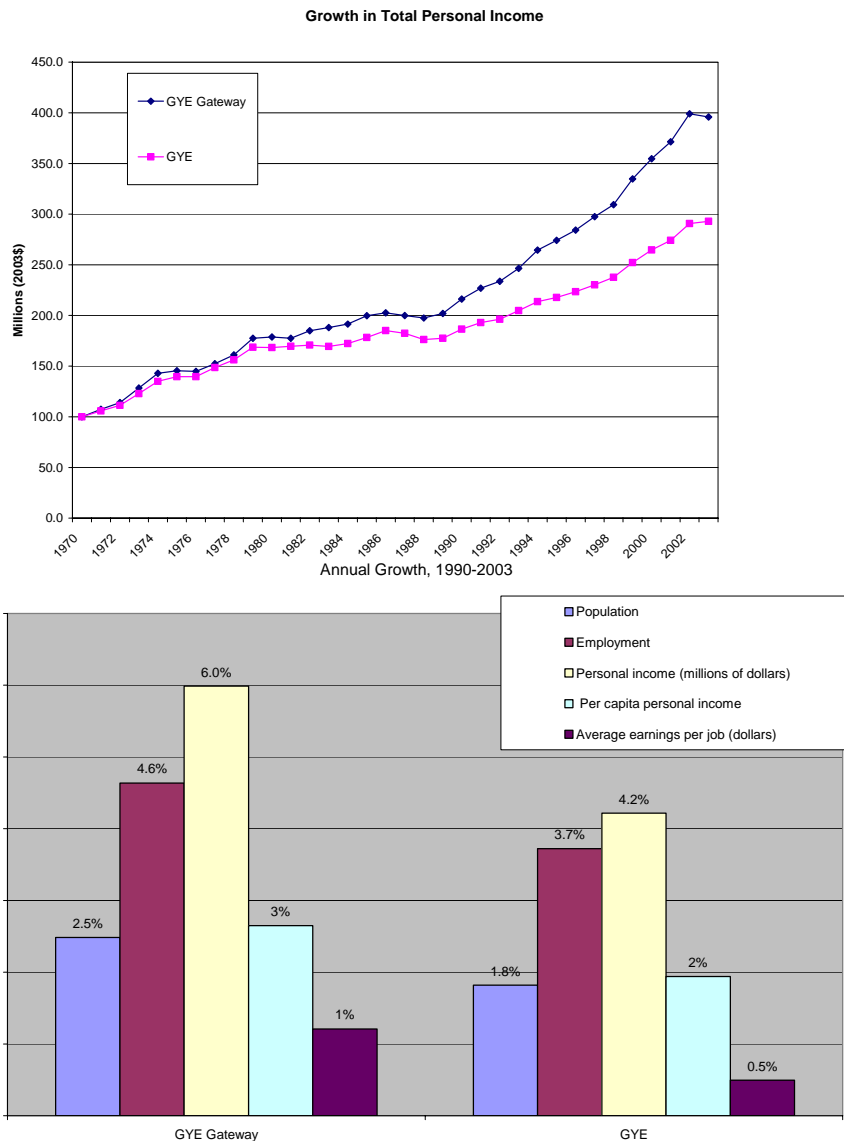
## Comparison of Economic Performance Between Yellowstone “Gateway” Counties and Greater Yellowstone Region

In this section the six Gateway counties are compared to the larger 20-county region to gauge whether there are noticeable differences. In other words, does immediate proximity and ready access to the two national parks of the region make a difference?

An Excel file containing the raw data and analysis comparing the economic performance of the gateway counties to the rest of the Greater Yellowstone region (or GYE; Greater Yellowstone Ecosystem, as the region is often referred to) can be found at <http://www.npca.org/northernrockies/gateway> by the filename GYE\_vs\_GYE\_Gateway.xls

The findings show that the Gateway Counties are growing faster than the GYE as a whole, especially since 1990.

In terms of average annual growth, the six Gateway counties outpace region in terms of population, employment, personal income, per capita income, and average earnings per job.



	1990	2003	Percent Change 1990-2003	Annualized Percent Change 1990-2003
<b>Population</b>				
GYE Gateway	114,043	150,867	32%	2.5%
GYE	313,593	387,746	24%	1.8%
<b>Employment</b>				
GYE Gateway	73,132	117,199	60%	4.6%
GYE	174,168	258,431	48%	3.7%
<b>Personal income (millions of dollars)</b>				
GYE Gateway	2,773	4,931	78%	6.0%
GYE	6,871	10,638	55%	4.2%
<b>Per capita personal income</b>				
GYE Gateway	24,313	32,683	34%	2.6%
GYE	21,909	27,435	25%	1.9%
<b>Average earnings per job (dollars)</b>				
GYE Gateway	24,903	28,820	16%	1.2%
GYE	27,075	28,810	6%	0.5%

### Conclusion

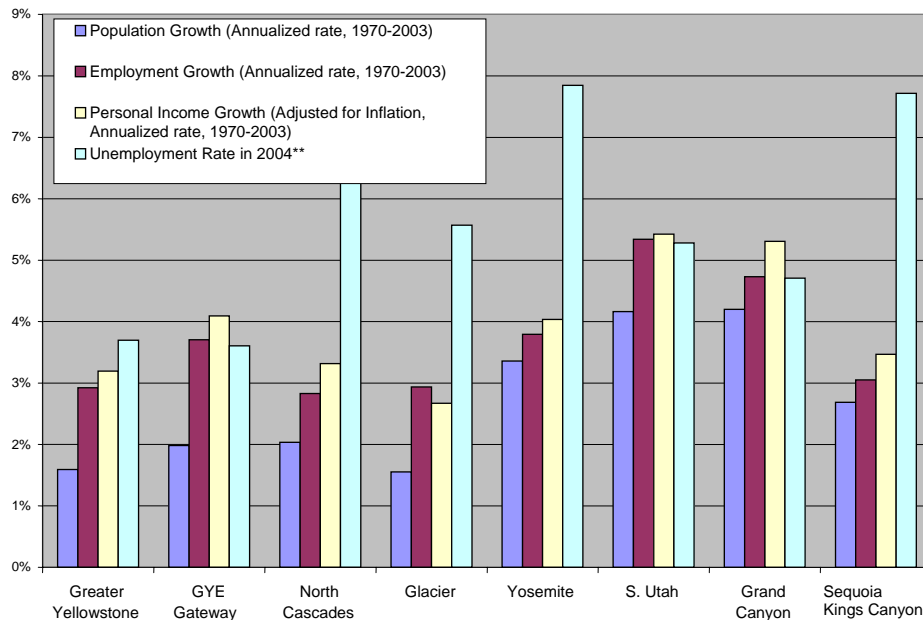
While the Greater Yellowstone area is growing rapidly and diversifying, the Gateway counties to Yellowstone and Grand Teton national parks are growing even faster. Beginning in 1990 the six Gateway counties have outpaced the growth of the region, with faster rates of growth in population, employment, and especially in personal income (in real terms; adjusted for inflation). In the Gateway counties wages and per capita income are higher than in the rest of the region, debunking the commonly held perception that gateway communities only provide low-wage tourism jobs.

## Comparison of Economic Performance Between Yellowstone “Gateway” Counties with Gateway Community Peers Outside the Greater Yellowstone Region

The Greater Yellowstone region and the Yellowstone Gateway counties were compared to other regions of the West that are similar in the following respects: (1) have at their core a National Park (or in the case of S. Utah, several), (2) are surrounded by Wilderness and other protected public lands, (3) are not adjacent to a large metropolitan area; and (4) are larger than 5,000 acres in size. The various “park” regions are defined in the table below:

Greater Yellowstone	GYE Gateway	North Cascades	Glacier	Yosemite	S. Utah	Grand Canyon	Kings Canyon /Sequoia
Bear Lake County Bonneville County Caribou County Clark County Franklin County Fremont County Madison County Teton County Carbon County Gallatin County Madison County Park County Stillwater County Sweet Grass County Fremont County Hot Springs County Lincoln County Park County Sublette County Teton County	ID Madison MT Gallatin Park Carbon Park Teton WY  MT   WY	Whatcom WA Okanogan Skagit Chelan	Glicier MT Pondera Flathead Teton	Tuolomne CA Mono Madera Mariposa	Kane UT Garfield San Juan Grand Washington	Coconino AZ Mohave	San Bernardino CA Tulare Fresno Inyo

The Excel file with the data and comparative analysis of economic performance is called [Regions\\_Comparison.xls](#) and can be found at <http://www.npca.org/northernrockies/gateway> A comparison of growth rates and unemployment rates among eight sub-regions is shown in the figure below.



**Conclusion** The Greater Yellowstone region (and the Yellowstone Gateway counties) have the lowest unemployment rate, and employment growth that is exceeded only by the counties surrounding National Parks in Southern Utah and the Grand Canyon.

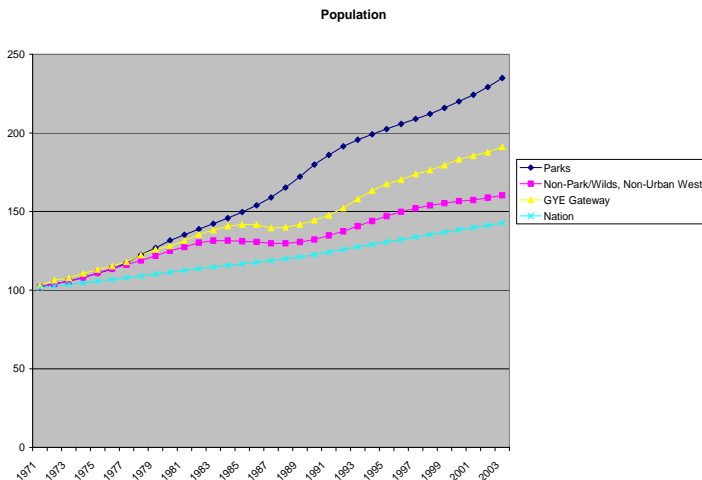
## Comparison of Economic Performance Between Western Gateway Communities and Non-Gateway Communities in the West

Previous sections have shown that the Greater Yellowstone, the Gateway counties of Greater Yellowstone, and regions of the West that have similar park/wildland characteristics, have economies that are diverse, stable and fast-growing. How about the rest of the West? What can be said about the places that do not have these national park amenities?

In this section we compared counties adjacent to park/wildland complexes to other counties in the West that had the following characteristics: (1) do not have at their core a National Park surrounded by protected wildlands, and (2) do not have a metropolitan area. The results can be found in several Excel files on <http://www.npca.org/northernrockies/gateway> by the following names: Compare parkcounties vs. other.xls and parksvswest.xls. Aggregated profiles are also available by the following names: EPS\_AGG\_GYE\_Gtwy.pdf, EPS\_AGG\_NATPark\_Counties.pdf and EPS\_AGGRuralWestNoParks.pdf

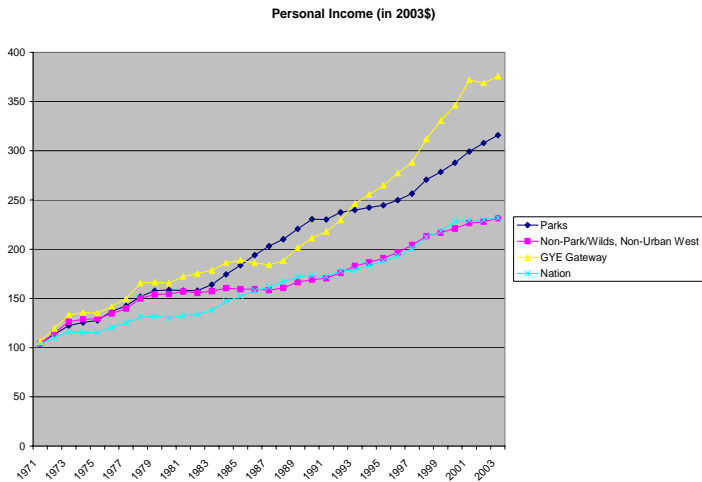
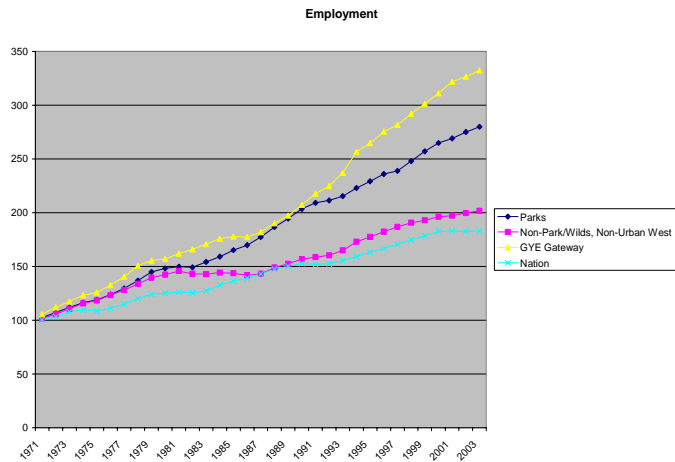
The results show that when “park” counties are compared to non-park counties, those counties next to National Parks and other protected wild lands have higher rates of growth in population, employment and real personal income. They also have a lower ratio of rich to poor, they are younger, have a higher per capita income, and significantly higher earnings per job.

Relative Performance Indicators	Greater Yellowstone	GYE Gateway	Non-Park/Wilds, Non-Urban West	Parks	Nation
Population Growth (Annualized rate, 1970-2003)	2%	2%	1%	2.6%	1%
Employment Growth (Annualized rate, 1970-2003)	3%	4%	2%	3.2%	1%
Personal Income Growth (Adjusted for Inflation, Annualized rate, 1970-2003)	3%	4%	3%	3.5%	2%
Non-labor Income Share of Total in 2003	37%	39%	38%	32.9%	38%
Median Age	33.5	35.7	36.2	31.7	37.3
Per Capita Income (2003)	27,435	32,683	23,462	\$ 24,134	\$ 24,082
Average Earnings Per Job (2003)	28,810	28,820	29,711	\$ 34,214	\$ 28,076
Education Rate (% of population 25 and over who have a college degree)	27%	34%	17%	17.8%	14%
Employment Specialization	756	781	727	750.7	961
Ratio Rich/Poor (Number of households that made under \$30K for every household that made over \$100K.)	5.4	4.7	7.5	4.4	8.7
Housing Affordability (100 or above means that the median family can afford the median house.)	148	118	143.8	124	186
Government share of Total employment	14%	14%	19%	16%	15%
Unemployment Rate in 2004	4%	4%	6%	6.9%	5%



Population growth in “park” counties of the West has outpaced that of “non-park” counties, especially since the late 1970s. The Greater Yellowstone Gateway counties (GYE Gateway) grew less rapidly than all the “park” counties in aggregate, yet outpaced “non-park” counties and the nation.

In terms of employment growth, the GYE Gateway counties grew the fastest. All “park” counties in aggregate also grew quickly, outpacing “non-park” counties, and the nation.



In terms of changes in personal income (in real terms; adjusted for inflation) the fastest growth was in the GYE Gateway counties. This growth began in the late 1980s. Personal income growth in the “park” counties in the West significantly outpaced the “non-park” counties, as well as the nation.

Conclusion

The economy of counties in the non-metropolitan West that are inside or adjacent to a national park/wildland complex significantly outperforms the economy of counties that do not have these types of park/wildland amenities. “Park” counties in the West are characterized by: higher rates of growth in employment, income and population; lower rates of unemployment; higher per capita income and average earnings per job; and a smaller ratio of rich to poor (a more equitable distribution of income).

The “park” counties do not suffer from the much-feared wage depression that comes from over-reliance on relatively low-wage tourism sectors. Average earnings per job in the park counties (\$34,214) are higher than non-park counties (\$29,711) and the nation (\$28,076). As the detailed economic profile of the Greater Yellowstone Gateway counties shows, towns adjacent to national parks do much more than attract tourists. They also attract entrepreneurs, retirees, and people with investment income, who all help raise the wage scale in a community.

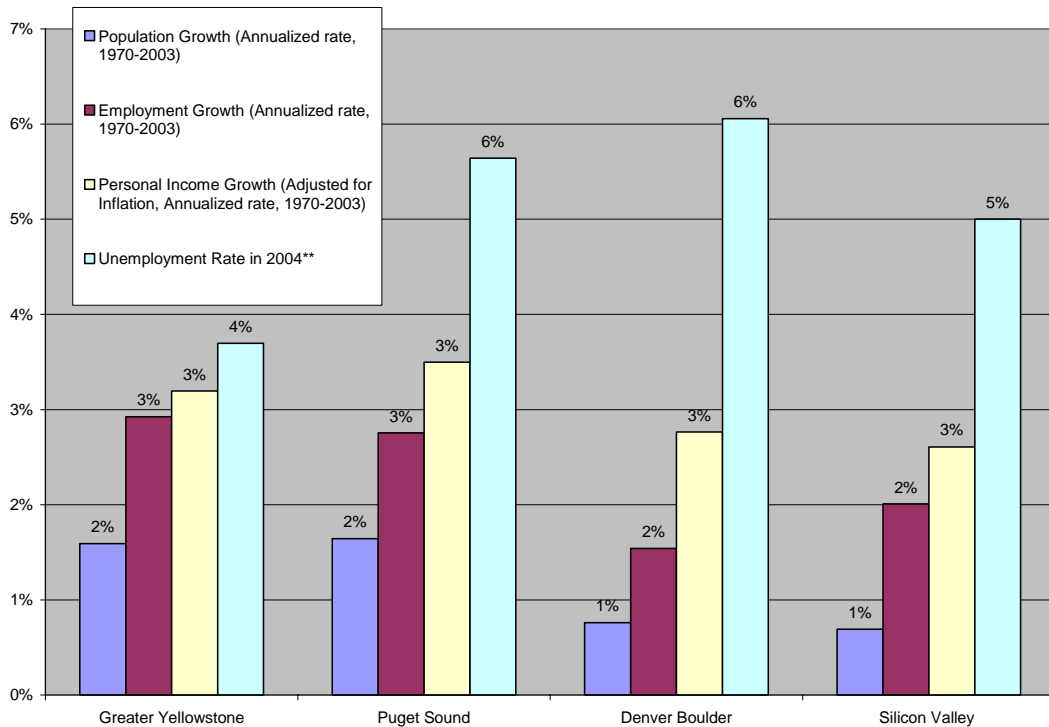
While correlations like these do not prove a cause and effect relationship – in other words, it does not prove that national parks are the cause of economic prosperity – they do lend evidence to notion that national parks and their surrounding wild lands are beneficial to the economy. At the very least, it shows strong evidence that the economy is not harmed environmental protection.

## Comparison of Economic Performance Between Greater Yellowstone Region and Selected Fast-Growing Metropolitan Areas in the West

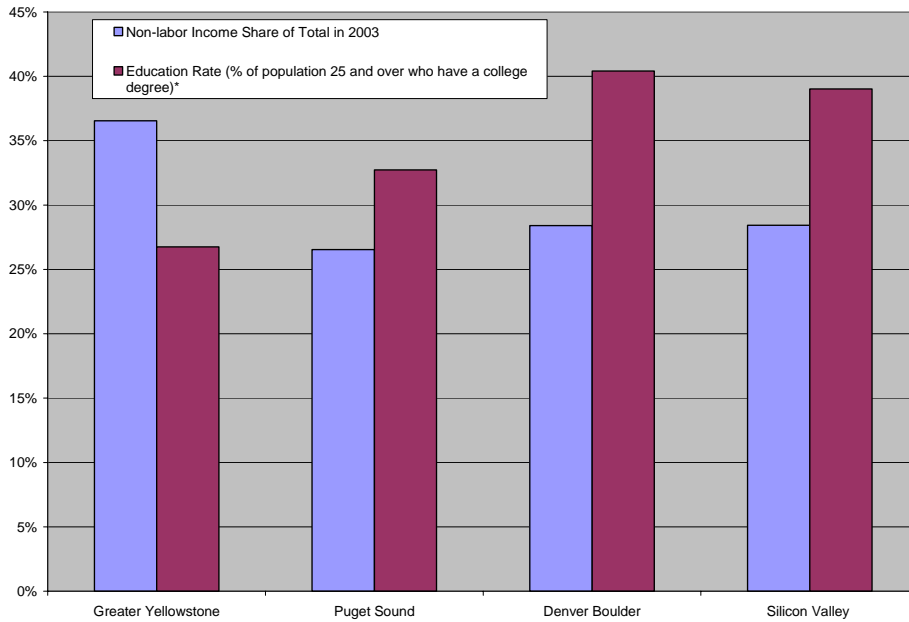
Previous sections have shown that the economy of Greater Yellowstone is growing and diversifying. Compared to non-metropolitan parts of the West without national park amenities, the Greater Yellowstone – and the Gateway counties in particular – are outperforming in terms of many different measures. But how does the region compare to metropolitan areas? There are a few areas of the West that are often looked at as examples of what the economy of the West could look like at its best. These are: the Puget Sound region (Seattle/Tacoma), the Denver/Boulder area (part of the Front Range), and Silicon Valley (the high-tech area south of San Francisco). In this section we compare the economic performance of Greater Yellowstone to these fast-growing metropolitan region.

The Excel file with the data and comparative analysis of economic performance is called [Regions\\_Comparison.xls](#) and can be found at <http://www.npca.org/northernrockies/gateway> Below are some of the highlights:

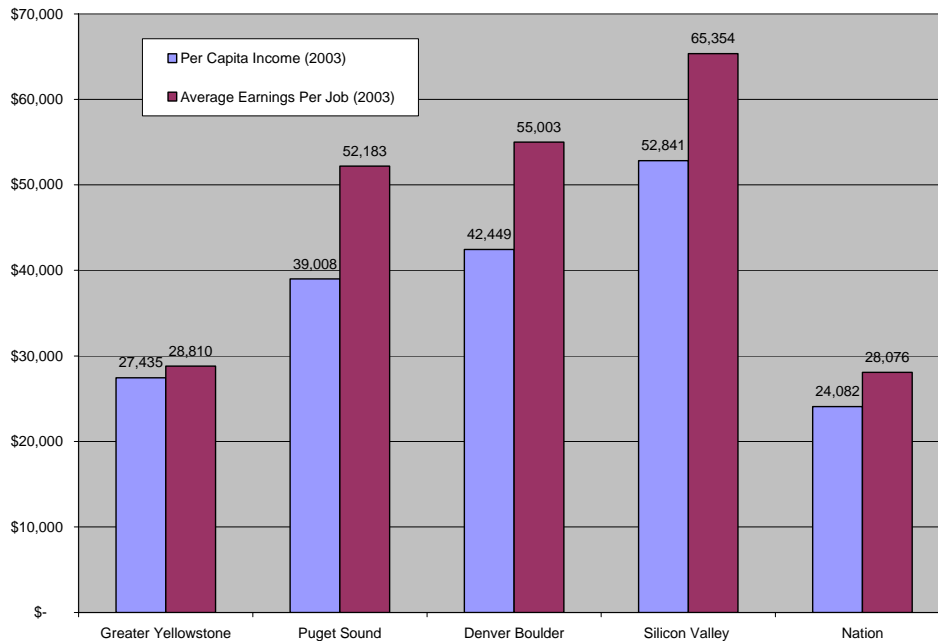
Compared to some of the most successful parts of the country, it is clear that the Greater Yellowstone’s economy is a star performer. The region has the lowest unemployment rate, and the fastest annual growth in personal income and population. The Greater Yellowstone region is second only to Puget Sound in employment growth, and has over the last thirty years outpaced both the Silicon Valley and the Denver/Boulder area.



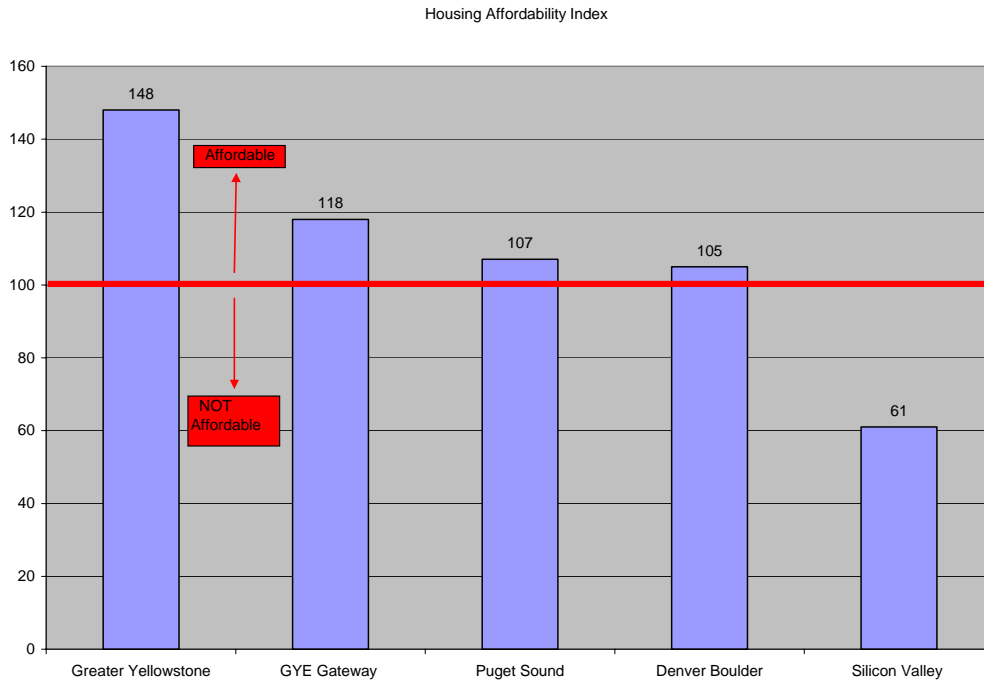
However, compared to these other areas, it also has a lower education rate and a higher dependence on non-labor sources. Dependence on labor income is better because it comes from more sources, but dependence on non-labor could be interpreted as attracting retirees and people with a nest egg.



Compared to the Puget Sound, Boulder/Denver and Silicon Valley, Greater Yellowstone has relatively lower per capita income and wages. It does, however, have higher per capita income and earnings per job than the nation.



An important measure is how far wages go in each of the regions. Greater Yellowstone is the most affordable (a housing affordability index > 100 means the family with a median income can afford the median priced home). In the Greater Yellowstone Region only 17% of the median income is necessary to buy a home. In the Denver/Boulder area 24% is needed; 23% in Puget Sound; and in Silicon Valley (San Mateo County) 41%.



Note: The housing affordability figures assume a 20% down payment and that no more than 25% of a family's income goes to paying the mortgage. It is based on an interest rate of 10.01% in 1990 and 8.03% in 2000. Use this statistic as a comparative, rather than absolute, measure.

### Conclusion

Compared to some of the fastest-growing metropolitan areas of the West, the Greater Yellowstone region is outpacing these in terms of population and personal income growth, and it has the lowest unemployment rates. While wages are lower in Greater Yellowstone, people's wages go further than in the metropolitan areas, with a smaller proportion of annual income devoted to housing. This means that in addition to good education, access to markets, and world-class natural amenities, the Greater Yellowstone region can also boast of relatively affordable housing as one of its competitive advantages.

## Conclusions

The economy of the Greater Yellowstone region is clearly vibrant and growing, outpacing the nation and even some high-growth metropolitan areas of the West. It is more diverse than 20 years ago, and therefore also more resilient. In the past, when a lumber mill shut down, the effects were immediate and severe, with many families personally affected. Today, with the vast majority of firms being small, with fewer than 20 employees, the loss of one employer is less of a shock. Just as a smart investor diversifies her portfolio, a successful economy has many industries. Fortunately for Greater Yellowstone, the economy is no longer overly-dependent on resource development industries. Mining, oil and gas development and wood products are still a part of the economy. However, today they are simply part of a diverse mix.

Other positive indicators show little dependence on welfare, a low unemployment rate, and a rise in average earnings per job and per capita income.

On the down side, compared to the rest of the West wages are significantly lower. Yet, when housing costs are compared to income, residents of Greater Yellowstone spend a smaller portion of income on housing than many fast-growing metropolitan portions of the West. Another significant trend – one that will potentially impact the ability of companies to recruit talent – is the fact that housing is becoming less affordable.

An important finding in this analysis is that throughout the West areas similar to Greater Yellowstone – with a national park at the core, and surrounded by Wilderness and other public lands – are also star economic performers. When compared to the non-metropolitan West that does not have these wildland amenities, it is clear that protected public lands are closely associated with economic well-being. When these “park” counties were compared to “non-park” counties, data shows that the park counties have higher rates of growth in population, real personal income and employment; higher earnings per job and per capita income; and less dependence on government employment. While positive correlations do not prove a cause-and-effect relationship, they do show that it is plausible, even highly likely, that environmental protection is good for the economy.

The economic trends in Greater Yellowstone are typical of many places in the country that has a combination of environmental amenities like National Parks and Wilderness areas, an educated workforce, good schools, and ready access to major markets via interstate highways and commercial airports. In areas such as these the growth is often primarily in service industries, yet in not just in the (predictable) tourism sectors. Engineers, business consultants, architects and other high-wage “service” workers can, with the technology that exists today, live in rural areas and do business with anyone else in the world.

In today’s competitive global marketplace, one of the keys to attracting and retaining talented workers is to offer a high quality of life. Greater Yellowstone is one of those places. The question is not whether the region will continue to grow, but whether it can grow gracefully and continue to protect its parks and wilderness areas – its competitive advantage.