

TIMBER, RESTORATION FORESTRY AND WILDERNESS IN NORTHEAST WASHINGTON

THE ECONOMIC IMPACT OF NORTHEAST WASHINGTON FORESTRY
COALITION'S "BLUEPRINT" FOR NATIONAL FOREST MANAGEMENT



PRODUCED BY
HEADWATERS ECONOMICS
for the
NORTHEAST WASHINGTON FORESTRY COALITION



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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is a nonprofit social science research organization that offers a unique blend of research skills and on-the-ground experience based on over 20 years of work with communities, landowners, public land managers and elected officials across the West.

The mission of Headwaters Economics is to improve community development and land management decisions in the West by producing and distributing credible information on linkages between economics and the environment.



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COVER PHOTOS

Colville Main Street/Jeff Tetrick photo	Prospector Days in Republic/Eric Zamora photo
Russ Vaagen, Vaagen Bros. Lumber/Eric Zamora photo	Car Camping/Eric Zamora photo
Old growth cedar/James Johnston photo	Columbia Highlands/James Johnston photo

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EXECUTIVE SUMMARY

At the request of the Northeast Washington Forestry Coalition, Headwaters Economics conducted this examination of northeast Washington's economy to determine the possible impacts of their "Blueprint" proposal for managing National Forest lands in the region.

The goal of this report is to inform an ongoing and collaborative discussion initiated by the Coalition on the potential benefits of managing National Forest resources in a balanced manner for timber, restoration, and Wilderness.

This report explores the questions of whether and how the "Blueprint" proposal will benefit area communities and businesses in three principal ways. First, the report describes the regional economy and identifies its strengths and weaknesses. Second, it analyzes the timber economy to determine how an increased supply of timber can be most beneficial to the study region. And third, the report assesses the potential benefits of designating additional Wilderness.

We conclude that the Blueprint can benefit the region, its communities and businesses. However, capturing these benefits is by no means a passive matter. It will require active engagement and cooperation by a spectrum of interests, in much the same manner as the Coalition bridges diverse perspectives and focuses on moving beyond conflict to identify solutions.

Specific conclusions are:

The economy of the region has diversified beyond a sole reliance on resource sectors. It has become more resilient, and grown because of its more balanced economic makeup and success at capturing employment and income in growing market segments, especially a range of service industries and retirement income. The result is that public lands are now part of broader set of considerations and opportunities that will make northeast Washington shine in the future. Public lands are now important not just for what can be harvested from them, but also for the setting and quality of life they provide visitors and residents alike.

Forestry and restoration activities called for in the Blueprint will increase timber harvest coming off National Forest lands. This is helpful to local mills struggling to operate at capacity. However, an increase in timber supply on its own will not necessarily create additional employment or better wages. The key to success will be to create value-added opportunities that turn logs into finished products and sell for a premium.

Wilderness and other protected public lands are associated with local economic growth and well-being. And, the more lands in protected status the faster the economic growth – for the West as a whole and for study-area peers. There is no evidence that Wilderness hurts economies. Protected public lands constitute a competitive advantage when combined with solid infrastructure, innovative talent, and engaged local leadership.

Perhaps the most important benefit from the Blueprint is the move away from adversity towards a collaborative, problem-solving approach to land management. Although difficult to quantify, creating a "can-do" atmosphere that is attractive to people and business may be the most effective way of implementing the Coalition's management proposal and reaping associated benefits.

INTRODUCTION

Northeast Washington is a region in transition. In the past, the economy was dependent primarily on resource industries. Although this is no longer the case, resource sectors continue to play an important role as part of a larger, more diverse economy. And they provide some of the highest wages in the region.

As the economy diversifies, creating a broader range of economic activities and a growing recognition that public lands support an array of values, a debate has evolved into a discussion about how best to manage National Forest resources.

After years of conflict over the use of public lands, especially forestry practices, there is a homespun effort to find collaborative solutions to managing the region's National Forests lands. The Northeast Washington Forestry Coalition has brought together an unusual group of interests in the hope of moving beyond gridlock and finding ways to balance natural and human values on the region's public lands.

The Coalition, in their own words, "is about working together on the real issues that are preventing progress on projects that will mutually benefit the participants and their interests." Their focus is creative problem solving that will reduce resource conflicts and create public benefits.

The Coalition's objectives are to:

- Design and implement forest restoration and fuels reduction projects that demonstrate innovative approaches to forestry.
- Demonstrate how a diverse coalition of stakeholders can work together to successfully promote restoration forestry and community protection from wildfire.
- Use the projects to educate the public about the ecological and socioeconomic benefits of restoration forestry and fuels reduction strategies.
- Develop model forest restoration and fuels reduction projects that can be emulated in other regions of the country.¹

This report evaluates whether, and how, the four-county region of northeast Washington, which includes Okanogan, Ferry, Stevens, and Pend Oreille counties, will benefit from the Coalition's Blueprint for managing National Forest lands in the region. It pays particular attention to the role of timber and wilderness in the area economy.

The report consists of three main chapters. The first looks at the regional economy in aggregate, differences between counties in the region, the region's economic performance compared to a larger group of peers, and area strengths and weaknesses. The second examines the timber industry in detail, including historical trends, and attempts to estimate the potential impact of a somewhat larger supply of timber from local National Forests. The third assesses the relationship between protected public lands and economic prosperity in the West, compares the four-county study area with Wilderness and non-Wilderness peers from the larger region, and analyzes economic performance before and after Wilderness designation to identify potential tradeoffs and benefits.

Headwaters Economics hopes that this report is a constructive addition to the ongoing discussion about how to manage the public's forest resources in northeast Washington in a collaborative fashion for the benefit of the land, the public at large, and nearby communities and businesses.

¹ For more information on the Northeast Washington Forestry Coalition, go to: www.newcommunityforestry.org.

ABOUT THE BLUEPRINT

The Northeast Washington Forestry Coalition's Blueprint proposal for managing National Forest lands in northeast Washington has three main components. It calls for Responsible Management Areas, Restoration, and the designation of new Wilderness areas. The goal of each of these management prescriptions are as follows:

1. Responsible Management Areas

The goal of responsible management is to reduce wildfire risks to adjacent communities and their infrastructure, consider Community Wildfire Protection Plans, provide a stable flow of forest products for local rural economies, and enhance recreational experiences. These goals will be met by providing site-specific ranges of stocking levels, species composition and tree size, using ecologically sensitive forestry techniques and equipment to mechanically treat the RMA on a sustainable schedule, using existing roads. As a result, the forest's resiliency to insects and disease may be increased.

2. Restoration

The Colville National Forest has, in many areas, an unnatural forest structure that adversely affects the Forest's ecosystems. There is a need to enhance ecological integrity and ecosystem function in these areas by restoring natural processes and resiliency, which will protect watersheds, habitat, and ecosystems. To effectively accomplish these goals – taking into consideration various forest types, ranging from warm dry forests to cold wet forests – restoration must integrate a variety of restoration treatments, including treatments to the transportation system (road maintenance and removal), wildlife habitat and watershed restoration, invasive species control, and fuel and fire treatments.

3. Wilderness

The goal of establishing Congressionally designated Wilderness areas is to honor a common cultural heritage, its diversity, integrity and resilience, and to honor nature as a living laboratory which will in provide in perpetuity the fundamental building blocks – the seeds of life – of the northeast Washington forest ecosystem. The Wilderness Act, Public Law 88-577 (16 U.S.C. 1131- et seq.), was established by the 88th Congress on September 3, 1964, (Sec. 2)(a) in order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition.



REGIONAL SOCIOECONOMIC TRENDS

This chapter describes socioeconomic trends in northeast Washington. It offers a baseline view of the changing demographics and economies in Okanogan, Ferry, Stevens, and Pend Oreille counties.

The chapter is organized as follows:

1. Description of long-term trends in the region as a whole for population, employment, unemployment, labor and non-labor income, earnings, wages by employment sector, and industry diversity.
2. Description of differences between counties in the region for population, employment, income, per capita income, non-labor income, education levels, average earnings per job, wages by industry, unemployment, and age. It also includes a brief portrait of differences at the Census subdivision level for per capita income and poverty.
3. Description of the four-county study region compared to rural counties from the four states – Idaho, Montana, Oregon, and Washington – in the northwest. This section includes data on the composition of population change, income growth, average earnings per job, per capita income, education levels, government employment, poverty, and unemployment.
4. Description of the connectedness of the four-county region to other parts of the West. This section includes an airport and drive time analysis, summary of net income flows, commuting to and from the area, and migration to and from the area.
5. Summary of the region's strengths and weaknesses, and overall findings.

The region's recent socioeconomic trends and current conditions are important to understanding the area's evolving competitive advantage, and the potential for communities and businesses to benefit from the Coalition's Blueprint proposal for managing the National Forest lands in the area.

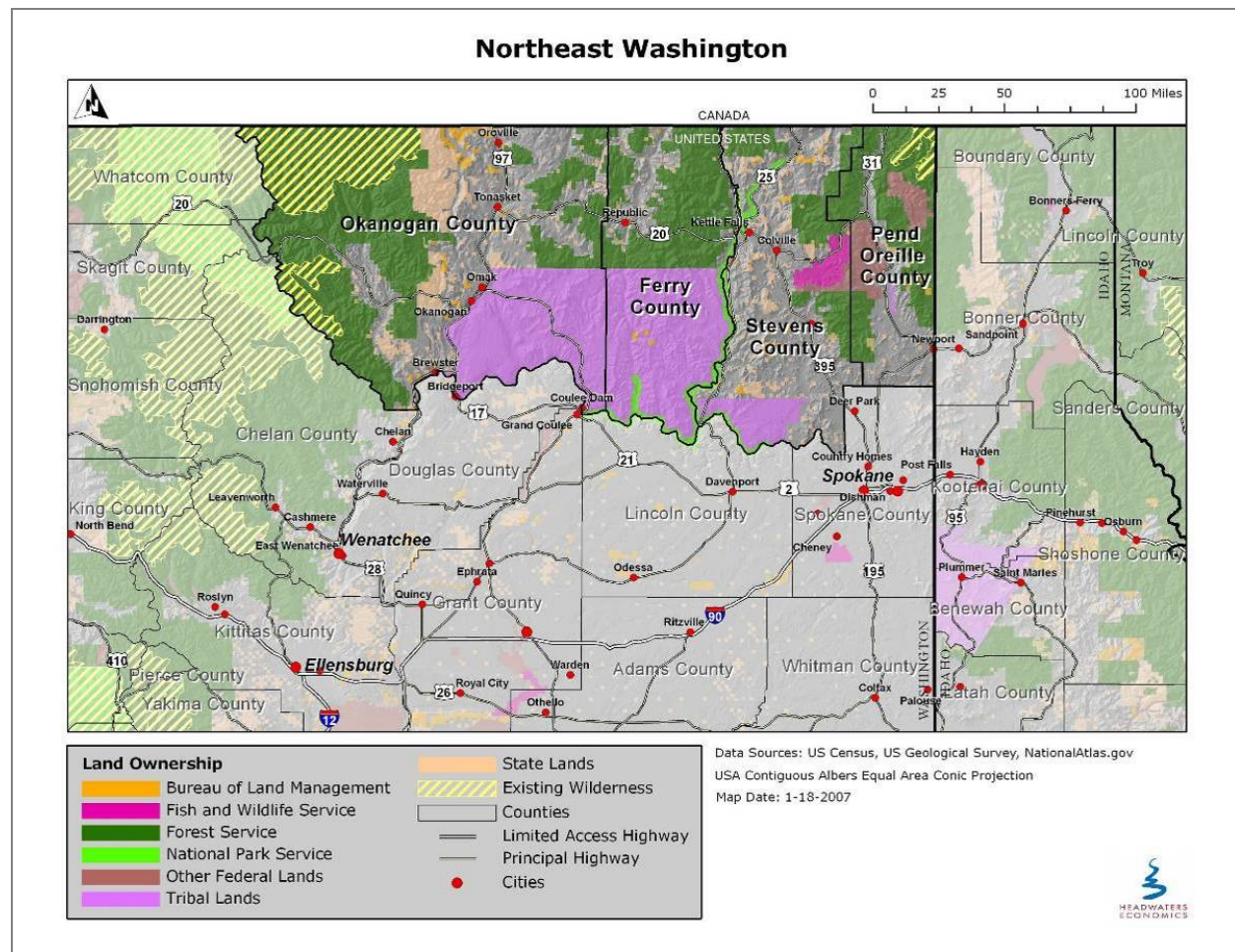
Specifics on the potential effects of timber harvests and new Wilderness designations are evaluated in the following chapters of this report.



Photo: Downtown Colville, Ben Alexander photo.

Study Area

The four counties in the study area are all rural by virtue of their sparse population. The population centers of Stevens and Pend Oreille are relatively well connected to the Spokane area, while residents of Okanogan and Ferry counties are more isolated from larger population centers and markets. Each county has substantial public lands (some already protected in various forms), and mountainous terrain. Several counties have significant native reservations.



The region has an economic history closely tied to the land. Agriculture, forestry, and mining are what brought many people to the area, and what continue to sustain many today. The economy of the region has diversified significantly over the last three decades. It has also grown substantially, nearly doubling population and employment, and more than doubling personal income since 1970.

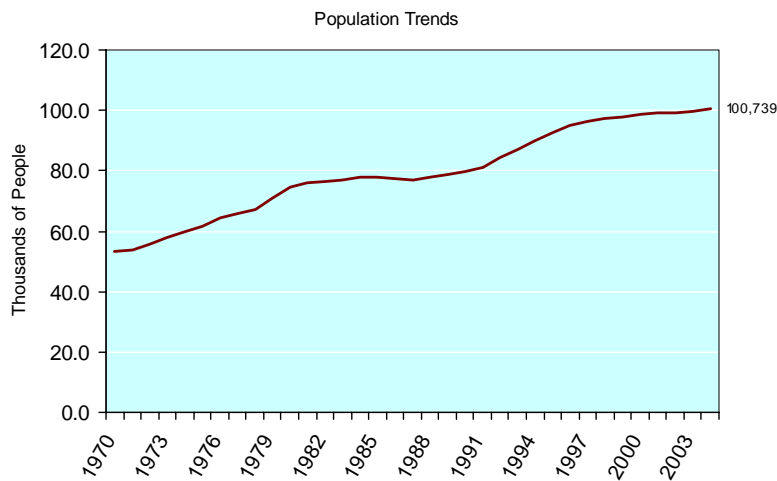
As the analysis in this chapter shows, the competitive advantage of the region three decades ago has changed significantly. Traditional economic sectors in the region remain important for some communities and businesses, but represent a diminishing proportion of the area's economic activity. Capturing value-added and high-wage aspects of traditional enterprises and growing sectors is a central challenge and opportunity for the region.

Long-Term Regional Trends

The long-term demographic and economic trends of the four-county region are outlined in this section. There are significant changes over the last three decades. The overall picture is of growth, substantial diversification, and nearly flat earnings.

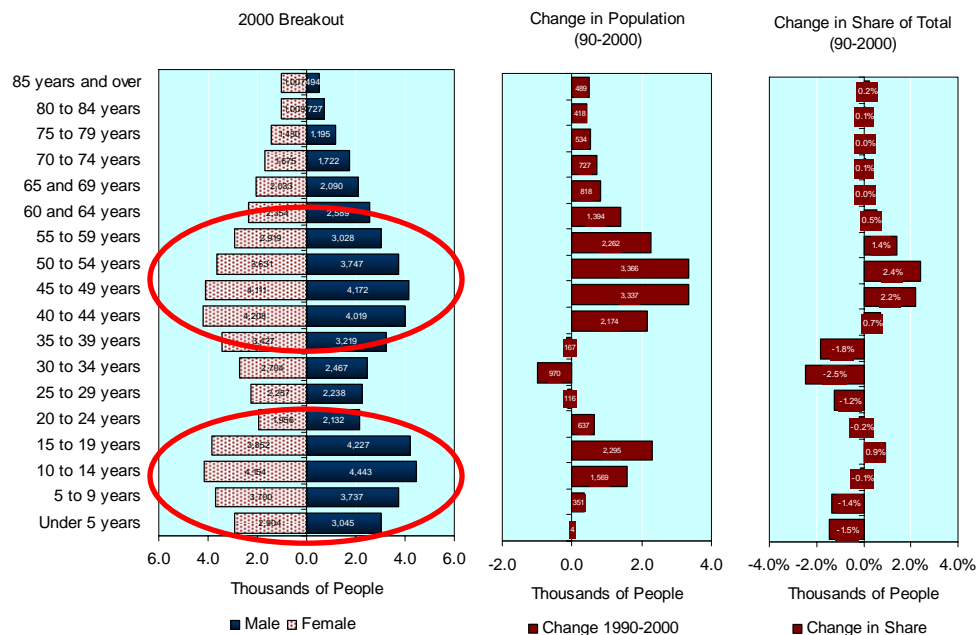
Population

The population of Okanogan, Ferry, Stevens, and Pend Oreille counties grew from 53,116 in 1970 to 100,739 in 2004. Over this time period, the region added 47,623 people, an increase of 90 percent. Population in the region grew faster than the state and nation.



Source: U.S. Department of Commerce, REIS.

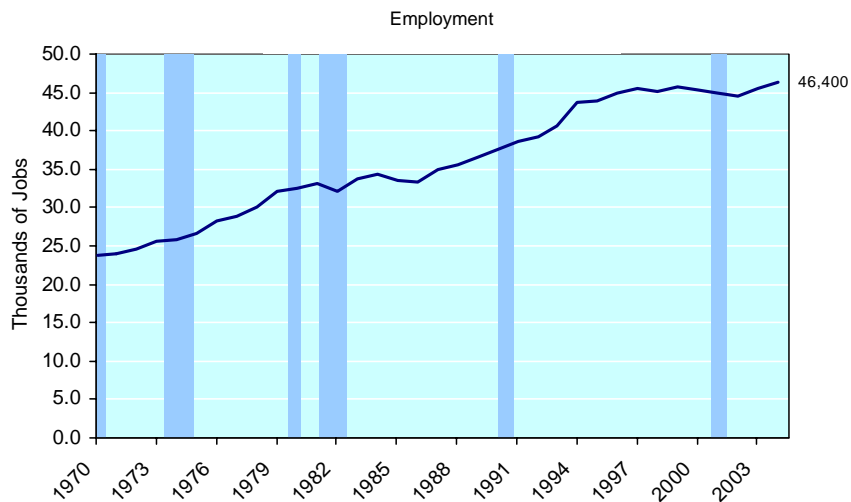
The Baby Boomers and Boomer Echo, circled in red below, are the region's largest age groups. The population has gotten older since 1990; median age in 2000 was 39.2 years, up from 34.8 years in 1990.



Source: U.S. Decennial Census.

Employment

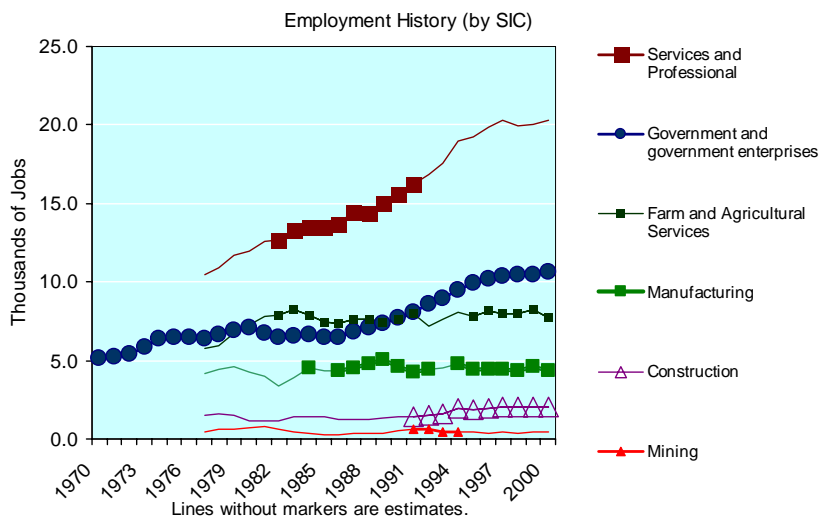
From 1970 to 2004, 22,705 new jobs were created. Study-area job growth was faster than the nation, but slower than the state. From 1970 to 2004, the majority of job growth, 69 percent of new jobs, was in wage and salary employment (people who work for someone else).



Vertical blue lines in this graph show national recessions.

Source: U.S. Department of Commerce, REIS.

The employment category whose share of total gained the most was services and professional, which went from 36.4 percent in 1977 to 44.8 percent in 2000.² The category whose share of total shrank the most was manufacturing, which includes timber-related industries.³ Manufacturing declined from 14.4 percent in 1977 to 9.5 percent in 2000.



Source: U.S. Department of Commerce, REIS.

Note: Data missing before 1977 due to disclosure restrictions from the U.S. Department of Commerce.

² We define services broadly as "Services and Professional" industries. We use the term Services and Professional to underscore an important point: service occupations are not just "hamburger flippers and maids," but rather consist of a combination of high-paying and low-paying professions, mixing physicians with barbers, and chambers maids with architects and financial consultants. See pages 11 and 20-23 for a detailed breakdown of employment and income in services for the region and each county.

³ According to the Standard Industrial Classification system used by the U.S. Department of Commerce to classify industries through the year 2000, "Manufacturing" includes all forestry and wood products manufacturing related activities.

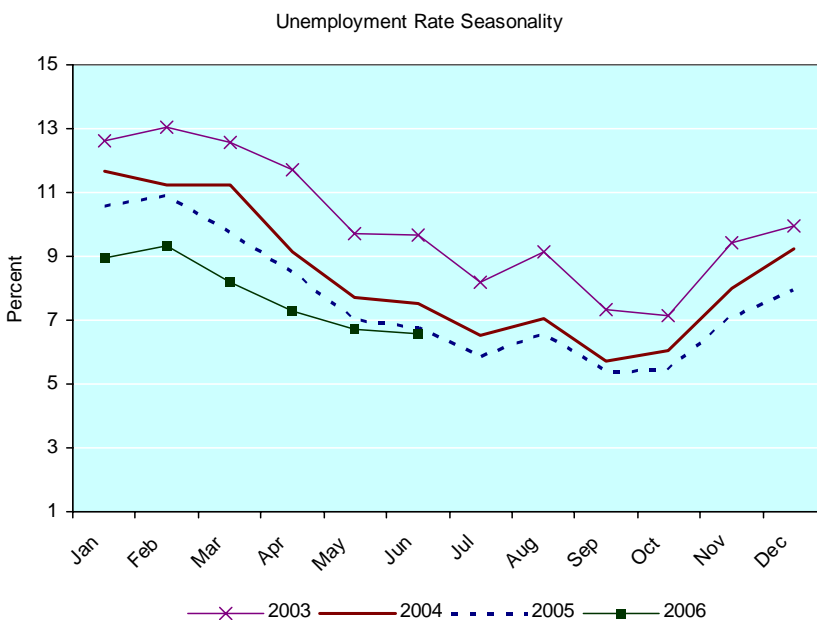
Unemployment

In 2005, the regional unemployment rate was 7.6 percent, compared to 5.5 percent for the state and 5.1 percent for the nation. Over the last several decades, the area's unemployment rate has been consistently higher than the state and nation, ranging from a high of 11.5 percent to a low of 7.6 percent.



Source: Bureau of Labor Statistics.

Unemployment varies seasonally, with highs in the winter (10.9% in February, 2005) and lows in the late summer and early fall (5.4% in September, 2005).

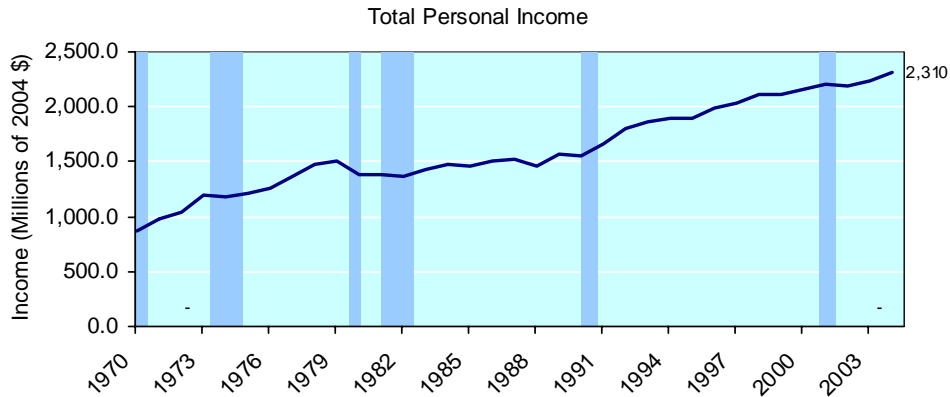


Unemployment rates have declined over time, with rates in 2006 significantly lower than in 2003.

Source: Bureau of Labor Statistics.

Personal Income

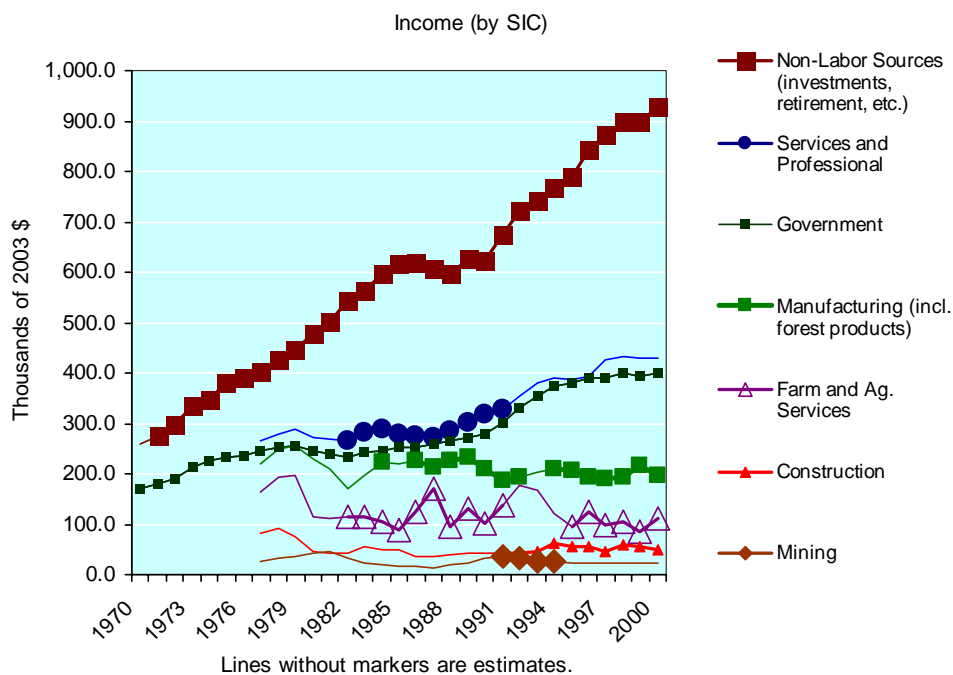
From 1970 to 2004, personal income added \$1,443 million in real terms. Income growth was faster than the nation, but slower than the state. The regional annualized growth rate was 2.9 percent.



Vertical blue lines in this graph show national recessions.

Source: U.S. Department of Commerce, REIS.

The income category whose share of total gained the most was non-labor income, which went from 30 percent of total in 1977 to 43 percent of total in 2000. The category whose share of total shrank the most was farm and agricultural services, which went from 11 percent in 1977 to 4 percent in 2000.

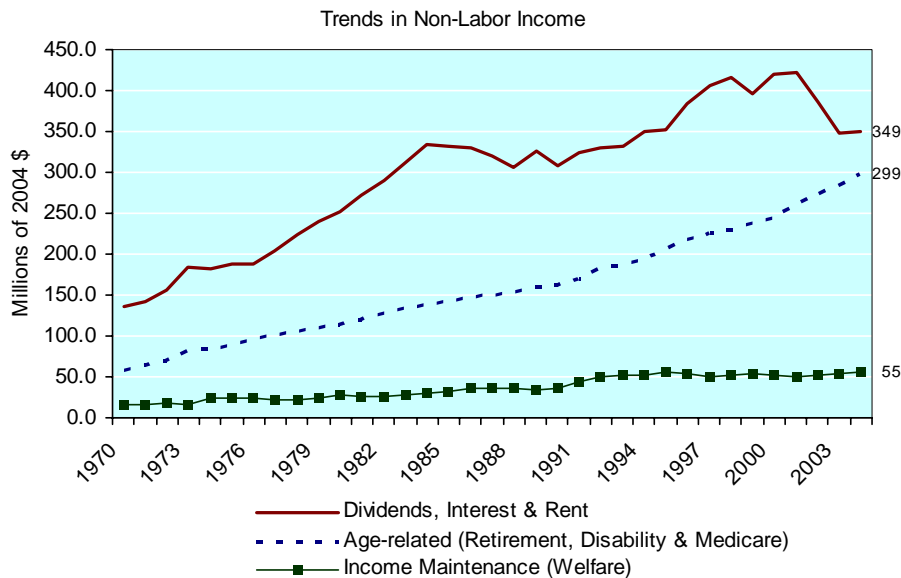


Source: U.S. Department of Commerce, REIS.

Note: Data missing before 1977 due to disclosure restrictions from the U.S. Department of Commerce.

Non-Labor Income

The largest components of non-labor income are dividends, interest and rent (*i.e.*, money earned from investments), followed by transfer payments (*i.e.*, government payments to individuals). In 2004, 51 percent of transfer payments were from age-related sources (retirement, disability, insurance payments, and Medicare), while 9 percent were from income maintenance programs.



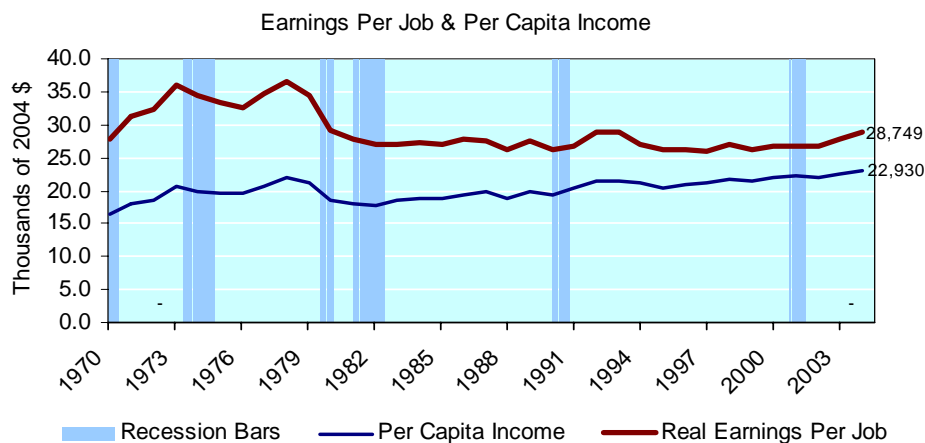
Investment income may have dropped at the turn of the century because of the stock market revaluation at that time.

Source: U.S. Department of Commerce, REIS.

Earnings/Income

Average earnings per job, adjusted for inflation, have risen from \$27,683 in 1970 to \$28,749 in 2004. Earnings hit a high of \$36,473 in 1978, and have not substantially recovered since the early 1980s. Average earnings per job is defined as total wages divided by the total number of workers. Earnings per job have consistently outpaced per capita income.

Per capita income, adjusted for inflation, has risen from \$16,317 in 1970 to \$22,930 in 2004, which represents a three decade high. Per capita income is defined as total personal income (including non-labor sources) divided by the total population (not just the working population).

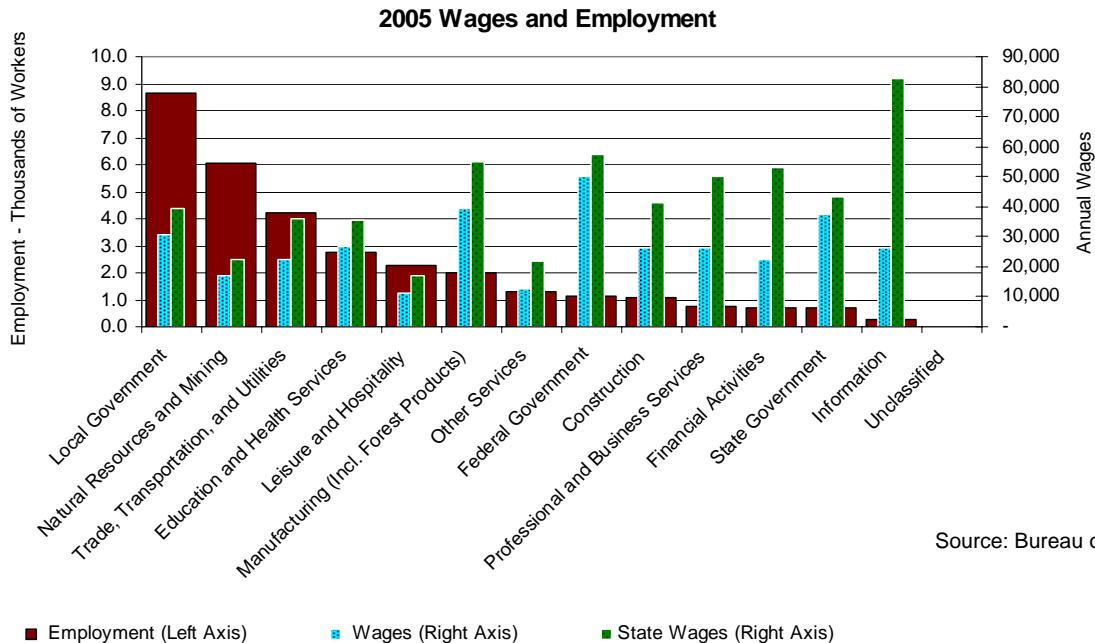


Vertical blue lines in this graph show national recessions.

Source: U.S. Department of Commerce, REIS.

Wages by Industry (2005)

The chart and table below show aggregate wage data for all four counties in the study area. There are significant differences between counties. See pages 20-23 of this report for data on each county. The Federal Government is the highest paying major category, followed by Manufacturing which includes forest products manufacturing. Mining, a sub-category of Natural Resources and Mining, pays less than the Federal Government but more than Manufacturing.



The asterisks (*) in the table below denote the partial suppression of data by the Bureau of Labor Statistics, all of which occur in Ferry County. The total number of jobs (52) missing from the Goods-Producing sector in Ferry County accounts for 0.2% of regional employment.

- Of the major categories, the highest paying sector is Federal Government. It accounts for 5.4% of total employment and pays \$50,184 per year.
- Of the major categories that have data, the largest employment sector is Local Government. It accounts for 27.0% of total employment and pays \$30,519 per year.
- Goods-producing employees (9,172 workers) were paid an average of \$22,837.
- Service-providing employees (12,352 workers) were paid an average of \$20,691.
- Wages in the public sector (\$33,144) exceeded wages in the private sector (\$21,606) by 53.4%.

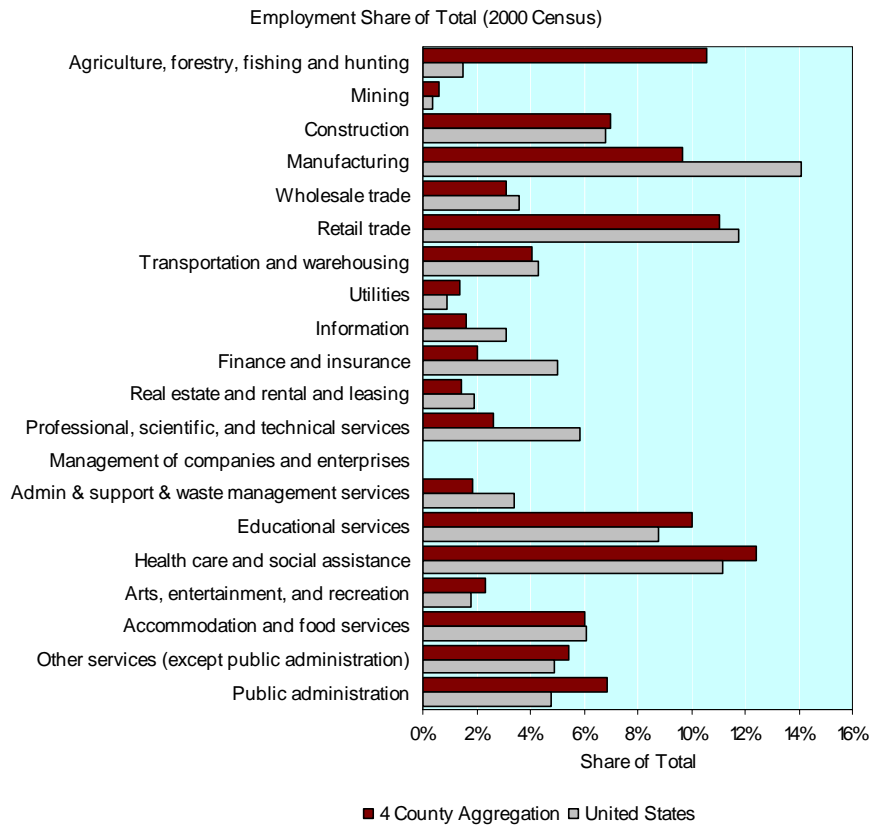
County Wages and Employment in 2005			Average Annual Wages
	Employment	% of Total	
Total Private & Public	32,019	100%	25,388
Total Private	21,523	67%	21,606
Goods-Producing	9,172	29%	22,837
Natural Resources and Mining	6,062	19%	16,791
Agriculture, forestry, fishing & hunting	5,559*	17%	14,266
Mining	309*	1%	44,417
Construction	1,070*	3%	26,097
Manufacturing (Incl. Forest Products)	1,988*	6%	39,444
Service-Providing	12,352	39%	20,691
Trade, Transportation, and Utilities	4,235	13%	22,616
Information	274	1%	26,311
Financial Activities	715	2%	22,592
Professional and Business Services	749	2%	26,245
Education and Health Services	2,770	9%	26,883
Leisure and Hospitality	2,295	7%	11,174
Other Services	1,315	4%	12,671
Unclassified	#N/A	#N/A	#N/A
Total Public	10,496	33%	33,144
Federal Government	1,161	4%	50,184
State Government	690	2%	37,352
Local Government	8,645	27%	30,519

Wages are shaded in green when they are more than 20% higher than the wages for all sectors and in red when they are less than 20% lower.

Note: the Standard Industrial Classification system used by the U.S. Department of Commerce includes forestry and wood products manufacturing in "Manufacturing," whereas the Bureau of Labor Statistics methodology used here includes forestry in "Natural Resources and Mining" and wood products manufacturing in "Manufacturing."

Industry Diversity

The chart below shows sector diversity using 20 employment categories from the 2000 U.S. Decennial Census. The four-county average is shown in dark red, and the median for all U.S. counties in grey. The region has more agriculture, forestry, fishing and hunting, as well as educational services and health care and social assistance. It has less manufacturing, information, finance and insurance, and professional, scientific, and technical services.



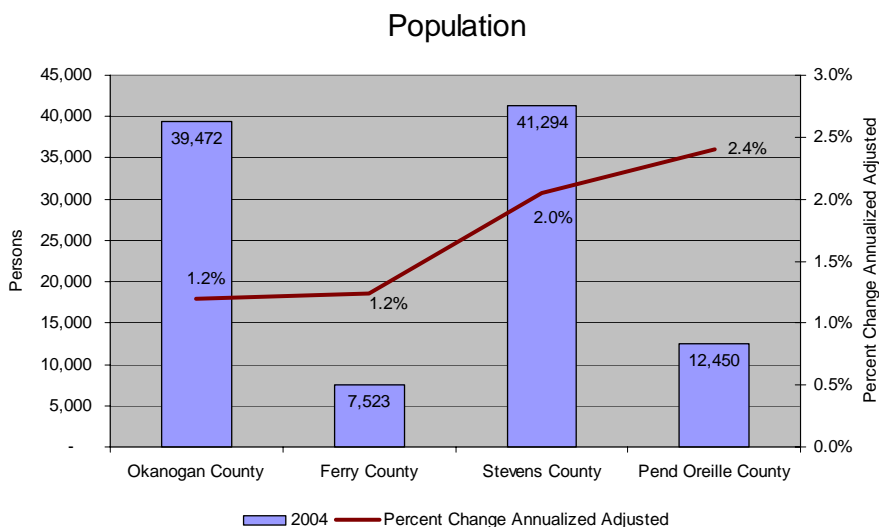
Source: U.S. Decennial Census.

Differences within the Region

There are significant differences between study-area counties and, in some cases, within these counties. This section outlines some of these differences, which are relevant to how areas may be able to benefit from changing public lands management.

Population

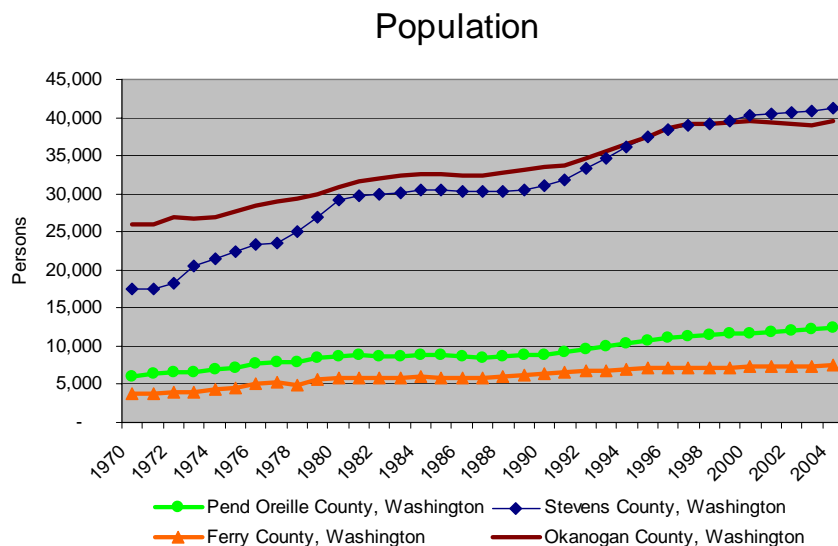
The bulk of the region's population (86%) resides in Okanogan and Stevens counties. Pend Oreille and Stevens counties have grown the fastest since 1990. The main population centers in these two counties are relatively close to Spokane – see Connectedness section below for more detail.



This figure shows in red the percent change from 1990 to 2004.

Source: U.S. Department of Commerce, REIS.

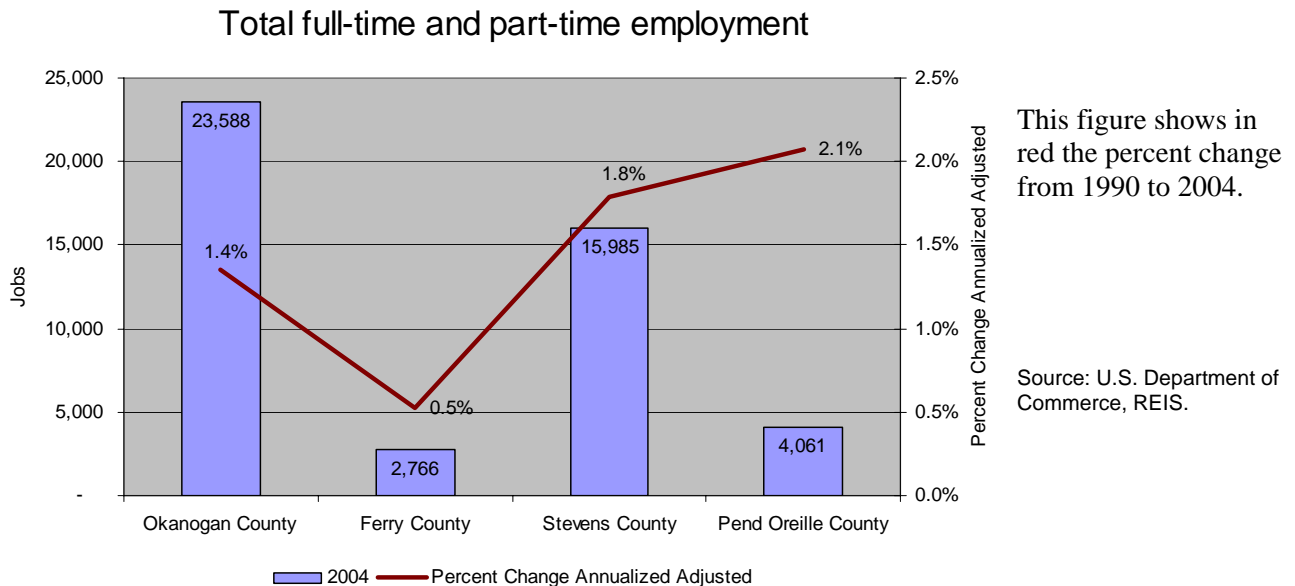
Over the long-term Stevens County has grown the most and the fastest, though it experienced a long period of stagnation in the 1980s. Okanogan and Pend Oreille show the same trends, but less dramatically. Ferry County has seen slower growth over the last three decades.



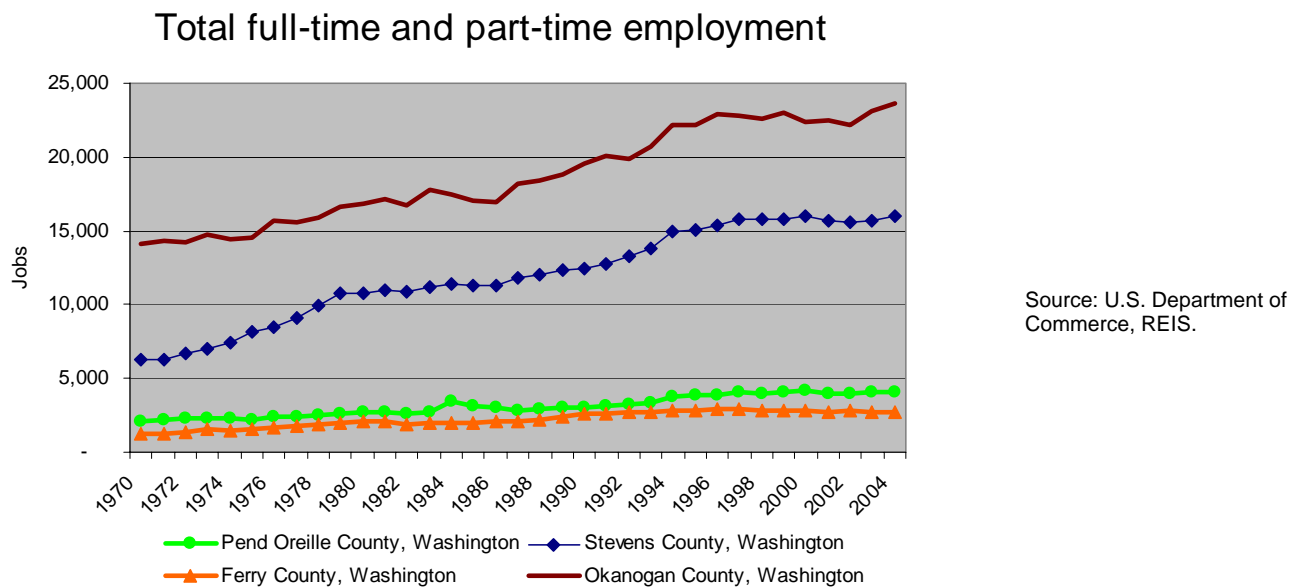
Source: U.S. Department of Commerce, REIS.

Employment

Most jobs are found in the more populated counties. Okanogan and Stevens counties account for 85 percent of all jobs. There is significant variation between counties in job growth since 1990. Pend Oreille has the fastest rate of job growth, followed by Stevens and Okanogan counties. Ferry County job growth has been more uneven. It created new employment in the first half of the 1990s, and since 1997 has seen a net decline.

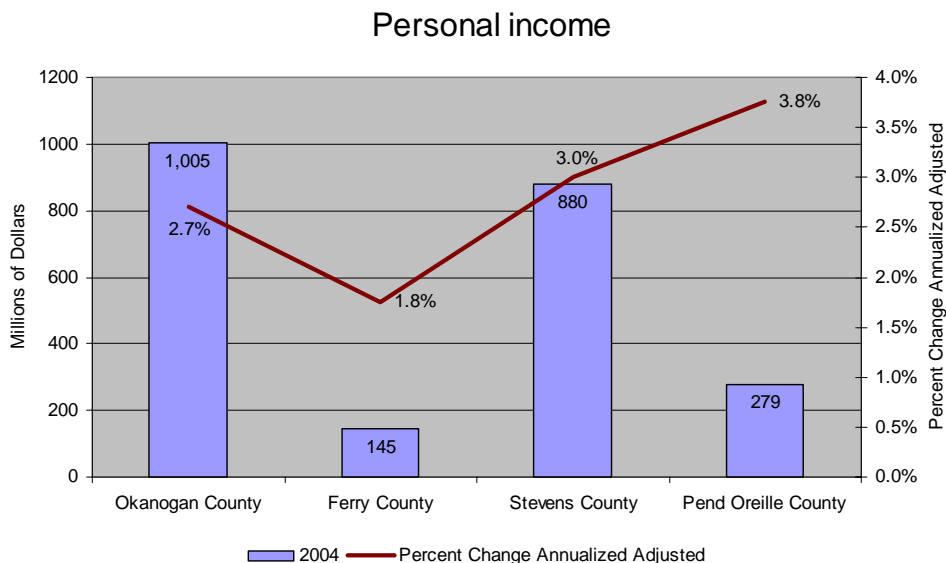


Over the long-term the more populous counties have generated faster employment growth. The early 1980s and turn of the century, national recessionary periods, slowed or led to negative job growth in all counties. Okanogan County is the only county to rebound substantially from the last recession.



Personal Income

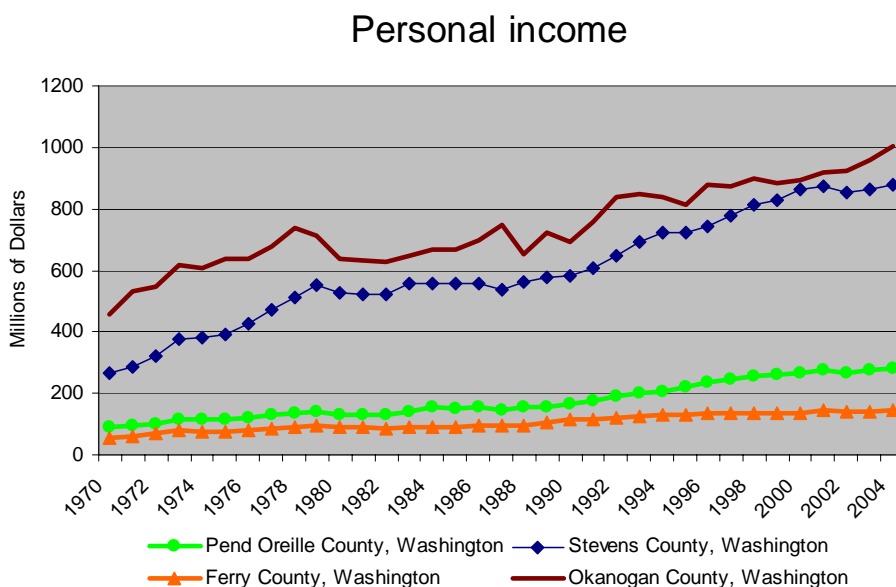
Okanogan and Stevens counties account for 82 percent of total personal income in the region. Despite the large growth in regional non-labor income, personal income trends still track closely with employment. Since 1990 Okanogan, Stevens, and Pend Oreille counties have seen relatively strong income growth. Ferry County saw gains from 1990 to 1997, and has since experienced declines in total personal income.



This figure shows in red the percent change from 1990 to 2004.

Source: U.S. Department of Commerce, REIS.

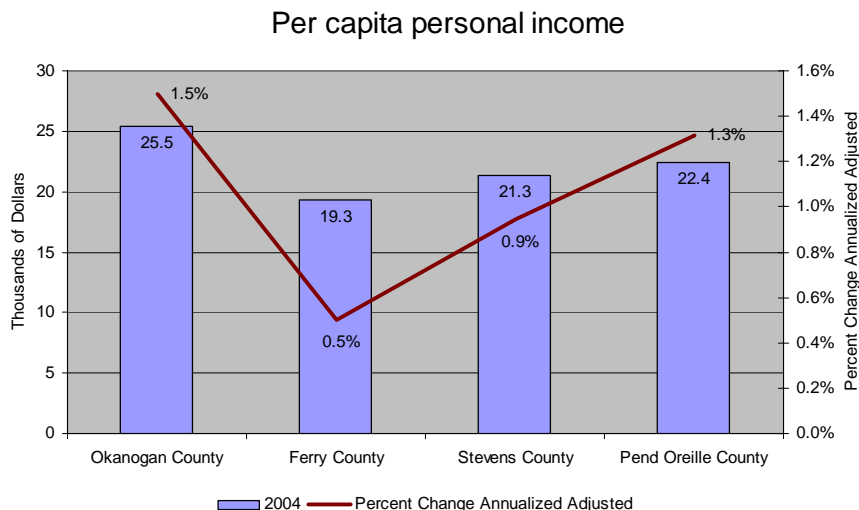
Stevens County has seen the fastest growth in total personal income over the long-term. Okanogan generates the most personal income, and has experienced the greatest income volatility since 1970. All counties have more than doubled their total personal income since 1970.



Source: U.S. Department of Commerce, REIS.

Per Capita Income

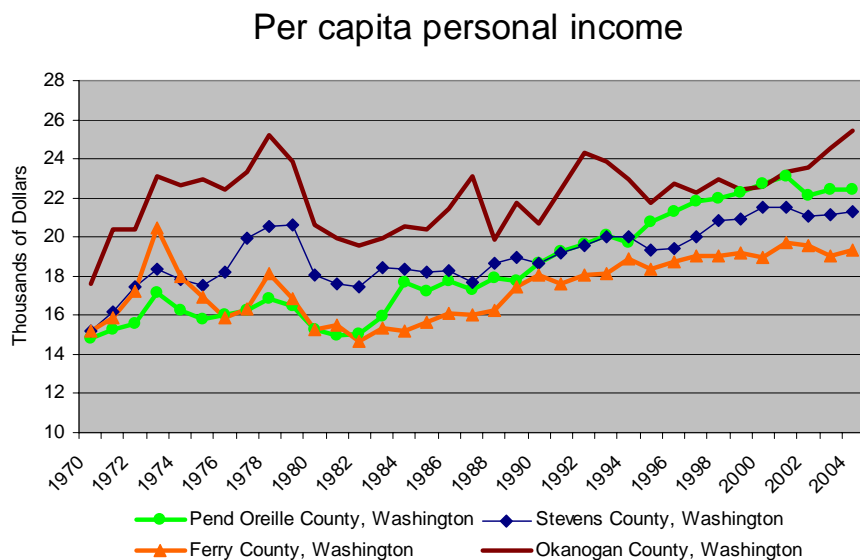
Okanogan County has the highest per capita income in the region, and Ferry County the lowest. Okanogan and Pend Oreille counties have seen the largest increases since 1990.



This figure shows in red the percent change from 1990 to 2004.

Source: U.S. Department of Commerce, REIS.

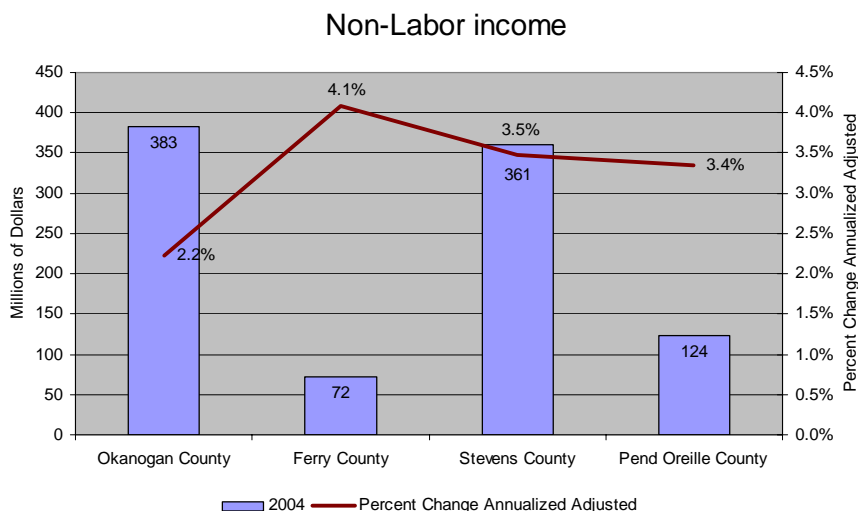
Okanogan County consistently has had the highest per capita income since 1970. It has also experienced significant drops, which happened in the late 1970s, middle 1980s, and early 1990s. Stevens and Pend Oreille counties track relatively closely. Stevens had higher per capita income in the 1970s and Pend Oreille higher in the 1990s. Ferry County had a per capita income high in 1973, followed by a decade of declines, and slow advances since then.



Source: U.S. Department of Commerce, REIS.

Non-Labor Income

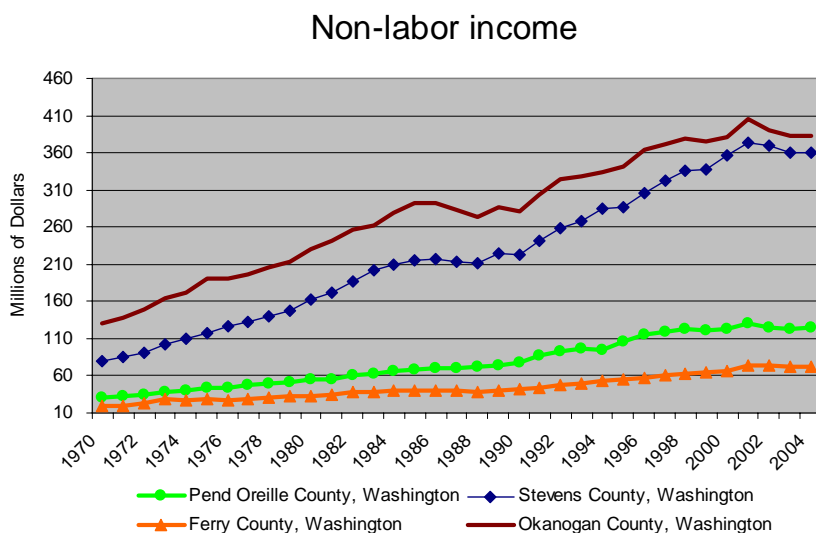
Non-labor income (dividend, interest, and rent; and government transfer payments) is the largest and fastest growing source of income for the region as a whole. All four counties have a high percentage of non-labor income: Okanogan 38 percent, Ferry 50 percent, Stevens 41 percent, and Pend Oreille 44 percent of total personal income in 2004. In all counties, transfer payments significantly exceed investment income. About half of all transfer payments are age-related (*i.e.*, related to retirement), while around a tenth are from income maintenance programs.



This figure shows in red the percent change from 1990 to 2004.

Source: U.S. Department of Commerce, REIS.

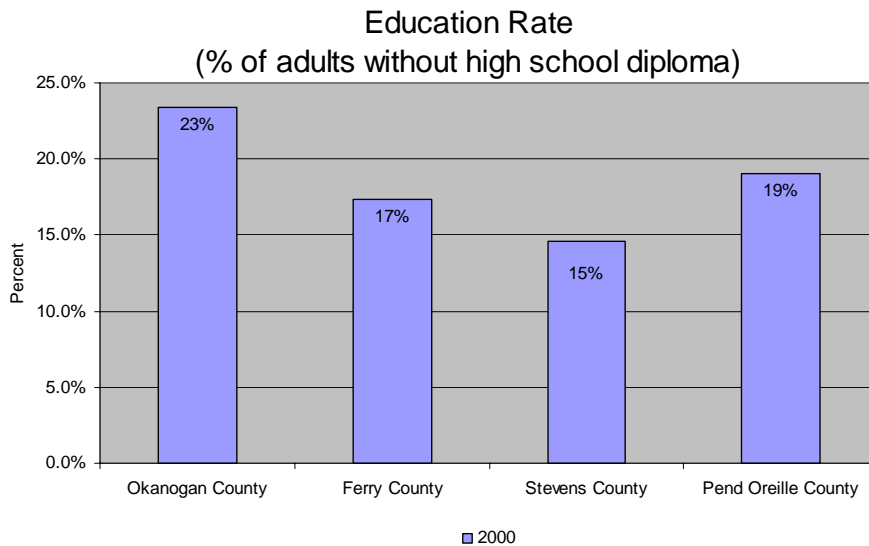
Long-term growth in investment income for all four counties has helped stabilize income fluctuations related to business cycles and employment shifts. In Ferry and Stevens counties, it has raised per capita income in the face of declining average earnings per job since 1970. While in Okanogan and Pend Oreille counties it has raised per capita income along side rising average earnings per job since 1970. The declines in non-labor income evident in the 1980s and early years of this century are a function of shrinking investment income in those recessionary periods.



Source: U.S. Department of Commerce, REIS.

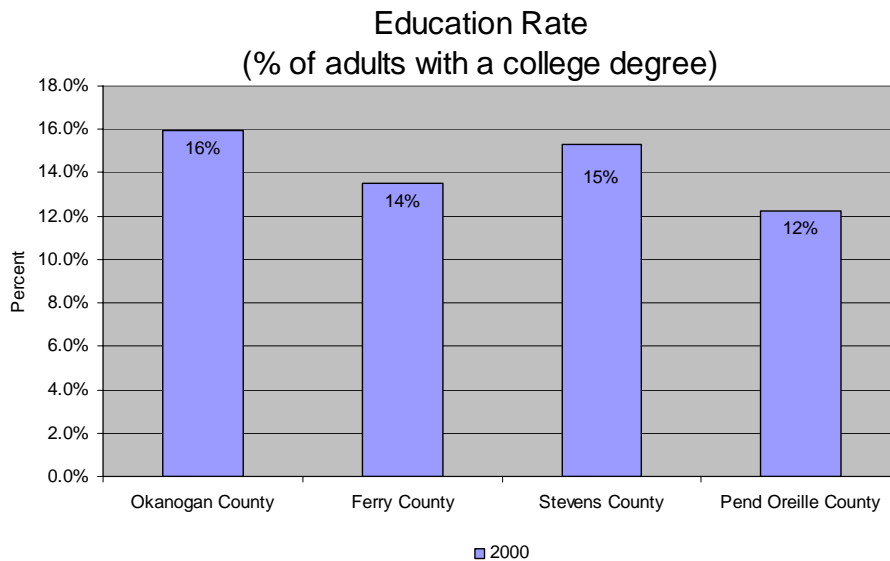
Education

Okanogan County has the highest percent of its adult population without a high school diploma (23%). Stevens County has the lowest (15%).



Source: U.S. Decennial Census.

Okanogan has the highest percent of its adult population with a college degree (16%). Pend Oreille has the lowest (12%).

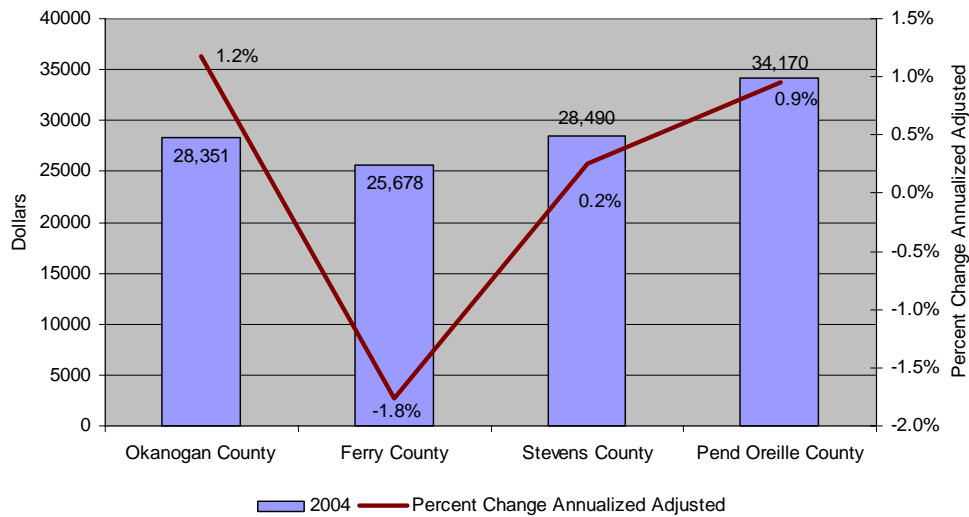


Source: U.S. Decennial Census.

Average Earnings Per Job

Pend Oreille County has the highest average wages (\$34,170) of the four counties. Ferry County has the lowest (\$25,678). Okanogan (+1.2% annually) and Pend Oreille (+0.9% annually) had the fastest earnings growth since 1990. While Ferry saw average wages decline (-1.8% annually) in this period.

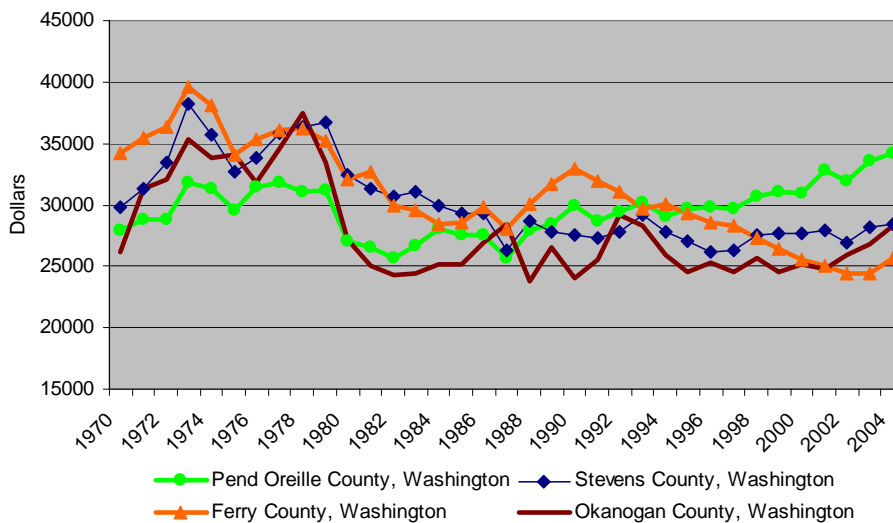
Average earnings per job



Source: U.S. Department of Commerce, REIS.

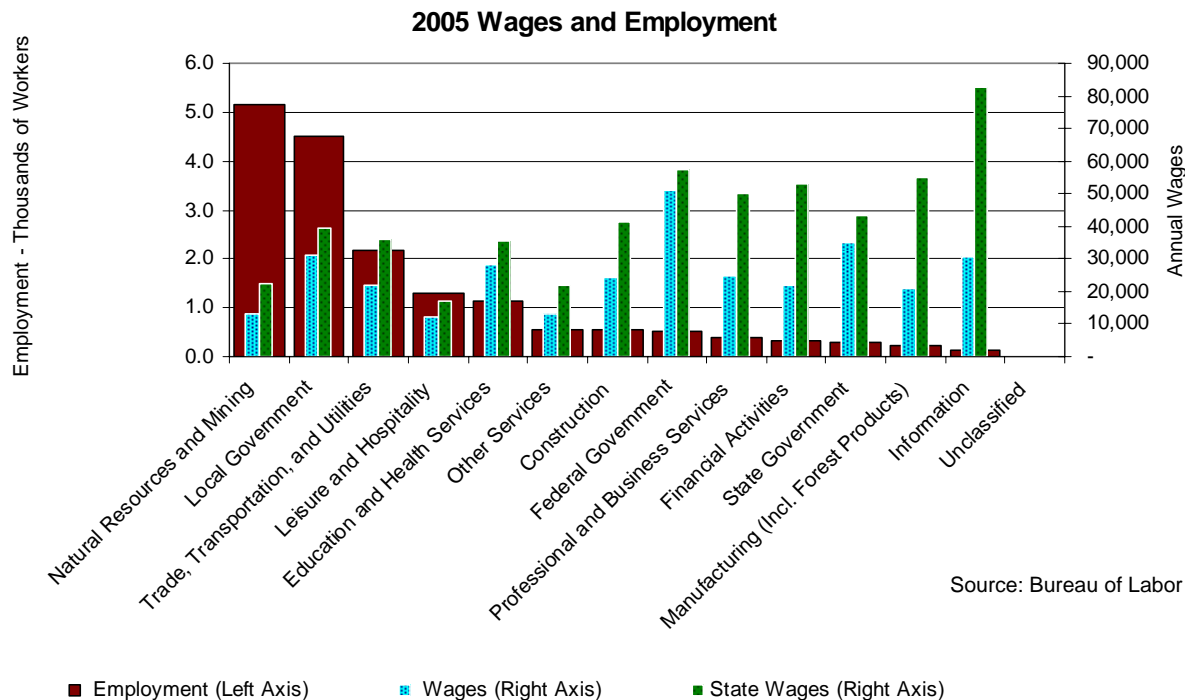
Over the long-term Pend Oreille and Okanogan counties have increased their average earnings per job, while Stevens and Ferry counties have seen a decline.

Average earnings per job



Source: U.S. Department of Commerce, REIS.

Wages by Industry (2005) – Okanogan County



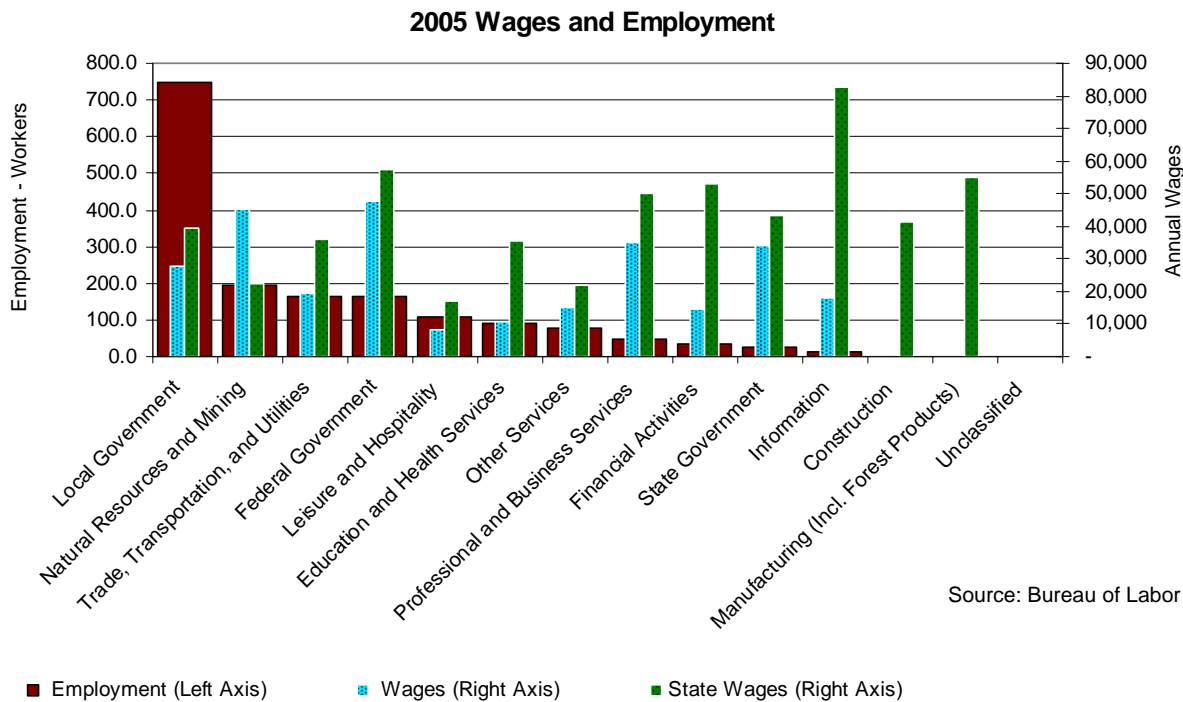
Federal, State and Local Government pay the highest wages in Okanogan County. Information, and Education and Health Services also pay relatively high wages in the county. Unlike the other counties in the study area, Okanogan has a small manufacturing sector and wages here are low by regional norms. The broader category of Natural Resources and Mining has lower wages than in other counties in the study area because of the preponderance of Agriculture, Forestry, Fishing and Hunting jobs relative to Mining. It is likely that many of these jobs, as with Leisure and Hospitality, are seasonal.

- Of the major categories, the highest paying sector is Federal Government. It accounts for 4.2% of total employment and pays \$50,923 per year.
- Of the major categories that have data, the largest employment sector is Natural Resources And Mining. It accounts for 29.9% of total employment and pays \$13,319 per year.
- Goods-producing employees (5,931 workers) were paid an average of \$14,594.
- Service-providing employees (6,036 workers) were paid an average of \$20,534.
- Wages in the public sector (\$33,215) exceeded wages in the private sector (\$17,590) by 88.8%.

County Wages and Employment in 2005			
	Employment	% of Total	Average Annual Wages
Total Private & Public	17,283	100%	22,397
Total Private	11,967	69%	17,590
Goods-Producing	5,931	34%	14,594
Natural Resources and Mining	5,171	30%	13,319
Agriculture, forestry, fishing & hunting	5,119	30%	13,182
Mining	52	0%	26,813
Construction	542	3%	24,263
Manufacturing (Incl. Forest Products)	219	1%	20,785
Service-Providing	6,036	35%	20,534
Trade, Transportation, and Utilities	2,188	13%	21,691
Information	126	1%	30,551
Financial Activities	325	2%	21,741
Professional and Business Services	404	2%	24,838
Education and Health Services	1,142	7%	28,338
Leisure and Hospitality	1,288	7%	12,334
Other Services	562	3%	12,909
Unclassified	#N/A	#N/A	#N/A
Total Public	5,316	31%	33,215
Federal Government	503	3%	50,923
State Government	308	2%	34,833
Local Government	4,505	26%	31,133

Wages are shaded in green when they are more than 20% higher than the wages for all sectors and in red when they are less than 20% lower.

Wages by Industry (2005) – Ferry County



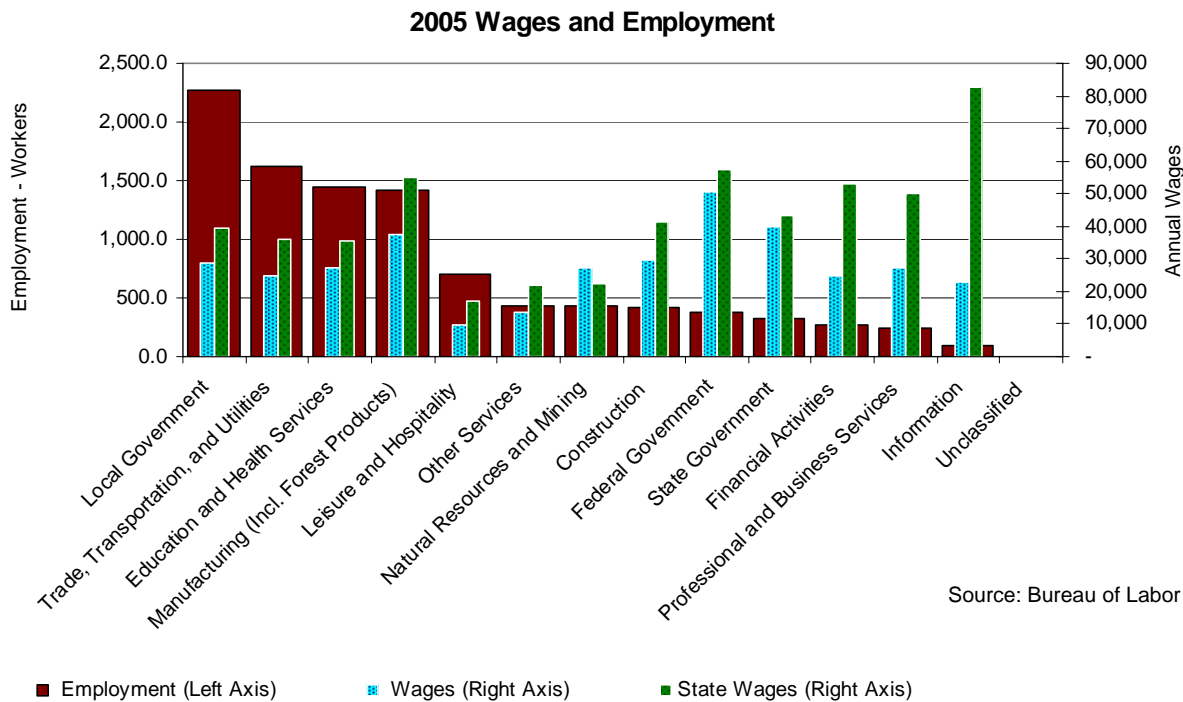
The Federal Government, Natural Resources and Mining, and Professional and Business Services are the highest paying employment sectors. Natural Resources and Mining wages (\$45,143) are likely high because of Mining employment. Manufacturing wages are not disclosed by the Bureau of Labor Statistics. See pages 48-49 for more information on logging, and wood products manufacturing in Ferry County.

- Of the major categories, the highest paying sector is Federal Government. It accounts for 20.7% of total employment and pays \$47,907 per year.
- Of the major categories that have data, the largest employment sector is Local Government. It accounts for 43.4% of total employment and pays \$27,578 per year.
- Goods-producing employees (247 workers) were paid an average of \$40,840.
- Service-providing employees (541 workers) were paid an average of \$16,092.
- Wages in the public sector (\$31,288) exceeded wages in the private sector (\$23,854) by 31.2%.

County Wages and Employment in 2005			
	Employment	% of Total	Average Annual Wages
Total Private & Public	1,727	100%	27,899
Total Private	788	46%	23,854
Goods-Producing	247	14%	40,840
Natural Resources and Mining	194	11%	45,143
Agriculture, forestry, fishing & hunting	#N/A	#N/A	#N/A
Mining	#N/A	#N/A	#N/A
Construction	#N/A	#N/A	#N/A
Manufacturing (Incl. Forest Products)	#N/A	#N/A	#N/A
Service-Providing	541	31%	16,092
Trade, Transportation, and Utilities	166	10%	19,565
Information	12	1%	18,227
Financial Activities	36	2%	14,377
Professional and Business Services	46	3%	34,993
Education and Health Services	91	5%	10,904
Leisure and Hospitality	110	6%	8,377
Other Services	80	5%	15,030
Unclassified	#N/A	#N/A	#N/A
Total Public	939	54%	31,288
Federal Government	163	9%	47,907
State Government	27	2%	34,275
Local Government	749	43%	27,578

Wages are shaded in green when they are more than 20% higher than the wages for all sectors and in red when they are less than 20% lower.

Wages by Industry (2005) – Stevens County



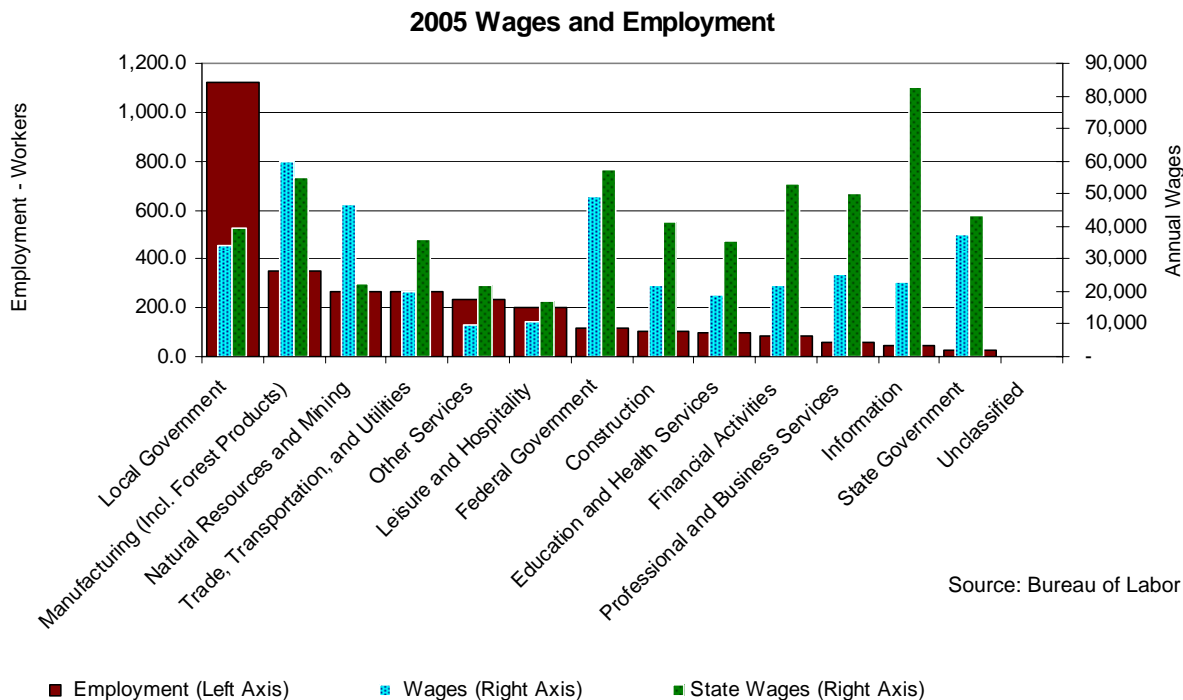
Federal and State Government, and Manufacturing pay the best wages in Stevens County. The majority of manufacturing jobs in the four-county study area are found in Stevens County. Most of these are related to forest products manufacturing.

- Of the major categories, the highest paying sector is Federal Government. It accounts for 5.3% of total employment and pays \$50,695 per year.
- Of the major categories that have data, the largest employment sector is Local Government. It accounts for 22.6% of total employment and pays \$28,508 per year.
- Goods-producing employees (2,276 workers) were paid an average of \$33,960.
- Service-providing employees (4,793 workers) were paid an average of \$22,340.
- Wages in the public sector (\$32,576) exceeded wages in the private sector (\$26,081) by 24.9%.

County Wages and Employment in 2005			
	Employment	% of Total	Average Annual Wages
Total Private & Public	10,039	100%	28,004
Total Private	7,069	70%	26,081
Goods-Producing	2,276	23%	33,960
Natural Resources and Mining	433	4%	27,346
Agriculture, forestry, fishing & hunting	369	4%	26,337
Mining	64	1%	33,180
Construction	425	4%	29,448
Manufacturing (Incl. Forest Products)	1,418	14%	37,333
Service-Providing	4,793	48%	22,340
Trade, Transportation, and Utilities	1,618	16%	24,646
Information	90	1%	23,051
Financial Activities	268	3%	25,039
Professional and Business Services	238	2%	27,183
Education and Health Services	1,441	14%	27,260
Leisure and Hospitality	699	7%	9,679
Other Services	439	4%	13,427
Unclassified	#N/A	#N/A	#N/A
Total Public	2,970	30%	32,576
Federal Government	376	4%	50,695
State Government	327	3%	39,984
Local Government	2,267	23%	28,508

Wages are shaded in green when they are more than 20% higher than the wages for all sectors and in red when they are less than 20% lower.

Wages by Industry (2005) – Pend Oreille County



Of the major categories, Manufacturing, Federal Government, and Natural Resource and Mining pay the highest wages in Pend Oreille County. High wage Mining jobs account for the higher than average wages in Natural Resources and Mining. The manufacturing sector in Pend Oreille County pays better than in any of the other study-area counties. These jobs are largely associated with a paper and allied products manufacturing.

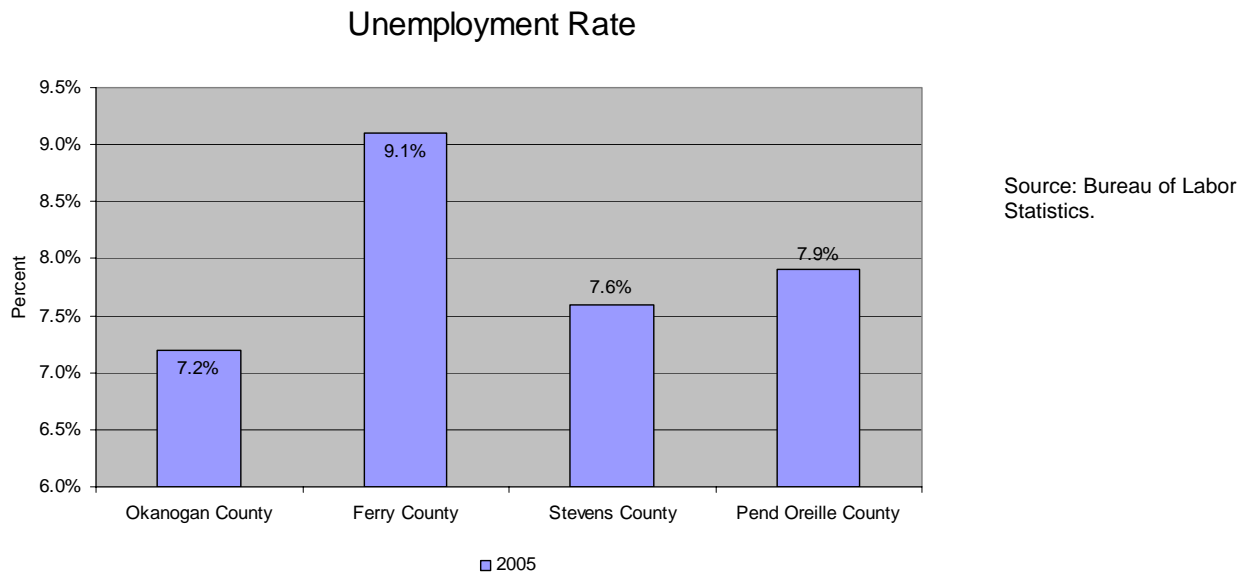
- Of the major categories, the highest paying sector is Manufacturing (Incl. Forest Products). It accounts for 20.7% of total employment and pays \$59,648 per year.
- Of the major categories that have data, the largest employment sector is Local Government. It accounts for 37.8% of total employment and pays \$34,093 per year.
- Goods-producing employees (718 workers) were paid an average of \$49,468.
- Service-providing employees (982 workers) were paid an average of \$16,146.
- Wages in the public sector (\$35,545) exceeded wages in the private sector (\$30,223) by 17.6%.

County Wages and Employment in 2005			
	Employment	% of Total	Average Annual Wages
Total Private & Public	2,970	100%	32,505
Total Private	1,699	57%	30,223
Goods-Producing	718	24%	49,468
Natural Resources and Mining	264	9%	46,595
Agriculture, forestry, fishing & hunting	71	2%	29,688
Mining	193	6%	52,812
Construction	103	3%	22,019
Manufacturing (Incl. Forest Products)	351	12%	59,648
Service-Providing	982	33%	16,146
Trade, Transportation, and Utilities	263	9%	19,801
Information	46	2%	23,037
Financial Activities	86	3%	21,742
Professional and Business Services	61	2%	25,447
Education and Health Services	96	3%	18,876
Leisure and Hospitality	198	7%	10,491
Other Services	234	8%	9,886
Unclassified	#N/A	#N/A	#N/A
Total Public	1,271	43%	35,545
Federal Government	119	4%	48,984
State Government	28	1%	37,382
Local Government	1,124	38%	34,093

Wages are shaded in green when they are more than 20% higher than the wages for all sectors and in red when they are less than 20% lower.

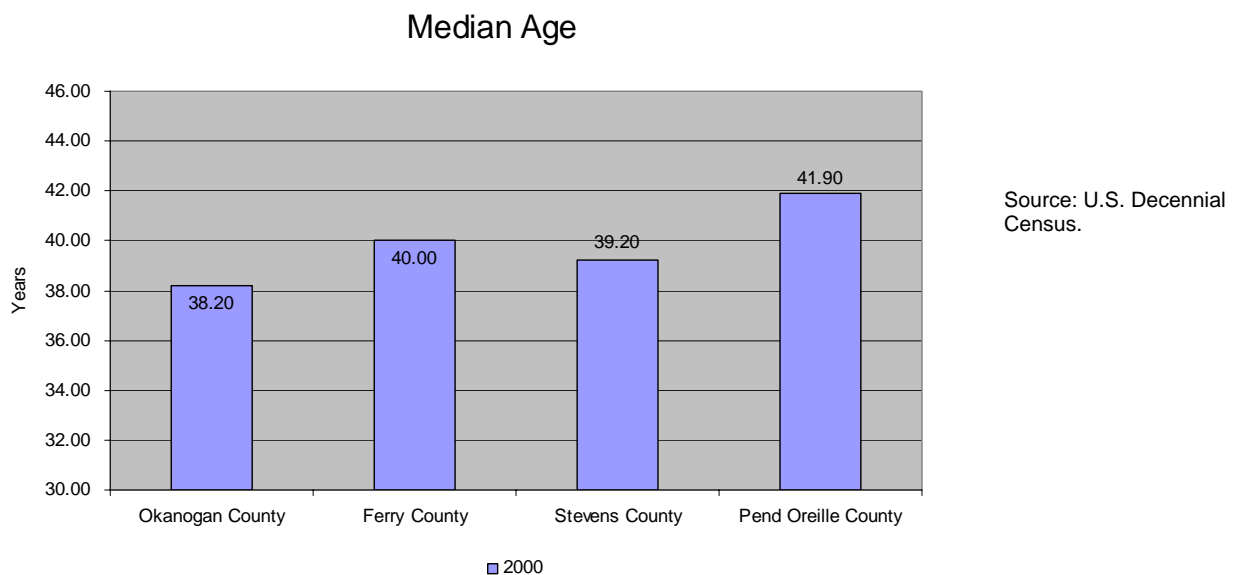
Unemployment

Unemployment in the four-county area is high by regional rural standards. It is especially high in Ferry County: 9.1 percent in 2005. Unemployment has declined in all counties in recent years. There is a significant seasonal variation in unemployment rates, with highs in the late winter and early spring and lows in the late summer and early fall.



Age

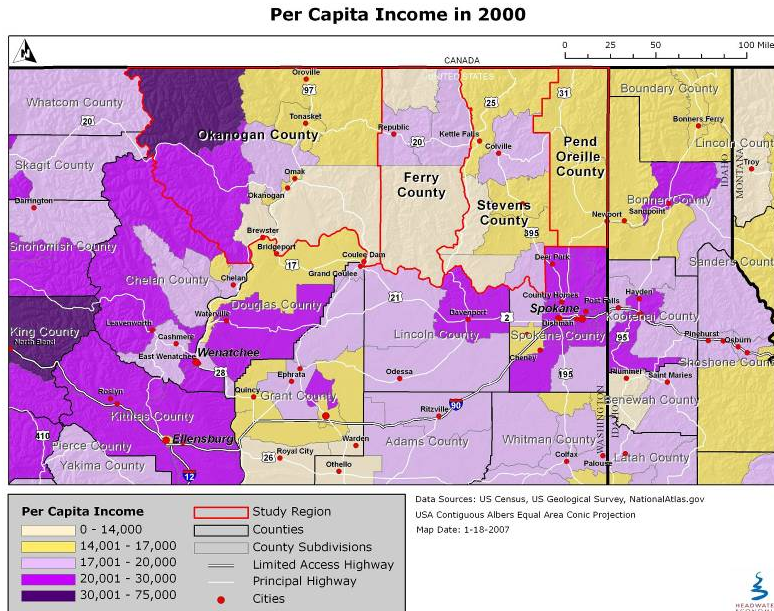
Pend Oreille is the oldest county (median age 42 years). Okanogan County is the youngest (median age 38 years).



Differences within Counties

Most demographic and economic information gathered by the U.S. Department of Commerce is only reported down to the level of the county. The U.S. Decennial Census provides a rich amount of detail at the sub-county level, in ten year increments. Two examples are shown below.

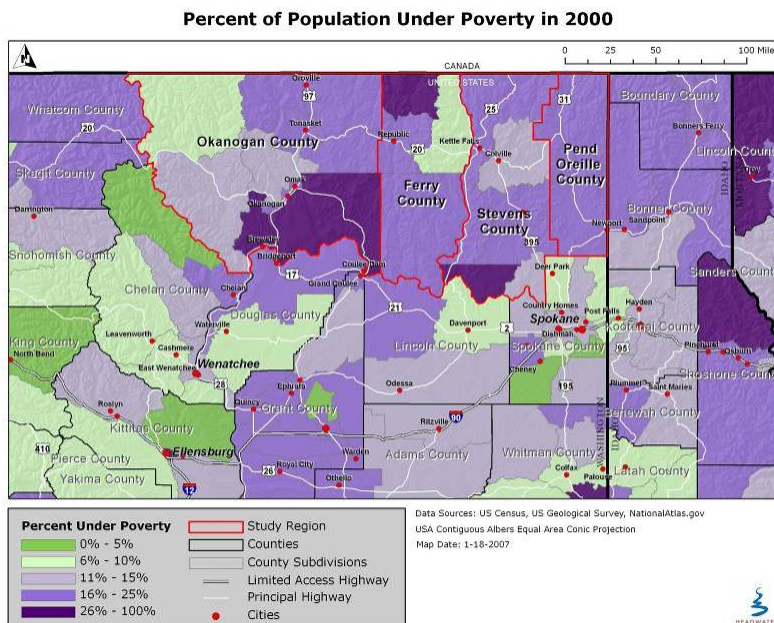
In 2000, Per capita income varied between and within study-area counties from less than \$14,000 to as much as \$20,000. Most, but not all, of the census subdivisions with lower per capita income match the geographies of the Confederated Tribes of the Colville and Spokane Tribe Indian reservations.



This map shows in dark purple areas with highest per capita income and in yellow areas with the lowest per capita income.

Source: U.S. Decennial Census.

Poverty in 2000 was highest in some, but not all, native reservation lands, and northwest Ferry County.

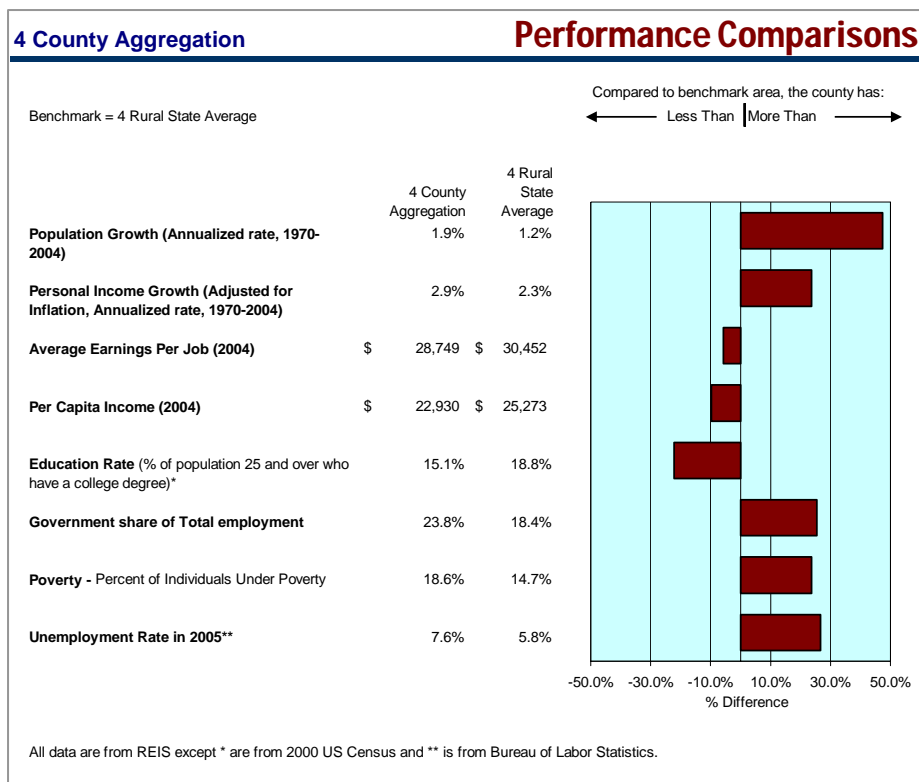


This map shows in dark purple areas with the highest percent of families below the poverty line.

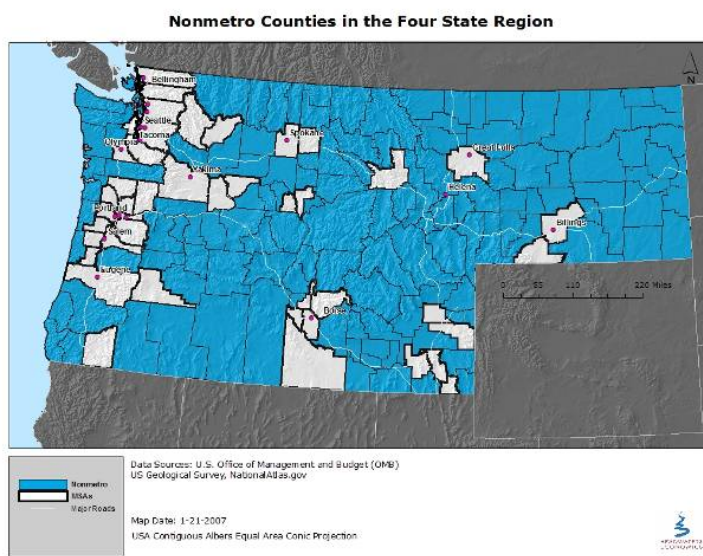
Source: U.S. Decennial Census.

Comparison with Rural Counties in Four-State Region

The four-county area of northeast Washington has some significant differences with the rural portion of the four northwest states. Indicators with a relatively large variation between the study area and four-state region are presented in the table below.



The study area has seen greater population and personal income growth, lower earnings per job, per capita income and education rate, and higher government share of employment, poverty and unemployment rate than the four state area.



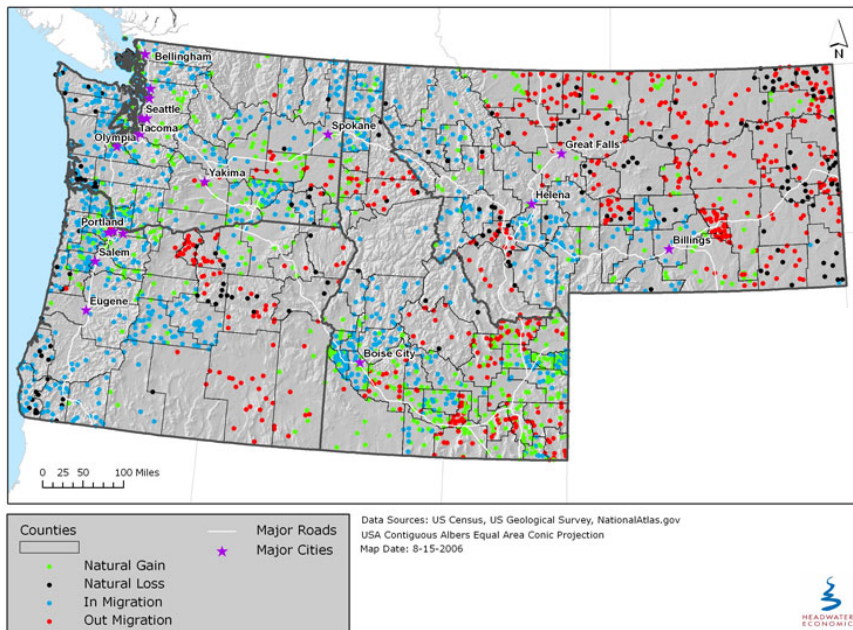
Non-metropolitan, or rural, counties are defined as counties the U.S. Census Bureau does not classify as part of a Metropolitan Statistical Area.⁴ The map at right shows in blue all rural counties in the northwestern United States. Counties in blue were aggregated and used as the benchmark for comparison with the four-county study area in the table above.

Source: U.S Office of Management and Budget.

⁴ For more information on MSA's see http://quickfacts.census.gov/qfd/meta/long_metro.htm.

Population in the four-county study area has grown faster than that of the larger rural region. This is largely due to in-migration in the eastern portion of the study area. It is also due to births outnumbering deaths in portions of the geography. See map below for the period 2000 to 2005 to compare migration and natural population change in northeast Washington to counties in the four-state region.

Composition of Population Change 2000-2005: Migration vs. Natural Change

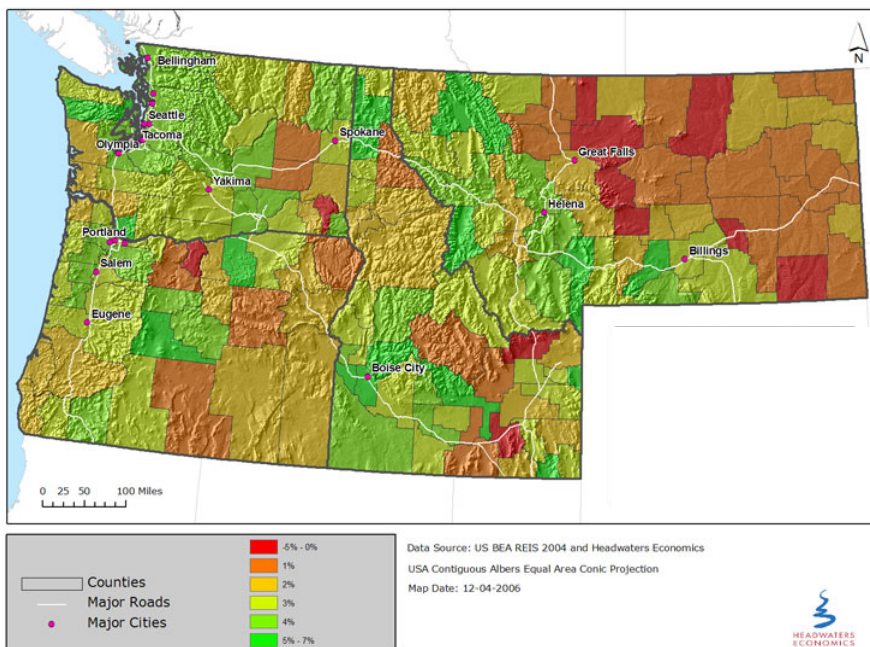


This map shows in blue areas where in-migration exceeds out-migration. Places where out-migration exceeds in-migration are shown in red. Black indicates more deaths than births, and green more births than deaths. Dots are randomly distributed within each county.

Source: U.S. Decennial Census.

Personal income in the study area has grown faster than that of the larger rural region. See map below for the period 1990 to 2004 to compare rates of personal income growth by county.

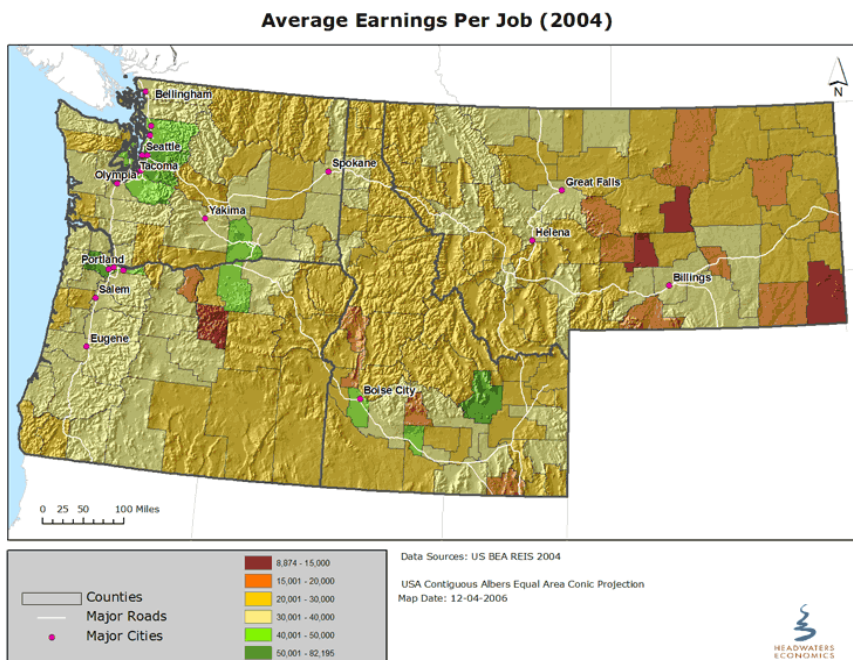
Personal Income Growth 1990 to 2004 (Annualized Percent Adjusted)



The fastest income growth rates are shown in green and the slowest are shown in red.

Source: U.S. Department of Commerce, REIS.

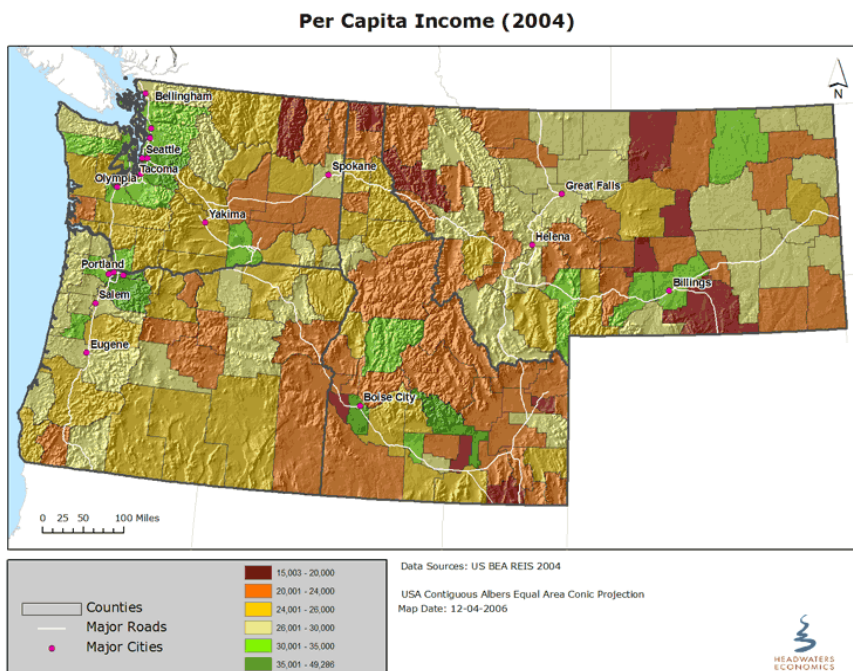
Average earnings per job in northeast Washington are lower than that of the larger four-state rural region. See the Earnings/Income section above for more details on employment and wages. The map below shows average earnings per job in 2004 for all counties in the four-state area.



Only a few counties in the Northwest have high wages. These are shown in green and are associated with larger cities and federal energy research and production facilities like Hanford and Idaho National Laboratory.

Source: U.S. Department of Commerce, REIS.

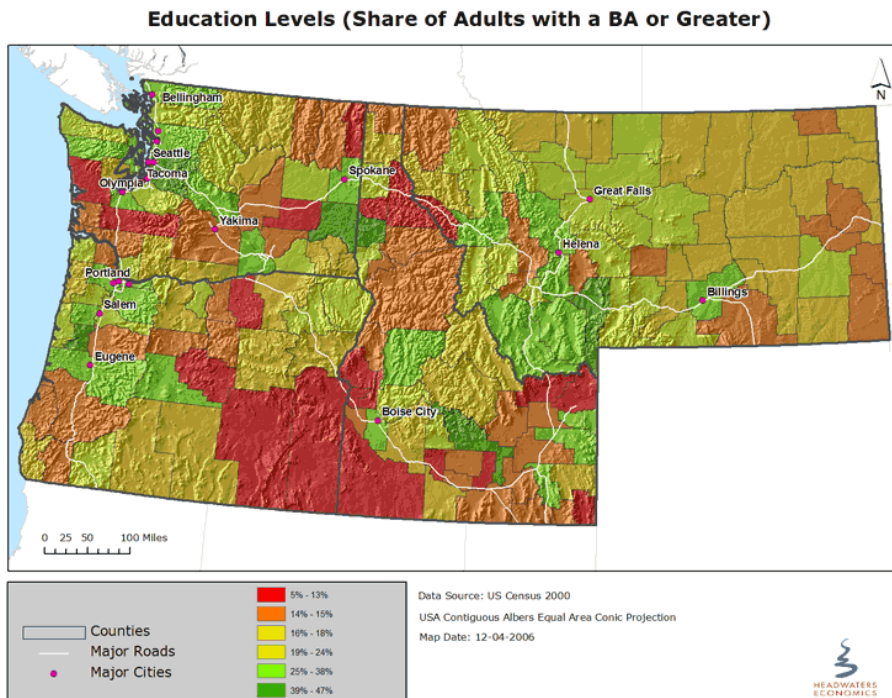
Per capita income in the study area is lower than that of the larger rural region. Note that per capita income includes labor *and* non-labor income. See map below to compare per capita income levels in 2004 across the larger region.



High per capita income is shown in green, while low per capita income is shown in red.

Source: U.S. Department of Commerce, REIS.

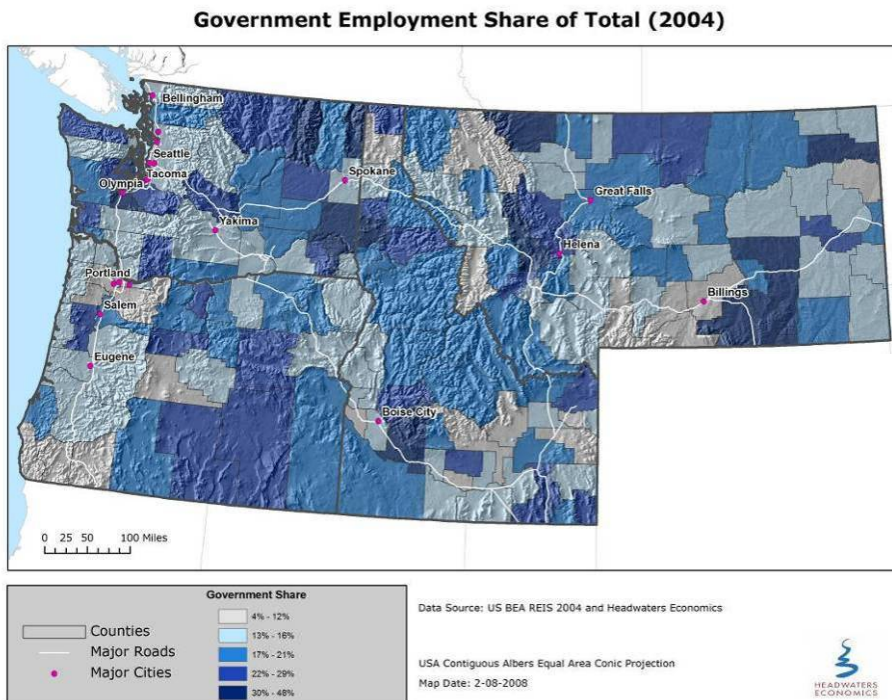
Education rates for adults (percent with a college degree) are lower than in the larger rural region. See map below for 2000 to compare college education rates across the four-state region.



High education rates are shown in green; low rates in red.

Source: U.S. Decennial Census.

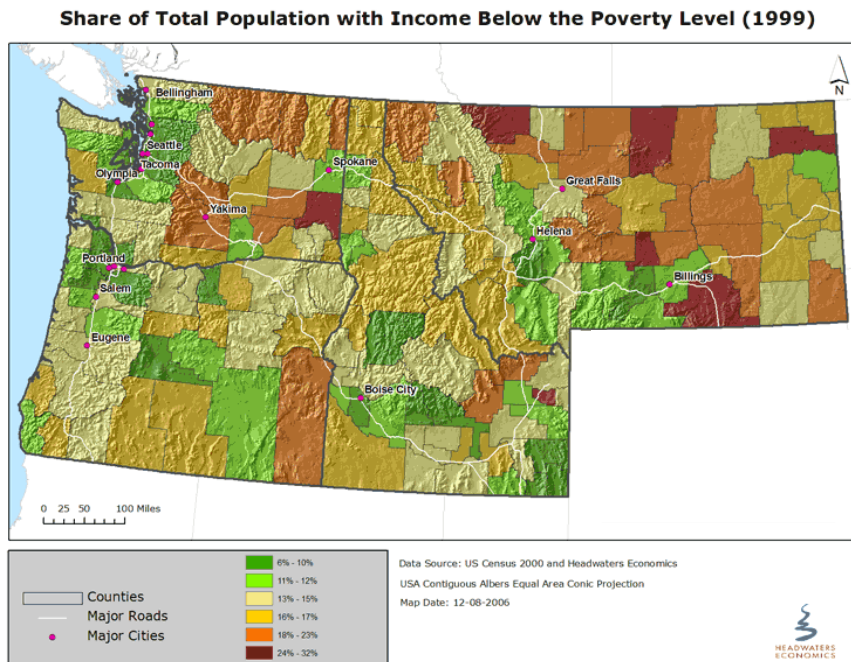
Government employment is higher in the study area than for the larger rural region. See map below for 2004 to compare government employment as share of total across the four-state area.



The highest dependence on government employment is indicated in dark blue.

Source: U.S. Department of Commerce, REIS.

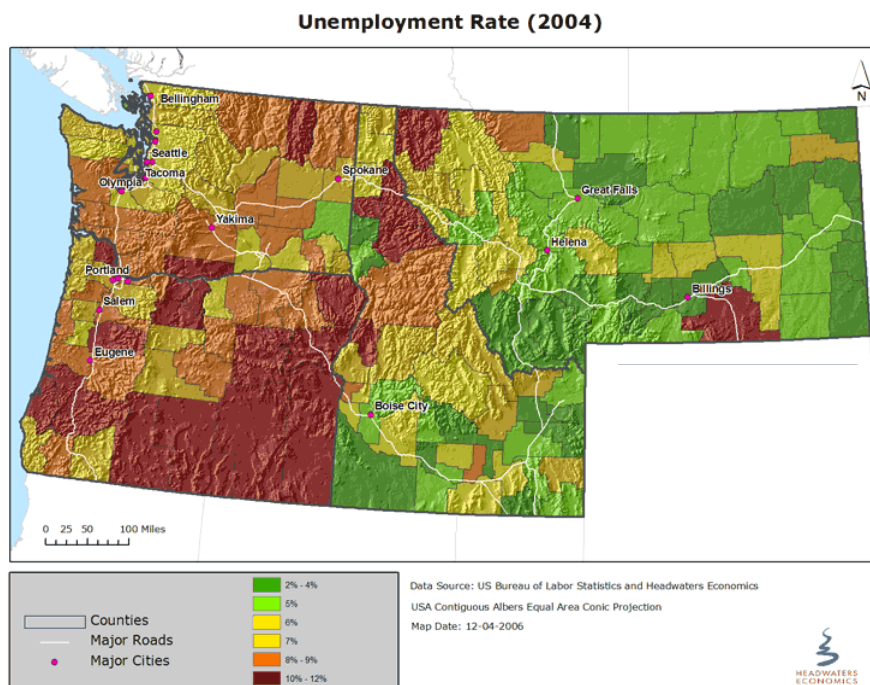
Poverty rates are higher in the study area than for the rural portions of the four-state area. See map below for 1999 to compare poverty rates across the four-state region.



The highest levels of poverty are shown in orange and dark red.

Source: U.S. Decennial Census.

Unemployment is higher in northeast Washington than for the rural portions of the larger region. See the map below for 2004 to compare unemployment rates across the northwest.

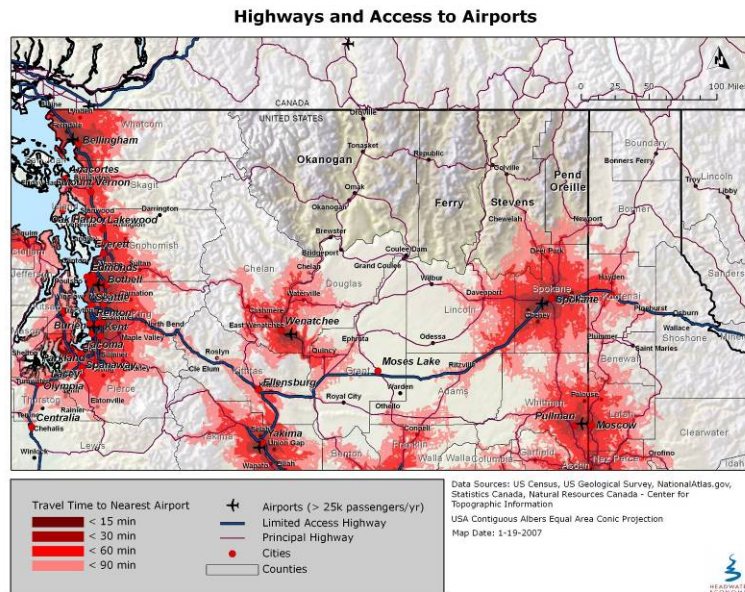


The rates of unemployment are shown in orange and dark red.

Source: Bureau of Labor Statistics.

Connectedness

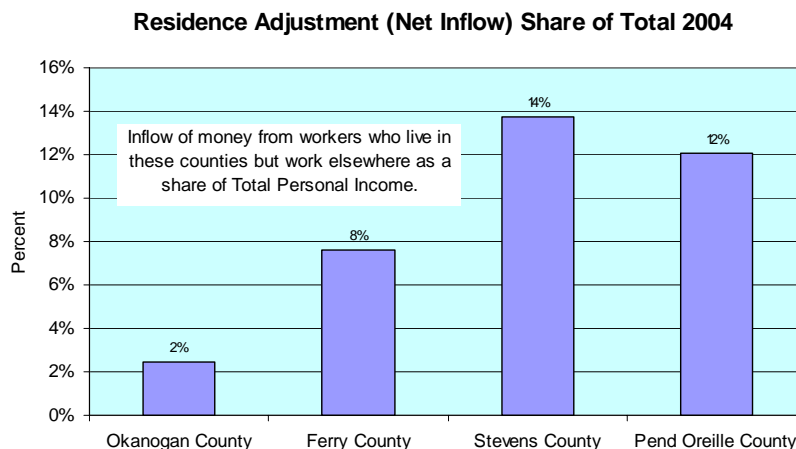
Just how remote and disconnected a rural economy is can have a large impact on the types of economic activities that can successfully be pursued. The information below shows various ways the region is both remote from, and connected to, larger population centers and markets.



Access to larger markets via commercial air travel and highways is a significant hurdle for businesses in many rural areas. The map at left shows commercial airports and drive times (in red) from them. The main populations in Okanogan and Ferry counties are remote, even by rural standards, and face challenges accessing larger markets. Whereas in Stevens and Pend Oreille counties, the populations from Chewelah and Newport, and to a lesser extent Colville, can reasonably access the Spokane market.

Source: U.S. Decennial Census; U.S. Geological Survey.

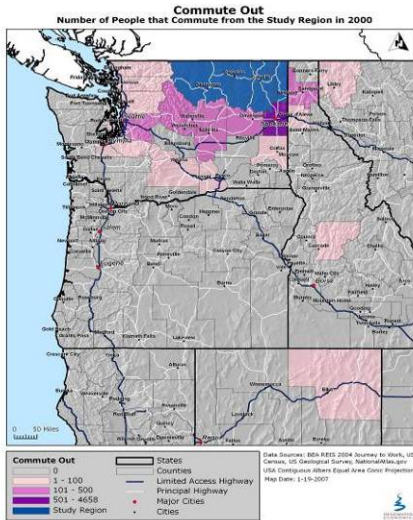
One way to gauge connectedness is to examine the flow of income across county borders. The net flow of income from people who live in one study-area county but commute to an adjacent county (which may or may not be in the four-county area) for work shows the regional nature of the economy. All four counties generate net income inflows, that is, more income is earned by people who live in a given county and work outside of that county than visa versa. Stevens (14%) and Pend Oreille (12%) counties have unusually high rates of cross-county income flow. It is likely that much of this commuting is to the greater Spokane area for work.



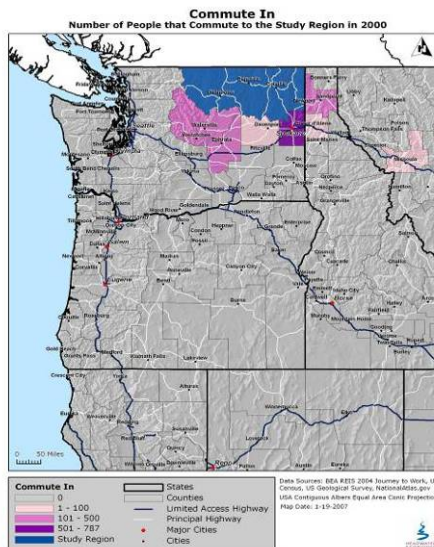
Source: U.S. Department of Commerce, REIS.

Commuting

There are a relatively large number of people who commute out of the region for work. The darker the purple the more people commute from the study region (blue) to these areas.

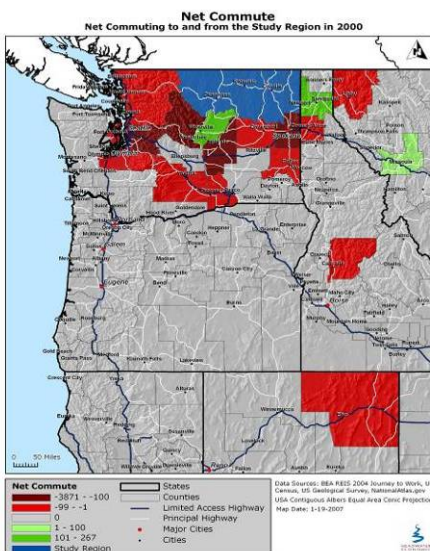


Commute into Region	# of Commuters
Spokane	787
Douglas	495
Bonner	480
Grant	168
Chelan	107
Lincoln	77
Missoula	19
Kootenai	18



A smaller number of people commute into the region for work. The darker the purple the more people commute from these areas to the study region (blue).

Commute from Region	# of Commuters
Spokane	4658
Grant	304
Bonner	300
King	263
Chelan	244
Douglas	228
Lincoln	126
Kootenai	48



The net commute figures show the importance of regional connections for the study area. The bulk of commuting is to Spokane. The darker the red the more people commute from the study region (blue).

Net	# of Commuters
Spokane	-3871
King	-263
Chelan	-137
Grant	-136
Lincoln	-49
Snohomish	-42
Kootenai	-30
Pierce	-26

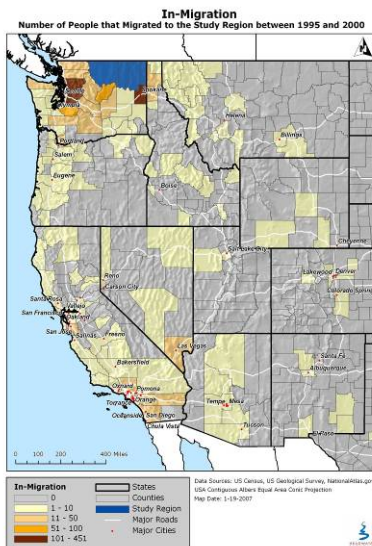
Source: U.S. Department of Commerce, REIS.

Migration



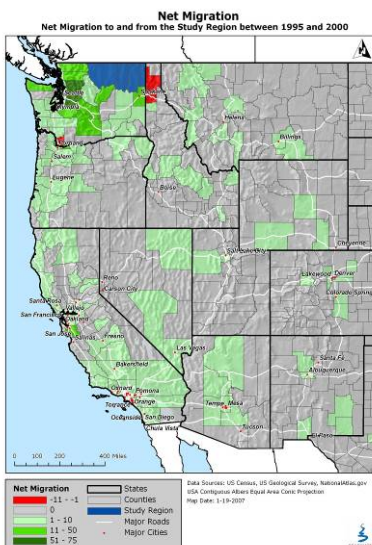
In the five-year period between 1995 and 2000 most people who left the study region departed to other parts of the state. Spokane and the Puget Sound area were the largest receiving areas for these émigrés.

Out-Migration	# of People
Spokane	422
King	121
Snohomish	47
Pierce	47
Douglas	44
Chelan	38
Grant	38
Bonner	33



In the same period people moving to the region came from a remarkably similar list of places. This pattern suggests a revolving door from and to the region.

In-Migration	# of People
Spokane	451
King	196
Snohomish	103
Pierce	69
Douglas	60
Chelan	46
Grant	38
Skagit	38



The net picture shows where, on balance, people are going to from the study area. Puget Sound and Spokane top the list.

Net	# of People
King	75
Snohomish	56
Spokane	29
Skagit	25
Whatcom	23
Pierce	22
Kittitas	17
Douglas	16

Source: U.S. Decennial Census.

Strengths and Weaknesses

Strengths

- Long-term gains in population, employment, and personal income
- In-migration, especially in the western part of study area
- Strong service and professional sector employment and income growth
- Declining unemployment
- Greater resilience coming out of recessions in recent years
- Parts of region well connected to regional metro area and airport
- High wages in mining, wood products manufacturing, and government

Weaknesses

- Population aging
- Little or no long-term employment and income growth in manufacturing (including wood products manufacturing) and agriculture
- Largest employment sectors are relatively lower wage, especially services
- High wage sectors have relatively few people employed in them
- Low per capita income and average earnings per job, even by regional rural standards
- Seasonal nature and high rates of unemployment
- Low college education rate among adults
- Above average poverty levels
- Parts of the region are remote and isolated from larger markets



Photos: John Eminger, Owner/Operator, 49 Degrees Ski Area/Eric Zamora photo; Republic, Washington/Eric Zamora photo; Ron Gray, Northeast Washington Forestry Coalition board member/Eric Zamora photo.

REGIONAL SOCIOECONOMIC TRENDS

Overall Findings

The population and economy of the region have grown over the last three decades. Once dependent on resource industries like agriculture, forestry and mining, the area is now more economically diversified. Parts of the region are connected to the Spokane regional economy, while others remain more isolated.

Sectors that have shown the strongest growth are generally related to service and professional occupations. And non-labor income is now the largest source of income. Resource sectors are not growing in the region and their share of total economic activity is declining. At the same time, these sectors, especially forest product-related manufacturing, pay among the highest private sector wages in the region. Unemployment is down but overall earnings are flat.

Four main opportunities emerge from the trends reviewed in this chapter: connectedness, adding value to traditional enterprises, capturing higher wage occupations, and attracting retirement and investment income.

1. Connectedness. Ensuring that individuals and businesses have access to high speed internet, regional service centers, and commercial airports for travel to larger markets are all important. The reverse is also true. Giving people a reason to come to the region can create opportunity. Visitors can become residents, business owners, and valued members of the community.
2. Adding value. It is unlikely that commodity-based businesses by themselves will increase jobs or wages substantially. Resource sectors like forestry and wood products manufacturing should focus on how best to compete in more intensive value-added activities.
3. Higher wages. Service and professional sectors are the area's largest and fastest growing. At present many of these jobs are relatively low wage. An emphasis on skills and quality – in schools, the environment, community interaction – can attract higher wage components, such as producer services, of the growing service economy.
4. Non-labor income. This is the region's largest source of income. Protecting a quality of life that attracts retirees and investment income offers continued opportunity.

The Coalition's Blueprint for National Forest lands is one opportunity for residents and business owners to think about how to increase connectivity, skills, high-value activities, and quality in traditional and new industries alike. The next chapters delve into two topics – Timber and Wilderness – at the core of the Blueprint proposal.

THE SHIFTING ROLE OF THE WOOD PRODUCTS INDUSTRY

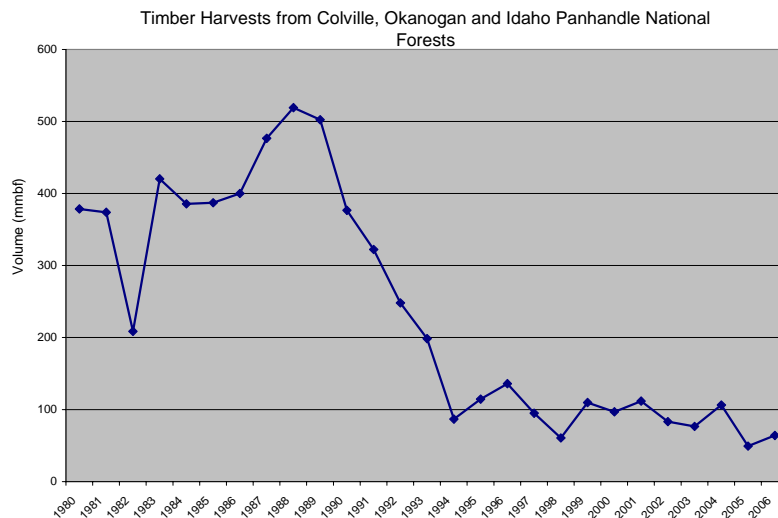
The Northeast Washington Forestry Coalition estimates that its Blueprint proposal will result in an increased harvest over 2005 levels of 20 to 40 million board feet (mmbf) from nearby National Forest lands.

In this chapter we look at long-term trends in the regional timber industry. We ask how an increase in National Forest timber will impact the local timber economy, and offer suggestions for maximizing benefits. We conclude with a section on the possible future role of the timber industry in light of the collaborative land management approach proposed by the Coalition.

The Regional Perspective: Timber and the Economy

Timber harvests on National Forests in the region mirror national trends, and are affected by similar national economic and policy forces. While timber harvests have declined locally, the economy has grown and diversified, although at different rates in each of the four counties.

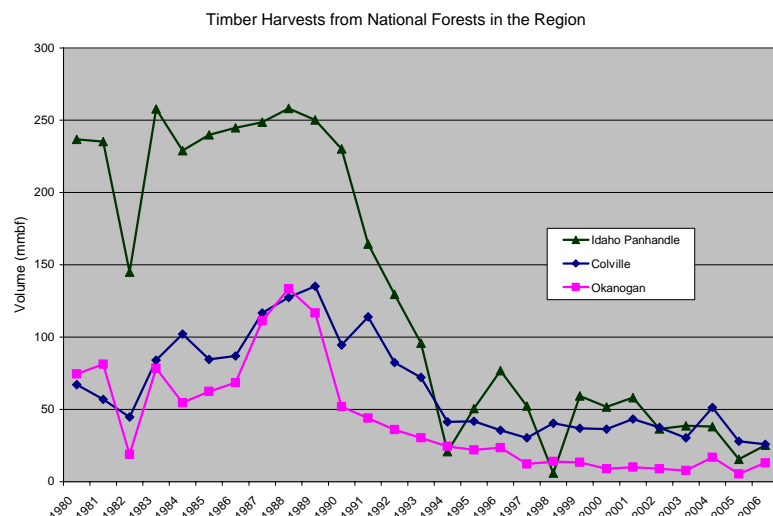
Historical Timber Harvests



Timber harvest levels on the three National Forests of the region – the Okanogan, Colville and Idaho Panhandle – have declined significantly over time. At their peak in 1988, these three forests produced over 519 million board feet (mmbf) in timber. By 2006, a little over 64 mmbf were harvested from these forests, a decline of 88 percent.

Source: USDA Forest Service, 2007. Data provided by Diane Golemis, based on "Cut and Sold Reports."

<http://www.fs.fed.us/r6/nr/fp/FPWebPage/FP70104A/FP70104A.htm>

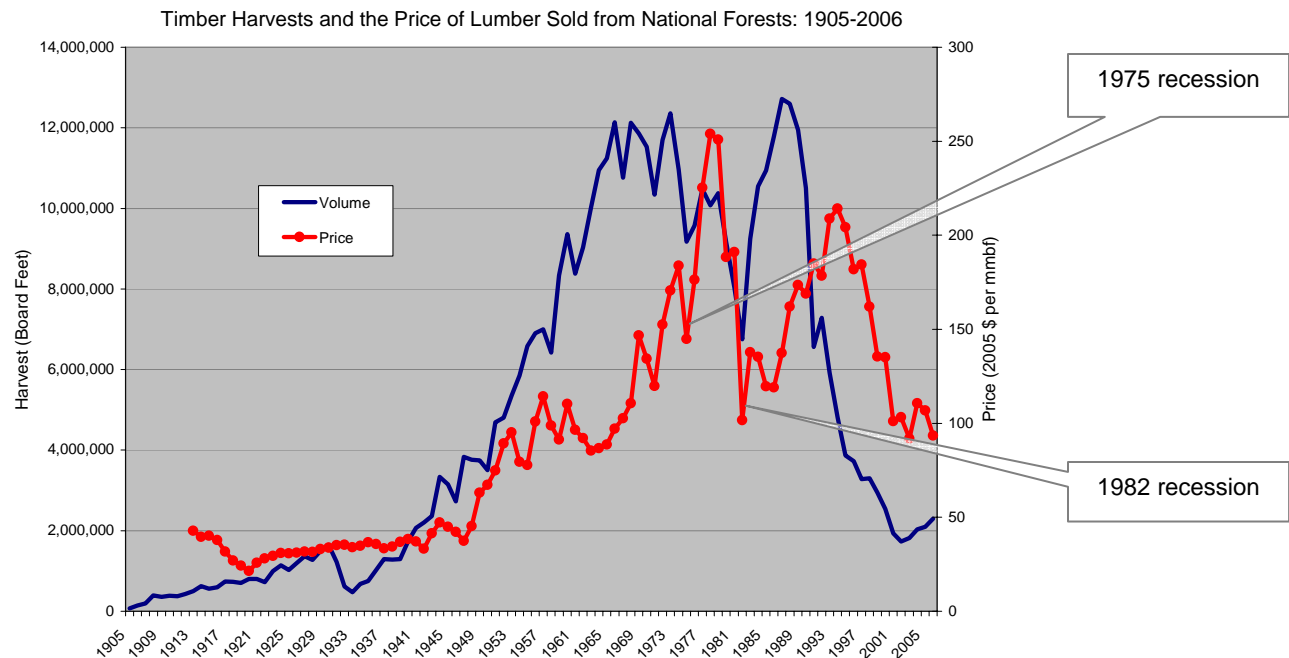


The bulk of the reduction in harvests can be attributed to declines on the Idaho Panhandle National Forest, which at peak harvest levels in 1988 accounted for 50 percent of the volume. By 2006, harvest levels on the Panhandle National Forest declined to 25.3 mmbf, slightly below that of the Colville National Forest, which provided 25.8 mmbf. The Okanogan in 2006 provided 13 mmbf of timber.

Source: USDA Forest Service, 2007, "Cut and Sold Reports."

Regional Timber Harvest Trends Compared to National Trends

Timber harvests on the National Forests of northeast Washington and northern Idaho follow national trends. The figure below shows the long-term harvest trends, from 1905 to 2005, from all National Forests, as well as the prices of the lumber sold off these forests. Today timber harvesting on the National Forest system is a little over 2.3 billion board feet.



Source: USDA Forest Service, 2007.

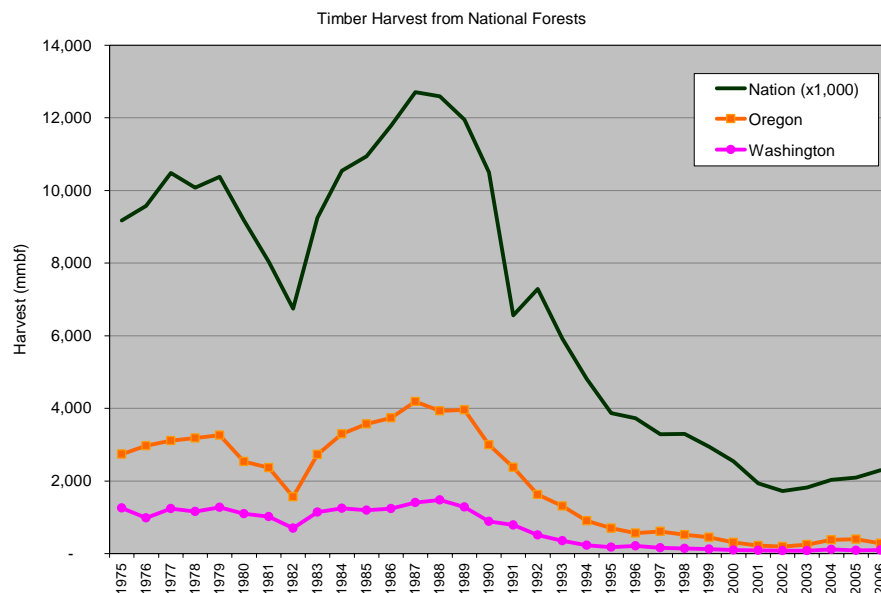
http://www.fs.fed.us/forestmanagement/reports/sold-harvest/documents/1905-2006_Natl_Sold_Harvest_Summary.pdf

National-level events can be detected in the trend lines above. These include:

- The depression in the 1930s which resulted in a decline in harvests.
- The rising demand for homes following World War II and the creation of a professional timber-oriented program within the USDA Forest Service can be seen in the rapid and sustained harvest levels throughout the 1950s, 1960s, 1970s, and the early half of the 1980s.
- The effect of recessions, in 1975 and 1982, on a decline in prices and harvest levels can also be seen, resulting in rapid declines in harvest levels.
- More generally, changing public attitudes about National Forests, international competition, new scientific information, changes in management philosophy, etc. have dramatically reduced timber harvests beginning in the late 1980s.

One key point is that what happens on National Forests is subject to a variety of factors that are outside the control of the local economy.

The figure below shows the trends in timber harvest from National Forests in Oregon and Washington (Region 6 of the USDA Forest Service) compared to timber harvests on all National Forests in the country. Trends that affected timber harvests nationally played the same role in the region.



Source: USDA Forest Service, 2007. "Cut and Sold Reports."

http://www.fs.fed.us/forestmanagement/reports/sold-harvest/documents/1905-2006_Natl_Sold_Harvest_Summary.pdf

Several national-level events affected harvest levels in the region. These include the 1982 recession which curtailed the demand for construction lumber, resulting in a drop in demand for lumber and a subsequent decline in National Forest timber harvests, regionally and nationally. And, more significantly, a change in public attitudes toward the management of National Forests. This was most powerfully symbolized in the Northwest Forest Plan, adopted in 1994 and gradually enacted in following years, which placed significant restrictions on the type and location of forestry activities on public lands.

National Forest Timber Supply and Other Economic Indicators

While harvests on the three National Forests in the region declined, the economy of the region (the aggregate of the four counties) showed an increase in several important economic indicators, along with a decline in the rate of unemployment (see table on the next page).

From 1990 to 2004 total personal income in the region, in real terms, increased by 49 percent. This growth consisted of increases in labor income (51%) and non-labor income (47%; dividends, interest, rent, and transfer payments). Wages increased by nine percent and per capita income by 18 percent (higher than wage increases due to the rapid rise in non-labor income).

The same trend – an increase in key economic indicators in the midst of timber harvest declines – is evident in each of the four counties of the region. The exception is a decline in average wages per job in Ferry County (a decline of 22% from 1990 to 2004), likely reflecting the loss of local lumber mills and the closure of a mine.

Note that between 1990 and 2004 per capita income in Ferry County rose by 7 percent, driven primarily by a 75 percent increase in non-labor sources. In spite of Ferry County's loss of mining and milling jobs, population, employment and real income rose, and unemployment declined.

These statistics indicate that the economy of the region is diverse and not wholly dependent on the timber industry. In other words, it has diversified to the extent that public lands management decisions affecting the timber industry can be mitigated in part by growth in other sectors of the economy.

As the previous chapter of this report illustrates, these figures also show that the rate of growth varies from one county to the next. For example, Pend Oreille County has the most robust growth: 33 percent increase in employment and 67 percent increase in personal income, driven by a high growth in labor income, combined with a healthy growth (14%) in wages per job, and the highest wage rate (\$28,351) in 2004. As following sections will show, Pend Oreille County also has the most diverse timber industry, with the greatest emphasis on value-added applications.

Note:

For 2005 wage information by industry see pages 11, 20-23, 49.

Source: U.S. Department of Commerce, 2005, Regional Economic Information System (REIS); Bureau of Labor Statistics, 2005.

National Forest	Timber Harvest (mmbf)			% Change 1990 to 2004
	1990	2000	2004	
Okanogan	51.9	8.9	16.9	-67%
Colville	94.6	36.4	51.4	-46%
Idaho Panhandle	230.2	51.7	38.1	-83%

Regional Economy (2004 Dollars)	1990	2000	2004	% Change 1990 to 2004
Population	79,778	98,867	100,739	26%
Employment	37,629	45,385	46,400	23%
Total personal income (\$ Mil)	1,553	2,165	2,310	49%
Non-labor income (\$ Mil)	624	928	940	51%
Labor income (\$ Mil)	929	1,237	1,370	47%
Average wages per job	26,288	26,636	28,749	9%
Per capita income	19,470	21,902	22,930	18%
Unemployment rate	9.5%	7.8%	8.4%	-12%

Okanogan County (2004 Dollars)	1990	2000	2004	% Change 1990 to 2004
Population	33,424	39,578	39,472	18%
Employment	19,535	22,383	23,588	21%
Total personal income (\$ Mil)	691	895	1,005	45%
Non-labor income (\$ Mil)	281	381	383	36%
Labor income (\$ Mil)	410	514	622	52%
Average wages per job	24,061	25,229	28,351	18%
Per capita income	20,679	22,608	25,459	23%
Unemployment rate	9.4%	8.2%	8.0%	-15%

Ferry County (2004 Dollars)	1990	2000	2004	% Change 1990 to 2004
Population	6,329	7,290	7,523	19%
Employment	2,569	2,782	2,766	8%
Total personal income (\$ Mil)	114	138	145	27%
Non-labor income (\$ Mil)	41	67	72	75%
Labor income (\$ Mil)	73	71	73	1%
Average wages per job	32,930	25,601	25,678	-22%
Per capita income	18,027	18,939	19,336	7%
Unemployment rate	11.5%	9.4%	10.6%	-8%

Stevens County (2004 Dollars)	1990	2000	2004	% Change 1990 to 2004
Population	31,101	40,250	41,294	33%
Employment	12,477	16,032	15,985	28%
Total personal income (\$ Mil)	581	865	880	51%
Non-labor income (\$ Mil)	224	357	361	61%
Labor income (\$ Mil)	358	508	519	45%
Average wages per job	27,516	27,659	28,490	4%
Per capita income	18,689	21,499	21,321	14%
Unemployment rate	8.2%	7.2%	8.3%	1%

Pend Oreille County (2004 Dollars)	1990	2000	2004	% Change 1990 to 2004
Population	8,924	11,749	12,450	40%
Employment	3,048	4,188	4,061	33%
Total personal income (\$ Mil)	167	267	279	67%
Non-labor income (\$ Mil)	78	123	124	59%
Labor income (\$ Mil)	89	144	155	75%
Average wages per job	29,944	30,917	34,170	14%
Per capita income	18,678	22,747	22,424	20%
Unemployment rate	13.9%	7.6%	8.8%	-37%

Summary Findings

- National Forest timber harvests in the region have declined substantially since the late 1980s.
- Regional timber harvest trends mirror national trends, though harvest declines in the region have been less severe, and are driven by many of the same large-scale forces, such as recessions and national policy shifts.
- While regional National Forest timber harvests have declined, the overall economy has grown and diversified.

A diverse economy is more resilient and adaptable to change, and less subject to the ups and downs of a single industry. A diverse economy is also less dependent on any single National Forest management action for its survival.

However, a growing and more resilient economy does not imply that a predictable supply of timber from the National Forests is not important for certain sectors of the economy, or for individual businesses. For example, the Vaagen Brothers mill in Colville is currently running at around 80 percent of capacity, and would benefit from additional National Forest lumber, which would allow them to add another shift.⁵

The next section looks at whether increases in timber harvests will lead to more jobs.



Photo: forest thinning, Eric Zamora photo.

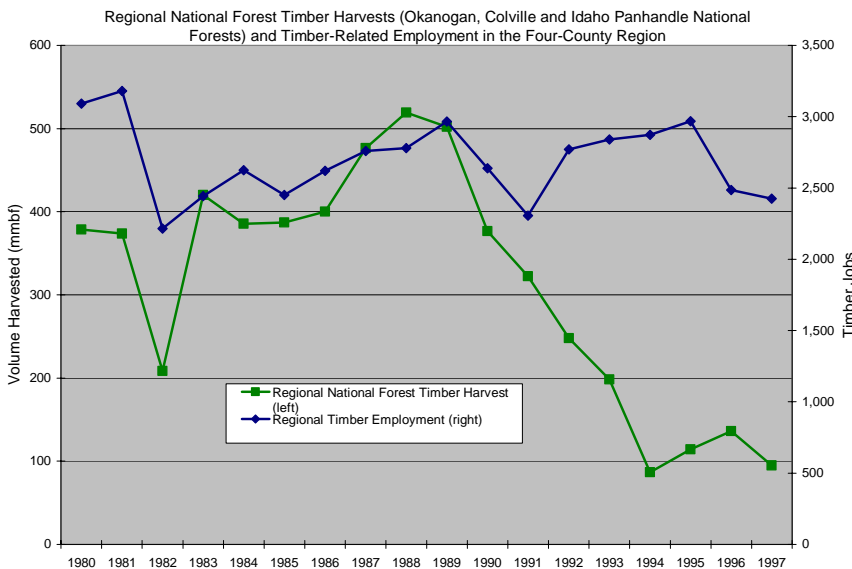
⁵ Personal conversation with Russ Vaagen, Manager, Vaagen Bros. Lumber, January 19, 2007. Mr. Vaagen estimates that the number of direct local timber jobs are as follows: 130 employees in the Colville mill; 100 in the Stimpson mill in Arden; 220 at the Boise Cascade complex in Kettle Falls; 210 log trucks drivers (approximately 70 per mill); 600 loggers working in the woods; plus 400 truck drivers who haul forest by-products, such as bark and wood chips; for a total of 1,660 wood products workers, not counting the paper mill.

Timber Harvests, Employment, and Wages

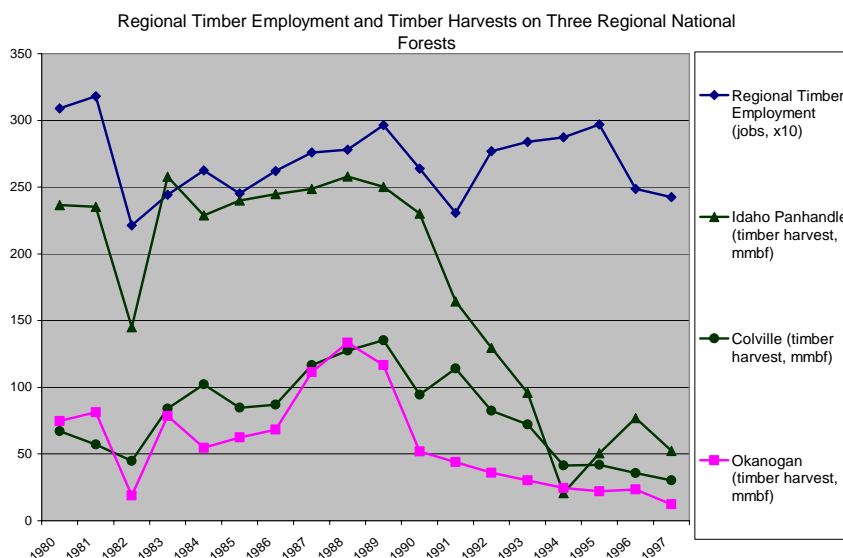
Connecting timber-related employment to National Forest harvest levels is difficult because timber employment is subject to many different market forces.

However, timber-related employment can increase in the face of declining harvests on area public lands, due to new timber supply from other lands in the region and from a variety of sources out of the region, and the addition of value-added activities.

National Forest Timber Supply and Regional Timber Employment



Timber harvests from the three regional National Forests dropped from over 519 million board feet 1988 to 86.8 million board feet 1994. During that time employment in lumber and wood products and paper and allied products manufacturing increased from 2,796 in 1988 to 2,913 jobs in 1994.



Among the three local National Forests the largest decline in harvests occurred on the Idaho Panhandle National Forest.

Source: USDA Forest Service, 2007. "Cut and Sold Reports;" Bureau of the Census, 2006, *County Business Patterns* – employment by industry for Lumber and Wood Products Manufacturing, Paper and Allied Products. Historical employment data was plotted up to 1997 because after that year the U.S. Department of Commerce used a different classification system, with no backward compatibility.

There are several possible reasons for the relative stability of area timber-related employment:

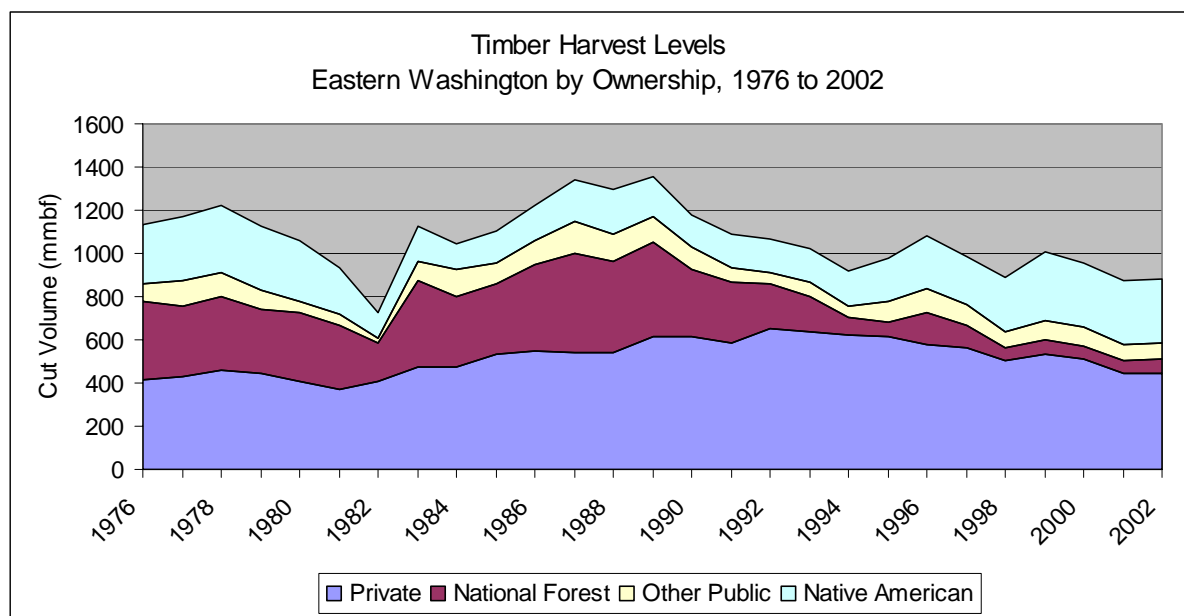
- *Alternative timber sources* from other lands in the region and a variety of sources outside the region (see next section);
- An increase in *value-added manufacturing*, ranging from log cabins to furniture;
- A shift in emphasis toward harvesting *small diameter lumber*, which is more labor-intensive, particularly for those working in the woods; and
- Even though several small mills were closed in the 1990s and early 2000s, employment losses may have been more than offset by the *opening of a new paper mill* in Pend Oreille in 1992.⁶

In other words, increases in timber-related employment are not tied solely to the volume of National Forest timber harvests. Jobs also depend on alternative timber sources, prices, public opinion, and other market forces. Recent historical trends suggest (especially with regards to Pend Oreille County) that a key feature to maintaining the relatively high-wage timber jobs will be the expansion of value-added manufacturing.

National Forest Timber in the Larger Timber Supply Context

The sources of regional timber has changed significantly over time.

As the figure below shows, harvest trends in eastern Washington have shifted over the years. Overall harvest levels since 1976 have been as high as 1,359 mmbf in 1989 and as low as 874 mmbf in 2001. National Forest timber volume had the greatest volatility. Its volume shrank from 32 percent of total in 1976 to 7 percent in 2002 for all counties in eastern Washington. The largest National Forest contribution came in 1987 with 462 mmbf, or 35 percent of all timber harvested in eastern Washington that year.



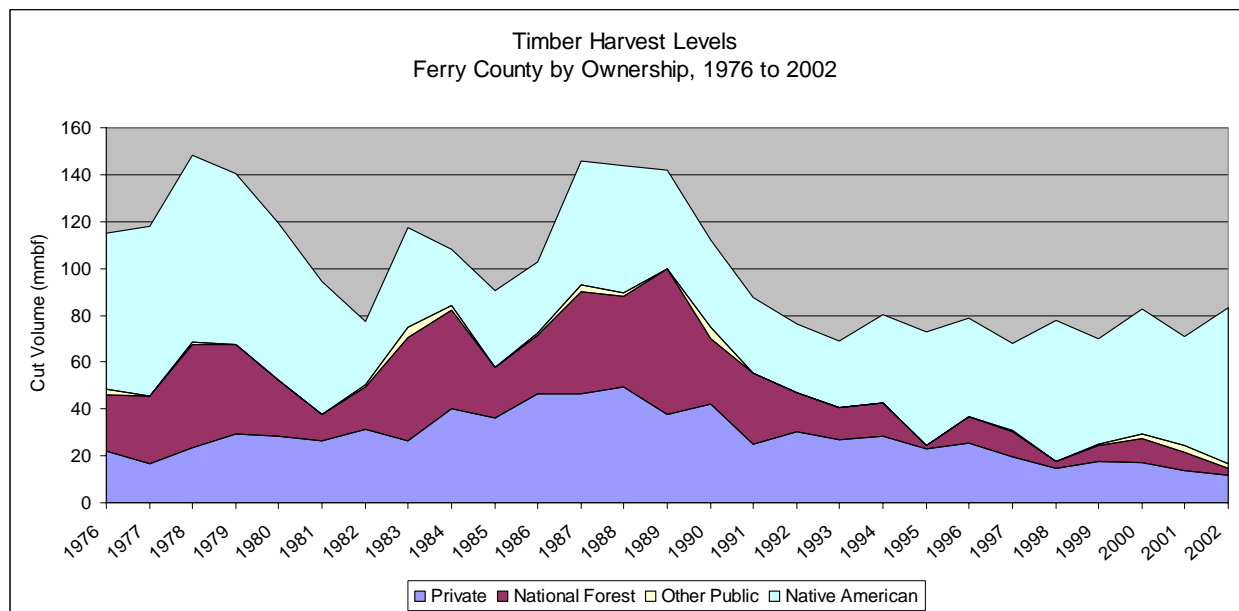
Source: Washington Department of Natural Resources, Timber Harvest Reports, 1976 to 2002.

⁶ Personal conversation with Russ Vaagen, Manager, Vaagen Bros. Lumber, January 19, 2007.

Since the late 1980s, overall harvest levels have declined, while private and other public sources have held more or less steady. Private timber sources in particular have helped keep overall volume up, and amounted to 84 percent of all timber harvested in eastern Washington in 2002. In 1976 harvest from all land ownerships was 1132 mmbf, and in 2002 it was 878 mmbf.

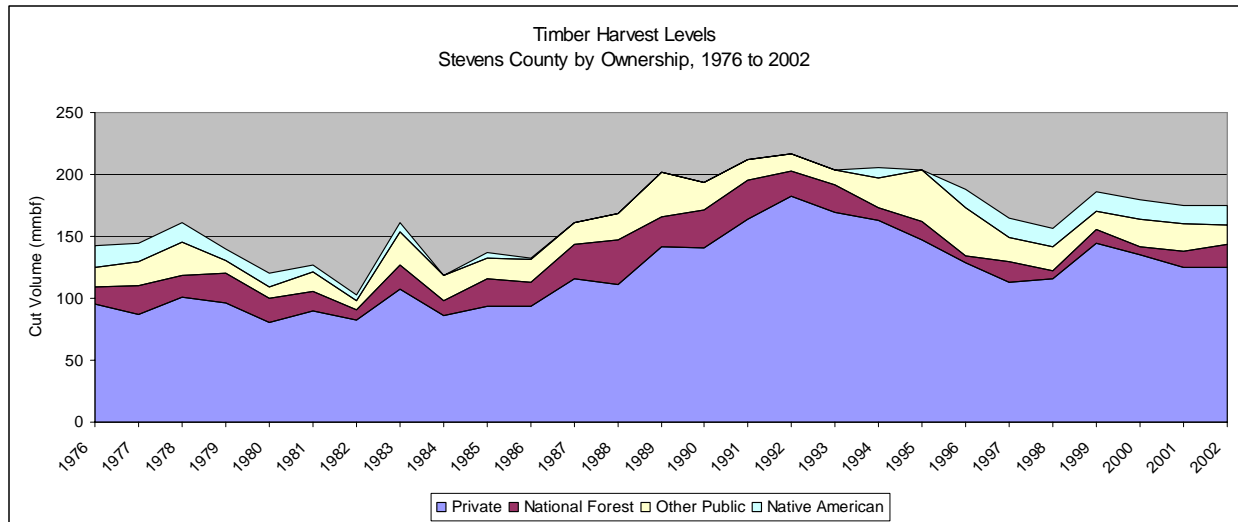
Regional trends vary by county in the study area. The graphs below and on the next page show county-level harvest trends for the three counties that have more significant forestry and wood products industries.

In Ferry County timber harvests peaked in 1977 at 149 mmbf and 1988 at 144 mmbf, and saw lows in 1995 at 73 mmbf and 2001 at 71 mmbf. Native lands have contributed a large proportion of all harvested timber since 1976. These lands accounted for the largest timber volume since the early 1990s and in 2002 contributed 80 percent of total county harvests. National Forest harvests have generally declined since 1989 when they made up 44 percent of total. In 2002 they accounted for 4 percent of all timber harvests in the county.



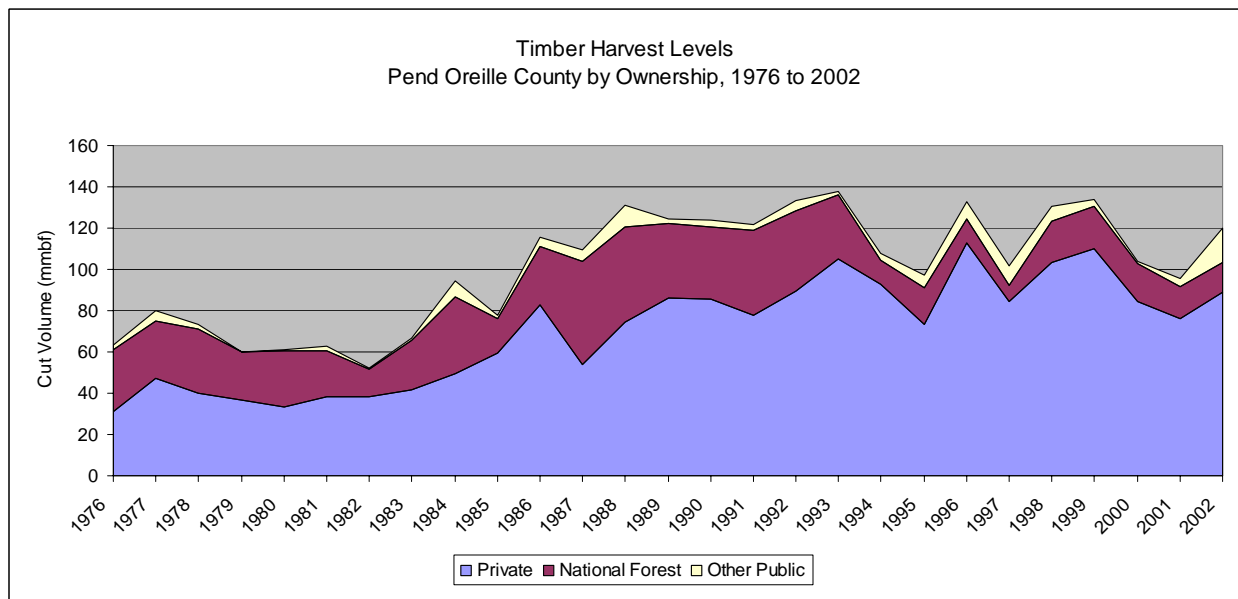
Source: Washington Department of Natural Resources, Timber Harvest Reports, 1976 to 2002.

In Stevens County timber harvests (see next page) grew from 143 mmbf in 1976 to 217 mmbf in 1992 and declined to 175 mmbf in 2002. Private lands have consistently made up the largest source of harvested timber, and in 2002 accounted for 71 percent of total. National Forest lands have historically made up a small percentage of the total harvest. They peaked at 22 percent in 1988 and in 2002 accounted for 11 percent of total timber harvests in the county.



Source: Washington Department of Natural Resources, Timber Harvest Reports, 1976 to 2002.

In Pend Oreille County harvests nearly doubled between 1976 and 2002, and peaked in 1999 at 131 mmbf from all sources. Private lands account for most of the growth in timber volume, and in 2002 made up 74 percent of all timber harvested in the county. Meanwhile, National Forest contributions have declined from 48 percent of total in 1976 to 12 percent in 2002. The contribution of timber from Native lands is negligible in Pend Oreille County.



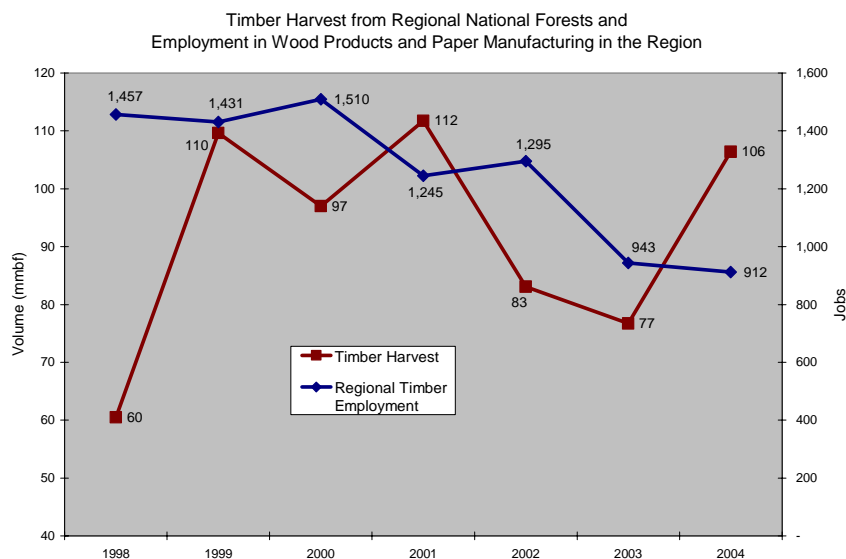
Source: Washington Department of Natural Resources, Timber Harvest Reports, 1976 to 2002.

In the three study-area counties with relatively significant forestry and wood products industries, National Forest lands make a relatively small contribution to overall harvest volume. Native lands are a significantly larger and growing source of timber in Ferry County. Private timber lands are the largest timber source in Stevens and Pend Oreille counties.

Increased National Forest Timber Harvests and the Potential for New Timber Employment

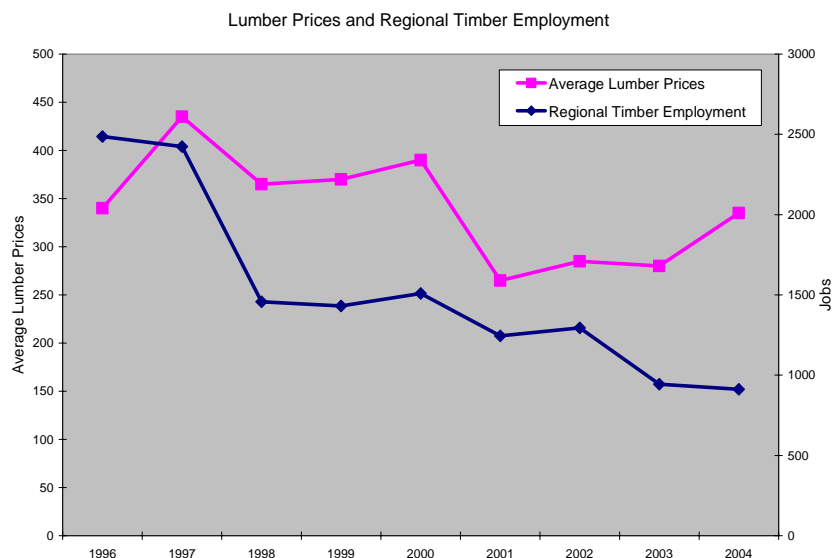
What effect will the Blueprint proposal to increase harvest levels from area National Forests have on employment in the local timber industry?

One way to estimate the potential impact of an increase of timber harvests is to examine what has happened in the past during periods of increased timber supply. The figure below shows periods in the recent past where timber harvests from the Okanogan, Colville, and Idaho Panhandle National Forests have increased and compares it to employment in the wood products industry in the four-county area. The figure at the bottom of this page compares regional timber employment to timber prices.



The figure at left appears to indicate a counter-cyclical trend, where jobs decline as harvests increase, and jobs rise as harvests decline. However, the relationship may indicate is a lag time, where it takes time for timber companies to respond to fluctuations in lumber prices (which are impacted by, among other variables, timber supply). As prices go up, mills add shifts, for example, and this in turn increases the demand for workers.

Source: USDA Forest Service, 2007, "Cut and Sold Reports." Bureau of the Census, 2006, *County Business Patterns* – employment by industry for Lumber and Wood Products Manufacturing, Paper and Allied Products. Current employment information is organized by the Census according to the North American Industrial Classification System (NAICS) and is not backward compatible with the previous Standard Industrial Classification (SIC) system, which existed before 1998.



The figure at left indicates that as lumber prices decline, employment also declines; as prices rise, employment rises. What these two figures illustrate above all is the importance of lumber prices. Prices are a reflection of the marketplace, which in turn is a reflection of numerous other factors, including timber supply and demand for wood products.

Source: Timber prices from Random Lengths (www.randomlengths.com). Provided by Russ Vaagen, Vaagen Bros. Lumber.

How many timber jobs would be created from 20-40 million board feet of additional timber harvests from the region's National Forests?

Estimates vary regarding the number of direct timber jobs created per million board feet (mmbf) of timber harvested from National Forests. Both Keegan (2004, for Montana) and the Forest Service and BLM (2000, for the Interior Columbia River Basin) estimate nine jobs are created in the timber industry for every mmbf harvested.⁷ Han *et al* estimate a range of nine to 11 jobs/mmbf, depending on the amount of paper manufacturing in the region.⁸ Warren (2004, for WA and OR) estimates 13.2 jobs/mmbf.⁹

Assuming a ratio of 11 jobs/mmbf, the range of jobs from an additional 20-40 mmbf of timber harvests from the region's National Forests could create anywhere from 220 to 440 new jobs in the wood products industry. An estimate like this will more likely hold true if there is no new application of labor-saving technologies and area mills bid successfully on new timber sales. It also assumes that the constraint to wood products employment is lack of supply, and not a lack of demand for timber products.

While the supply of logs made available from nearby National Forests is a factor influencing the profitability of local mills – and therefore the viability of local timber employment – it is one of a number of factors that require attention. Other factors that influence the timber industry are:

- Lumber prices;
- Demand for lumber and construction materials;
- Supply of timber (local, regional, national, international, private, public);
- International trade conditions (barriers or liberalization);
- Interest rates;
- Mechanization of mills, or lack thereof;
- Local and international competition;
- Debt load of local mills;
- Labor, taxes and other input expenses;
- Distance to markets – rail and trucking costs and log haul distances;
- Size of a mill and economies of scale;
- Whether a mill is tooled to produce the type of product in demand in today's market;
- Competing and conflicting demands for uses of the National Forest system;
- Environmental and labor laws;
- Availability of subsidies;
- Shifting national and regional political conditions.

⁷ Keegan III, C., C. Fiedler, and T. Morgan. 2004. Wildfire in Montana: Potential Hazard Reduction and Economic Effects of a Strategic Treatment Program. *Forest Products Journal*. 54 (7/8): 21-25. USDA Forest Service and Bureau of Land Management. 2000. Interior Columbia Basin Supplemental Draft Environmental Impact Statement. 2000. Volume 1, p. 159, Table 4-44.

⁸ Han, H., H. Lee, L. Johnson, R. Folk, T. Gorman, J. Hinson, and G. Jackson. 2002. Economic Feasibility of Small Wood Harvesting and Utilization on the Boise National Forest: Cascade, Idaho City, Emmett Ranger Districts. Department of Forest Products, College of Natural Resources, University of Idaho. Moscow, Idaho.

⁹ Warren, D. 2004. Production, Price, Employment, and trade in Northwest Forest Industries, All Quarters 2002. Resource Bulletin. PNW-RB-241. USDA Forest Service. Pacific Northwest Research Station Portland, Oregon.

Adding Value to Timber

Secondary manufacturing is one promising avenue to add value to timber and capture more dollars in the local economy. An increase in value-added manufacturing, particularly in Pend Oreille County, is one of the reasons timber-related employment did not drop precipitously along with large declines in National Forest harvest levels. It appears likely that more value-added processing will help in the future.

The table below helps to put the timber industry in a larger perspective. Pend Oreille County is the most dependent on the wood products industry (17% of total employment), followed by Stevens County (13%), Ferry County (9%) and Okanogan County (2%). In the four-county region approximately 8.8 percent of total direct employment is in the wood products industry. As the next section illustrates, in three of the four counties timber-related jobs are the highest paying private sector jobs.

2004	Washington State		Region		Counties							
	Washington	Share of Total	Region	Share of Total	Okanogan	Share of Total	Ferry	Share of Total	Stevens	Share of Total	Pend Oreille	Share of Total
Total Employment	2,268,913	100.0%	17,411	100.0%	7,313		714		7,496		1,888	
Wood Products Industry:	36,518	1.6%	1,525 *	8.8%	158	2%	63	9%	980	13%	324	17%
Forestry and Logging	6,062	0.3%	462	2.7%	86	1%	63	9%	214	3%	99	5%
Wood Product Manufacturing	18,405	0.8%	912	5.2%	72	1%	-	0%	766	10%	73	4%
Paper Manufacturing	12,051	0.5%	152 *	0.9%	-		-		-		152	

Source for table above and on following page: Bureau of the Census, 2006, *County Business Patterns*. Excludes proprietors.

* Indicates employment numbers estimated based on number of firms by size and employment by firm size.

Are there opportunities to diversify the wood products industry?

The following page shows details in the regional wood products industry for each of the four study-area counties. All areas in the table where no activity takes place (*i.e.*, where there currently is no employment) represent opportunities for value-added manufacturing.



Photo: Vaagen Brothers mill, Eric Zamora photo.

2004	Washington State		Region		Counties			
	Washington	Share of Total	Region	Region Share of Total	Okanogan County	Ferry County	Stevens County	Pend Oreille County
Total Employment	2,268,913	100.0%	17,411	100.0%	7,313	714	7,496	1,888
Forestry and Logging	6,062	0.3%	462	2.7%	86	63	214	99
Timber Tract Operations	203	0.0%	33 *	0.2%	-	-	2	32
Timber Tract Operations	203	0.0%	33 *	0.2%	-	-	2	32
Timber Tract Operations	203	0.0%	33 *	0.2%	-	-	2	32
Forest Nurseries and Gathering of Forest Products	48	0.0%	-	0.0%	-	-	-	-
Forest Nurseries and Gathering of Forest Products	48	0.0%	-	0.0%	-	-	-	-
Forest Nurseries and Gathering of Forest Products	48	0.0%	-	0.0%	-	-	-	-
Logging	5,811	0.3%	415	2.4%	86	63	199	68
Logging	5,811	0.3%	415	2.4%	86	63	199	68
Logging	5,811	0.3%	415	2.4%	86	63	199	68
Wood Product Manufacturing	18,405	0.8%	912	5.2%	72	-	766	73
Sawmills and Wood Preservation	8,735	0.4%	546 *	3.1%	67	-	403	76
Sawmills and Wood Preservation	8,735	0.4%	546 *	3.1%	67	-	403	76
Sawmills	8,049	0.4%	508 *	2.9%	65	-	374	69
Wood Preservation	686	0.0%	2 *	0.0%	-	-	2	-
Veneer, Plywood, and Engineered Wood Product Manufacturing	3,268	0.1%	154 *	0.9%	-	-	154	-
Veneer, Plywood, and Engineered Wood Product Manufacturing	3,268	0.1%	154 *	0.9%	-	-	154	-
Hardwood Veneer and Plywood Manufacturing	247 *	0.0%	-	0.0%	-	-	-	-
Softwood Veneer and Plywood Manufacturing	1,379	0.1%	163 *	0.9%	-	-	163	-
Engineered Wood Member (except Truss) Manufacturing	289	0.0%	-	0.0%	-	-	-	-
Truss Manufacturing	1,079	0.0%	-	0.0%	-	-	-	-
Reconstituted Wood Product Manufacturing	252 *	0.0%	-	0.0%	-	-	-	-
Other Wood Product Manufacturing	6,402	0.3%	210	1.2%	7	-	203	-
Millwork	4,135	0.2%	230 *	1.3%	7	-	223	-
Wood Window and Door Manufacturing	1,744	0.1%	-	0.0%	-	-	-	-
Cut Stock, Resawing Lumber, and Planing	1,554	0.1%	230 *	1.3%	7	-	223	-
Other Millwork (including Flooring)	837	0.0%	7 *	0.0%	-	-	7	-
Wood Container and Pallet Manufacturing	931	0.0%	7 *	0.0%	-	-	7	-
Wood Container and Pallet Manufacturing	931	0.0%	7 *	0.0%	-	-	7	-
All Other Wood Product Manufacturing	1,336	0.1%	2 *	0.0%	-	-	2	-
Manufactured Home (Mobile Home) Manufacturing	379	0.0%	1 *	0.0%	-	-	1	-
Prefabricated Wood Building Manufacturing	326	0.0%	-	0.0%	-	-	-	-
All Other Miscellaneous Wood Product Manufacturing	631	0.0%	-	0.0%	-	-	-	-
Paper Manufacturing	12,051	0.5%	152 *	0.9%	-	-	-	152
Pulp, Paper, and Paperboard Mills	7,401	0.3%	209 *	1.2%	-	-	-	209
Pulp Mills	336 *	0.0%	-	0.0%	-	-	-	-
Pulp Mills	336 *	0.0%	-	0.0%	-	-	-	-
Paper Mills	4,441	0.2%	209 *	1.2%	-	-	-	209
Paper (except Newsprint) Mills	3,385	0.1%	-	0.0%	-	-	-	-
Newsprint Mills	1,056	0.0%	148 *	0.9%	-	-	-	148
Paperboard Mills	3,555 *	0.2%	-	0.0%	-	-	-	-
Paperboard Mills	3,555 *	0.2%	-	0.0%	-	-	-	-
Converted Paper Product Manufacturing	4,650	0.2%	-	0.0%	-	-	-	-
Paperboard Container Manufacturing	2,563	0.1%	-	0.0%	-	-	-	-
Corrugated and Solid Fiber Box Manufacturing	1,833	0.1%	-	0.0%	-	-	-	-
Folding Paperboard Box Manufacturing	438	0.0%	-	0.0%	-	-	-	-
Setup Paperboard Box Manufacturing	13 *	0.0%	-	0.0%	-	-	-	-
Fiber Can, Tube, Drum, and Similar Products Manufacturing	137 *	0.0%	-	0.0%	-	-	-	-
Nonfolding Sanitary Food Container Manufacturing	162 *	0.0%	-	0.0%	-	-	-	-
Paper Bag and Coated and Treated Paper Manufacturing	659	0.0%	-	0.0%	-	-	-	-
Coated and Laminated Paper Manufacturing	177	0.0%	-	0.0%	-	-	-	-
Plastics, Foil, and Coated Paper Bag Manufacturing	30 *	0.0%	-	0.0%	-	-	-	-
Uncoated Paper and Multiwall Bag Manufacturing	304	0.0%	-	0.0%	-	-	-	-
Surface-Coated Paperboard Manufacturing	126 *	0.0%	-	0.0%	-	-	-	-
Stationery Product Manufacturing	802	0.0%	-	0.0%	-	-	-	-
Die-Cut Paper and Paperboard Office Supplies Manufacturing	367 *	0.0%	-	0.0%	-	-	-	-
Envelope Manufacturing	423	0.0%	-	0.0%	-	-	-	-
Stationery, Tablet, and Related Product Manufacturing	91 *	0.0%	-	0.0%	-	-	-	-
Other Converted Paper Product Manufacturing	626	0.0%	-	0.0%	-	-	-	-
Sanitary Paper Product Manufacturing	69 *	0.0%	-	0.0%	-	-	-	-
All Other Converted Paper Product Manufacturing	535 *	0.0%	-	0.0%	-	-	-	-
Wood Product Manufacturing & Paper Manufacturing	30,456	1.3%	1,063 *	6.1%	72	-	766	225
Forestry, Logging, Wood Products & Paper Manufacturing	36,518	1.6%	1,525 *	8.8%	158	63	980	324

A specialized or diverse timber industry?

Compared to the state, the region is specialized in logging and sawmill operations. Pend Oreille County is the most diverse.

Note:

Ferry County shows no manufacturing jobs according to Bureau of Labor Statistics. Columbia Cedar has a cedar mill in Boyds. However, their corporate headquarters are located in Kettle Falls. As a result, it is likely that the approximately 100 jobs in this Ferry County mill are attributed to Stevens County by BLS.

Compared to value-added activities in the state, significant opportunity exists in the region.

* Estimates based on number of firms by size.

Shaded and bold where region's share of total exceeds state's share of total.

Timber Industry Wages

As shown in pages 11 and 20-23, wages in the timber industry vary from county to county. The bulk of the wood products industry is embedded in the Manufacturing sector. A safe assumption is that the majority of manufacturing jobs in the region are related to the sectors called Timber and Wood Products Manufacturing and Paper and Allied Products Manufacturing.

In 2005 the lowest wages in Manufacturing (\$22,397) were in Okanogan County. Because of the relatively heavier dependence on agriculture, which is lower paying than resource industries. Goods-Producing (\$14,594) and Total Private (\$17,590) wages in Okanogan are low as well.

By comparison, resource sector jobs are higher paying in the other three counties. In Ferry County no information is available for Manufacturing due to data suppressions by the Bureau of Labor Statistics. However, in 2005 the Goods-Producing sector, which includes mining and the wood products industry, paid on average \$40,840 per year. Average private sectors wages in the county were \$23,854, brought down in large part by the presence of low-wage services.

In Stevens County the manufacturing sector paid an average annual wage of \$37,333 (\$33,960 for all Goods-Producing) and the average private sector wage is \$26,081 in 2005. One of the reasons this is higher than Ferry County is the presence of relatively higher pay in service industries.

In Pend Oreille County average annual wages in Manufacturing were the highest, at \$59,648 per year in 2005, reflecting the increased amount of value-added manufacturing in the wood products industry. Because mining jobs also pay relatively high wages, the entire Goods-Producing part of the county economy had wages of \$49,468. In contrast, average private sector wages in Pend Oreille County were \$30,223. As in Ferry County, average wages are brought down by the presence of relatively low-wage service sectors.

An important finding of this wage information is that, except for Okanogan County, the wood products and mining sectors pay relatively high wages. Whether these high wages pull up average wages in the private sector depends in large part on the type of service industries in the county. In this regard, Stevens County stands apart as having relatively higher wage service occupations, particularly in education, health, business and professional services. For all counties, the low wages in the services are in Leisure and Hospitality services.

Also visible on pages 11 and 20-23 is the relative importance of government jobs in the region. In all four counties government jobs paid higher average annual wages than private industry jobs in 2005: Okanogan County (\$33,215 in government compared to \$17,590 in private); Ferry County (\$31,288 government compared to \$23,854 private); Stevens County (\$32,576 government compared to \$26,081 private); and Pend Oreille County (\$35,545 compared to \$30,223 private). Especially important in each of the four counties are the over 1,100 federal government jobs, with average annual wages ranging from \$47,907 to \$50,923). This underscores the importance of jobs in public agencies such as the USDA Forest Service.¹⁰

¹⁰ Bureau of Labor Statistics, 2006, *Quarterly Census of Employment and Wages*.

Summary Findings

- A wide diversity of factors influence public lands timber harvests and whether the local timber industry and local economy benefit from increases in timber production.
- Timber employment is more closely associated with lumber prices, and less directly with the availability of regional National Forest timber.
- In times of declining timber harvests from local National Forests, employment in the wood products industry has been able to remain steady and even increase due in large part to alternative supply sources and increased value-added manufacturing.
- Relative to Washington state, the study region has little in the way of secondary wood products manufacturing – this is a growth opportunity for the local timber industry.
- Timber wages are relatively high in three of the four counties in the region (Ferry, Stevens, Pend Oreille), and the highest in the county with the most secondary wood products manufacturing (Pend Oreille).



Photos: new growth following a forest fire, James Johnston photo; Northeast Washington Forest Coalition tour, Eric Zamora photo.

The Future Role of the Timber Industry

Timber has long played an important role in the region, both economically and culturally. Timber-related employment has been remarkably stable over time, fluctuating between 2,500 and 3,000 jobs since the early 1980s, despite drastic declines in the volume of timber harvested from area public lands. While the absolute contribution of the industry has been stable, its relative contribution has declined significantly: timber-related employment was 27.7 percent of total in 1977, 13.5 percent of total in 1998, and 7.9 percent of total by 2004.¹¹

Given these recent trends, what is the likely role of the timber industry in a new forest management regime that combines Wilderness designation and increased timber harvests with restoration forestry and stewardship?

There are several possible outcomes:

1. New jobs

There are so many factors at play in determining the health of the timber industry and timber-related employment that increasing the supply of National Forest timber by itself does not guarantee increased employment. Assuming standard multipliers, it is reasonable to assume timber related employment could increase on the order of 220 to 440 jobs. For some mills greater local timber availability may mean an additional shift, and the ability to operate at greater capacity. There may even be opportunities to expand current mill capacity, or add new, smaller format mills.

2. Better wages

A key determinant of whether there will be an increase in timber-related wages is the extent to which the local timber industry develops value-added manufacturing. Any increase in manufacturing related employment will likely improve wage rates for some workers in the region. This is less true for forestry and logging employment.

3. Economic diversity

Because the economy of the region has grown beyond it's natural resource dependence, new timber-related employment today will help to diversify local economies. This can create greater resilience in local economies that in many cases are now reliant on a mix of government and service industries.

4. Stability

Prices and the availability of timber, particularly on private land, can fluctuate dramatically in response to local, regional, national and international markets. Though it will not help with demand side challenges, an increased and consistent supply of National Forest timber can add stability and counter some of the downward cycles in the market.

5. Ecological restoration

The regulatory framework of the Forest Service has shifted to reflect changing attitudes and opinions of how National Forests should be managed. In the past, efforts by the agency were directed largely toward maintaining a non-declining and sustained flow of timber, and then translating that into the difficult goal

¹¹ Bureau of the Census, 2006, *County Business Patterns*.

of providing “community stability.” Today the focus is on maintaining or improving the condition of the land, with job-creation and economic benefits as a secondary benefit.¹²

The timber industry can be helpful to the Okanogan, Colville and Idaho Panhandle National Forests in efforts such as ecological restoration, stewardship forestry, and fuel reduction in the wildland/urban interface to reduce the chances of catastrophic wildfires. Put another way, these ecological restoration activities would be difficult, if not impossible, to undertake without the talent and infrastructure that exists today. This includes the people who work in the woods, who transport materials and equipment, who process wood products into value-added goods, and who market the commodities to export markets.

6. Biomass production

In the near future it is likely that the demand will increase for alternative fuel sources, and National Forests could provide a significant portion of the raw materials, while the local timber industry will have in place the talent, experience and infrastructure to harvest, transport and deliver the materials to fuel conversion plants.¹³

7. New competitive strengths

Restoration forestry has the potential to bolster the emerging competitive advantage in the region related to the attractiveness of natural amenities. Healthy forests, clean air and water, productive wildlife habitat and fisheries, and other compelling natural values can help retain current residents and businesses while increasing visitation, in-migration, the appeal of the region to retirees, and attracting footloose businesses, including those in higher paying services.



Photo: Vaagen Bros. Lumber mill, Colville, Ray Rasker photo.

¹² For more detail see the 2005 NFMA Planning Rule and the Planning Handbook <http://www.fs.fed.us/emc/nfma/index2.html>

¹³ According to Russ Vaagen, Manager, Vaagen Bros. Lumber a significant portion of the increase in timber production under the proposed management regime will be used for biomass to ethanol production. Personal communication, January 19, 2007.

THE ROLE OF WILDERNESS IN THE ECONOMY

In this section we analyze how Wilderness designation may affect the economy of the four-county region.

We attempt to answer this question three different ways by:

1. Reviewing how Wilderness and other protected public lands have affected the West in general;
2. Comparing the four-county region of northeast Washington to peers around the northwest, then contrasting the economic performance of counties with Wilderness to those without;
3. Analyzing the performance of two counties in the study area that have Wilderness inside their boundaries, before and after the date of Wilderness designation.

The Big Picture – The Role of Protected Public Lands in the West

This section draws upon previous research on the relationship between protected public lands and local economic prosperity across the West, and assesses the applicability of this research's findings to northeast Washington.

The analysis indicates that the current and future economy of northeast Washington will not be hurt by Wilderness designation and may benefit from it. Sub-areas of the region may benefit in different ways and amounts due to the presence (or absence) of variables we have identified across the West as necessary for economic growth and well-being.

Prosperity in the 21st Century West

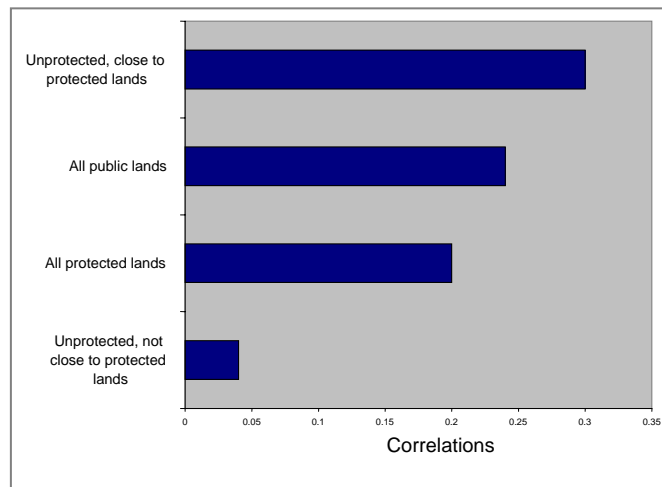
In 2004, the Sonoran Institute released two publications, *Public Lands Conservation and Economic Well-Being* and *Prosperity in the 21st Century West: The Role of Protected Public Lands* (hereinafter, the *Prosperity* reports). Headwaters Economics' staff, while in the employ of the Sonoran Institute, produced these reports.¹⁴

The *Prosperity* reports use various statistical analyses – regression analysis, correlations, and comparisons of averages – to examine the relationship between various types of protected public lands and economic growth in all 417 counties in the 11 Western states (excluding Alaska and Hawaii). These reports also evaluate county economies in terms of their degree of isolation from metropolitan areas, the amount and type of public lands they contain, and their relative economic performance in terms of growth in total personal income. The reports also examine the importance of protected public lands relative to other variables that need to be in place for economic growth, as well as factors that generally need to be in place to attract higher-wage jobs.

As the graph on the next page shows, all public lands in the West, regardless of their status or management, are positively associated with economic growth. Unprotected public lands that are immediately adjacent to protected lands have the largest positive influence on economic growth. These are lands that are not likely to be used for resource extraction because of their close proximity to Wilderness, National Parks and other protected public lands. At the other end of the spectrum, the slowest growth occurs in counties with public lands that are unprotected and not close to protected areas. These are five times more likely to be used solely for resource extraction.

¹⁴ See also Rasker, R. 2006. "An Exploration Into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands." *Society and Natural Resources*. 19(3): 191-207.

Types of Public Lands Management and the Growth of Personal Income, 1970 to 2000.



Source: Rasker, R. 2006. "An Exploration Into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands." *Society and Natural Resources*. 19(3): 191-207. Rasker *et al.* 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

The *Prosperity* reports conclude that Wilderness, National Parks, National Monuments, National Conservation Areas and other protected public lands, set aside for their wild land characteristics, can and do play an important role in stimulating economic growth – and the more public land in protected status the better for the economy.

Other Factors Crucial to Success

Environmental amenities by themselves are not generally enough to ensure economic growth and well-being. While protected public lands can serve as an asset that stimulates an economy, other factors generally also need to be in place.

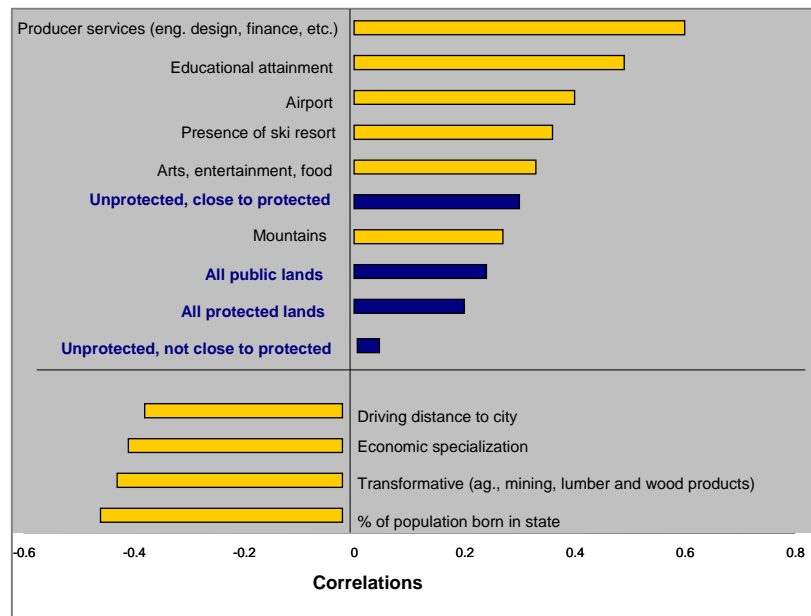
These include:

- A well-educated workforce
- Access to metropolitan areas via highways
- Access to commercial airports
- Employment in relatively high-wage service industries
- Economic diversity
- In-migration of newcomers

As the figure on the next page illustrates, public lands and other factors are associated with personal income growth in the western U.S. This figure shows data for all counties in the West.

Correlations Between Real Growth in Total Personal Income, 1970 to 2000, and Factors Influencing Economic Growth

(Different Public Lands Management Shown in **Blue**)



Source: Rasker, R. 2006. "An Exploration Into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands." *Society and Natural Resources*. 19(3): 191-207. Rasker et al. 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

The figure above shows that public lands of all types correlate positively with growth in personal income. Protected public lands such as Wilderness are a factor that counties with above average income growth tend to have in common. An even stronger correlation is noted for unprotected public lands close to protected lands. This is likely because these areas are often used for commercial development such as ski resorts and other forms of large-scale tourism.

Variables negatively correlated with growth in personal income are: driving distance to large cities, the degree of economic specialization, dependence on agriculture, mining, wood products and other “transformative” industries, and the relative lack of newcomers in the community.

These findings indicate that protected public lands are part of a successful mix of ingredients that combine to make county economies vibrant. They also indicate that by themselves protected public lands are generally not enough to ensure economic growth and prosperity.

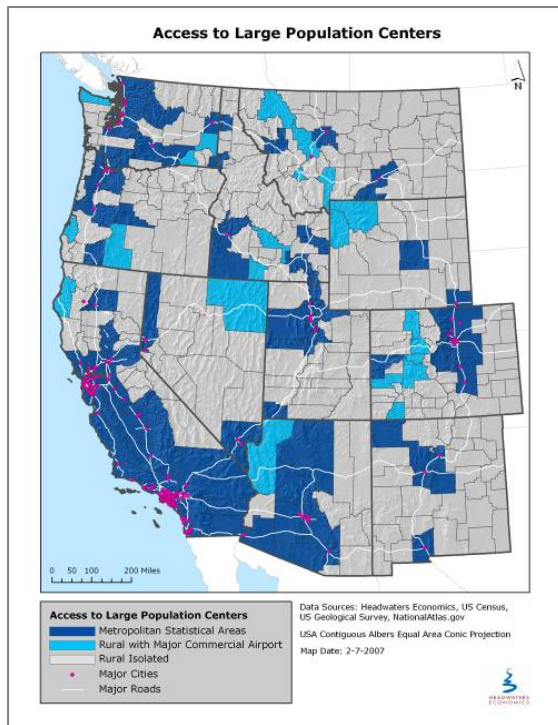
Types of Counties

The *Prosperity* reports classify the West into three types of counties based on population, distance from metropolitan areas, and transportation networks. The three categories are:

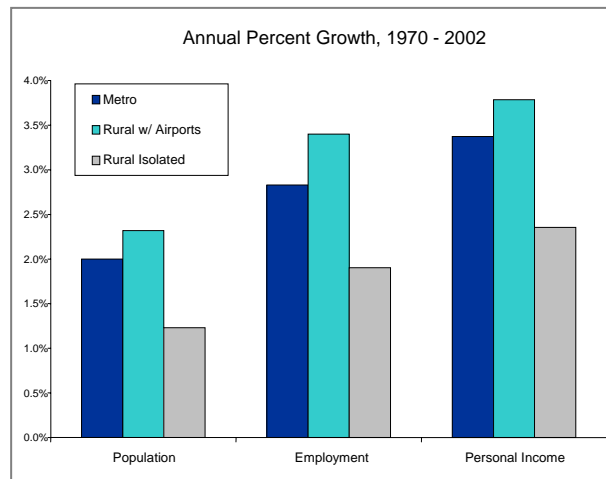
1. Metropolitan or within a metropolitan commuter shed: Counties with an urban population greater than 50,000 (a size commonly used by the Bureau of the Census for defining a metropolitan area) or within an hour’s drive of such an area (also referred to as “metro/commutershed”);
2. Rural with an airport or within an airport commuter shed: Counties with a population of less than 50,000, but having an airport with daily commercial flights and enplanements (passengers

boarding) greater than 25,000 passengers per year,¹⁵ or within an hour's drive of such an airport (referred to as "non-metro with airport"); and

3. Rural without an airport and not within an airport commuter shed: Counties with a population of less than 50,000, but more than an hour's drive from metropolitan areas and without easy access to regularly scheduled commercial air service (referred to as "non-metro without airport").



Three Types of Counties in the Western U.S.



Source: Rasker, R. 2006. "An Exploration Into the Economic Impact of Industrial Development Versus Conservation on Western Public Lands." *Society and Natural Resources*. 19(3): 191-207. Rasker et al. 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

As the figure above shows, counties that are rural but connected to larger markets and population centers – indicated in light blue in the figures above – have in the last three decades had the highest rates of growth in population, employment and real personal income.

According to the analysis of the *Prosperity* reports, all of northeast Washington is non-metro, or rural, by definition, but parts of the four-county region are close enough to the greater-Spokane area to be a functional part of the larger regional economy – see pages 31-33 of this report for more details.

The urban-rural mapping analysis was undertaken for the entire West and completed several years ago. It shows only Stevens County as part of the Spokane commutershed. Closer examination for this report based on more up-to-date drive-time and commuting analysis indicates that both Stevens and Pend Oreille counties are functionally connected to the Spokane economic region. They remain rural in the size of their populations, and could be classified as either metro/commutershed or non-metro with airport. Okanogan and Ferry counties are still rural and isolated from easy access to larger markets.

No evidence was found that having more protected public lands hurt economies in any of the 417 western counties in the West. However, when metro/commutershed, non-metro with airport and non-metro without airport counties are analyzed separately, slightly different results emerge.

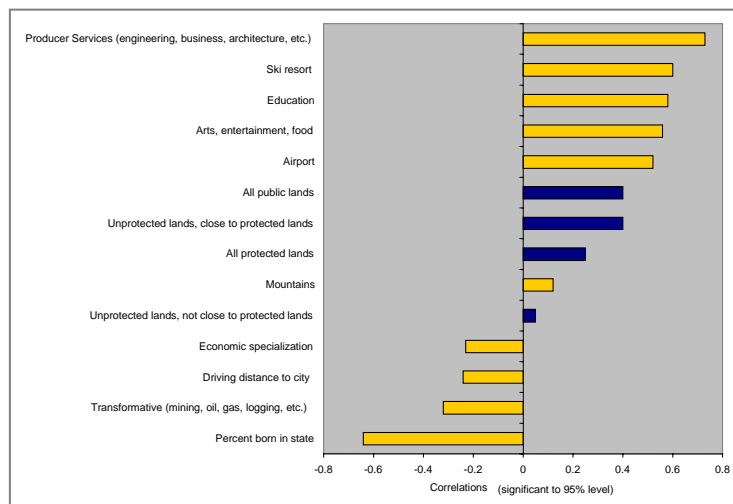
² This is the level at which there is generally daily commercial air service to major cities and airport hubs.

The picture for metropolitan counties is the most difficult to assess because there is so much activity in the economy that it is not possible to filter out the effects of protected public lands. This does not mean that protected areas lack positive benefits; it simply means that their effects are more difficult to quantify.

Rural counties with population centers within an hour's drive of a mid-sized airport benefit from the presence of public lands. Indeed, the more public lands, the faster the growth of personal income. Public lands that are unprotected, but are close to protected areas, are also closely associated with economic growth. Protected lands are more strongly associated with growth in personal income than those lands that are unprotected and distant from protected areas.

From 1970 to 2000, real per capita income for connected rural counties that contain protected public land grew 75 percent faster than connected rural counties without protected lands.

How Public Lands and Other Factors Influence Income Growth in Connected Rural Counties



Source: Rasker *et al.* 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

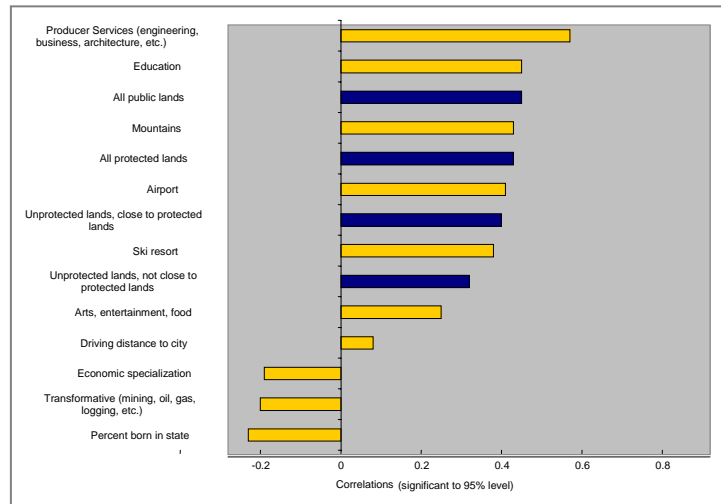
All public lands are correlated with income growth in rural and isolated counties. All public lands and protected public lands are most closely associated with income growth. Of the three county classifications, protected lands have the greatest influence on economic growth in rural isolated counties that lack easy access to larger markets.

A clarification about statistical terms is warranted. A correlation does not by itself prove causation. However, a correlation does lend evidence to support further investigation whether a truly statistically valid relationship exists. All correlations presented in this report have been tested for statistical rigor and are significant at the 95% confidence level. In *Public Lands Conservation and Economic Well-Being* we conducted further statistical tests, including regression analysis, which showed variables that have the highest explanatory values. They are the same as those presented in the figures in this report.

From 1970 to 2000, real per capita income for isolated rural counties with protected lands grew more than 60 percent faster than isolated rural counties without any protected lands.

As in other types of counties, producer services (*i.e.*, high-wage services related to goods production), educational attainment, mountains, airports, ski areas, and employment in arts, and entertainment are also important. Economic specialization, especially in transformative sectors, and the lack of in-migration are the Achilles heels for small remote economies.

How Public Lands and Other Factors Influence Income Growth in Isolated Rural Counties



Source: Rasker *et al.* 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

Northeast Washington is a region split between counties that are more and less remote.

Stevens and Pend Oreille counties are functionally connected to the Spokane regional economy. According to the *Prosperity* findings, they should readily be able to take advantage of new public land protections. These counties also have significant natural amenities and mountainous terrain, a regional ski resort, growing arts, entertainment and recreation economies, and net in-migration from urban areas.

Okanogan and Ferry counties are more isolated. For remote, small population counties the *Prosperity* research indicates a high correlation between protected lands and economic growth. The challenge is to capitalize on this relationship in the absence of other attributes closely associated with economic growth and increased well-being.

At present, Okanogan County does not have a lot of high-wage service employment, a well-educated workforce, diversified economy, or net in-migration from urban areas. Ferry County faces similar challenges, though it has a relatively significant leisure and hospitality sector (14% of private employment in 2005) and net in-migration.

Summary Findings

1. The presence of public lands in the West is a significant driver of economic growth.
2. Lands that are unprotected, but are close to protected lands, contribute significantly to economic growth.
3. Lands that are unprotected and distant from protected areas, and therefore more likely to be used for resource development, contribute very little to economic growth.
4. Protected lands, in the form of Wilderness, National Parks, and National Monuments, go hand in hand with economic growth, but some counties fare better than others.
 - In counties with metropolitan areas or within the metro commuter shed, it is not possible to conclude if there is a positive relationship between protected lands and economic growth.
 - Rural and connected counties are positioned best to take advantage of the amenity values created by protected public lands.
 - Rural and isolated counties have the highest correlation between the presence of protected areas and income growth, though these areas are often not generating a lot of new economic activity for other reasons, such as their degree of isolation from larger markets.
5. While public lands are important for growth, other factors are even more important, including the proportion of the workforce employed in producer services, arts and entertainment; a ski area and commercial airport; the education of the workforce; and the presence of mountains.
6. The more diverse an economy, the faster it will grow. The more specialized, the slower it will grow over time, especially if the specialization is in mining, oil and gas development, manufacturing, logging, wood products manufacturing, or other resource extractive sectors.¹⁶
7. Distance from markets is a detriment to economic development. Despite advances in telecommunications, a key to economic development is the ability to readily travel to larger population centers.
8. The influx of newcomers is closely tied to economic growth.

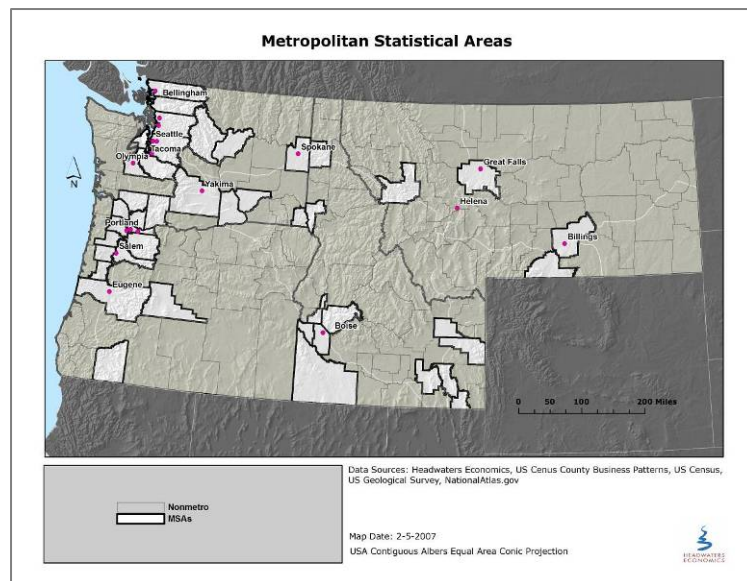
¹⁶ For evidence and a discussion on the relationship between economic diversity and growth, see Rasker et al. 2005. *Public Lands Conservation and Economic Well-Being*. Sonoran Institute.

The Role of Wilderness in Northeast Washington – Peer County Analysis

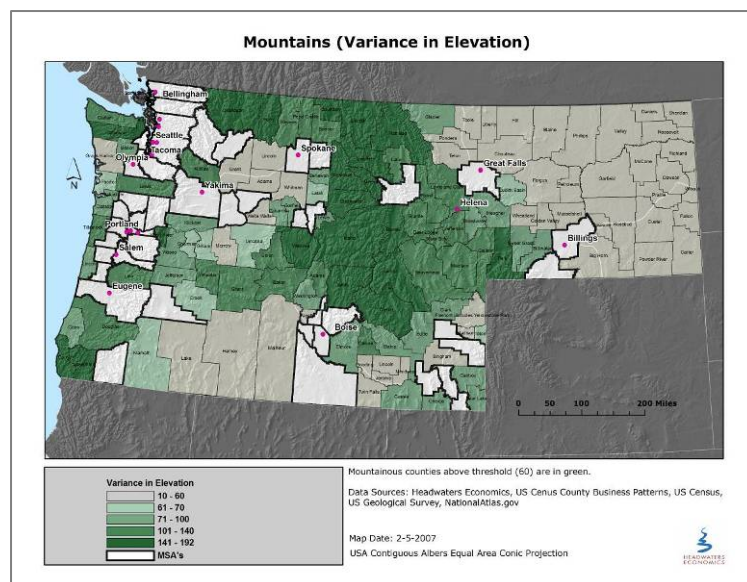
In this section we analyze how Wilderness designation may affect the economy of the four-county region by comparing northeast Washington to peers around the northwest, and attempt to discern whether there are significant differences in economic performance between counties that have Wilderness inside their boundaries and those that do not.

The analysis indicates that between 1990 and 2004 peer counties with Wilderness outperformed non-Wilderness peer counties in all performance indicators measured: population, total personal income, per capita income, employment, and average earnings per job.

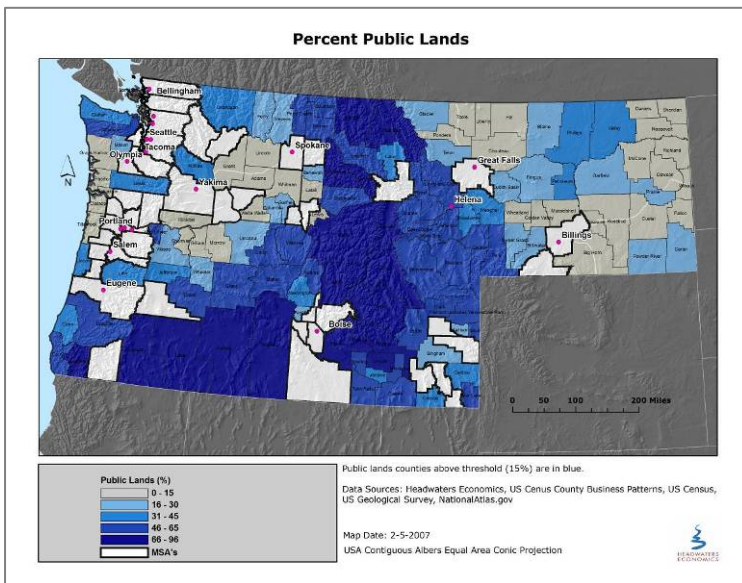
We adopted the following steps to determine peer counties for comparison:



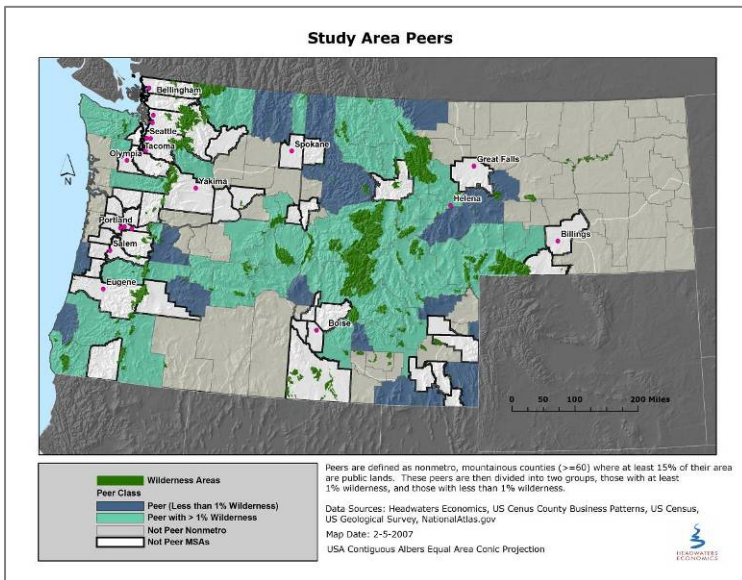
1. All Metropolitan Statistical Areas (MSAs) were identified and excluded. There are 131 non-metro counties out of 175 counties in the four-state region. In the map to the left the MSAs are identified in white.



2. We then filtered out areas that did not have any substantial mountains. Mountainous terrain is more likely to be associated with timber-related counties, and most like the counties of northeast Washington (these are indicated in green on the map to the left). This leaves 80 non-metro counties in the region.



3. Next we excluded counties that had less than 15 percent of their land base in federal public ownership to be consistent with the minimum presence of public lands in the study area (the higher the percentage of federal lands the darker the shade of blue in the map to the left). This threshold takes the number of potential peers to 71 counties.



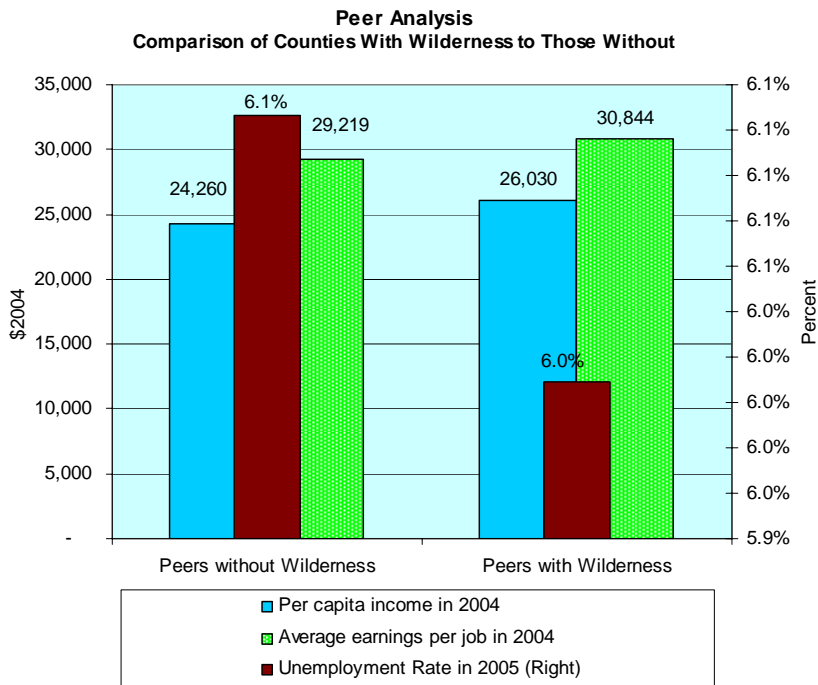
4. These 71 counties were then divided into those with at least one percent of their land base in Wilderness, and those with less than one percent in Wilderness. As a result, we identified 45 Wilderness peers, and 26 non-Wilderness peers in the region. Note that the study area is split between these two categories: Okanogan and Pend Oreille counties have Wilderness; Ferry and Stevens do not. The map to the left shows Wilderness areas in dark green, counties without Wilderness in dark blue, and counties with Wilderness in light green.

Economic Indicator	Peers without Wilderness	Peers with Wilderness
Per capita income in 2004	24,260	26,030
Average earnings per job in 2004	29,219	30,844
Unemployment Rate in 2005	6.1%	6.0%
Percent change 1990 to 2004 Adjusted:		
Population	16.6%	22.7%
Total Personal Income	34.8%	45.5%
Per Capita income	15.6%	18.6%
Employment	26.2%	32.4%
Average earnings per job	0.5%	7.0%

5. We then compared each peer grouping in aggregate according to economic performance indicators. The results can be seen in table to the left and the figures on the following page.

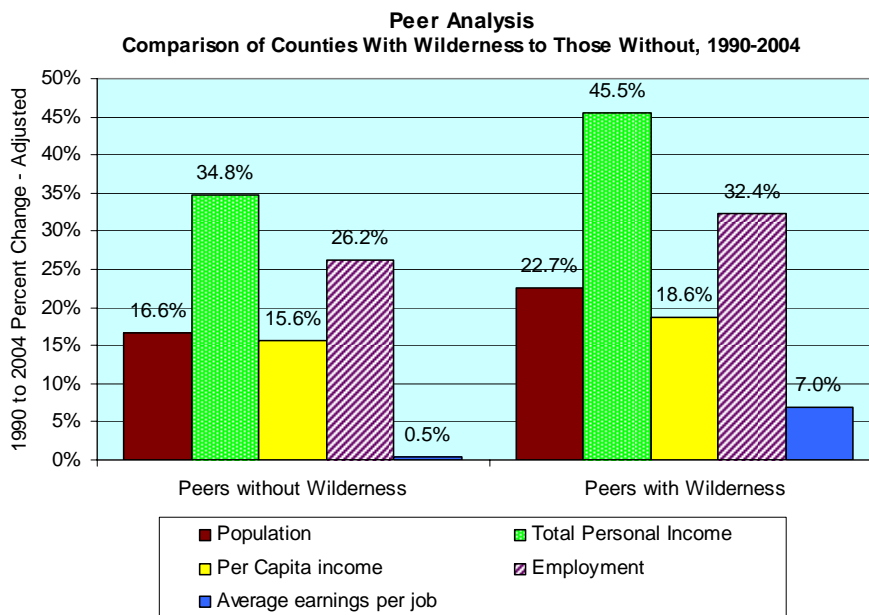
Source: U.S. Department of Commerce, 2004, Regional Economic Information System (REIS); Bureau of Labor Statistics 2005. All income figures in 2004 dollars.

In 2004 per capita income (+\$1,770) and average earnings per job (+\$1,625) were higher in Wilderness counties than in non-Wilderness counties. In 2005 the rate of unemployment was slightly lower for Wilderness peer counties.



Source: U.S. Department of Commerce, 2004, Regional Economic Information System (REIS); Bureau of Labor Statistics 2005. All income figures in 2004 dollars.

From 1990 to 2004, counties with Wilderness grew faster than non-Wilderness counties in terms of population, total personal income, per capita income, employment, and average earnings per job.



Source: U.S. Department of Commerce, 2004, Regional Economic Information System (REIS); Bureau of Labor Statistics 2005. All income figures in 2004 dollars.

These results show that counties with Wilderness out-perform their non-Wilderness peers in all standard measures of economic growth, as well as having lower rates of unemployment.

Summary Findings

A peer analysis of similar counties in the larger four-state region shows better economic performance for those counties that have Wilderness than for those that do not. This is true both for growth measures like total personal income, and quality measures like earnings per job.

These peer findings are consistent with the findings of the *Prosperity* reports summarized above.

It is tempting to conclude from the data that the reason peer counties with Wilderness outperform those without Wilderness is because a portion of the county has been set aside for permanent protection and conservation management.

Some caution is warranted in the interpretation of these findings: a correlation does not imply a cause and effect relationship. It does not guarantee that the economic prosperity in northeast Washington will automatically rise following the designation of Wilderness.



Photo: Columbia Highlands, Eric Zamora photo.

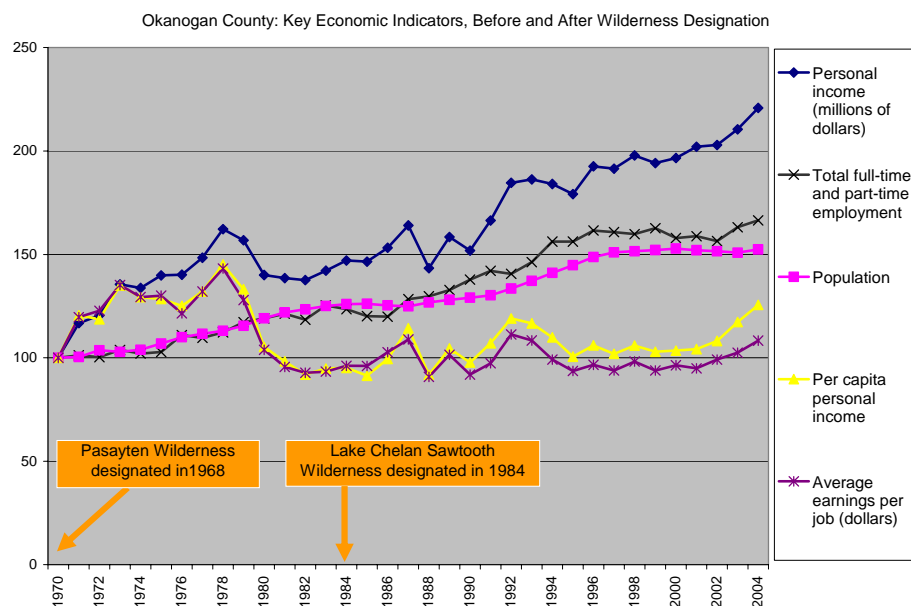
Wilderness Designation – An Analysis of Before and After

In this section we evaluate the potential impact of new Wilderness designation by looking at what happened in the past when Congress designated Wilderness areas in the study region. Two counties – Okanogan (1968, 1984) and Pend Oreille (1984) – have had Wilderness areas for some time.

The before-and-after analysis on Okanogan and Pend Oreille counties indicates that it is difficult to determine the effect of Wilderness designation at the local level and in the short-term. That said, there is no evidence that Wilderness designation in either county hampered economic growth or well-being. It appears that larger events – the national recession in the case of Okanogan and a federal dam project in the case of Pend Oreille – accounted for most of the variation in economic performance indicators before and after Wilderness designation in these counties.

Okanogan County

Two Wilderness areas exist in Okanogan County. In 1968 Congress designated the 529,477 acres Pasayten Wilderness and in 1984 designated the 151,435 acre Lake Chelan-Sawtooth Wilderness.¹⁷ The figure below shows five key economic indicators – growth in population, real personal income, wages, per capita income, and employment – from 1970 to 2004. To understand whether there was any relationship between the conversion of Forest Service land into permanent protected status, we analyzed the economic performance of the county five years before and five years after Wilderness designation.



Source: U.S. Department of Commerce, 2006, Regional Economic Information System; www.Wilderness.net.

¹⁷ www.wilderness.net. The size of each Wilderness area is the current acreage.

Pasayten Wilderness designated in 1968:
Average Annual Change, Five Years After Wilderness

Okanogan County Indicators	After
Personal income (millions of dollars)	6%
Population	2%
Per capita personal income	3%
Total full-time and part-time employment	1%
Average earnings per job (dollars)	4%

While no reliable published statistics on the key economic indicators exist before 1968, it is illustrative to examine what happened from 1969 to 1973, five years after designation of the Pasayten Wilderness.

During that time total personal income and average earnings per job grew an average of 6 percent per year, and 4 percent per year, respectively, in real terms. Population, per capita income, and employment also rose during those years. While industries that normally depend on access to public lands for resources – mining and timber – did not grow in those early years, there was substantial growth in non-labor income (investment and retirement-related income), the farming sectors enjoyed a period of expansion at that time, and there was significant growth in construction and government employment (see the detailed socioeconomic profiles in the appendix for more details).

The table below, as well as the figure on the previous page, show that five years prior to the designation of the Lake Chelan Sawtooth Wilderness in 1984 three out of five economic indicators – personal income, per capita personal income, and average earnings per job – declined. After designation all five economic indicators showed growth.

Lake Chelan Sawtooth Wilderness designated in 1984:
Average Annual Change, Five Years Before Wilderness
Designation, and Five Years After.

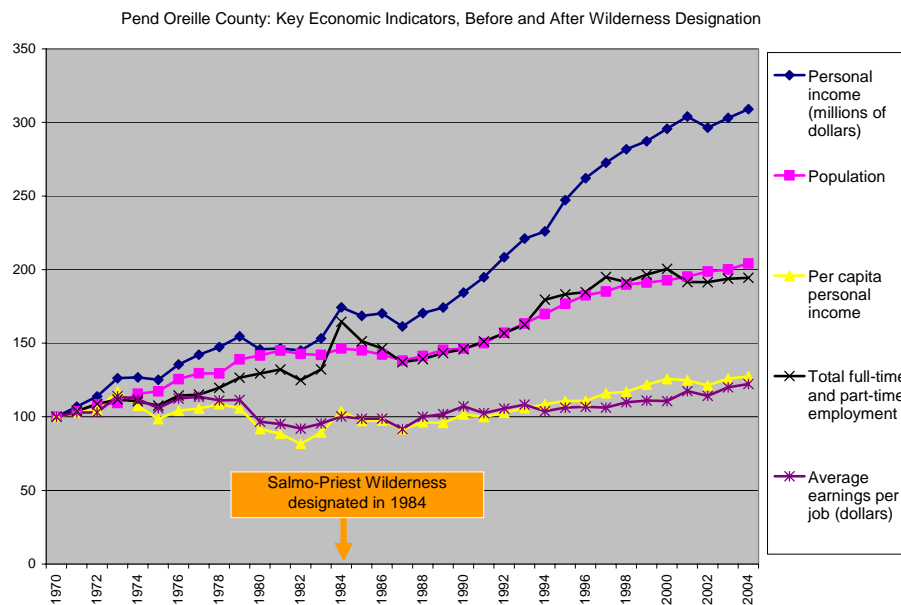
Indicator	Before	After
Personal income (millions of dollars)	-2%	2%
Population	2%	0.3%
Per capita personal income	-8%	3%
Total full-time and part-time employment	2%	2%
Average earnings per job (dollars)	-8%	2%

The fact that the economy improved in Okanogan County after the designation of the Pasayten Wilderness in 1968, and again after the designation of the Lake Chelan-Sawtooth Wilderness in 1984, does not prove that Wilderness designation causes an economy to grow. It is clear the Wilderness designations did not hurt the economy since there is no evidence that the economy was doing well before and then poorly after designations took place. In fact, the evidence points in the other direction.

Factors that cause an economy to grow or shrink are more complex than changing management regimes on public lands alone. The education of the workforce, demand for local products, international prices, access to larger markets, national recessions, and myriad other factors affect the growth or decline of local area employment and income. This point underscores the need to think about the potential benefits of new protective designations in a broader economic context, and as part of a broader economic development strategy.

Pend Oreille County

In 1984 Congress designated the Salmo-Priest Wilderness, which now has 41,325 acres. The figure below illustrates the growth and decline of five economic performance indicators in Pend Oreille County from 1970 to 2004.



Source: U.S. Department of Commerce, 2006, Regional Economic Information System; www.Wilderness.net.

Salmo-Priest Wilderness designated in 1984:
Average Annual Change, Five Years Before Wilderness Designation, and Five Years After.

Indicator	Before	After
Personal income (millions of dollars)	1%	0.1%
Population	2%	-0.1%
Per capita personal income	-4%	-2%
Total full-time and part-time employment	2%	-3%
Average earnings per job (dollars)	-3%	0.4%

The table above shows the growth or decline of key economic indicators in Pend Oreille County for five years before and five years after the designation of the Salmo-Priest Wilderness. Unlike the designation of Wilderness areas in Okanogan County, in Pend Oreille County several economic indicators decline after 1984: population, per capita income and employment all declined, while personal income and average earnings per job rose, although modestly.

Just as it cannot be argued that Wilderness designation by itself causes the economy to grow simply because a period of growth follows shortly after Congress set aside Forest Service land for conservation, it also difficult to argue that Wilderness designation by itself causes economic decline.

Between 1984 to 1988 close to 900 jobs and \$17 million in personal income were lost in Pend Oreille County. During that time period personal income from those employed in lumber and wood products manufacturing increased by \$12 million, while employment in mining remained steady. A likely explanation is the construction and completion of two new generating units for the Boundary Dam on the

Pend Oreille River. These were completed in 1985.¹⁸ From 1984 to 1988 the largest source of decline in personal income was from ‘heavy construction contractors (minus \$14 million in personal income); ‘federal, civilian’ government employment (minus \$5 million) and ‘farm earnings’ (minus \$9 million).¹⁹ The dam project would help explain why the economy of Pend Oreille bucked a national trend and grew during a period of recession (1982), and declined after the recession ended.

Summary Findings

These examples of Wilderness designations in northeast Washington illustrate a few important points:

1. Local economies grow over the long-term with Wilderness.

The economies of both Okanogan and Pend Oreille counties have shown long-term (1970 to 2004) growth in leading indicators such as population, employment, and personal income. The earnings picture is more mixed, but consistent with regional norms.

2. Economies are complex.

Because of this the short-term “before and after” impact of Wilderness designation is difficult to measure. Sometimes a single event or condition, such as a national recession, prices for agricultural commodities, or a large-scale public works project, creates a significant economic downturn or impetus. Smaller and less diverse economies are demonstrably more susceptible – on the downside and upside – to single causes of change. Most times, however, it is difficult, if not impossible, to identify a single driver of change. Wilderness designation is no exception. There is usually so much else at play in an economy that the transfer of lands from one management regime to another is not easily measured.

3. The opportunity cost of Wilderness is low

The cost of the ‘next best alternative foregone’ is low. It could be argued that Wilderness designations negatively affect a local economy when several conditions are in place:

1. The local economy is truly resource-dependent;
2. Industries that need access to public lands for resource extraction – for example, mining and timber – are constrained by supply only (and not by a myriad other factors, such production costs, competition, transportation expenses, product demand, and price); and
3. The amount of land “set aside” as Wilderness results in “locking up” significant resources that would otherwise be used by resource extractive industries.

In the four counties of the region none of these conditions apply. The economies of the region have diversified away from being overly resource-dependent. As the Timber chapter in this report makes clear, timber supply *per se* is not the major constraint on the local timber industry. And if the Northeast Washington Forestry Coalition’s “Blueprint” proposal is adopted, new Wilderness will come hand in hand with the more predictable release of timber from public lands.

¹⁸ HistoryLink.org the Online Encyclopedia of Washington State History: www.historylink.org/essays/output.cfm?file_id=5198.

¹⁹ U.S. Department of Commerce, 2006, Regional Economic Information System.

THE ROLE OF WILDERNESS IN THE ECONOMY

Overall Findings

West-wide analysis reveals two important findings. First, the presence of protected areas is closely associated with economic growth, and generally the more protected a county's land is from resource development, the faster the economic growth. Second, there is no evidence that designating public lands in protected status harms the economy.

Peer analysis shows that the economies of counties similar to those in the study area with Wilderness solidly outperform similar counties with little or no Wilderness. This is true both for growth measures like employment and total personal income, and quality measures like earnings per job and per capita income.

Will Okanogan, Ferry, Stevens and Pend Oreille counties benefit from the designation of new Wilderness areas?

The evidence shows:

- In the West the more protected a county's public land base, the faster its economic growth;
- The economies of peer counties in the four-state region with Wilderness outperform those without Wilderness; and
- When Wilderness was designated in northeast Washington in the past there is no evidence that by itself Wilderness either boosted or harmed the economy in any significant way.

Will all study-area counties benefit equally from Wilderness designation?

The *Prosperity* reports and other research show that although Wilderness is generally associated with economic growth, some counties are better positioned to make use of environmental amenities as a way to attract and retain people and their businesses.

Rural counties that are connected to larger markets (Stevens, Pend Oreille) are able to trade on newly protected lands most easily. Rural counties that are more isolated (Okanogan, Ferry) have the highest correlation between the presence of protected lands and economic opportunity, but may face challenges realizing the potential inherent in protected public lands because of their remoteness.

Whether a local economy benefits from Wilderness may depend most on whether community and business leaders promote environmental amenities as a way to enhance quality of life, attract newcomers, retain residents, and foster a healthy sense of entrepreneurship.

CONCLUSION

The economy of the four-county region in northeastern Washington has grown and diversified over the last few decades, with most of the growth coming from service-related industries and with the single largest source of personal income from retirement and investments. Poverty remains a significant problem, caused in part by an over reliance on low-wage jobs and not enough high-wage occupations, especially in services.

Sectors that have historically been an important part of the economy, such as forestry and wood products manufacturing, are still active, and today function as part of a growing economic diversity that has added resilience to the economy. Forestry will continue to play an important role, especially as an agent of stewardship and land restoration. Wood products manufacturing will be a central part of efforts to raise wages in the region.

There are important differences among the four counties in the region, and these differences influence the potential economic effects of the Northeast Washington Forestry Coalition's Blueprint. Not all counties in the region are equally positioned to take advantage of either increased timber harvests or additional Wilderness designations.

There is no guaranteed relationship between timber supply and timber-related employment. Several northeast Washington counties have successfully created higher wage timber jobs, which are related to value-added manufacturing. Increases in timber harvests resulting from the Blueprint will have the most widespread positive effect if there is also secondary manufacturing. Similarly, whether new Wilderness designations will positively affect the economy, as it has in other parts of the West, depends on other variables like education levels and the degree of isolation from markets.

The region has grown beyond the point where what happens on National Forest lands by itself constitutes a significant driver of the economy. Transportation infrastructure and access to markets, education and the ability of a community to attract and retain investment and retirement income are also important. This new complexity makes the economy more resilient and less vulnerable to fluctuations in National Forest policy, changing public attitudes, and price variations resulting from changes in international commodity markets.

Perhaps the most important effect of the Coalition's proposed Blueprint is the message it sends to larger world that this is a "can-do" area where people set aside their differences, find shared values, and work towards common goals and solutions. Regardless of the specifics of the proposal – the board feet of timber or acres of new Wilderness – the real impact may be that this region has finally moved beyond the war in the woods.

