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A SocioEconomic Profile Pend Oreille County, Washington

Produced by the Economic Profile System (EPS) July 24, 2007

About The Economic Profile System (EPS)

This profile was produced using the 2007 version of the Economic Profile System (EPS), last updated in June 2007. EPS is designed to allow users to automatically and efficiently produce detailed socioeconomic profiles at a variety of geographic scales using the spreadsheet program Microsoft Excel.

Profiles contain tables and figures that illustrate long-term trends in population; employment and personal income by industry; average earnings; business development; retirement and other non-labor income; commuting patterns; agriculture; and earnings by industry.

Databases used for EPS profiles are from: Bureau of the Census, County Business Patterns, Bureau of Labor Statistics, and the Regional Economic Information System (REIS) of the Bureau of Economic Analysis, U.S. Department of Commerce.

EPS was developed in partnership with the Bureau of Land Management by Ray Rasker, Jeff van den Noort, Ben Alexander and Patty Gude when they were employees of the Sonoran Institute, and continues to be refined and improved by these authors under the auspices of their new organization, Headwaters Economics.

EPS is available for free download from Headwaters Economics (www.headwaterseconomics.org).

For technical questions about EPS, contact Jeff van den Noort at jeff@headwaterseconomics.org.



www.headwaterseconomics.org

Headwaters Economics conducts social science research to understand demographic and socioeconomic trends and their impacts on changing land use patterns. We use this knowledge to assist individuals, organizations and communities to benefit from their competitive advantages.



www.blm.gov

The Bureau of Land Management (BLM), an agency within the U.S. Department of the Interior, administers 262 million surface acres of America's public lands, located primarily in 12 Western States. The BLM sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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Read This First

There are two related systems for producing socioeconomic profiles: this one, the Economic Profile System (EPS) and the Economic Profile System Community (EPSC). For best results, use both profile systems. Below is a table highlighting how the two systems complement each other.

	EPS	EPSC
Geographic level of detail	Nation Region (metro, non-metro, total) State (metro, non-metro, total) County	Nation, Region, Division, States, Counties, County Subdivisions, Places (Towns), Indian Reservations, Congressional Districts
Databases used	Bureau of the Census (Census) County Business Patterns (CBP) Bureau of Labor Statistics (BLS) Bureau of Economic Analysis (BEA), Regional Economic Information System (REIS)	Bureau of the Census, Decennial Census of Population and Housing, 1990, 2000. (1990 to 2000 comparisons at the county level only)
Time series used	Continuous data from 1970 to as close to the present as possible.	2000. At the county level only 1990 to 2000 comparisons can be made to show changes in age and household income distribution.
Advantages	Long-term trend analysis; changes in employment and personal income by sector, change of businesses establishments by type and size, and non-labor sources of income, like retirement and age-related income.	Age distribution, race, housing costs, housing affordability, education rates, poverty. Finer geographic detail.
	Counties are compared to states and nation.	Allows comparisons to user-selected 'benchmark' areas.
Disadvantages	For some counties employment and personal income data may be suppressed for some industries and for some years. EPS includes a system for estimating these data gaps, and a chapter in the EPS User's Manual profiles step- by-step instructions.	Census data is not suppressed, but it is less useful than REIS data used in EPS for long-term trends by industry; it is only available only for 2000.

Important notes:

- 1) Total employment figures from the Bureau of the Census (used in EPSC) and the Regional Economic Information System (used in EPS) can differ for the following reasons:
 - Census employment figures are reported by place of residence, while BEA REIS figures are by place of work.
 - BEA REIS counts all jobs, regardless of whether part-time or whether a person has several jobs. For example, if a person has three part-time jobs, they count it as three jobs.
 - In some areas seasonality may play a role: the census is taken in the spring, a shoulder season for many "resort" areas, while BEA REIS data is an annual average.
- 2) Tables and charts may be copied from Excel into any other program, like Word or PowerPoint: highlight the selection, choose copy from the edit menu, then open Word or PowerPoint and insert by choosing "Paste Special" in the Edit Menu. We recommend that you paste charts as a picture.
- 3) EPS is updated every year with the latest figures.
- 4) This profile also shows business cycles, represented as vertical bars on selected charts.

Pend Oreille County, Washington Demographic, Employment and Income

The following pages (2-25) contain long-term trends in demographics, employment and income, for types of information where no disclosure restrictions occur.

What is a 'disclosure restriction'?

A disclosure restriction means a gap exists in the data. Information has been suppressed by the U.S. Department of Commerce to avoid disclosure of confidential information. Generally, the smaller the geographic level of analysis and the smaller the population of the county, the higher the chances that industry-specific information is suppressed and that disclosure restrictions will occur.

The last section of this profile contains long-term trends on employment and personal income by industry sector (services, retail trade, manufacturing, etc.). This type of data often has data gaps, or disclosure restrictions. EPS has a built-in system for estimating data gaps through 2000 for the 11 contiguous western states (AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY).

In this section you will learn about:

- 1. Changes in population, age distribution, household income distribution and housing affordability.
- 2. Comparisons of the county to the state and the nation.
- 3. Employment and income by type: proprietors versus wage and salary.
- 4. Personal income by type: labor versus non-labor income.
- 5. The role of transfer payments.
- 6. How well do we recover from recessions?
- 7. Trends in government employment.
- 8. Earnings per job versus per capita income.
- 9. Growth in firms by size and industry type.
- 10. Unemployment rates.
- 11. Cross-county flow of dollars via commuting.
- 12. Trends in agricultural businesses.

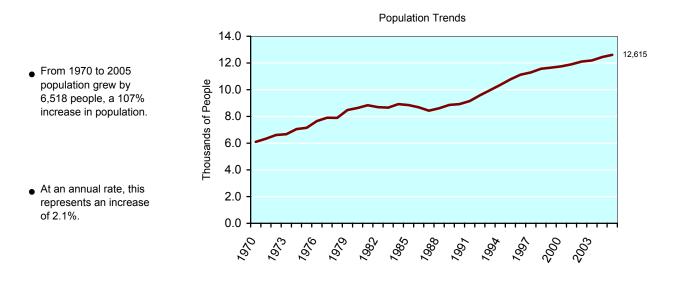
Highlights** - In Pend Oreille County, Washington:

- Population Growth (Annualized rate, 1970-2005) was fast.
- Employment Growth (Annualized rate, 1970-2005) was somewhat fast.
- Personal Income Growth (Adjusted for Inflation, Annualized rate, 1970-2005) was somewhat fast.
- Non-labor Income Share of Total in 2005 was somewhat high.
- Median Age* was old.
- Per Capita Income (2005) was somewhat low.
- Average Earnings Per Job (2005) was somewhat high.
- Education Rate (% of population 25 and over who have a college degree)* was somewhat low.
- Employment Specialization* was somewhat diverse.
- Ratio Rich/Poor (Number of households that made under \$30K for every household that made over \$100K)* was roughly average.
- Housing Affordability (100 or above means that the median family can afford the median house)* was somewhat less affordable.
- Government share of Total employment was very high.
- Unemployment Rate in 2006** was high.

**These highlights are based on how this area compares to the distribution of all of the counties in the United States. See the methodology section at the end for more information.

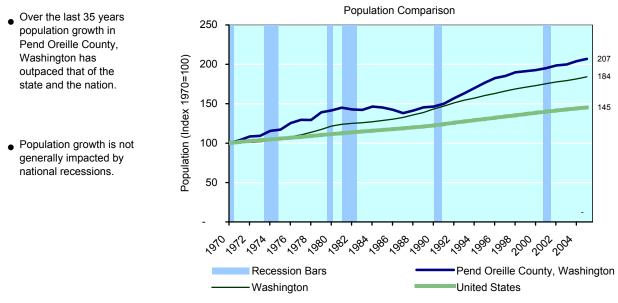
* from 2000 US Census ** from Bureau of Labor Statistics

Population



The vertical shaded bars on the figure below represent the last five recession periods: November 1973 to March 1975; January 1980 to July 1980; July 1981 to November 1982; July 1990 to March 1991; March 2001 to November 2001. More information about recessions is available on the next page.

Population Growth Compared to the State and the Nation



Population

How well do we recover from recessions?

An important indicator of economic performance is the ability to recover quickly from recessions.

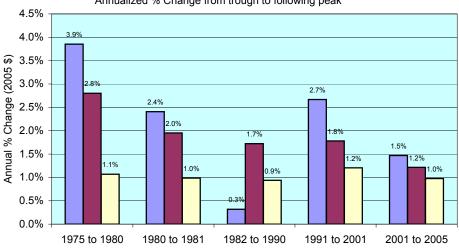
A recession is defined by the National Bureau of Economic Research as "a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail sales."

The graph below shows how well we have recovered from the last five recessions. The recovery period used is from the end of one recession (the trough) to the beginning of the next recession (the peak).

This type of graph is repeated throughout the profile to show how the region recovers from recessions compared to the state and the nation.

See http://www.nber.org/cycles.html for more information about business cycles.

- In the latest recovery (2001 to 2005), population growth in Pend Oreille County, Washington (up 1.5%) outpaced Washington and the United States.
- Similarly, in the last recovery (1991 to 2001), Pend Oreille County, Washington (up 2.7%) grew the fastest.
- In the recovery from 1982 to 1990, Washington (up 1.7%) grew the fastest.



Population Growth During Recent Recoveries -Annualized % Change from trough to following peak

Pend Oreille County, Washington - Population
 United States - Population

Age and Gender

(From EPSC)

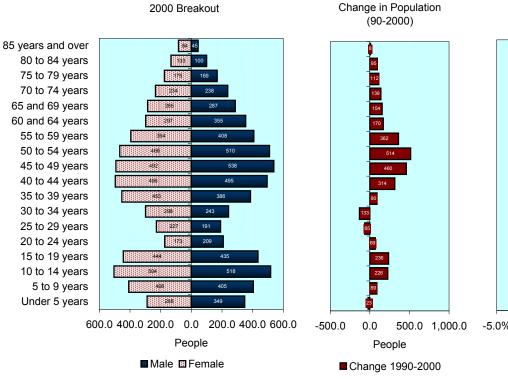
- The population has gotten older since 1990. The median age in 2000 is 41.9 years, up from 36.1 years in 1990.
- The largest age category is 45 to 49 years old (1,030 people or 8.8% of the total).
- Total Population in 2000 was 11,732 people, up 32% from 8,915 in 1990.
- The age group that has grown the fastest, as a share of total, is 50 to 54 years, up 514 people. Their share of total rose by 3.1%

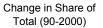
Population	Population by Age and Sex														
	40 - 54 (Baby65 years andNTotalUnder 20 yearsBoom in 2000)overNumberNumber ShareNumber ShareNumber Share		Median Age	Density (Pop. per sq. mi.)											
Total Population															
2000	11,732	3,351	29%	2,997	26%	1,750	15%	41.9	8						
1990	8,915	2,823	32%	1,709	19%	1,242	14%	36.1	6						
10 Yr. Change	2,817	528	-3%	1,288	6%	508	1%	5.8	2						
10 Yr. % Change	32%	19%		75%		41%		16%	32%						
2000 Sex Breakout															
Male	5,881	1,707	29%	1,543	26%	839	14%	42.1							
Female	5,851	1,644	28%	1,454	25%	911	16%	41.7							
Male/Female Split	50% / 50%	51% / 49	9%	51% / 49	9%	48% / 52	2%								

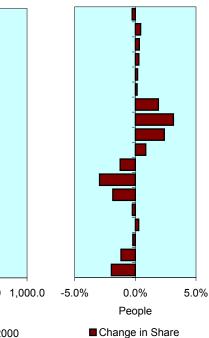
2000 Table SF1 - P12 & 1990 SF1 Table P05 & P12

In the graphs below, changes in population by age are shown two ways. The "Change in Population" graph illustrates how each age bracket has changed in the last 10 years. The "Change in Share" graph illustrates how each category has changed as a share of total. Note that an age bracket can have an increase in population while declining as a share of total. The "Change in Share" graph usually demonstrates how the baby boom has caused a demographic shift in the population (growth in the 40-60 age brackets).

Note: In aggregated profiles, medians are interpolated.







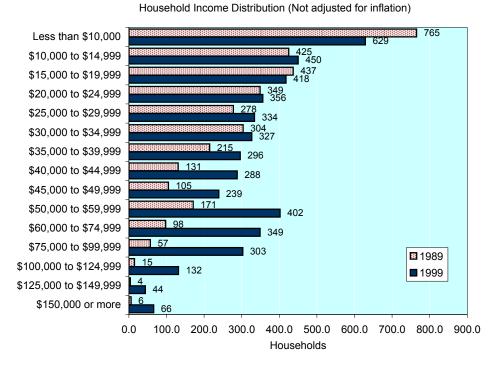
Source: Census 2000 and Census 1990

Income Distribution & Housing

(From EPSC)

Income Distribution

- In 1999, for every household that made over \$100K, there were 9.0 households that made under \$30K. 10 years earlier, for every household that made over \$100K, there were 90.2 households that made under \$30K.
- Please note that the income distribution is not adjusted for inflation so some of the changes are due to inflation.



Housing Affordability - Owner Occupied

- The housing affordability index is 129, which suggests that the median family can afford the median house. *
- Housing affordability has become less affordable in the last decade, from 145 in 1990 to 129 in 2000.

Owner Occupied Housing Affordability	1990	2000
Specified owner-occupied housing units: Median value (Adjusted for	\$ 66,271	\$ 101,100
% of median income necessary to buy the median house	17%	19%
Income required to qualify for the median house	\$ 22,351	\$ 28,568
Housing Affordability Index: (100 or above means that the median family can afford the median house.)*	145	129
Universe: Specified owner-occupied housing units		SF3 - H76

Income in:	1989		1999
Per capita income		\$	15,731
Median household income (Adj. for Inflation in 2000 \$)	\$ 27,415	\$	31,677
Median family income (Adj.for Inflation in 2000 \$)	\$ 32,441	\$	36,977
Universe: Total population, Households, Families	SF3	3 - P8	32,P53,P77

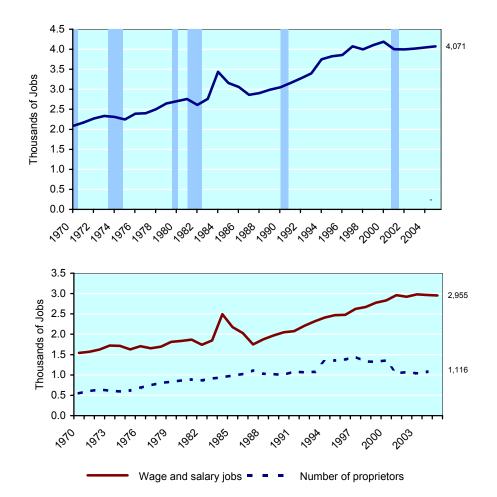
* Note: The housing affordability figures assume a 20% down payment and that no more than 25% of a family's income goes to paying the mortgage. It is based on an interest rate of 10.01% in 1990 and 8.03% in 2000. Use this statistic as a comparative, rather than absolute, measure.

Source: Census 2000 and Census 1990

Employment

Long term trend

- From 1970 to 2005, 1,983 new jobs were created.
- From 1970 to 2005, the majority of job growth, 71% of new jobs, has been in wage and salary employment (people who work for someone else).
- Employment of wage and salary employment (people who work for someone else) contributed to 71% of new employment from 1970 to 2005, and 198% of new employment since 1995.
- In 1970, proprietors represented 26.2% of total employment; by 2005, they represented 27.4%.



Wages and Salaries vs. Proprietors Changes from 1970 to 2005

changes from 1970 to 20	05								
							% of	New	% of
						New	New	Employm	New
		% of			% of	Employme	Employm	ent (95-	Employm
	1970	Total	1995	2005	Total	nt (70-05)	ent	05)	ent
Total full-time and part-time employmer	2,088		3,825	4,071		1,983		246	100.0%
Wage and salary jobs	1,541	73.8%	2,469	2,955	72.6%	1,414	71.3%	486	197.6%
Number of proprietors	547	26.2%	1,356	1,116	27.4%	569	28.7%	-240	NA
Number of nonfarm proprietors 5/	356	17.0%	1,071	841	20.7%	485	24.5%	-230	NA
Number of farm proprietors	191	9.1%	285	275	6.8%	84	4.2%	-10	NA

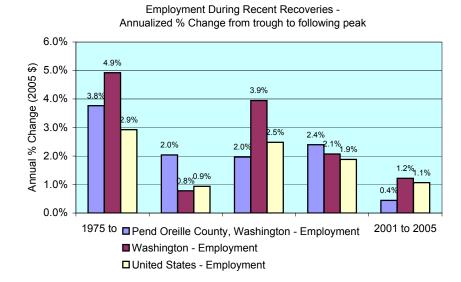
Proprietors include sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

Wage and salary employment refers to employees.

Employment

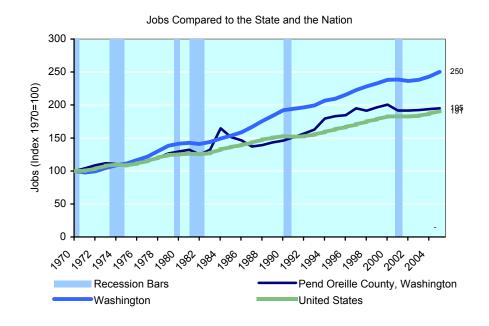
How well do we recover from recessions?

- In the latest recovery (2001 to 2005), employment growth in Washington (up 1.2%) has outpaced the United States and Pend Oreille County, Washington.
- Alternatively, in the last recovery (1991 to 2001), Pend Oreille County, Washington (up 2.4%) grew the fastest.
- In the recovery from 1982 to 1990, Washington (up 3.9%) grew the fastest.



Job Growth Compared to the State and the Nation

- Over the last 35 years job growth in Pend Oreille County, Washington has been slower than the state and faster than the nation.
- Some areas can experience employment gains even during the recessions. If so, check to see how much is due to migration and population changes.

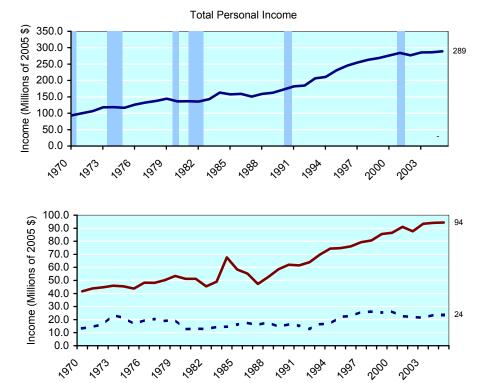


Personal Income

Proprietors' income

Long term trend

- From 1970 to 2005, personal income added \$195 million in real terms.
- The annualized growth rate was 3.3%.



Importance of Proprietors

- In the last 35 years, wage and salary disbursements grew at an annual rate of 2.4%, outpacing proprietors' income which grew at a 1.7% rate.
- 10.3% of new labor income from 1970 to 2005 was from proprietors' income.

Wages and Salaries ve	s. Proprie	tors						
		1970		1995		2005	New	% of
All income in millions of 2005 dollars	1970	% of Labor	1995	% of Labor	2005	% of Labor	Income 70-05	New Income
An income in minors of 2005 dollars	1970	Labor	1995	Labor	2005	Labor	70-03	meonie
Labor Sources	62	100%	121	100%	163	100%	101	100.0%
Wage and salary disbursements	42	68%	75	62%	94	58%	53	52.1%
Proprietors' income	13	21%	22	18%	24	15%	10	10.3%
Nonfarm proprietors' income	11	18%	21	18%	24	15%	13	12.7%
Farm proprietors' income	2	4%	1	1%	(0)	0%	(2)	NA

Wage and salary disbursements

Wage and salary is monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401(K) plans.

Proprietors is income of sole proprietorships, partnerships and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

Source: BEA REIS 2005 Table CA05N and CA30

Proprietors

Definitions:

"Proprietors" refers to employment and income from sole proprietorships, partnerships, and tax-except cooperatives. "Wage and salary" refers to employees; people who work for someone else.

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Are proprietors an important indicator of economic health?

Growth of proprietor employment and income can be a healthy sign that opportunities for entrepreneurship exist. Another way to gauge the health of small business growth is to look at changes in businesses by type and size of establishment (later in this profile).

Growth of proprietors can also mean that a rising number of people in the community want to (or need to) have side jobs in addition to their wage and salary jobs. When this is the case, earnings from second jobs can pull down average wages. To see if this is a sign of stress, look for other potential stress indictors in this profile: unemployment rates over time and changes in earnings per job.

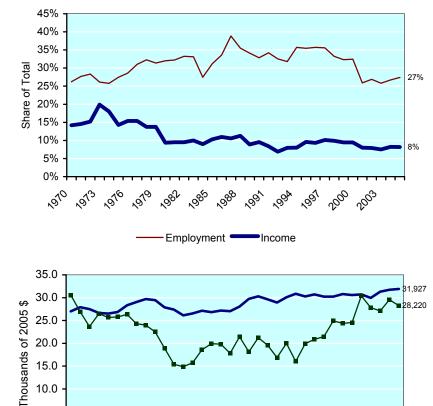
Proprietors' Share of Total (Income vs. Employment)

- In 2005, proprietors' share of total employment (27%) was higher than proprietors' income share of total (8%).
- From 1970 to 2005, proprietors' income share of total fell by 42.2%, while proprietors' employment share of total grew by 4.6%.

How are Proprietors Doing?

- From 1970 to 2005, average wage and salary disbursements grew at an annualized rate of 0.5% (adjusted for inflation), faster than from average nonfarm proprietors' income, which fell by 0.2%.
- In 2005, average wage and salary disbursements were \$31,927 (adjusted for inflation), more than average nonfarm proprietors' income (\$28,220).
- In 1970, it was the other way around. Average nonfarm proprietors' income was \$30,584 (adjusted for inflation), more than average wage and salary disbursements (\$27,000).
- If these shares vary widely, it suggests that proprietors and wage earners have different earnings.

Source: BEA REIS 2005 Table CA30



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^{,060}

Average wage and salary disbursements Average nonfarm proprietors' income

`%

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2000

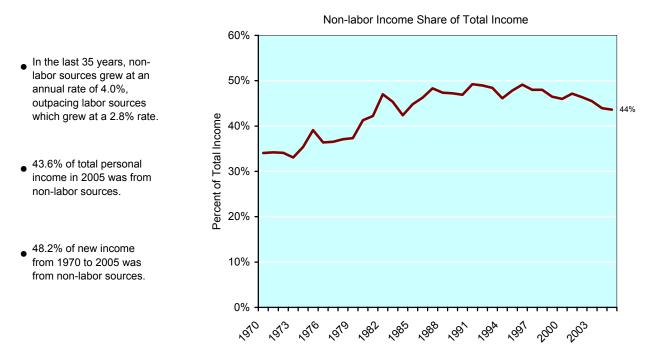
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Non-labor Income

The term "Non-Labor Income" is also referred by some economists as "Non-Earnings Income". It consists of Dividends, Interest and Rent (collectively often referred to as money earned from investments) and Transfer Payments (payments from governments to individuals, age-related, including Medicare, disability insurance payments, and retirements).

(See methods section for definitions and further explanations.)



Non-labor income under estimates retirement income because it does not include pensions (401Ks).

		1970		1995		2005	New	% of	% Chg	% Chg
All income in millions of 2005		% of		% of		% of	Income	New	Ann. Rate	Ann. Rate
dollars	1970	Total	1995	Total	2005	Total	70-05	Income	70-05	95-05
Total Personal Income	93	100%	231	100%	289	100%	195	100.0%	3.3%	2.3%
Labor Sources	62	66%	121	52%	163	56%	101	51.8%	2.8%	3.1%
Non-Labor Sources	32	34%	110	48%	126	44%	94	48.2%	4.0%	1.3%
Dividends, interest, and rent	14	15%	48	21%	48	17%	34	17.6%	3.7%	-0.1%
Personal current transfer receipts	18	20%	62	27%	78	27%	60	30.6%	4.2%	2.3%

Percentages do not add to 100 because of adjustments made by BEA, such as residence, social security, and others.

Transfer Payments

All figures in millions of 2005 dollars	1970	% of Total TP	2005	% of Total TP	New Payments 1970 to 2005		-	je in Sha (1970 - 2	
Total transfer payments	18.2		78.1		59.9				
Government payments to individuals	17.5	96%	74.9	96%	57.5	95.9%			
Retirement & disab. insurance benefit payments	8.8	49%	28.5	36%	19.6	32.8%			
Medical payments	2.7	15%	33.8	43%	31.1	52.0%			
Income maintenance benefit payments ("welfare")	2.0	11%	8.4	11%	6.5	10.8%			
Unemployment insurance benefit payments	1.8	10%	1.6	2%	(0.2)	NA			
Veterans benefit payments	2.2	12%	2.4	3%	0.2	0.4%			
Federal educ. & trng. asst. pay. (excl. vets)	0.1	0.7%	0.1	0.2%	0.0	0.0%			
Other payments to individuals	-	0.0%	0.1	0.2%	0.1	0.2%			
Payments to nonprofit institutions *	0.4	2%	2.3	3%	1.9	3.2%			
Business payments to individuals	0.3	2%	0.9	1%	0.5	0.9%			
Age-related (Retirement, Disability & Medicare)	9.7	53%	39.8	51%	30.1	50.2%	-50%	0%	50%

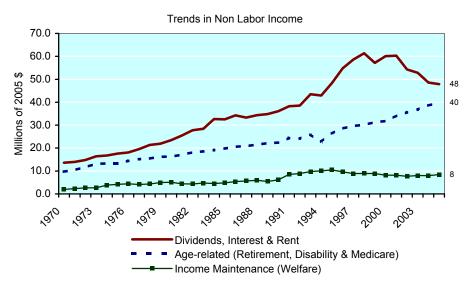
Trends in Non-Labor Income by Type

- The largest components of Non-Labor Income are from Dividends, Interest & Rent (i.e. money earned from past investments).
- In 2005 welfare represented 10.8% of transfer payments, and 2.9% of total personal income. This is up slightly from 1970 and down from 1980.

Components of Transfer Payments

 In 2005, 51% of Transfer Payments were from agerelated sources (retirement, disability, insurance payments, and Medicare), while 11% was from welfare.

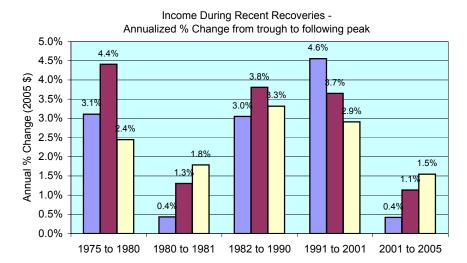
* See glossary for definitions. Source: BEA REIS 2005 Table CA35



Personal Income

How well do we recover from recessions?

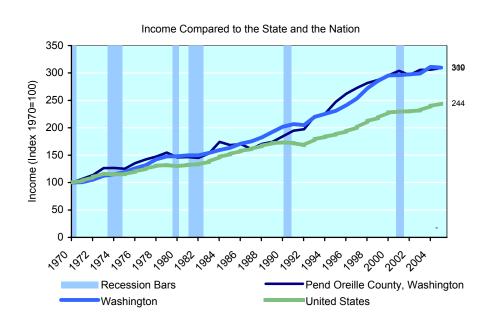
- In the latest recovery (2001 to 2005), income growth in the United States (up 1.5%) outpaced Washington and Pend Oreille County, Washington.
- Alternatively, in the last recovery (1991 to 2001), Pend Oreille County, Washington (up 4.6%) grew the fastest.
- In the recovery from 1982 to 1990, Washington (up 3.8%) grew the fastest.



Pend Oreille County, Washington - Income Washington - Income United States - Income

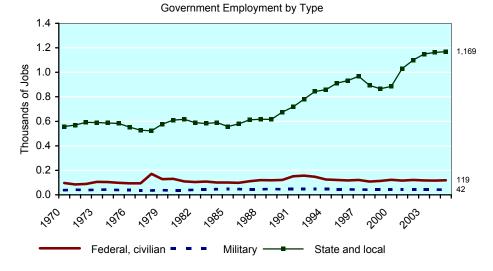
Income Growth Compared to the State and the Nation

- Over the last 35 years income growth in Pend Oreille County, Washington has been the sane as the state and faster than the nation.
- Some areas can experience income gains even during the recessions. If so, check to see how much of the change is due to changes in earnings per job, employment, migration and population changes.

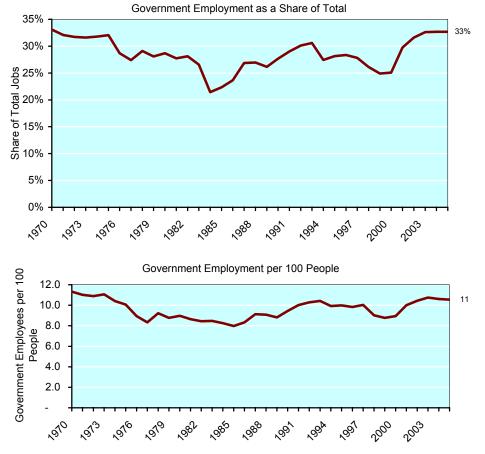


Government Employment

• The majority of the growth in government employment has been in state and local government (96%).



Is the size of government getting bigger? One way to answer this is to look at whether government employment has grown. If so, what type of government employment, and how does it compare to population growth? The figures on this page show government employment by type.



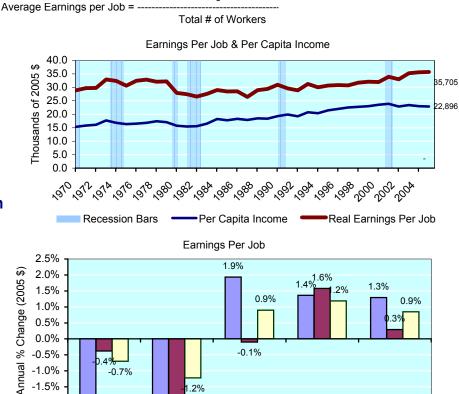
Source: BEA REIS 2005 Table CA25 and CA25N

Earnings Per Job

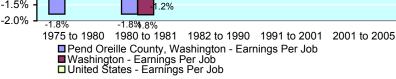
- Average earnings per job, adjusted for inflation, have risen from \$28,892 in 1970 to \$35,705 in 2005.
- In 2005, Average earnings per job in Pend Oreille County, Washington (\$35,705) were lower than the state (\$47,057) and the nation (\$45,817).

How well do we recover from recessions?

- In the current recovery (2001 to 2005), earnings per job growth in Pend Oreille County, Washington (up 1.3%) have outpaced the United States and
- Alternatively, in the last recovery (1991 to 2001), Washington (up 1.6%) grew the fastest.
- In the recovery from 1982 to 1990, Pend Oreille County, Washington (up 1.9%) grew the fastest.



Total Wages Earned



Reasons why earnings per job may change over time:

- 1) Average earnings per job statistics include full and part-time employment. In some counties only a portion of the eligible workforce works full-time, driving down wage statistics. Run an EPSC profile to see the percentage of people working full-time.
- 2) Communities with an increase in tourism may see a decline in earnings due to a rise in seasonal (part-time) workers.
- 3) Communities that have established themselves as regional retail trade centers may see a decline in wages due to the low wages paid in retail trade.
- 4) Structural changes may have resulted in the loss of relatively high-wage occupations. Look at the long-term trends in employment, by industry, and compare to the nation and other counties. Are the changes local, or part of nation-wide trends?
- 5) More women have entered the workforce, and because of relatively lower pay, or because of fewer hours worked (depending on the region both may occur), earnings may decline over time. For a comparison of male versus female income run an EPSC profile.
- 6) Earnings will decline if job growth is primarily from low-wage services industries. Look at the breakdown of different industrial sectors to see the type of service industries that are growing. Does the community have what it takes (education, airports, amenities, etc.) to attract the high-wage service industries (engineering, finance, etc.)?
- 7) People may be choosing to live in some communities for quality of life reasons. In some areas the increase in population can outpace the rate of job creation, thereby flooding the labor market and causing a downturn in wages. Look at the growth rates of population relative to growth in jobs and personal income.

Per Capita Income

Total Personal Income

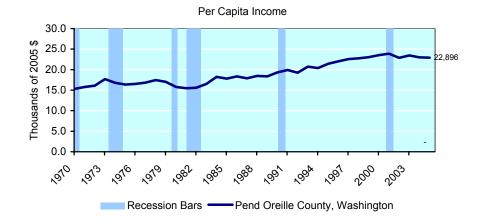
PCI = -----

Population

Per capita income is often used as a measure of economic performance, but it should be combined with changes in earnings for a realistic picture of economic health:

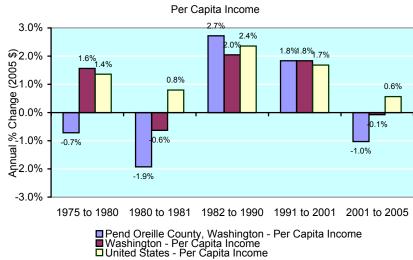
Since total personal income includes income from 401(k) plans as well as other non-labor income sources like transfer payment, dividends, and rent, it is possible for per capita income to rise, even if the average wage per job declines over time. In other words, the non-labor sources of income can cause per capita income to rise, even if people are earning less per job.

- Per capita income, adjusted for inflation, has risen from \$15,322 in 1970 to \$22,896 in 2005.
- In 2005, per capita income in Pend Oreille County, Washington (\$22,896) was lower than the state (\$35,479) and the nation (\$34,471).



How well do we recover from recessions?

- In the current recovery . (2001 to 2005), per capita income growth in the United States (up 0.6%) has outpaced Washington and Pend Oreille County, Washington.
- Alternatively, in the last recovery (1991 to 2001), Washington (up 1.8%) grew the fastest.
- In the recovery from 1982 to 1990, Pend Oreille County, Washington (up 2.7%) grew the fastest.



Firms by Industry (SIC)

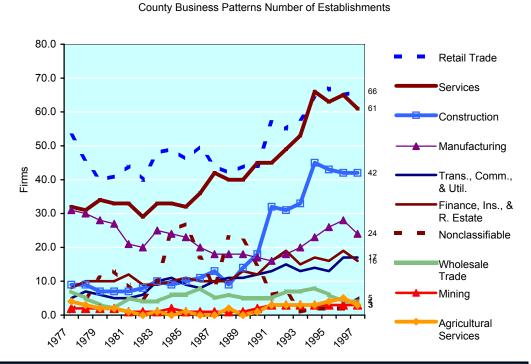
The advantage of this data source is that it never has disclosure restrictions. This source also releases data for hundreds of sectors (available on demand). The data on this page are from the US Census County Business Patterns, which unlike the REIS data, does NOT include proprietors, government, household services or railroad workers. If available, we encourage you to look at employment and income data from BEA REIS starting on page 26 as well.

Growth

• The employment category whose share of total gained the most was construction, which went from 5.9% in 1977 to 17.4% in 1997.

Decline

• The category whose share of total shrank the most was manufacturing, which went from 20.4% in 1977 to 10.0% in 1997.



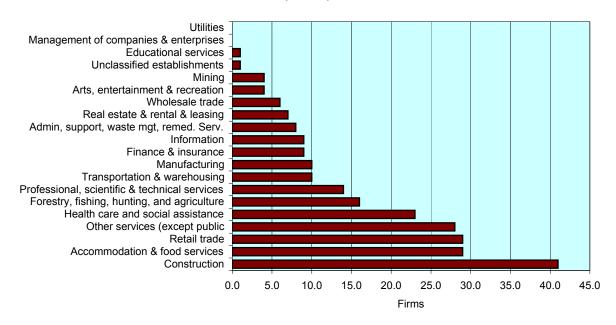
Firms by Industry

							New	Firms	Chan	ge in S	har
	1977	Shr of Tot	1987 S	Shr of Tot	1997 \$	Shr of Tot	77-97	Shr of Tot	c	of Total	
Total	152		151		241		89				
Agricultural Services	4	2.6%	#N/A	#N/A	3	1.2%	-1	NA			
Mining	2	1.3%	1	0.7%	3	1.2%	1	1.1%			
Construction	9	5.9%	13	8.6%	42	17.4%	33	37.1%			
Manufacturing	31	20.4%	18	11.9%	24	10.0%	-7	NA			
Trans., Comm., & Util.	5	3.3%	10	6.6%	17	7.1%	-3	NA			
Wholesale Trade	7	4.6%	5	3.3%	4	1.7%	-3	NA			
Retail Trade	53	34.9%	44	29.1%	66	27.4%	13	14.6%			
Finance, Ins., & R. Estate	8	5.3%	10	6.6%	16	6.6%	8	9.0%			
Services	32	21.1%	42	27.8%	61	25.3%	29	32.6%			
Nonclassifiable	1	0.7%	8	5.3%	5	2.1%	4	4.5%			
									-20%	0%	20%

Data ends in 1997 because the CBP switched to a different classification system (NAICS) in 1997.

Source: Census County Business Patterns

Pend Oreille County, Washington Firms by Industry in 2005 (NAICS)

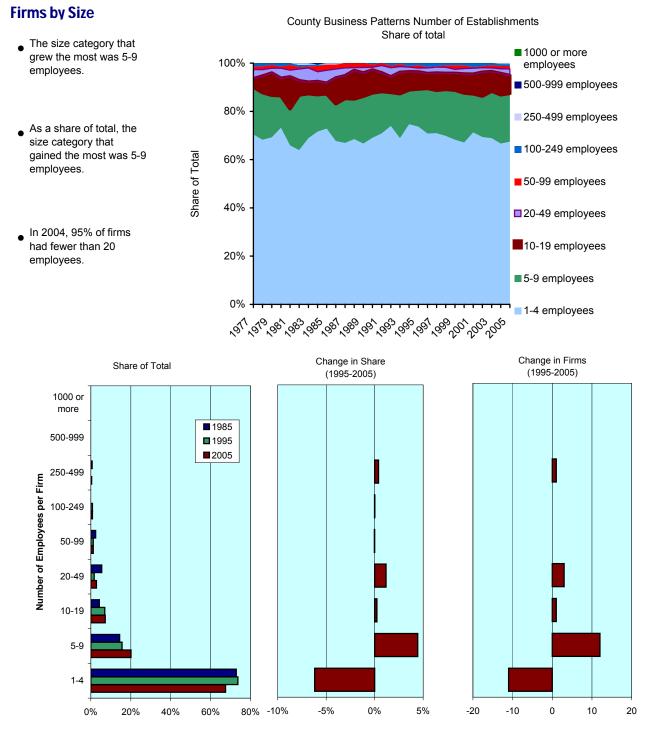


Firms by Industry in 2005

Firms by size and industry in 2005

				Number	of Emplo	oyees per	⁻ Firm			
	Total	1-4	5-9	10-19	20-49	50-99	100- 249	250- 499	500- 999	1000 O more
Forestry, fishing, hunting, and agriculture s	16	12	1	1	2	0	0	0	0	0
Mining Utilities	4	1	1	0	1	0	1	0	0	0
Construction	41	31	6	3	1	0	0	0	0	0
Manufacturing	10	4	2	1	0	2	1	0	0	0
Wholesale trade	6	5	1	0	0	0	0	0	0	0
Retail trade	29	19	7	2	0	1	0	0	0	0
Transportation & warehousing	10	7	3	0	0	0	0	0	0	0
Information	9	4	2	3	0	0	0	0	0	0
Finance & insurance	9	3	6	0	0	0	0	0	0	0
Real estate & rental & leasing	7	6	1	0	0	0	0	0	0	0
Professional, scientific & technical services Management of companies & enterprises	14	11	1	2	0	0	0	0	0	0
Admin, support, waste mgt, remed. Serv.	8	6	2	0	0	0	0	0	0	0
Educational services	1	1	0	0	0	0	0	0	0	0
Health care and social assistance	23	13	6	3	0	0	0	1	0	0
Arts, entertainment & recreation	4	2	1	0	1	0	0	0	0	0
Accommodation & food services	29	16	9	2	2	0	0	0	0	0
Other services (except public administratio	28	26	1	1	0	0	0	0	0	0
Unclassified establishments	1	1	0	0	0	0	0	0	0	0
Total	249	168	50	18	7	3	2	1	0	0

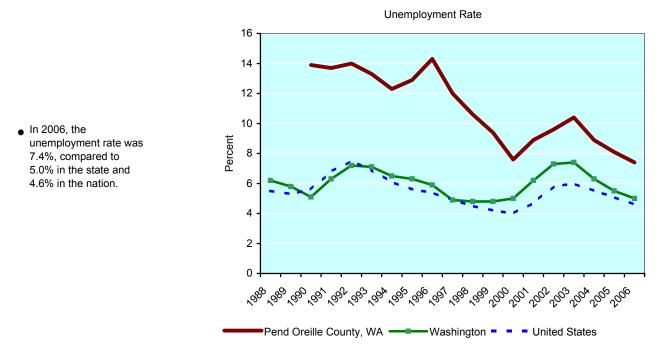
Firms by Size



Source: Census County Business Patterns

Unemployment Trends

Annual Average Unemployment Rate Compared to the State and the Nation



Unemployment Rate Seasonality

This graph illustrates the

seasonal variation in the

unemployment rate over

the last three years. In

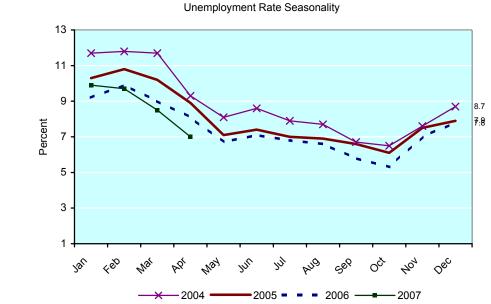
of 5.3% in October 2006 to a high of 9.9% in

unemployment rate varied from from a low

February 2006

2006, the

•



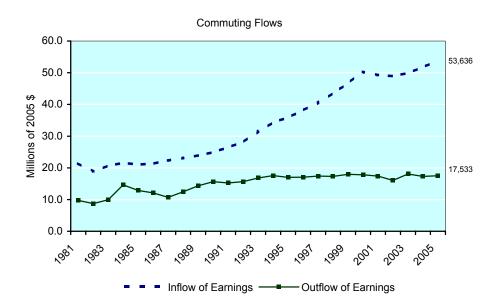
Linemployment Data Secondity

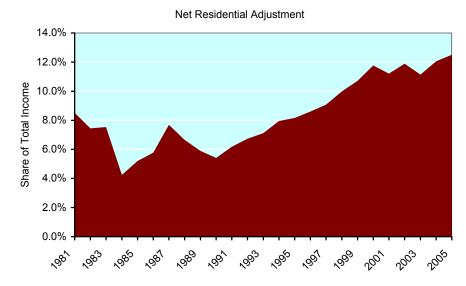
Source: Bureau of Labor Statistics

Commuting

Inflow & Outflows

Commuting data • suggests that Pend Oreille County, Washington is a bedroom community. (Income derived from people commuting out of the county to work exceeds the income from people commuting into the county.) The net difference represents 12.5% of total income in the county.





• A positive Net Residential Adjustment indicates out-commuting for work to adjacent counties.

The Bureau of Economic Analysis (BEA) reports personal income in terms of location of residence. BEA calculates how much money is earned in the county by people living outside the county (Total Gross Earnings Outflow) and it calculates how much money is brought into the county by residents who work outside of the county (Total Gross Earnings Inflow). Subtracting one from the other gives the Net Residence Adjustment. The Inflow and Outflow trends indicate whether the county is closely tied to others in terms of commuting.

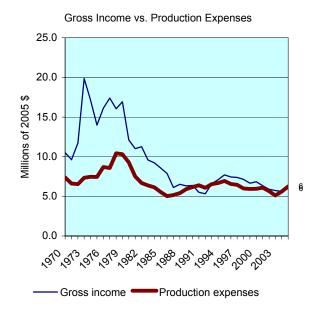
Pend Oreille County, Washington Agriculture (Business Income)

Farm income figures presented on this page reflect income from farming *enterprises* (income of the business). The term "farm" includes farming and ranching, but not agricultural services such as soil preparation services and veterinary services. In contrast, farm income figures presented in the next section reflect personal income earned by *individuals* (income of individuals, both proprietors and wage and salary employees) who work in farming and ranching.

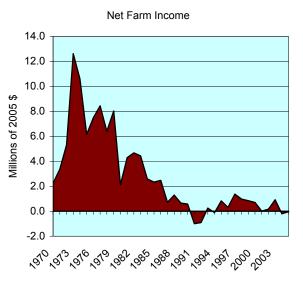
Farm income of businesses differs from individual farm income because it also includes government payments, rent, the value of inventory change and production expenses. In some areas, net farm income can be negative when production expenses exceed gross income.

Gross Income, Expenses, a	nd Net L	ncome	from Fa	rming	and Rar	nching	
		% of		% of		% of	70-04
		Gross		Gross		Gross	Change in
All figures in thousands of 2005 dollars	1970	Income	1995	Income	2005	Income	Share
Gross Income (Cash + Other)	10,621		7,717		5,985		
Cash Receipts from Marketings	9,684	91%	4,631	60%	3,596	60.1%	-31%
Livestock & Products	6,040	57%	3,449	45%	2,203	36.8%	-20%
Crops	3,644	34%	1,183	15%	1,393	23.3%	-11%
Other Income	936	9%	3,086	40%	2,389	39.9%	31%
Government Payments	126	1%	413	5%	25	0.4%	-1%
Imputed Rent & Rent Received	705	7%	2,673	35%	2,379	39.7%	33%
Production Expenses	7,394		6,944		6,253		
Realized Net Income (Income - Expenses)	3,226		773		(268)		
Value of Inventory Change	(871)	-8%	65	1%	212	3.5%	NA
Total Net Income (Inc. corporate farms)	2,356		838		(56)		

Gross Income vs. Production Expenses



Net Farm Income



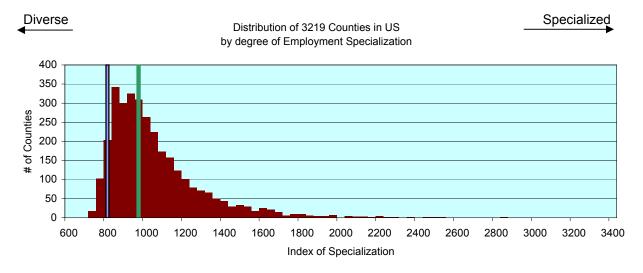
Pend Oreille County, Washingtor Relative Performance Comparisons

In the following pages (23-25) you will learn about:

- 1. The economic diversity of the county, compared to the state and the nation.
- 2. The year to year stability of personal income growth, comparing the county to the state and the nation.
- 3. The stability of personal income over time, comparing labor versus non-labor income.
- 4. If this is a county profile, numerous performance characteristics of the county (population growth, employment growth, employment stability, etc.), are used to compare the county to the median county in the country (a "benchmark").

Employment Diversity Index

One measure of economic success is economic diversity, or the lack of specialization. Communities that are heavily reliant on only a few industries are economically vulnerable to disruptions. This page documents one measure of specialization based on employment data from the 2000 Census.



■ County Distribution ■ Pend Oreille County, Washington = 816 ■ Median = 961

The above chart illustrates how this Employment Share of Total (2000 Census) county compares to all of the other Agriculture, forestry, fishing and hunting counties in the nation. Each bar Mining represents the number of counties Construction that have a index of specialization in Manufacturing that range. The green vertical line illustrates the value for the mean. Wholesale trade As you can see, most counties are Retail trade similar, but there are a few counties Transportation and warehousing that are wildly specialized (the long Utilities tail on the right). Information Finance and insurance Real estate and rental and leasing Professional, scientific, and technical services Management of companies and enterprises Pend Oreille County, Washington is somewhat diverse (816 versus a Admin & support & waste management services median of 961 for the US counties.) Educational services Health care and social assistance Arts, entertainment, and recreation Accommodation and food services The chart to the right illustrates the Other services (except public administration) data on which the index is based -Public administration employment share of total from the 2000 Census. There are more 4% 0% 6% 8% 10% 14% 16% 2% 12% timely breakouts by industry from a Share of Total different data source on pages 28-

Pend Oreille County, Washington Dunited States

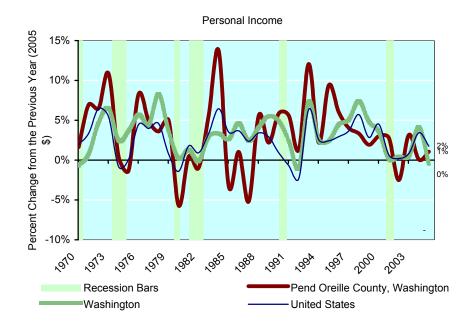
Source: Census 2000 SF3 Table P49.

31.

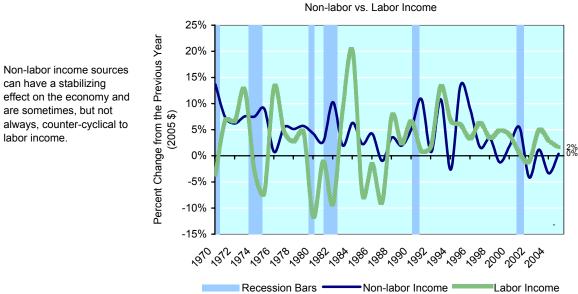
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Stability vs. State and Nation

- Different regions can behave very differently during recessions and recoveries.
- Note: Below 0% means absolute decline. Above 0% means absolute growth, but at different rates.



Labor vs. Non-Labor Income Stability



Performance Comparisons

Compared to benchmark area, the county has:

— Less Than More Than —

Population Growth (Annualized rate, 1970-

Employment Growth (Annualized rate, 1970-

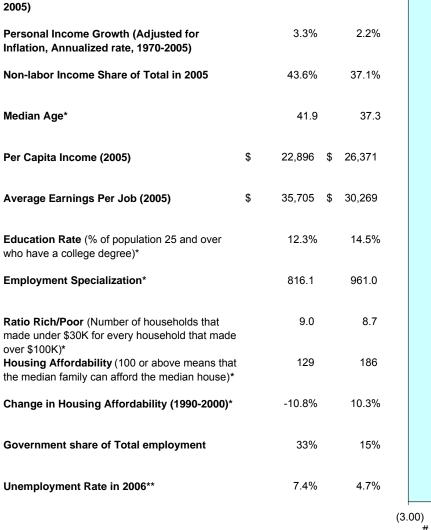
2005)

(3.00)(1.00)1.00 3.00 # of Standard Deviations from the Median

Benchmark = Median of all Counties in U.S.***

All data are from REIS except * are from 2000 US Census and ** is from Bureau of Labor Statistics.

***Median is the middle value of a list of numbers. This is different from mean (average), which is the sum of all the numbers in a list divided by the number of numbers in the list.



Pend Oreille County, Washington US Median

2.1%

1.9%

0.6%

1.4%

Pend Oreille County, Washingto Employment and Income by Industry

In the following pages (28-31) you will learn about:

- 1. Long-term employment and personal income trends, from 1970 to 2005
- 2. How the structure of the economy has changed during the last three decades

Information for some industries and for some years may not be available from the U.S. Department of Commerce because of disclosure restrictions.

What is a 'disclosure restriction'?

A disclosure restriction means a gap exists in the data. Information has been suppressed by the U.S. Department of Commerce to avoid disclosure of confidential information. Generally, the smaller the geographic level of analysis and the smaller the population of the county, the higher the chances that industry-specific information is suppressed and that disclosure restrictions will occur.

Our model to estimate the disclosure restrictions currently provides estimates for employment and income using the SIC classification method through 2000 for the western states only.

Important Notes on the Industrial Classification Systems used by EPS

The U.S. Department of Commerce made a transition in how economic information is gathered and organized in 2001. The Standard Industrial Classification System (SIC) was used from 1970 to 2000; the North American Industrial Classification System (NAICS, pronounced "nakes") is used currently, for data from 2001 and beyond.

Unfortunately the two systems are not backward comparable, so they are presented separately in EPS: 1970 to 2000 data are organized by SIC, and data beyond those years are organized by NAICS.

The most important change resulting from the shift to NAICS is the recognition of hundreds of new businesses in today's economy. NAICS divides the economy into 20 broad sectors rather than the SIC's 10 divisions. This is especially helpful in giving a more detailed breakdown of the fastest growth area in the country's economy – "services." For example, advanced technology related "service" industries (e.g., professional, scientific and technical services) are clearly differentiated from "in-person" services (e.g., health care) and low-wage services (e.g., accommodation and food services).

For historical data (1970-2000, organized by SIC) EPS was designed to illustrate the complexity of the service economy in a couple of ways:

- 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 chambermaids with architects and financial consultants.
- 2) We reorganized the SIC categories into different types of services, such as Consumer Services, Producer Services, Social Services, and Government Services.

The transition to NAICS has alleviated the need to explain that "services" are actually a wide mix of low, medium, and high-wage industries.

About Missing Data

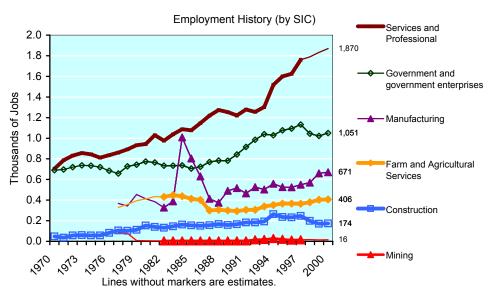
This profile is organized so that all non-disclosed information is presented first. Employment and personal income by industry is presented last. For some rural counties, and for some industries, data gaps may occur. EPS has a built-in system for estimating data gaps through 2000 for the 11 contiguous western states (AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY). When estimates are used in the tables on pages 28 and 30, they are highlighted in bold red text.

Employment (SIC)

Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

Growth

• The employment category whose share of total gained the most was services and professional, which went from 35.8% in 1977 to 44.7% in 2000.



Decline

• The category whose share of total shrank the most was farm, which went from 12.6% in 1977 to 7.8% in 2000.

Employment by Industry Changes from 1977 to 2000

Changes from 1977 to 200	1977	% of Total	2000	% of Total	New	Employment		% of New mploy ment	Change in Share
Total Employment	2,402.0		4,188.0		1,786.0				
Wage and Salary Employment	1,657.0	69.0%	2,830.0	67.6%	1,173.0			65.7%	
Proprietors' Employment	745.0	31.0%	1,358.0	32.4%	613.0			34.3%	
Farm and Agricultural Services	328.3	13.7%	406.0	9.7%	77.7			4.4%	
Farm	302.0	12.6%	328.0	7.8%	26.0			1.5%	
Ag. Services	26.3	1.1%	78.0	1.9%	51.7			2.9%	
Mining	81.3	3.4%	15.7	0.4%	(65.7)			NA	
Manufacturing (incl. forest products)	368.4	15.3%	671.0	16.0%	302.6			16.9%	
Services and Professional	861.0	35.8%	1,870.3	44.7%	1,009.3			56.5%	
Transportation & Public Utilities	90.0	3.7%	184.0	4.4%	94.0			5.3%	
Wholesale Trade	31.0	1.3%	30.3	0.7%	(0.7)			NA	
Retail Trade	298.0	12.4%	692.0	16.5%	394.0			22.1%	
Finance, Insurance & Real Estate	114.0	4.7%	201.0	4.8%	87.0			4.9%	
Services (Health, Legal, Business, Others)	328.0	13.7%	763.0	18.2%	435.0			24.4%	
Construction	105.0	4.4%	174.0	4.2%	69.0			3.9%	
Government	658.0	27.4%	1,051.0	25.1%	393.0			22.0%	
						0.0K	2.0K		-8% 20%

* Estimates for data that were not disclosed are bold and red in the above table.

* Agricultural Services include soil preparation services, crop services, etc. It also includes forestry services, such as reforestation services, and fishing, hunting and trapping. *Manufacturing* includes paper, lumber and wood products manufacturing. Source: BEA REIS 2005 CD Table CA25

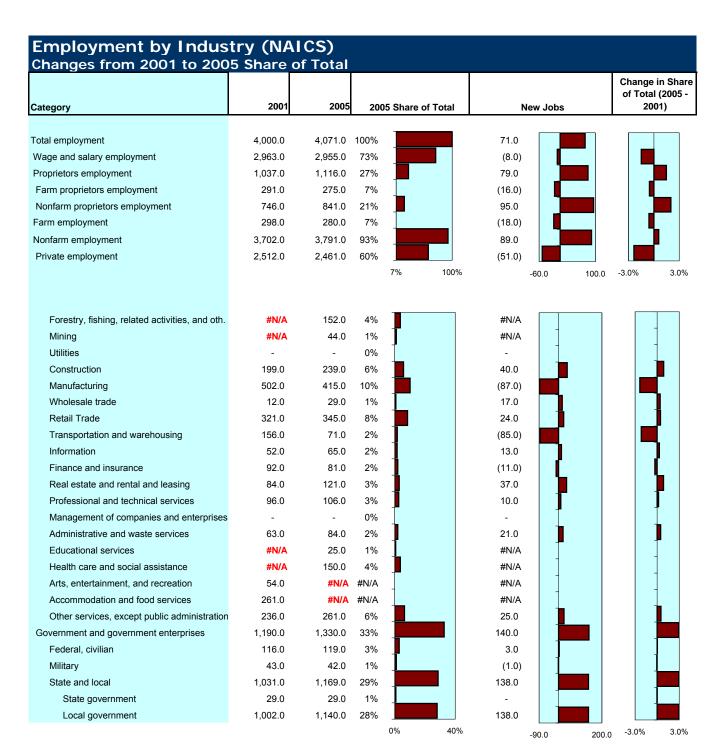
Growth

Missing data prevent this ranking

Decline

Missing data prevent this ranking.

Employment (NAICS)



Personal Income (SIC)

Income (by SIC) Non-Labor Sources The income category (investments, 140.0 retirement, etc.) whose share of total 127 Manufacturing (incl. gained the most was non-120.0 forest products) labor income, which went from 36.5% in 1977 to 100.0 Government Thousands of 2005 \$ 80.0 Services and 60.0 Professional 54 43 40.0 Construction 32 20.0 Farm and Ag. P 0.0 Services -20.0 Mining 1970 ,970 ¹⁹ 198² 198⁵ ,9⁹⁰ ,9⁹¹ 2000 ,0° ~9⁷3

Lines without markers are estimates.

Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

Decline

46.0% in 2000.

Growth

• The category whose share of total shrank the most was farm and agricultural services, which went from 7.0% in 1977 to 0.4% in 2000.

New Income by Type									
All figures in millions of 2000 dollars	1977 % of Total		2000 % of Total		New Income 1977 to 2000		% of New Income	Change i Shar	
Total Personal Income*	132.9		276.3		143.5				
Farm and Agricultural Services	9.3	7.0%	1.2	0.4%	(8.0)		NA		
Farm	9.0	6.8%	0.9	0.3%	(8.1)		NA		
Ag. Services	0.3	0.2%	0.4	0.1%	0.1		0%		
Mining	4.8	3.6%	0.6	0.2%	(4.2)		NA		
Manufacturing (incl. forest products)	17.3	13.0%	53.6	19.4%	36.3		25%		
Services and Professional	22.1	16.6%	32.3	11.7%	10.2		7%		
Transportation & Public Utilities	3.8	2.9%	7.2	2.6%	3.3		2%		
Wholesale Trade	1.3	1.0%	0.6	0.2%	(0.7)		NA		
Retail Trade	6.6	5.0%	8.3	3.0%	1.6		1%		
Finance, Insurance & Real Estate	1.2	0.9%	2.8	1.0%	1.6		1%		
Services (Health, Legal, Business, Oth.	9.1	6.8%	13.4	4.9%	4.4		3%		
Construction	3.7	2.8%	3.1	1.1%	(0.5)		NA		
Government	21.8	16.4%	43.0	15.6%	21.3		15%		
Non-Labor Income	48.5	36.5%	127.0	46.0%	78.5		55%		
Dividends, Interest & Rent	19.5	14.7%	60.1	21.8%	40.6		28%		
Transfer Payments	29.0	21.9%	66.9	24.2%	37.9		26%		
						-3.0 100.0	0	-9% 20%	
						-3.0 100.0	0	-9%	

* Estimates for data that were not disclosed are bold and red in the above table.

*The sum of the above categories do not add to total due to adjustments made for place of residence and personal contributions for social insurance made by the U.S. Department of Commerce.

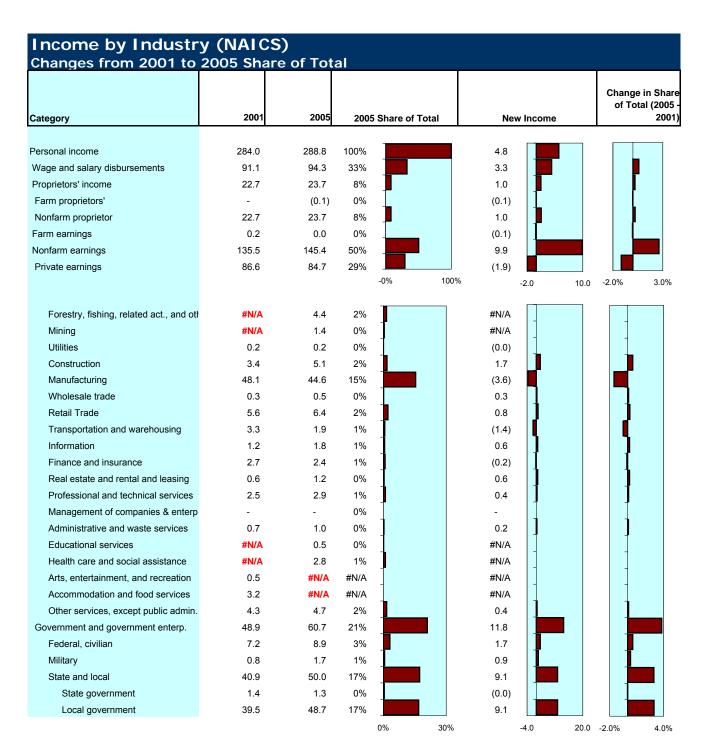
Personal Income (NAICS)

Growth

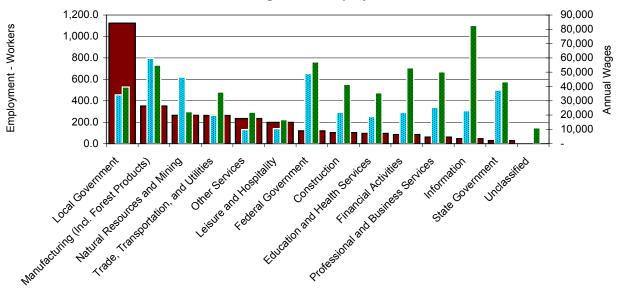
• Missing data prevent this ranking

Decline

Missing data prevent this ranking.



Wages & Employment



2005 Wages and Employment

Employment (Left Axis)

- 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 \$49,455.
- Service-providing employees (981 workers) were paid an average of \$16,150.
- Wages in the public sector (\$35,550) exceeded wages in the private sector (\$30,224) by 17.6%.

Wages (Right Axis)

County Wages and Employment in 2005 Average Annual Employment % of Total Wages **Total Private & Public** 2,970 100% 32,508 Total Private 1,699 57% 30,224 **Goods-Producing** 718 24% 49,455 9% 46,595 Natural Resources and Mining 264 Agriculture, forestry, fishing & hunting 71 2% 29,688 6% 52,812 Mining 193 3% Construction 103 12% Manufacturing (Incl. Forest Products) 351 59,648 Service-Providing 981 33% Trade, Transportation, and Utilities 263 9% 19,801 46 2% 23,037 Information 85 3% **Financial Activities** 21,805 Professional and Business Services 61 2% 25,447 Education and Health Services 3% 18,876 96 Leisure and Hospitality 198 7% 10.493 Other Services 234 8% 9.886 Unclassified #N/A #N/A #N/A **Total Public** 1,271 43% 35,550 4% 48,984 Federal Government 119 State Government 1% 37,503 28 Local Government 1,124 38% 34,093

State Wages (Right Axis)

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.

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW)

Data Sources

Data Sources

The Economic Profile System was designed to focus on long-term trends at the county level. We used this method and geographic scale for several reasons: (1) trend analysis provides a more comprehensive view of change than spot data for select years, (2) the most reliable information on long-term employment and income trends is available at the county level, and (3) communities within counties rarely function as economic units themselves. Finally, even though in many areas the most accurate geographic scale to understand economic changes may be at the multi-county or regional level, county-level data is useful in the context of existing political jurisdictions, such as county commissions and planning departments. The list below contains the World Wide Web sites and telephone numbers for the databases used in this report:

- Regional Economic Information System (REIS)
 Bureau of Economic Analysis, U.S. Department of Commerce.
 <u>http://bea.gov/bea/regional/data.htm</u>
 Tel.202-606-9600
- Quarterly Census of Employment and Wages (QCEW)

Bureau of Labor Statistics http://www.bls.gov/cew Tel. 202-691-6567

• Local Area Unemployment Statistics (LAUS)

Bureau of Labor Statistics http://www.bls.gov/LAU Tel. 202-691-6392

- 1990 and 2000 U.S. Census Bureau of Census <u>http://www.census.gov</u> Tel. 303-969-7750
- County Business Patterns (CBP)
 Bureau of the Census, U.S. Department of Commerce.
 <u>http://www.census.gov/epcd/cbp/view/cbpview.html</u>
 Tel 301-763-2580
- County Business Patterns (Before 1986)
 University of Virginia, Geospatial and Statistical Data Center:
 <u>http://fisher.lib.virginia.edu</u>
 Tel. 804-982-2630

Use of Federal Rather than State Data Bases

Data from state agencies was not used for this profile. Many of the state and local sources of data do not include information on the selfemployed or on the importance of non-labor income, such as retirement income and money earned from past investments. In many counties this can result in the underestimation of employment and total personal income by at least one third. The REIS disk of the Bureau of Economic Analysis contains the most robust data set and for this reason it was used as the primary source.

The only disadvantage of the REIS dataset is it's not as recent; 2005 is the latest for REIS, while state data sources provide data for as recent as 2006. By providing long-term trends data, from 1970 to 2005, having the most recent data is less important than being able to discern where the county's economy has been, and the direction in which it has been headed in recent years.

Industrial Classification Systems (SIC & NAICS)

The long-term historic industry data used in this profile are based on data that is organized by the U.S. Department of Commerce using the Standard Industrial Classification (SIC) system. In recent years, the Department of Commerce has reorganized economic data according to a new system, called the North American Industry Classification System (NAICS, pronounced "nakes"). County Business Patterns started organizing their data using new NAICS in 1998, Census in 2000, and the Regional Economic Information System (REIS) in 2001.

The NAICS system is an improvement to the SIC system in several ways: first, businesses that use similar processes to produce goods or services are classified together. Previously, under the SIC system, some businesses were classified on the basis of their production processes while others were classified under different principles, such as class of consumer. Second, NAICS is a flexible system that will be updated every five years in order to keep pace with changes in the economy. Third, the NAICS system recognizes the uniqueness and rising importance of the "information economy," and provides several new categories, such as cable program distributors and database and directory publishers. Finally, and perhaps the most useful, the NAICS system provides seven sectors to better reflect services-producing businesses that were previously combined into one generic SIC division (the Services division).

This new system allows the data user to differentiate more clearly between what was previously often lumped under the general heading of "services," into categories such as arts and entertainment; education; professional, scientific and technical services; health care and social assistance, among others.

Arguably the most important change of NAICS is the recognition of hundreds of new businesses in the economy. NAICS divides the economy into 20 broad sectors rather than the SIC's 10 divisions as seen in the table on the following page. Creating these additional sector-level groupings allows NAICS to better reflect key business activities, as well as chronicle their changes.

SIC Divisions vs. NAICS Sectors **SIC Divisions NAICS Sectors** Agriculture, Forestry, and Fishing Agriculture, Forestry, Fishing and Hunting Mining Mining Construction Construction • Manufacturing Manufacturing Transportation, Communications, and Public Utilities Transportation and Warehousing Wholesale Trade Wholesale Trade Retail Trade Retail Trade Accommodation and Food Services Finance, Insurance, and Real Estate Finance and Insurance Real Estate and Rental and Leasing Information Services Professional, Scientific, and Technical Services Administrative and Support and Waste Management and Remediation Services **Educational Services** Health Care and Social Assistance Arts, Entertainment, and Recreation Other Services (except Public Administration) Public Administration Public Administration None (previously, categories within each division) Management of Companies and Enterprises

Non-Labor Income

Non-labor income is a mix of Dividends, Interest, and Rent (money earned from past investments), and Transfer Payments (government payments to individuals). Private pension funds (e.g. 401(K) plans) are not counted as part of transfer payments.

Some data sources, such as "Section 202" data available from state unemployment insurance records and reported by the Bureau of Labor Statistics, do not report non-labor income. The Bureau of Economic Analysis (BEA), on the other hand, tracks non-labor income. In order to understand the actual growth (labor and non-labor) of personal income, the REIS/BEA data set must be used, and this is what was used for this profile. From REIS table CA05, we added together the following two categories to derive non-labor income: "Personal current transfer receipts" and "Dividends, interest, and rent."

Disclosure Gaps

Some data, such as employment and income figures in counties with small economies, are not available because of confidentiality restrictions. In order to protect information about individual businesses, data are sometimes suppressed or, in the case of the publication County Business Patterns, a range of values are given instead of a specific value. Generally, the smaller the geographic level of analysis or the smaller the economy under examination the higher the chances that industry-specific information will be suppressed.

Where disclosure gaps exist, the EPS User's Manual outlines a few ways to handle the gaps. One approach is to use a built-in system within EPS for estimating data gaps through 2000 for the 11 contiguous western states (AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY). In order to calculate the estimates, we first estimated gaps in the County Business Patterns data by using the firms by size information. Then we used these County Business Patterns data to estimate the gaps in the REIS data. Finally, we scaled the estimates up or down to force known identities. There is an option in EPS to either show these estimates or not. When these estimates are shown, annotations were made in the profile documenting where estimates were used. For a description of the methods used to estimate the data gaps in EPS, see the EPS User's Manual.

Aggregated Profiles

The economic profile system has an option to allow you to aggregate data from multiple counties into one profile. The majority of the data in the profiles are summed in the aggregate profile. For some data points, however, the data are averaged. In order to do this, EPS has to replace some of the data in the raw data tables with formulae. For example, the aggregate unemployment rate for a group of counties is calculated from the sum of the unemployed divided by the sum of the labor force. This results in a proportionally weighted average, where larger counties are given more weight then smaller counties.

The Economic Profile System interpolates the medians from the data that are available. When the Census releases data expressed as a median, they also release the number of observations that fall in the full range of categories, or "brackets". For example, median age is interpolated from the number of people in each age bracket. EPS aggregates the number of people in each bracket, and then interpolates the median from the aggregated data. In some cases, the Census have more detailed brackets than we do in the EPS databases so the interpolations in aggregated EPS profiles are rough estimates.

Adjustments from Current to Real Dollars

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. The U.S. Department of Commerce reports personal income figures in terms of current dollars. All income data in this profile were adjusted to real (or constant) 2005 dollars using the Consumer Price Index, except the Income Distribution information on page 5 of the profile.

Unemployment Rate

Unemployment is generally available as seasonally unadjusted or adjusted, and there is an advantage to using adjusted data. From the Bureau of Labor Statistics web site (http://stats.bls.gov/lauseas.htm), an explanation of why adjusted figures should be used, whenever possible: "Over the year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to seasonal events including changes in weather, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical, long term trend, and other non-seasonal movements in the series."

Unadjusted numbers were used in this profile in order to obtain an annual average and because county-level data are not available in adjusted format from the Bureau of Labor Statistics web site. This may introduce some error in counties where the size of the workforce fluctuates seasonally, such as tourist destination areas.

Farm Income

Note that farm income figures on pages 21 are not the same as the figures on pages 30 & 31. The figures on page 21 reflect income from farming *enterprises* (farm proprietors and corporate income), while the farm income on pages 30 & 31 is personal income earned by *individuals* (both proprietors, and wage and salary employees) who work in farming.

Specialization Index

The specialization index was calculated as:

 $SPECIAL_{it} = \sum_{j=1} (EMP_{ijt}/EMP_{it})^{2}$

$$\begin{split} SPECIAL_{it} &= \text{specialization of economy in county i in year t} \\ EMP_{ijt} &= \text{employment in industry j in county i in year t} \\ EMP_{it} &= \text{total employment in county i in year t} \\ n &= \text{number of industries} \end{split}$$

This index is commonly used as a measure of industrial specialization in the economy. Counties with a high specialization index can also be described as not being economically diverse.



Income

- <u>Total Personal Income</u> = private earnings, income from government and government enterprises, dividends, interest, and rent, and transfer payments plus adjustments for residence minus personal contributions for social insurance.
- <u>Wage and salary</u> = monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401K plans.
- <u>Other labor income</u> = payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees.
- <u>Proprietors' income</u> = income from sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

Transfer Payments

- <u>Transfer payments</u> = payments to persons for which they do not render current services. As a component of personal income, they are payments by government and business to individuals and nonprofit institutions.
- <u>Retirement & disab. insurance benefit payments</u> = Old-Age, Survivors, and Disability Insurance payments (Social Security), Railroad Retirement and Disability payments, Federal Civilian Employee & Disability Payments, Military Retirement, and State and Local Government Employee retirement payments.
- Medical payments = Medicare, public assistance medical care and CHAMPUS payments.
- Income maintenance (welfare) = Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Food Stamps, and Other Income Maintenance Payments, such as emergency assistance, foster care payments and energy assistance payments.
- <u>Unemployment insurance benefit payments</u> = unemployment compensation for state and federal civilian employees, unemployment compensation for railroad workers, and unemployment compensation for veterans.
- Veterans benefits = primarily compensation to veterans for their disabilities and payments to their survivors.
- <u>Federal education and training assistance</u> = Job Corps payments, interest payments on Guaranteed Student Loans, federal fellowship payments, and student assistance for higher education.
- <u>Other government payments</u> = compensation of survivors of public safety officers and compensation of victims of crime. In Alaska this item includes Alaska Permanent Fund payments.
- <u>Payments to nonprofit institutions</u> = payments for development and research contracts. For example, it includes payments for foster home care supervised by private agencies.
- <u>Business payments to individuals</u> = personal-injury liability payments, cash prizes, and pension benefits financed by the Pension Benefit Guarantee Corporation.

Mean, Median and Modes

- Mean = The sum of a list of numbers, divided by the total number of numbers in the list.
- <u>Median</u> = "Middle value" of a list. The smallest number such that at least half the numbers in the list are no greater than it. If the list has an odd number of entries, the median is the middle entry in the list after sorting the list into increasing order. If the list has an even number of entries, the median is equal to the sum of the two middle (after sorting) numbers divided by two. The median can be estimated from a histogram by finding the smallest number such that the area under the histogram to the left of that number is 50%.
- <u>Mode</u> = For lists, the mode is the most common (frequent) value. A list can have more than one mode. For histograms, a mode is a relative maximum ("bump").