

www.headwaterseconomics.org

# A SocioEconomic Profile Alaska

Produced by the Economic Profile System (EPS) September 10, 2007

## About The Economic Profile System (EPS)

This profile was produced using the 2007 version of the Economic Profile System (EPS), last updated in September 2007. EPS is designed to allow users to produce detailed socioeconomic profiles automatically and efficiently 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 including 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 and Acrobat files (.pdf) of completed profiles for the West are available for free download at www.headwaterseconomics.org.

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



#### www.headwaterseconomics.org

**Headwaters Economics** is a high-tech nonprofit 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. Our mission is to improve community development and land management decisions in the West.



#### 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.

About the Economic Profile System	
Table of Contents	
Read This First	
Demographics, Employment and Income	
Demographics, Employment and Income	1
Population Trends	2
Population	3
Age and Gender	4
Income Distribution & Housing	5
Employment	6
Employment	7
Personal Income	8
Proprietors	9
Non-labor Income	10
Transfer Payments	11
Personal Income	12
Government Employment	13
Earnings Per Job	14
Per Capita Income	15
Firms by Industry	16
Firms by Industry in 2001 (NAICS)	17
Firms by Size	18
Unemployment Trends	19
Commuting	20
Agriculture (Business Income)	21
Relative Performance Comparisons	
Relative Performance Comparisons	22
Employment Diversity Index	23
Stability	24
Performance Comparisons	25
Employment and Personal Income by Industry	
Employment and Income by Industry	26
Read This First	27
Employment (SIC)	28
Employment (NAICS)	29
Personal Income (SIC)	30
Personal Income (NAICS)	30
Wages and Employment	32
Data Sources	Data Sources
Methods	Methods
Glossary	Glossary
<u>Olossary</u>	Giussaly

# **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 the most recent data available.	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 including trends in employment and personal income by sector, the number of businesses establishments by type and size, and non-labor sources of income such as retirement and age-related income. Wages by Industry.	Age distribution, race, housing costs, housing affordability, education rates, poverty. Finer geographic detail.
	Counties are compared to states and nation. Key indicators of performance are benchmarked against the US medians.	
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.	Census data is never suppressed, but it is less useful than REIS data used in EPS to see long- term trends by industry; it is only available only for 2000 with limited comparisons to 1990.

### **Important notes**:

- 1) Total employment figures from the Regional Economic Information System (used in most of EPS) and the other sources can differ for the following reasons:
  - Census employment figures are reported by place of residence, while BEA REIS and the other sources 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.
  - BEA REIS includes sole proprietors and government employment while County Business Patterns and BLS Wages do not.
  - Earnings from BEA REIS on pages 14 and 25 include the value of benefits while the wages on page 32 from the BLS do not.
- 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) This profile also shows business cycles, represented as vertical bars on selected charts.
- 4) EPS is updated every year with the latest figures.
- 5) All income figures in this profile (except for the graph on the top of page 5) are adjusted for inflation reported in 2005 dollars.

# **Demographics, Employment and Income**

The following pages (2-25) contain long-term trends in demographics, employment and income. No disclosure restrictions occur in this section.

# 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.

Alaska

- 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.

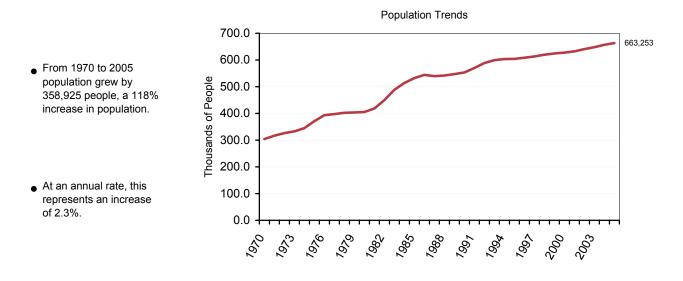
### Highlights - In Alaska:

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.

• Population Growth (Annualized rate, 1970-2005) was fast.

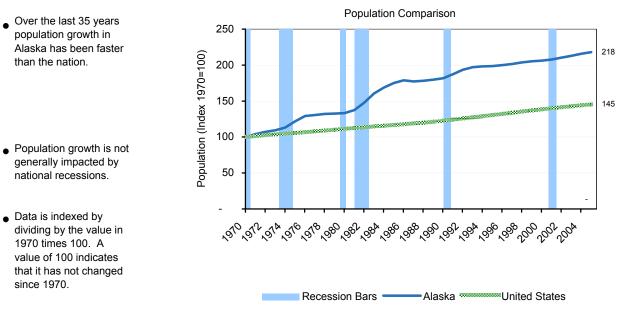
# **Population Trends**

# **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 Nation**



### How well do we recover from recessions?

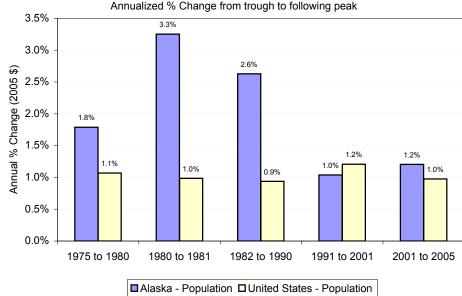
An important indicator of economic performance is the ability to recover quickly from recessions.

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 periods are 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 area recovers from recessions compared to the state and the nation.

See <u>www.nber.org/cycles.html</u> for more information about business cycles.



Population Growth During Recent Recoveries -

- In the latest recovery (2001 to 2005), population growth in Alaska (up 1.2%) has outpaced the United States.
- Alternatively, in the last recovery (1991 to 2001), the United States (up 1.2%) grew the fastest.
- In the recovery from 1982 to 1990, Alaska (up 2.6%) grew the fastest.

- The population has gotten older since 1990. The median age in 2000 is 32.4 years, up from 29.4 years in 1990.
- The largest age category is 40 to 44 years old (58,326 people or 9.3% of the total).
- Total Population in 2000 was 626,932 people, up 14% from 550,043 in 1990.
- The age group that has grown the fastest, as a share of total, is 45 to 49 years, up 21,398 people. Their share of total rose by 2.7%

Population	by Age	and So	ex						
	Total Number	Under 20 y Number		40 - 54 (E Boom in 2 Number	2000)	65 years a over Number i		Median Age	Density (Pop. per sq. mi.)
Total Population									
2000	626,932	208,117	33%	153,278	24%	35,699	6%	32.4	1
1990	550,043	186,963	34%	99,258	18%	22,369	4%	29.4	1
10 Yr. Change	76,889	21,154	-1%	54,020	6%	13,330	2%	3.0	0
10 Yr. % Change	14%	11%		54%		60%		10%	14%
2000 Sex Breakout									
Male	324,112	107,368	33%	80,060	25%	16,724	5%	32.4	
Female	302,820	100,749	33%	73,218	24%	18,975	6%	32.5	
Male/Female Split	52% / 48%	52% / 48	3%	52% / 48	3%	47% / 53%			

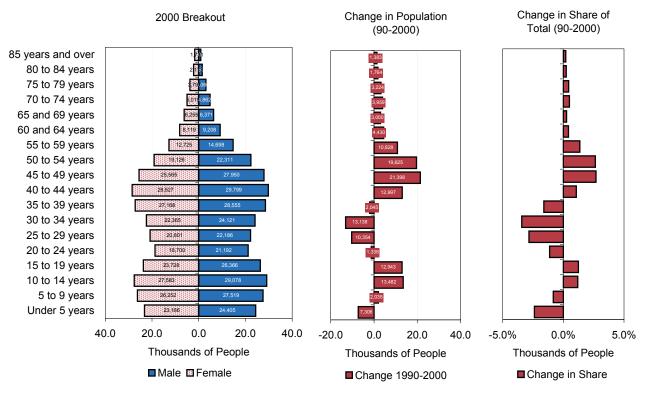
2000 Table SF1 - P12 & 1990 SF1 Table P05 & P12

**Age and Gender** 

(From EPSC)

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

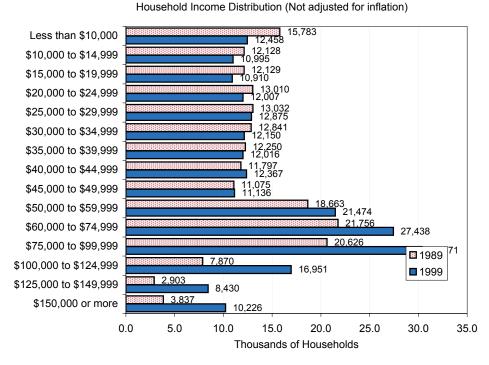
# **Income Distribution & Housing**

#### (From EPSC)

# **Income Distribution - H**(

Alaska

- In 1999, for every household that made over \$100K, there were 1.7 households that made under \$30K. 10 years earlier, for every household that made over \$100K, there were 4.5 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 145, which suggests that the median family can afford the median house. \*
- Housing affordability has not changed in the last decade.

Owner Occupied Housing Affordability	1990	2000
Specified owner-occupied housing units: Median value (Adjusted for	\$ 124,374	\$ 144,200
% of median income necessary to buy the median house	17%	17%
Income required to qualify for the median house	\$ 41,948	\$ 40,746
Housing Affordability Index: (100 or above means that the median family can afford the median house.)*	146	145
Universe: Specified owner-occupied housing units		SF3 - H76

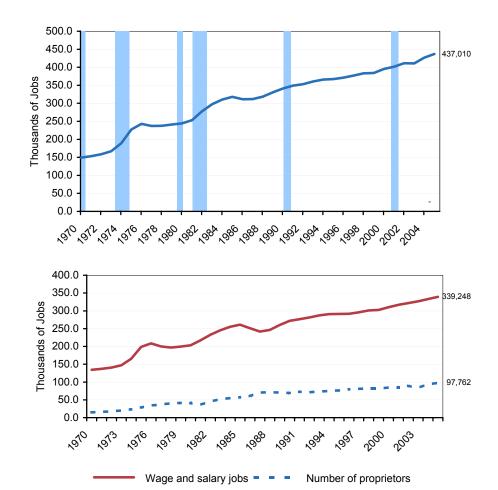
Income in:	1989		1999		
Per capita income		\$	22,660		
Median household income (Adj. for Inflation in 2000 \$)	\$ 54,556	\$	51,571		
Median family income (Adj.for Inflation in 2000 \$)	\$ 61,371	\$	59,036		
Universe: Total population, Households, Families	SF3 - P82,P53,P				

\* 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

## Long term trend

- From 1970 to 2005, 288,004 new jobs were created.
- From 1970 to 2005, the majority of job growth, 71% of new jobs, was 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 69% of new employment since 1995.
- In 1970, proprietors represented 9.8% of total employment; by 2005, they represented 22.4%.



**Employment** 

### 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-	Employ
	1970	Total	1995	2005	Total	nt (70-05)	ent	05)	ment
Total full-time and part-time employmer	149,006		367,324	437,010		288,004		69,686	100.0%
Wage and salary jobs	134,383	90.2%	291,110	339,248	77.6%	204,865	71.1%	48,138	69.1%
Number of proprietors	14,623	9.8%	76,214	97,762	22.4%	83,139	28.9%	21,548	30.9%
Number of nonfarm proprietors 5/	14,332	9.6%	75,680	97,140	22.2%	82,808	28.8%	21,460	30.8%
Number of farm proprietors	291	0.2%	534	622	0.1%	331	0.1%	88	0.1%

**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**

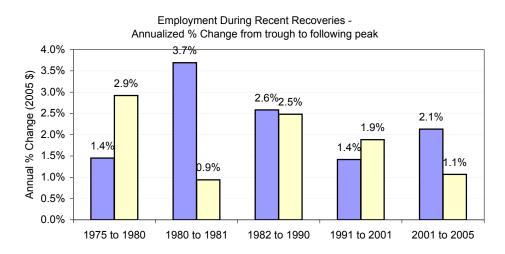
### How well do we recover from recessions?

- In the latest recovery . (2001 to 2005), employment growth in Alaska (up 2.1%) has outpaced the United States.
- Alternatively, in the last recovery (1991 to 2001), the United States (up 1.9%) grew the fastest.
- In the recovery from 1982 to 1990, Alaska (up 2.6%) grew the fastest.

Some areas can

gains even during

changes.



Alaska - Employment United States - Employment

## **Job Growth Compared to the Nation**

Jobs Compared to the State and Nation • Over the last 35 years job growth in Alaska has been 350 faster than the nation. 300 293 Jobs (Index 1970=100) 250 200 experience employment 191 150 recessions. If so, check to see how much is due to 100 migration and population 50 0 200,002,004

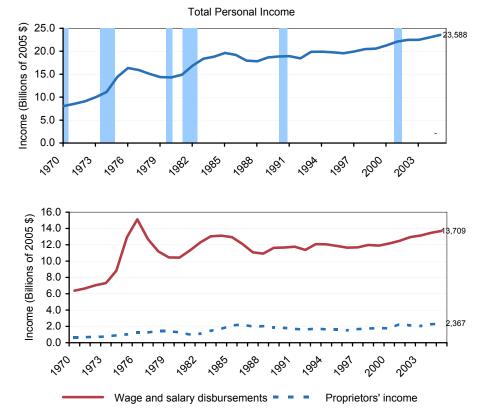
Source: BEA REIS 2005 Table CA30

Recession Bars — Alaska WWWWWWWWWWWWWW

# **Personal Income**

### Long term trend

- From 1970 to 2005, personal income added \$15,526 million in real terms.
- The annualized growth rate was 3.1%.



# **Importance of Proprietors**

- In the last 35 years, proprietors' income grew at an annual rate of 3.8%, outpacing wage and salary disbursements which grew at a 2.2% rate.
- 17.4% of new labor income from 1970 to 2005 was from proprietors' income.

Wages and Salaries vs	. Proprie	tors						
	_	1970		1995		2005	New	% of
		% of		% of		% of	Income	New
All income in millions of 2005 dollars	1970	Labor	1995	Labor	2005	Labor	70-05	Income
Labor Sources	7,117	100%	13,916	100%	16,999	100%	9,882	100.0%
Wage and salary disbursements	6,372	90%	11,861	85%	13,709	81%	7,337	74.2%
Proprietors' income	647	9%	1,641	12%	2,367	14%	1,720	17.4%
Nonfarm proprietors' income	642	9%	1,631	12%	2,366	14%	1,724	17.4%
Farm proprietors' income	6	0%	10	0%	1	0%	(4)	NA

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

**Proprietors'** income includes 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.

#### 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.

## 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 (pages 16-18).

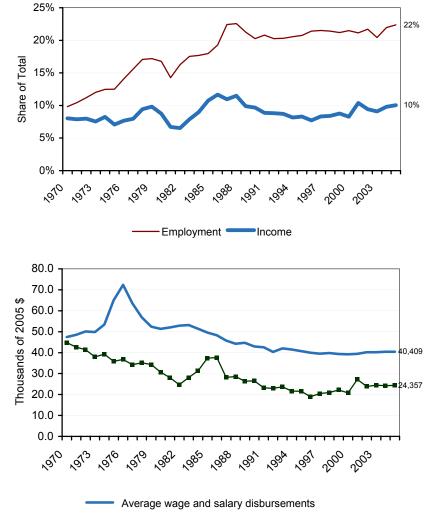
Growth of proprietors can also mean that a rising number of people in the community want to (or need to) have side jobs in addition to their wage and salary jobs. When this is the case, earnings from second jobs can pull down average wages. To see if this is a sign of stress, look for other potential 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 (22%) was higher than proprietors' income share of total (10%).
- From 1970 to 2005, proprietors' income share of total grew by 25.0%, while proprietors' employment share of total grew by 128.0%.

# **How are Proprietors Doing?**

- From 1970 to 2005, average wage and salary disbursements fell at an annualized rate of 0.5% (adjusted for inflation), declining slower than from average nonfarm proprietors' income, which fell by 1.7%.
- In 2005, average wage and salary disbursements were \$40,409 (adjusted for inflation), more than average nonfarm proprietors' income (\$24,357).
- Similarly, in 1970 average wage and salary disbursements were \$47,416 (adjusted for inflation), more than average nonfarm proprietors' income (\$44,778).
- If these shares vary widely, it suggests that proprietors and wage earners have different earnings.

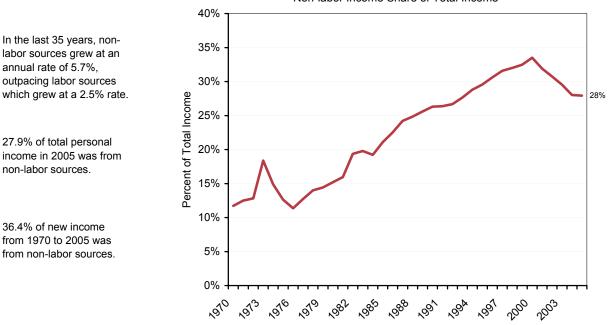


---- Average nonfarm proprietors' income

# **Non-labor Income**

The term "Non-Labor Income" is also referred to by some economists as "Non-Earnings Income". It consists of:

- Dividends, Interest and Rent (collectively often referred to as money earned from investments).
- Transfer Payments (payments from governments to individuals such as Medicare, Social Security, unemployment compensation, disability insurance payments and welfare). See the next page for a breakout of transfer payments.



Non-labor Income Share of Total Income

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	8,061	100%	19,754	100%	23,588	100%	15,526	100.0%	3.1%	1.8%
Labor Sources	7,117	88%	13,916	70%	16,999	72%	9,882	63.6%	2.5%	2.0%
Non-Labor Sources	944	12%	5,838	30%	6,588	28%	5,645	36.4%	5.7%	1.2%
Dividends, interest, and rent	582	7%	3,362	17%	3,158	13%	2,576	16.6%	5.0%	-0.6%
Personal current transfer receipts	362	4%	2,476	13%	3,430	15%	3,068	19.8%	6.6%	3.3%

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

# **Transfer Payments**

# **Components of Transfer Payments**

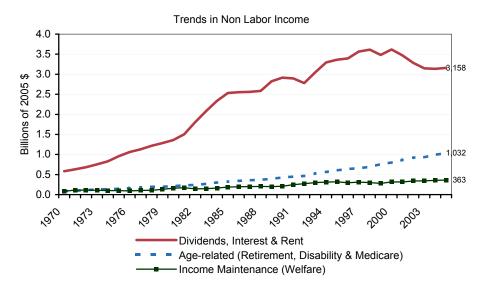
All figures in millions of 2005 dollars	1970	% of Total TP	2005	% of Total 5 TP	New Payments 1970 to 2005	% of New Pay- ments	Change in Share of Total (1970 - 2005)
Total transfer payments	361.8		3,430.3		3,068.4		
Government payments to individuals	324.7	90%	3,308.4	96%	2,983.7	97.2%	
Retirement & disab. insurance benefit payments	79.9	22%	680.4	20%	600.6	19.6%	
Medical payments	26.6	7%	1,439.9	42%	1,413.3	46.1%	
Income maintenance benefit payments ("welfare")	85.6	24%	363.4	11%	277.9	9.1%	
Unemployment insurance benefit payments	67.8	19%	107.3	3%	39.5	1.3%	
Veterans benefit payments	25.8	7%	126.4	4%	100.5	3.3%	
Federal educ. & trng. asst. pay. (excl. vets)	6.2	1.7%	16.5	0.5%	10.3	0.3%	
Other payments to individuals	32.9	9.1%	574.5	16.7%	541.6	17.7%	
Payments to nonprofit institutions *	22.7	6%	77.9	2%	55.2	1.8%	
Business payments to individuals	14.4	4%	43.9	1%	29.5	1.0%	
Age-related (Retirement, Disability & Medicare)	85.7	24%	1,031.8	30%	946.2	30.8%	-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 10.6% of transfer payments, and 1.5% of total personal income. This is down from 1970 and down from 1980.

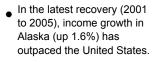
# **Components of Transfer Payments**

 In 2005, 30% of Transfer Payments were from agerelated sources (retirement, disability, insurance payments, and Medicare), while 11% was from welfare.

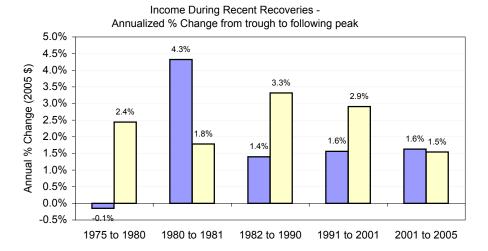


# **Personal Income**

### How well do we recover from recessions?



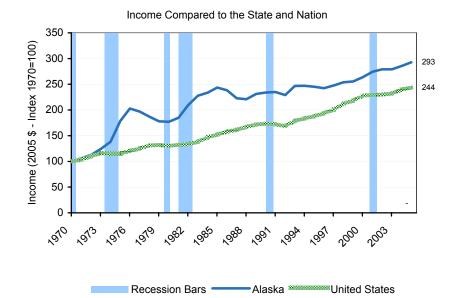
- Alternatively, in the last recovery (1991 to 2001), the United States (up 2.9%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 3.3%) grew the fastest.



Alaska - Income United States - Income

# **Income Growth Compared to the Nation**

- Over the last 35 years income growth in Alaska has been 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**

Government Employment by Type The majority of the growth 70.0 in government employment has been in state and local 60,666 60.0 government (143%). Thousands of Jobs 50.0 40.0 30.0 24,157 20.0 17,020 10.0 0.0 <sup>10</sup> 2000 2003 ~9<sup>7</sup>3 ,98° 1991 ,01<sup>0</sup> ,99<sup>4</sup> ~9<sup>19</sup> ୍ ୧୨୦ ୧ 0% ્રુ Federal, civilian State and local Military Government Employment as a Share of Total 60% Is the size of government getting bigger? One way to 50% 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? 23% 10% 0% 1970 191<sup>3</sup> <sup>1919</sup> 2003 ,910 1000 ~%<sup>%%</sup> 2000 1987 ~99<sup>A</sup> ~9<sup>97</sup> ~°°^ 90 25.0 00 20.0 Government Employment per 100 People Government Jobs per 1 0.01 005 000 0.01 000 0.0 15 ,9<sup>10</sup> ~9<sup>73</sup> ,976 ,98° <sup>1919</sup> ,98°r ,0<sup>065</sup> 2000 1,00<sup>04</sup> 100<sup>1</sup> 2003 ~99<sup>^</sup>

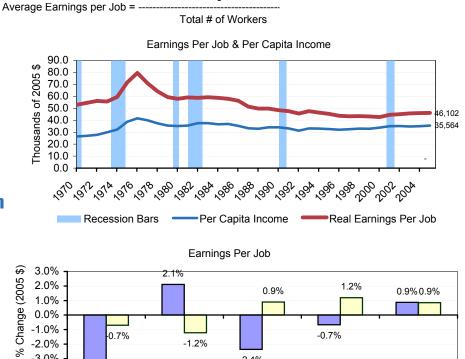
Source: BEA REIS 2005 Table CA25 and CA25N

# **Earnings Per Job**

- Average earnings per job, adjusted for inflation, have fallen from \$52,907 in 1970 to \$46,102 in 2005.
- In 2005, Average earnings per job in Alaska (\$46,102) were the sane as the state (\$46,102) and higher than the nation (\$45,817).

# How well do we recover from recessions?

- In the latest recovery (2001 to 2005), earnings per job growth in Alaska (up 0.9%) have outpaced the United States.
- Alternatively, in the last recovery (1991 to 2001), the United States (up 1.2%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 0.9%) grew the fastest.



Total Wages Earned



-2.4%

# Reasons why earnings per job may change over time:

-3.0%

- 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

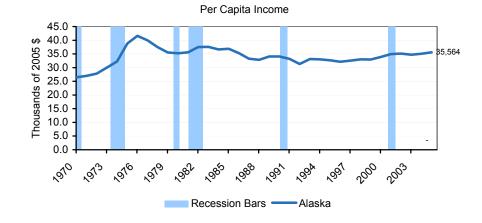
Population

PCI = -----

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

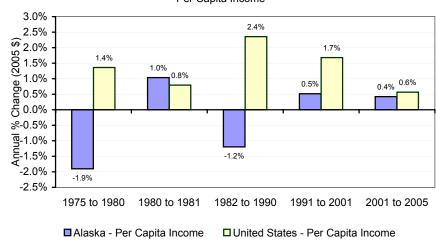
Since total personal income includes income from 401(k) plans as well as other non-labor income sources like transfer payments, dividends, and rent, it is possible for per capita income to rise, even if the average wage per job declines over time. In other words, non-labor sources of income can cause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

- Per capita income, adjusted for inflation, has risen from \$26,491 in 1970 to \$35,564 in 2005.
- In 2005, per capita income in Alaska (\$35,564) was the sane as the state (\$35,564) and higher than the nation (\$34,471).



### How well do we recover from recessions?

- In the latest recovery (2001 to 2005), per capita income growth in the United States (up 0.6%) has outpaced Alaska.
- Similarly, in the last recovery (1991 to 2001), the United States (up 1.7%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 2.4%) grew the fastest.



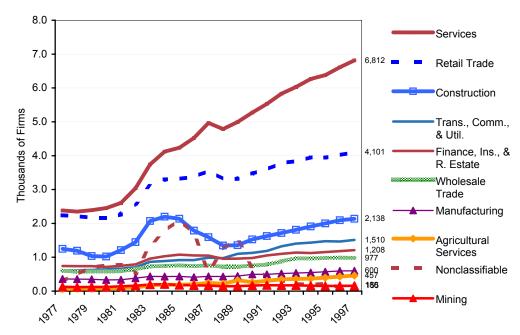
Per Capita Income

# 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 services, which went from 27.5% in 1977 to 37.6% in 1997.



Number of Establishments by Industry

#### Decline

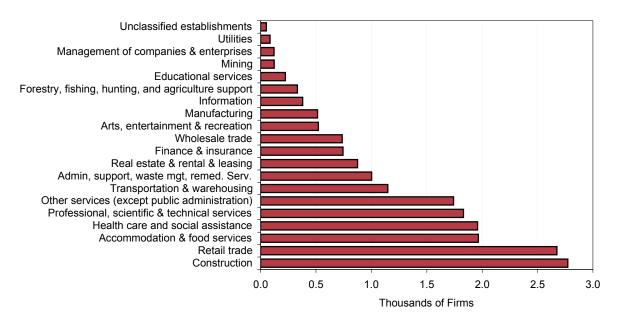
• The category whose share of total shrank the most was retail trade, which went from 25.9% in 1977 to 22.6% in 1997.

							New	Firms	Change in Shar
	1977	Shr of Tot	1987 S	Shr of Tot	1997	Shr of Tot	77-97	Shr of Tot	of Total
Total	8664		14317		18138		9474		
Agricultural Services	61	0.7%	240	1.7%	457	2.5%	396	4.2%	
Mining	127	1.5%	167	1.2%	155	0.9%	28	0.3%	
Construction	1248	14.4%	1592	11.1%	2138	11.8%	890	9.4%	
Manufacturing	359	4.1%	437	3.1%	600	3.3%	241	2.5%	
Trans., Comm., & Util.	616	7.1%	989	6.9%	1510	8.3%	372	3.9%	
Wholesale Trade	605	7.0%	759	5.3%	977	5.4%	372	3.9%	
Retail Trade	2240	25.9%	3547	24.8%	4101	22.6%	1861	19.6%	
Finance, Ins., & R. Estate	741	8.6%	1050	7.3%	1208	6.7%	467	4.9%	
Services	2380	27.5%	4968	34.7%	6812	37.6%	4432	46.8%	
Nonclassifiable	287	3.3%	568	4.0%	180	1.0%	-107	NA	
									-10 0% 10% 20%

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

Source: Census County Business Patterns

# 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	100 c mor
Forestry, fishing, hunting, and agriculture s	332	305	7	10	5	4	1	0	0	C
Mining	123	58	18	9	17	7	5	6	2	1
Utilities	85	36	17	11	11	7	2	1	0	C
Construction	2773	1,946	410	256	117	30	10	1	0	3
Manufacturing	514	288	90	62	40	16	11	5	1	1
Wholesale trade	736	349	144	123	97	15	7	1	0	(
Retail trade	2675	1,262	687	413	194	59	41	17	2	(
Transportation & warehousing	1149	688	158	139	94	37	21	8	3	
Information	380	196	66	47	39	16	11	2	3	(
Finance & insurance	744	370	177	124	51	12	9	1	0	(
Real estate & rental & leasing	876	626	138	70	35	4	3	0	0	(
Professional, scientific & technical services	1832	1,270	265	164	102	20	10	1	0	(
Management of companies & enterprises	121	45	17	28	21	4	3	3	0	(
Admin, support, waste mgt, remed. Serv.	1003	629	173	97	50	22	24	1	5	2
Educational services	224	113	48	34	20	4	4	1	0	(
Health care and social assistance	1959	916	500	297	160	32	29	13	6	6
Arts, entertainment & recreation	522	367	55	50	37	9	2	1	1	(
Accommodation & food services	1966	975	371	290	241	62	22	4	1	(
Other services (except public administratio	1742	1,071	398	199	61	8	5	0	0	(
Unclassified establishments	52	51	0	0	1	0	0	0	0	(
Total	19808	11,561	3,739	2,423	1,393	368	220	66	24	14

Source: Census County Business Patterns

**Firms by Size** 

employees.

.

The size category that

grew the most was 1-4

# **Firms by Size**

1000 or more

employees

■ 500-999 employees

# 90% 80% As a share of total, the 70% Share of Total 60% 50% 40% 30% 20% 10% 0% Change in Share Share of Total (1995-2005) **1**985 **1**995 2005

80% -2%

-1%

-1%

0%

1%

1%

0

100%

250-499 employees 100-249 employees ■ 50-99 employees 20-49 employees 10-19 employees ■ 5-9 employees 1-4 employees Change in Firms (1995-2005)

County Business Patterns Number of Establishments Share of total

size category that gained the most was 20-49 employees. In 2004, 89% of firms had fewer than 20 employees. 1000 or more 500-999 250-499 100-249 50-99 20-49 10-19 5-9

Source: Census County Business Patterns

20%

40%

60%

1-4

0%

500

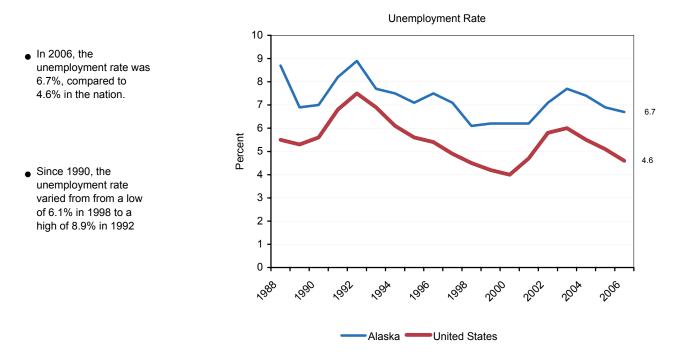
1000

1500

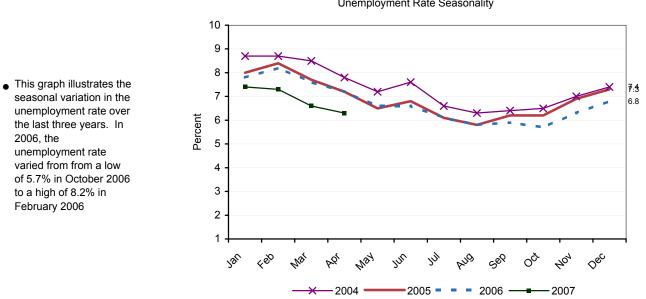
Number of Employees per Firm

# **Unemployment Trends**

# **Annual Average Unemployment Rate Compared to the Nation**



# **Unemployment Rate Seasonality**



Unemployment Rate Seasonality

Source: Bureau of Labor Statistics

2006, the

unemployment rate varied from from a low

to a high of 8.2% in February 2006



This page is blank because the system does not contain commuting data for this geography.

# Agriculture (Business Income)

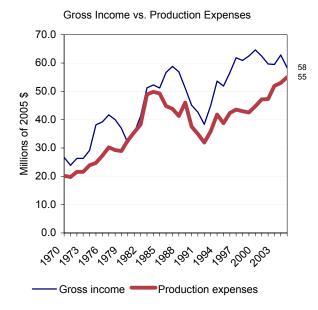
Farm income figures presented on this page reflect income from farming *enterprises* (income of the business). The term "farm" includes farming and ranching, but not agricultural services such as soil preparation services and veterinary services. In contrast, farm income figures presented in the next 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.

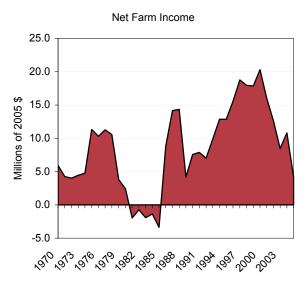
and Net I	ncome	from Fa	rming	and Rar	nching	
	% of		% of		% of	70-04
	Gross		Gross		Gross	Change in
1970	Income	1995	Income	2005	Income	Share
26,688		51,865		58,313		
24,614	92%	47,819	92%	50,329	86.3%	-6%
17,018	64%	24,149	47%	25,607	43.9%	-20%
7,596	28%	23,671	46%	24,722	42.4%	14%
2,074	8%	4,046	8%	7,984	13.7%	6%
423	2%	2,223	4%	5,216	8.9%	7%
1,651	6%	1,822	4%	2,768	4.7%	-1%
20,164		38,765		55,053		
6,523		13,099		3,260		
(604)	-2%	(237)	0%	942	1.6%	NA
5,919		12,862		4,202		
	1970 26,688 24,614 17,018 7,596 2,074 423 1,651 20,164 6,523 (604)	% of Gross           1970         Income           26,688         92%           17,018         64%           7,596         28%           2,074         8%           423         2%           1,651         6%           20,164         -2%	% of Gross         1995           1970         Income         1995           26,688         51,865           24,614         92%         47,819           17,018         64%         24,149           7,596         28%         23,671           2,074         8%         4,046           423         2%         2,223           1,651         6%         1,822           20,164         38,765         13,099           (604)         -2%         (237)	% of Gross         % of Gross           1970         Income         1995         Income           26,688         51,865           24,614         92%         47,819         92%           17,018         64%         24,149         47%           7,596         28%         23,671         46%           2,074         8%         4,046         8%           423         2%         2,223         4%           1,651         6%         1,822         4%           20,164         38,765         5         5           6,523         13,099         (604)         -2%         (237)         0%	$\begin{array}{c c c c c c c } & & & & & & & & & & & & & & & & & & &$	Gross         Gross         Gross         Gross         Income         2005         Income           26,688         51,865         58,313         24,614         92%         47,819         92%         50,329         86.3%           17,018         64%         24,149         47%         25,607         43.9%           7,596         28%         23,671         46%         24,722         42.4%           2,074         8%         4,046         8%         7,984         13.7%           423         2%         2,223         4%         5,216         8.9%           1,651         6%         1,822         4%         2,768         4.7%           20,164         38,765         55,053         55,053         55,053           6,523         13,099         3,260         1.6%         1.6%         1.6%

### **Gross Income vs. Production Expenses**

Alaska



# **Net Farm Income**



#

- 1. The degree of economic specialization of the county relative to 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").

# **Specialization**

This page uses the sectoral composition of the U.S. economy as a benchmark for economic diversity and compares the local sector breakout to that of the nation. Communities that are heavily reliant on only a few industries may be economically vulnerable to disruptions. The aim of this page is to quantitatively measure the extent to which the sectoral breakout of the local economy mirrors that of the US, and if they are different to illustrate the major factors that are contributing to the differences.

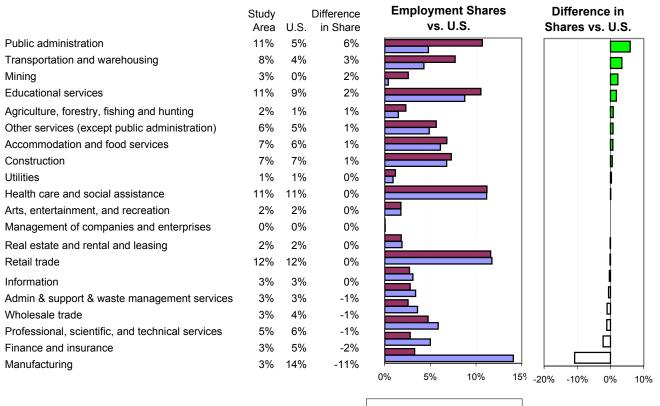
Alaska is extremely specialized, with a specialization score of 181 which is the fourth most specialized state. By comparison, a state that is structured identically to the US would have a score of 0 (very diverse). The largest observed score in the 50 states is 298 (very specialized)

The sectors that most diverge from the US norm are:

- Under reliance on Manufacturing (3.3% compared to 14.1% in the US)
- Over reliance on Public administration (10.7% compared to 4.8% in the US)
- Over reliance on Transportation and warehousing (7.7% compared to 4.3% in the US)
- Under reliance on Finance and insurance (2.8% compared to 5.0% in the US)

The figure below illustrates how the distribution of local employment by sector compares to the nation. The first bar chart compares the local area to the United States. The second bar chart subtracts one from the other to show where they differ. The closer the bars are to each other, the more the local economic structure is like that of the US.

# Sector Analysis (Sorted by Difference in Share)



Alaska United States

The above index uses a new improved methodology relative to earlier versions of EPS. It was calculated by summing the squares of the difference in shares between the local economy and the US for the 20 sectors.

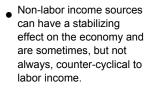
Source: Census 2000 SF3 Table P49.

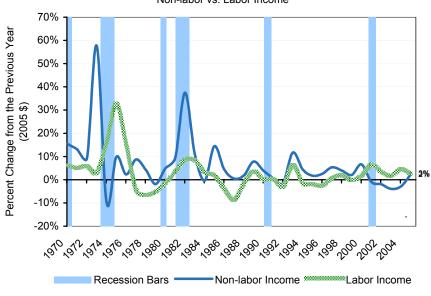
0

#### Personal Income Percent Change from the Previous Year (2005\$) Different regions can 35% behave very differently 30% during recessions and 25% recoveries. 20% 15% Note: Below 0% means 10% absolute decline. Above 0% means absolute 5% growth, but at different 0% rates. -5% -10% 1970 ~9<sup>7</sup>3 <sup>1910</sup> <sup>19</sup> 1982 1080 ୍ଚ୍ଚି ,0°1 2000 2003 ,094 ,9<sup>91</sup>

# **Stability vs. State and Nation**







Non-labor vs. Labor Income

Recession Bars ——Alaska ——United States

# **Performance Comparisons**

# In the following pages (28-32) 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
- 3. How wages vary across different sectors in the economy.

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 indicates that a gap exists in the data. The U.S. Department of Commerce suppresses information 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) covered the period from 1970 to 2000; the North American Industrial Classification System (NAICS, pronounced "nakes") is used currently, for data from 2001 to the present.

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 data that are organized by SIC, EPS was designed to illustrate the complexity of the service economy. We use the term "Services and Professional" to underscore the important point that service occupations are a combination of high-paying and low-paying professions.

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**

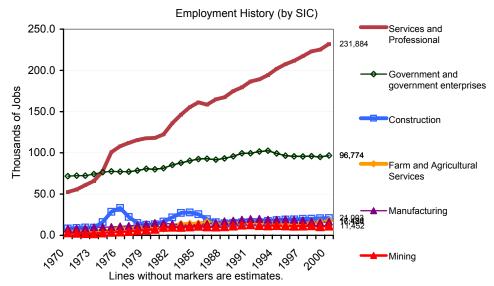
This profile is organized so that all non-disclosed information is presented first. Employment and personal income by industry is presented last. For some rural counties, and for some industries, data gaps may occur. EPS has a built-in system for estimating data gaps through 2000 for the 11 contiguous 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. Estimates in the charts are shown as thin solid lines with no markers.

# **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 35.2% in 1970 to 58.7% in 2000.



#### Decline

• The category whose share of total shrank the most was government, which went from 48.1% in 1970 to 24.5% in 2000.

### **Employment by Industry** Changes from 1970 to 2000

Changes from 1970 to 200	)0								
	1970	% of Total	2000	% of Total	New	Employme	nt	% of New Employ ment	Change in Share
Total Employment	149,006.0		395,017.0		246,011.0				
Wage and Salary Employment	134,383.0	90.2%	310,106.0	78.5%	175,723.0			71.4%	
Proprietors' Employment	14,623.0	9.8%	84,911.0	21.5%	70,288.0			28.6%	
Farm and Agricultural Services	5,078.0	3.4%	17,480.0	4.4%	12,402.0			5.0%	
Farm	479.0	0.3%	823.0	0.2%	344.0			0.1%	
Ag. Services *	4,599.0	3.1%	16,657.0	4.2%	12,058.0			4.9%	
Mining	3,224.0	2.2%	11,452.0	2.9%	8,228.0	I		3.3%	
Manufacturing (incl. forest products) *	8,159.0	5.5%	16,424.0	4.2%	8,265.0			3.4%	
Services and Professional	52,467.0	35.2%	231,884.0	58.7%	179,417.0			72.9%	
Transportation & Public Utilities	9,809.0	6.6%	31,558.0	8.0%	21,749.0			8.8%	
Wholesale Trade	3,503.0	2.4%	9,982.0	2.5%	6,479.0	1		2.6%	
Retail Trade	14,657.0	9.8%	60,313.0	15.3%	45,656.0			18.6%	
Finance, Insurance & Real Estate	5,603.0	3.8%	22,962.0	5.8%	17,359.0			7.1%	
Services (Health, Legal, Business, Others)	18,895.0	12.7%	107,069.0	27.1%	88,174.0			35.8%	
Construction	8,374.0	5.6%	21,003.0	5.3%	12,629.0			5.1%	
Government	71,704.0	48.1%	96,774.0	24.5%	25,070.0			10.2%	
						0.4K	200.0K		-30% 30%

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)** 

Category	2001	2005	200	05 Share of To	otal	Ν	lew Jobs		Change of Tota 20	
otal employment	401,639.0	437,010.0	100%			35,371.0				
Nage and salary employment	316,753.0	339,248.0	78%			22,495.0				
Proprietors employment	84,886.0	97,762.0	22%			12,876.0				
Farm proprietors employment	585.0	622.0	0%	1		37.0				
Nonfarm proprietors employment	84,301.0	97,140.0	22%			12,839.0				
Farm employment	874.0	968.0	0%			94.0				
Nonfarm employment	400,765.0	436,042.0	100%			35,277.0				
Private employment	302,850.0	334,199.0	76%			31,349.0				
	002,000.0	001,100.0		0%	100%	01,01010	0.0K	40.0K	-2.0%	2.0%
Forestry, fishing, related activities, and oth	#N/A	12,758.0	3%			#N/A				
Mining	#N/A	11,738.0	3%	Ī		#N/A				
Utilities	1,695.0	2,003.0	0%	Ī		308.0				
Construction	22,561.0	27,500.0	6%			4,939.0	-			
Manufacturing	14,361.0	14,779.0	3%			418.0		-		
Wholesale trade	7,292.0	7,591.0	2%	T		299.0	1			
Retail Trade	43,021.0	46,154.0	11%			3,133.0				
Transportation and warehousing	22,707.0	22,665.0	5%			(42.0)				
Information	8,354.0	7,963.0	2%	]		(391.0)	Í			
Finance and insurance	11,194.0	11,676.0	3%			482.0				
Real estate and rental and leasing	13,211.0	20,269.0	5%			7,058.0				
Professional and technical services	20,110.0	22,474.0	5%			2,364.0				]
Management of companies and enterprise	1,983.0	1,435.0	0%			(548.0)				
Administrative and waste services	15,401.0	16,664.0	4%			1,263.0				
Educational services	4,454.0	5,039.0	1%			585.0	Ĩ			
Health care and social assistance	34,462.0	42,759.0	10%			8,297.0	-			
Arts, entertainment, and recreation	9,144.0	9,898.0	2%			754.0				
Accommodation and food services	28,204.0	31,409.0	7%			3,205.0				
Other services, except public administratio	#N/A	19,425.0	4%		_	#N/A				
Government and government enterprises	97,915.0	101,843.0	23%			3,928.0				
Federal, civilian	16,369.0	17,020.0	4%			651.0				Į
Military	22,396.0	24,157.0	6%			1,761.0				
State and local	59,150.0	60,666.0	14%			1,516.0				
State government	23,101.0	23,463.0	5%			362.0	ſ			
Local government	36,049.0	37,203.0	9%			1,154.0				

Growth

# **Personal Income (SIC)**

#### Income History (by SIC) Services and The income category 9.0 Professional whose share of total gained the most was non-8.0 8,007 Non-Labor Sources labor income, which went (investments, 7.123 7.0 from 11.7% in 1970 to retirement, etc.) - Government Millions of 2005 \$ 6.0 5,401 5.0 Mining 4.0 3.0 Construction 2.0 Manufacturing (incl. 1.266 1.0 forest products) 720 243 0.0 Farm and Ag. 1970 1976 <sup>19</sup> 1982 1000 ~9<sup>1°3</sup> ~%<sup>%%</sup> 094 1991 2000 ~°°^ Services

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

#### Decline

33.5% in 2000.

• The category whose share of total shrank the most was government, which went from 42.1% in 1970 to 25.4% in 2000.



# New Income by Type

All figures in millions of 2000 dollars	1970 %	6 of Total	2000 %	6 of Total	New Incom	ne 1970 to 2000	% of New Income	Change i Shar
Total Personal Income*	8,061.4		21,255.5		13,194.1			
Farm and Agricultural Services	185.7	2.3%	242.7	1.1%	57.0		0%	
Farm	9.3	0.1%	17.0	0.1%	7.6		0%	
Ag. Services	176.3	2.2%	225.7	1.1%	49.4		0%	
Mining	297.3	3.7%	1,262.0	5.9%	964.7		7%	
Manufacturing (incl. forest products)	516.2	6.4%	720.4	3.4%	204.1		2%	
Services and Professional	2,613.6	32.4%	8,007.5	37.7%	5,393.9		41%	
Transportation & Public Utilities	695.9	8.6%	1,796.4	8.5%	1,100.5		8%	
Wholesale Trade	244.8	3.0%	454.4	2.1%	209.6		2%	
Retail Trade	654.4	8.1%	1,521.3	7.2%	866.9		7%	
Finance, Insurance & Real Estate	212.4	2.6%	751.0	3.5%	538.6		4%	
Services (Health, Legal, Business, Oth.	806.1	10.0%	3,484.4	16.4%	2,678.3		20%	
Construction	880.3	10.9%	1,236.2	5.8%	355.8		3%	
Government	3,390.4	42.1%	5,401.1	25.4%	2,010.7		15%	
Non-Labor Income	944.0	11.7%	7,123.1	33.5%	6,179.2		47%	
Dividends, Interest & Rent	582.1	7.2%	3,619.0	17.0%	3,036.9		23%	
Transfer Payments	361.8	4.5%	3,504.1	16.5%	3,142.3		24%	

\* 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.

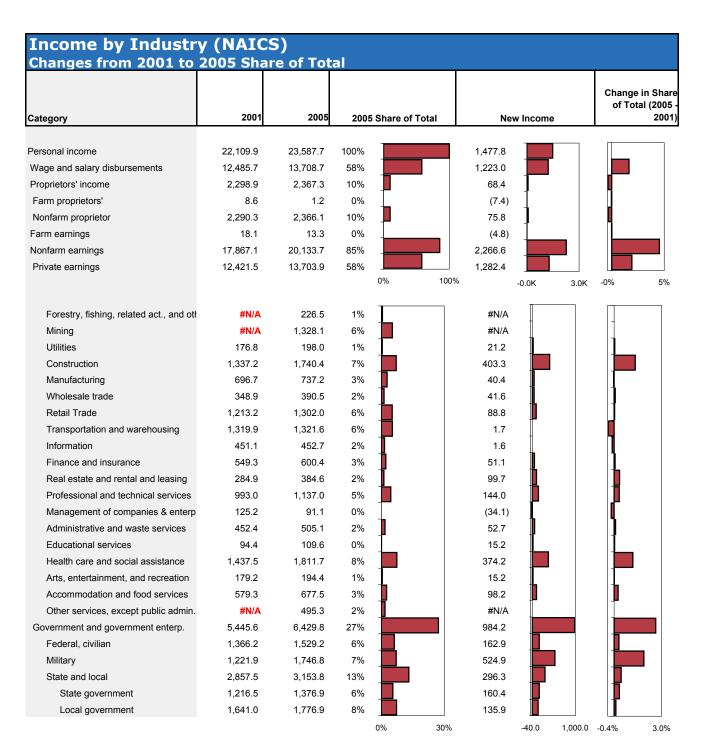
### Growth

• Missing data prevent this ranking

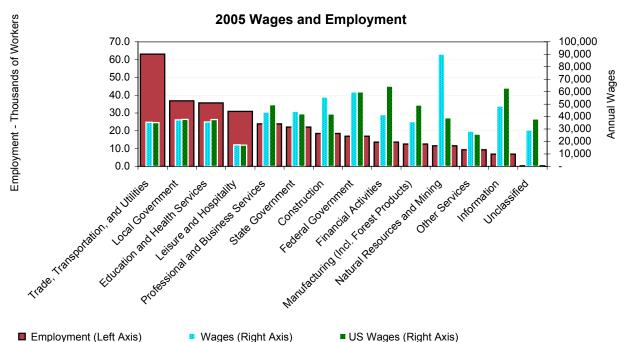
# Personal Income (NAICS)

#### Decline

Missing data prevent this ranking.



# Wages & Employment



Of the major categories, the highest paying sector is Natural Resources And Mining. It accounts for 5.1% of total employment and pays \$90,061 per year.

- Of the major categories, the largest employment sector is Trade, Transportation, And Utilities. It accounts for 20.9% of total employment and pays \$35,402 per year.
- Goods-producing employees (42,611 workers ) were paid an average of \$59,231.
- Service-providing employees (183,829 workers ) were paid an average of \$34,085.
- Note that these data dod not include proprietors or the value of benefits.
- Wages in the public sector (\$44,388) exceeded wages in the private sector (\$38,817) by 14.4%.

US Wages (Right Axis)

County Wages and Employment in 2008

County wages and Emp	ioyme <u>nt</u>	in 200 <u>5</u>	
			Average Annua
	Employment	% of Total	Wages
Total Private & Public	302,330	100%	40,216
Total Private	226,441	75%	38,817
Goods-Producing	42,611	14%	59,231
Natural Resources and Mining	11,577	4%	90,061
Agriculture, forestry, fishing & hunting	1,059	0%	40,166
Mining	10,518	3%	95,084
Construction	18,486	6%	55,762
Manufacturing (Incl. Forest Products)	12,548	4%	35,899
Service-Providing	183,829	61%	34,085
Trade, Transportation, and Utilities	63,093	21%	35,402
Information	6,903	2%	48,524
Financial Activities	13,664	5%	41,531
Professional and Business Services	23,918	8%	43,616
Education and Health Services	35,691	12%	35,736
Leisure and Hospitality	30,918	10%	17,390
Other Services	9,316	3%	28,331
Unclassified	325	0%	29,280
Total Public	75,890	25%	44,388
Federal Government	16,976	6%	59,862
State Government	22,073	7%	44,226
Local Government	36,840	12%	37,354

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**

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 changes than spot data for select years, (2) the most reliable information on long-term employment and income trends is available at the county level, (3) communities within counties rarely function as economic units themselves, (4) 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:

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:
  <a href="http://fisher.lib.virginia.edu">http://fisher.lib.virginia.edu</a>

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

# **Non-Labor Income**

Non-labor income is a mix of Dividends, Interest, and Rent (money earned from 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: "Dividends, interest, and rent" and "Personal current transfer receipts."

### **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, there are 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 show either these estimates or not. When these estimates are shown, annotations were made in the profile documenting where estimates were used.

### **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 page 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 index was calculated by summing the squares of the difference in shares between the local economy and the US for the 20 sectors.

The specialization index was calculated as:

```
SPECIAL_{it} = \sum_{i=1}^{U} ((EMP_{ijt}/EMP_{it})-(EMP_{usjt}/EMP_{ust}))^{2}
```

```
Where, SPECIAL it = specialization of economy in county i in year t

EMP_{ijt} = employment in industry j in county i in year t

EMP_{it} = total employment in county i in year t

EMP_{usjt} = employment in industry j in US in year t

EMP_{ust} = total employment in US in year t

n = number of industries
```

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").