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A SocioEconomic Profile

Flathead County, Montana

Produced by the

Economic Profile System (EPS)

February 13, 2009

About The Economic Profile System (EPS)

This profile was produced using the 2008 version of the Economic Profile System (EPS), last updated in February 2009. 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.

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.

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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.

U.S. DEPARTMENT OF THE INTERIOR
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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 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. Counties are compared to states and nation. Key indicators of performance are benchmarked against the US medians.	Age distribution, race, housing costs, housing affordability, education rates, poverty. Finer geographic detail.
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 2006 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.
6. How well does this area 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 Flathead County, Montana:

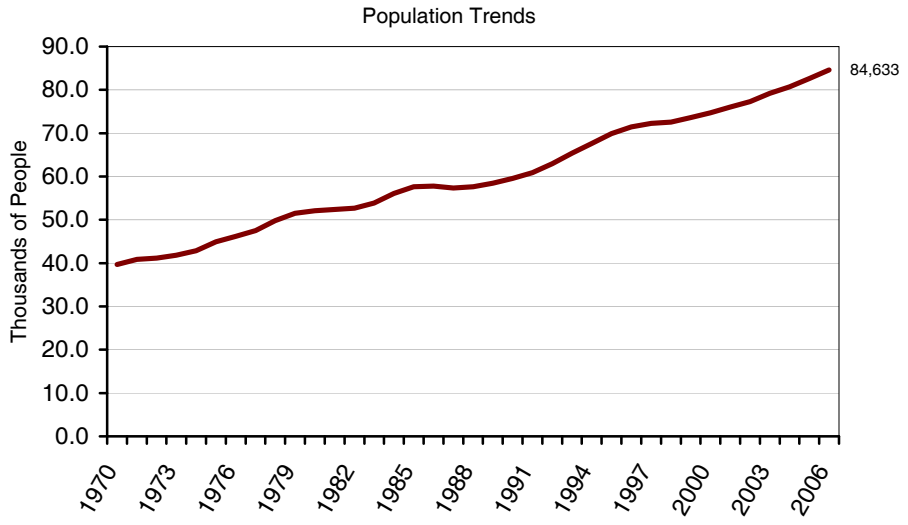
These highlights are based on how this area compares to the distribution of all of the counties in the United States. See the methodology section at the end for more information.

- Population Growth (Annualized rate, 1970-2006) was fast.
- Employment Growth (Annualized rate, 1970-2006) was fast.
- Personal Income Growth (Adjusted for Inflation, Annualized rate, 1970-2006) was fast.
- Non-labor Income Share of Total in 2006 was roughly average.
- Median Age* was somewhat old.
- Per Capita Income (2006) was somewhat high.
- Average Earnings Per Job (2006) was roughly average.
- Education Rate* (% of population 25 and over who have a college degree) was high.
- Education Rate* (% of population 25 and over who have less than a high school diploma) was somewhat low.
- Employment Specialization* was diverse.
- Rich-Poor Ratio* (for each household that made over $100K, how many households made less than $30K) was roughly average.
- Housing Affordability in 2000 (100 or above means that the median family can afford the median house)* was less affordable.
- Government share of Total employment was somewhat low.
- Unemployment Rate in 2007** was somewhat low.

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

Population

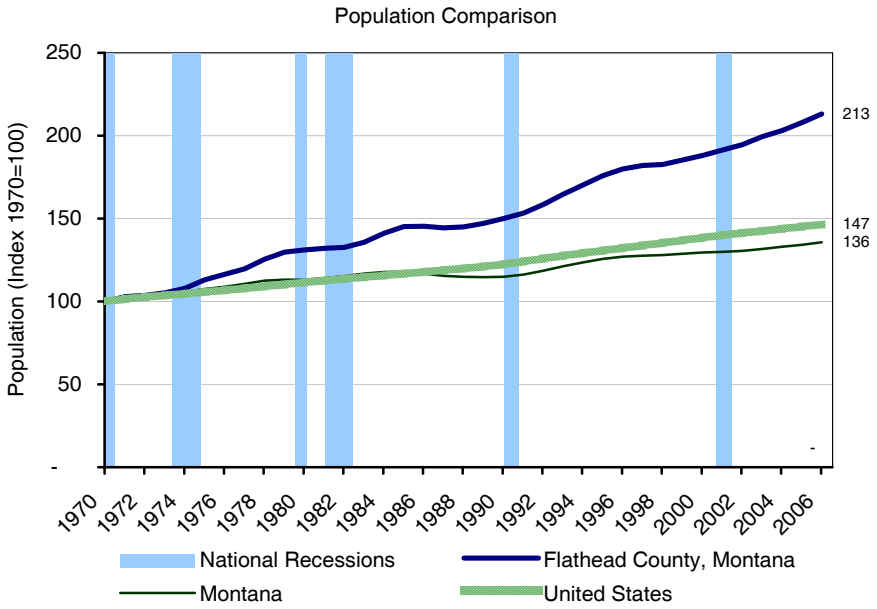
- From 1970 to 2006 population grew by 44,917 people, a 113% increase in population.
- At an annual rate, this represents an increase of 2.1%.



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

- Over the last 36 years population growth in Flathead County, Montana has outpaced Montana and the nation.
- Population growth is not generally impacted by national recessions.
- Data is indexed by dividing by the value in 1970 times 100. A value of 100 indicates that it has not changed since 1970.



Source: BEA REIS 2006 Table CA30

How well do we recover from recessions?

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

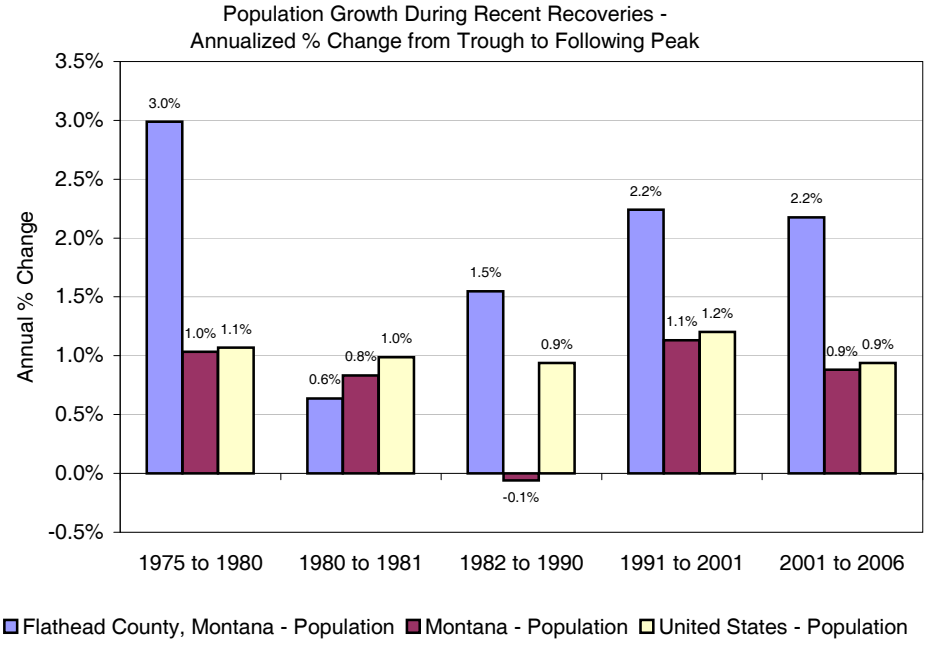
A recession is defined by the National Bureau of Economic Research as "a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail sales."

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

- In the latest recovery (2001 to 2006), population growth in Flathead County, Montana (up 2.2%) outpaced the United States and Montana.
- Similarly, in the last recovery (1991 to 2001), Flathead County, Montana (up 2.2%) grew the fastest.
- In the recovery from 1982 to 1990, Flathead County, Montana (up 1.5%) grew the fastest.



Source: BEA REIS 2006 Table CA30

Age and Gender

(From EPSC)

- The population has gotten older since 1990. The median age in 2000 is 39.0 years, up from 35.3 years in 1990.
- The largest age category is 45 to 49 years old (6,780 people or 9.1% of the total).
- Total Population in 2000 was 74,471 people, up 26% from 59,218 in 1990.
- The age group that has grown the fastest, as a share of total, is 45 to 49 years , up 3,178 people. Their share of total rose by 3.0%

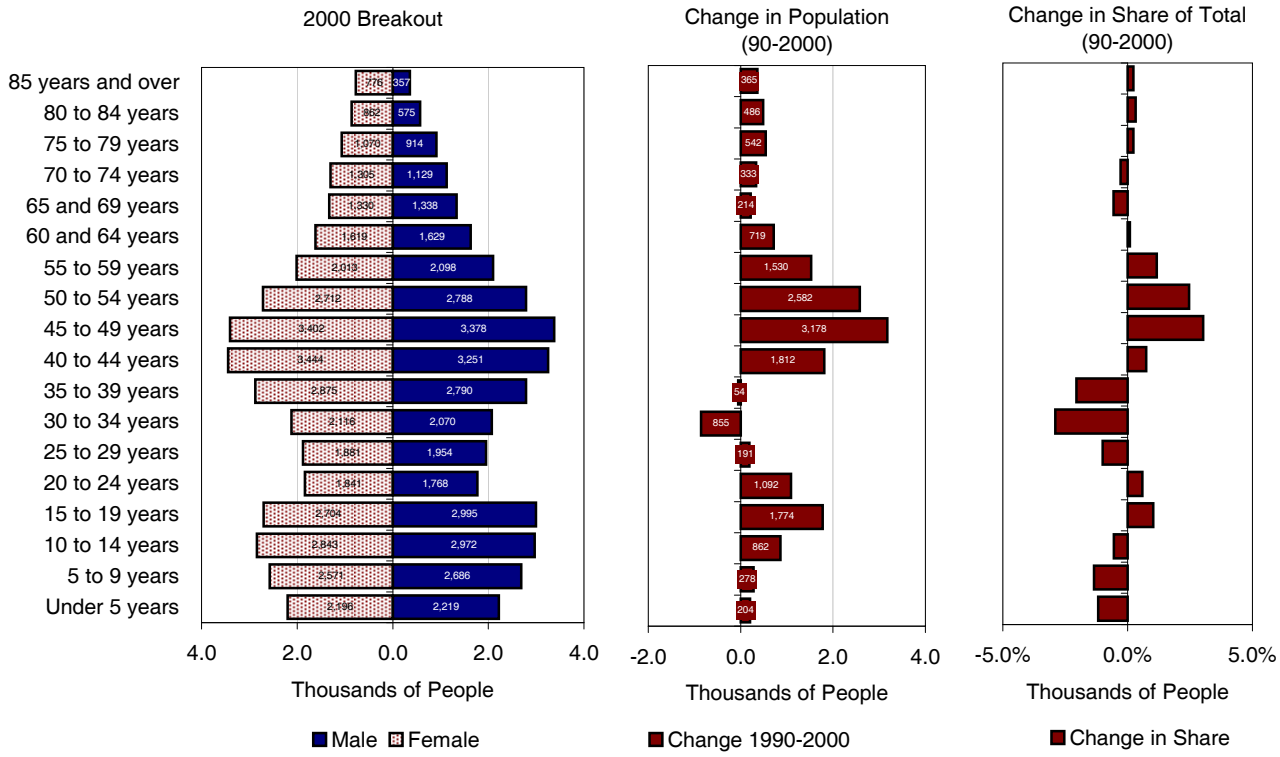
Population by Age and Sex

	Total Number	Under 20 years Number	Under 20 years Share	40 - 54 (Baby Boom in 2000) Number	40 - 54 (Baby Boom in 2000) Share	65 years and over Number	65 years and over Share	Median Age	Density (Pop. per sq. mi.)
Total Population									
2000	74,471	21,186	28%	18,975	25%	9,656	13%	39.0	14.6
1990	59,218	18,068	31%	11,403	19%	7,716	13%	35.3	11.6
10 Yr. Change	15,253	3,118	-2%	7,572	6%	1,940	0%	3.7	3.0
10 Yr. % Change	26%	17%		66%		25%		10%	26%
2000 Sex Breakout									
Male	36,911	10,872	29%	9,417	26%	4,313	12%	38.3	
Female	37,560	10,314	27%	9,558	25%	5,343	14%	39.6	
Male/Female Split	50% / 50%	51% / 49%		50% / 50%		45% / 55%			

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).

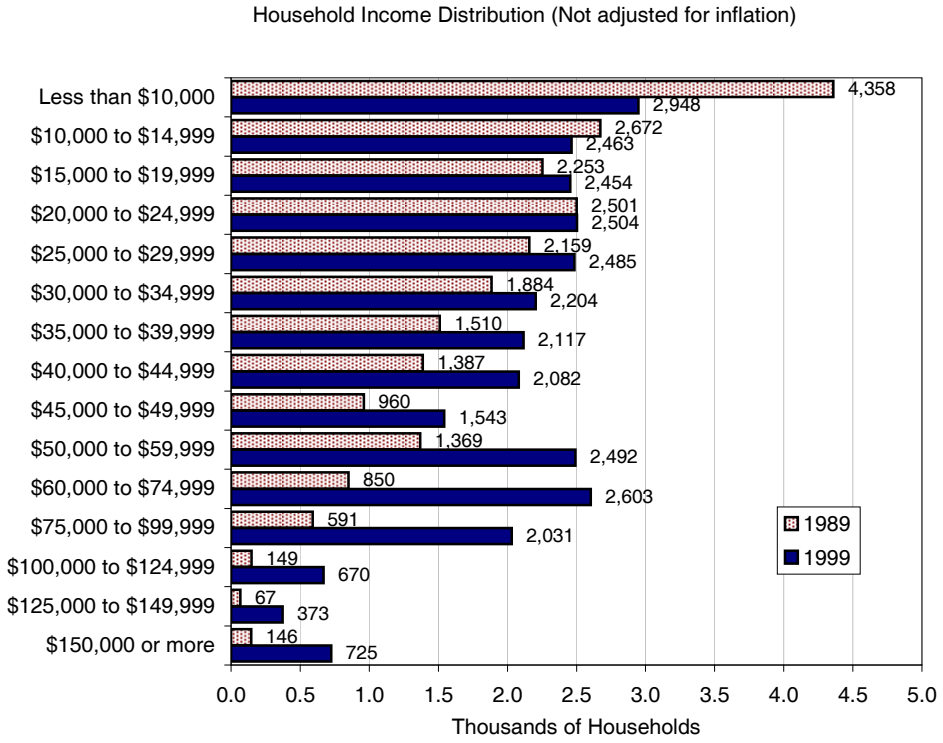
Note: In aggregated profiles, medians are interpolated.



Source: Census 2000 and Census 1990

Income Distribution - Households

- In 1999, for every household that made over $100K, there were 7.3 households that made under $30K. 10 years earlier, for every household that made over $100K, there were 38.5 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 115, which suggests that the median family can afford the median house. *
- Housing has become less affordable in the last decade, from 132 in 1990 to 115 in 2000.

Owner Occupied Housing Affordability	1990	2000
Specified owner-occ. housing units: Median value (2000 $'s)	$ 84,585	$ 125,600
% of median income necessary to buy the median house	19%	22%
Income required to qualify for the median house	$ 28,528	$ 35,491
Housing Affordability Index: (100 or above means that the median family can afford the median house.)*	132	115

Universe: Specified owner-occupied housing units — Census SF3 - H76

Income in:	1989	1999
Per capita income		$ 18,112
Median household income (Adj. for Inflation in 2000 $)	$ 31,812	$ 34,466
Median family income (Adj.for Inflation in 2000 $)	$ 37,639	$ 40,702

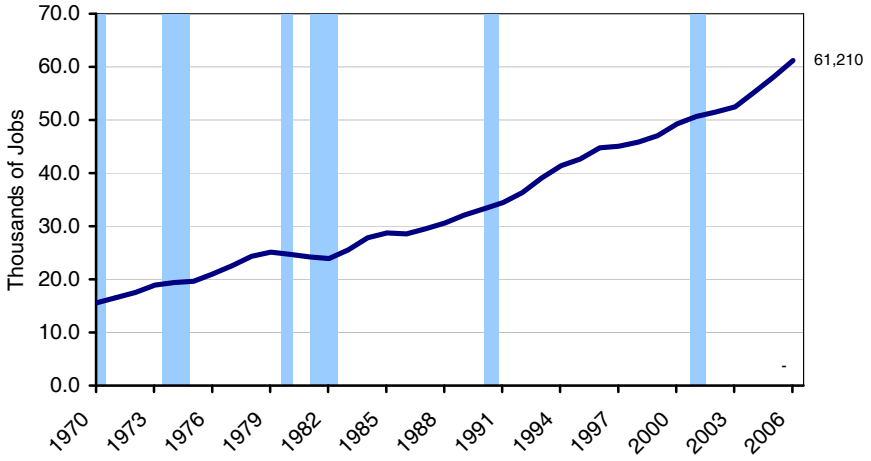
Universe: Total population, Households, Families — Census SF3 - P82,P53,P77

* 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.

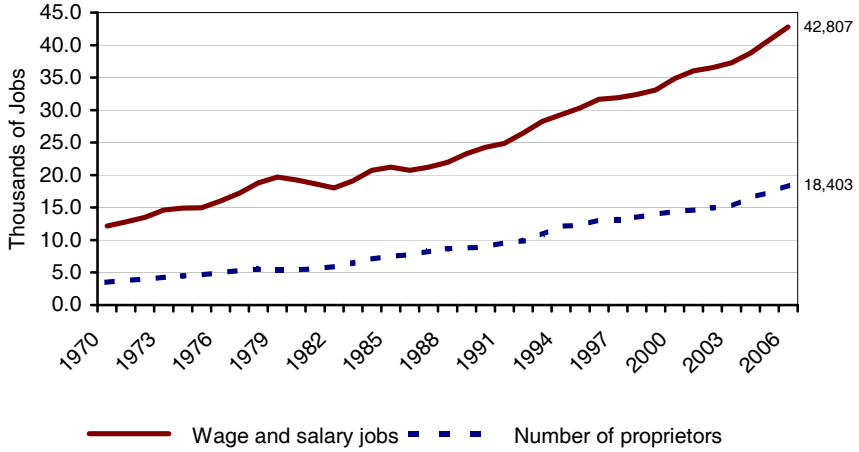
Source: Census 2000 and Census 1990

Long term trend

- From 1970 to 2006, 45,583 new jobs were created.
- From 1970 to 2006, the majority of job growth, 67% of new jobs, was in wage and salary employment (people who work for someone else).



- Wage and salary employment (people who work for someone else) contributed 67% of new employment from 1970 to 2006, and 67% of new employment since 1995.
- In 1970, proprietors represented 22.3% of total employment; by 2006, they represented 30.1%.



Wages and Salaries vs. Proprietors
Changes from 1970 to 2006

	1970	% of Total	1995	2006	% of Total	New Employment (70-06)	% of New Employment	New Employment (95-06)	% of New Employment
Total full-time and part-time employment	15,627		42,636	61,210		45,583		18,574	100.0%
Wage and salary jobs	12,143	77.7%	30,329	42,807	69.9%	30,664	67.3%	12,478	67.2%
Number of proprietors	3,484	22.3%	12,307	18,403	30.1%	14,919	32.7%	6,096	32.8%
Number of nonfarm proprietors 5/	2,880	18.4%	11,384	17,403	28.4%	14,523	31.9%	6,019	32.4%
Number of farm proprietors	604	3.9%	923	1,000	1.6%	396	0.9%	77	0.4%

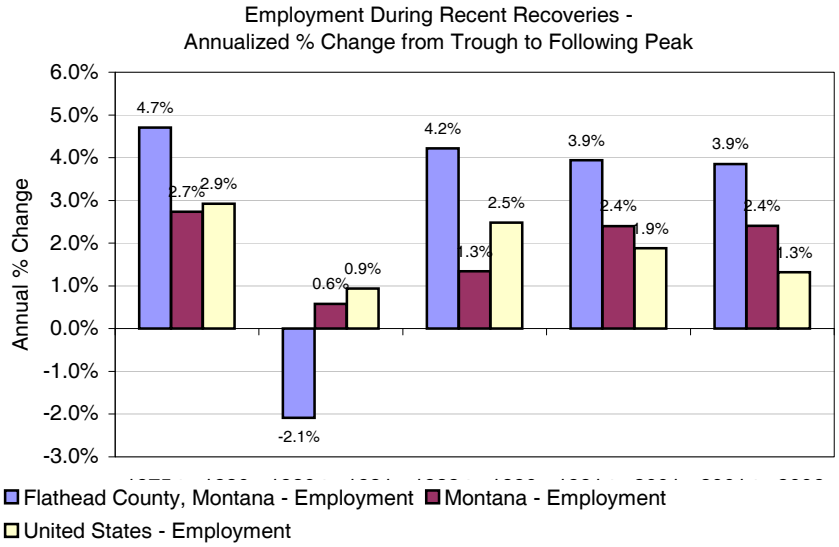
Proprietors include sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that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

Wage and salary employment refers to employees.

Source: BEA REIS 2006 Table CA30

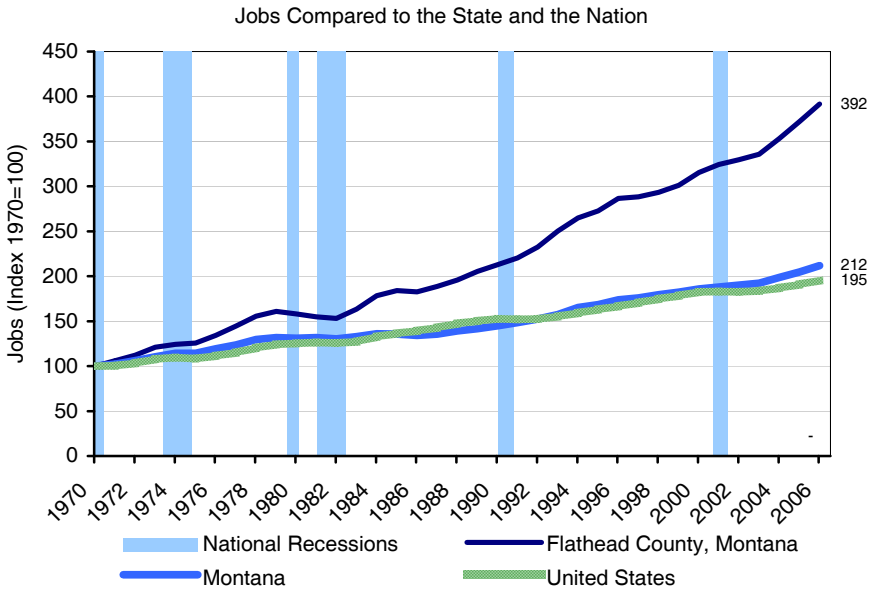
How well do we recover from recessions?

- In the latest recovery (2001 to 2006), employment growth in Flathead County, Montana (up 3.9%) has outpaced Montana and the United States.
- Similarly, in the last recovery (1991 to 2001), Flathead County, Montana (up 3.9%) grew the fastest.
- In the recovery from 1982 to 1990, Flathead County, Montana (up 4.2%) grew the fastest.



Job Growth Compared to the State and the Nation

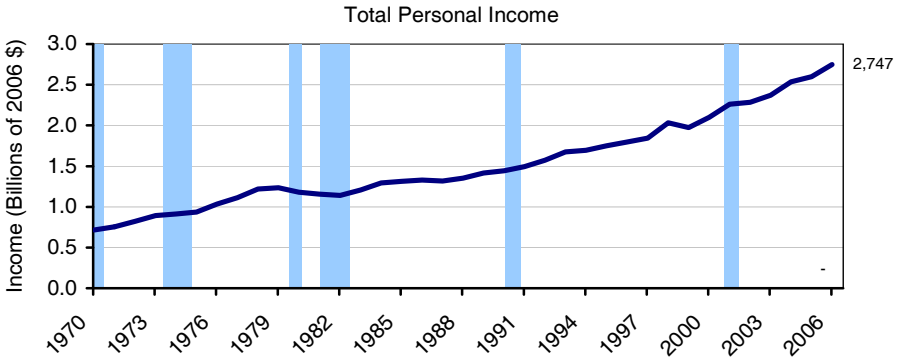
- Over the last 36 years population growth in Flathead County, Montana has outpaced Montana and the nation.
- Some areas can experience employment gains even during recessions. If so, check to see how much is due to migration and population changes.



Source: BEA REIS 2006 Table CA30

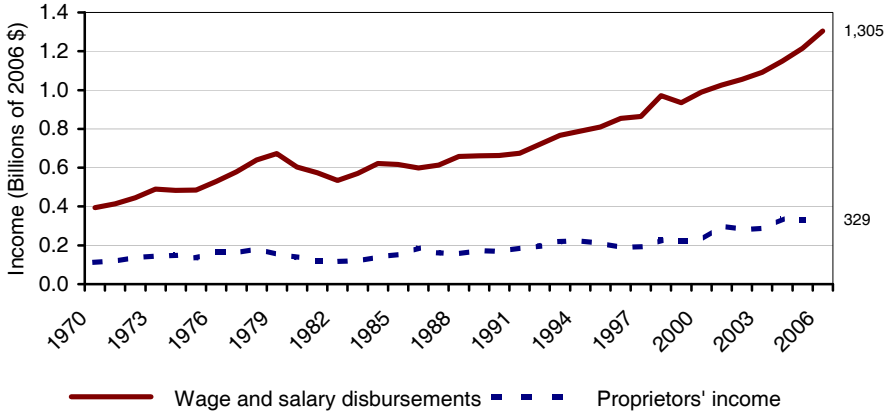
Long term trend

- From 1970 to 2006, personal income added $2,033 million in real terms.
- The annualized growth rate was 3.8%.



Importance of Proprietors

- In the last 36 years, wage and salary disbursements grew at an annual rate of 3.4%, outpacing proprietors' income which grew at a 3.0% rate.
- 18.6% of new labor income from 1970 to 2006 was from proprietors' income.



Wages and Salaries vs. Proprietors

All income in millions of 2006 dollars	1970	1970 % of Labor	1995	1995 % of Labor	2006	2006 % of Labor	New Income 70-06	% of New Income
Labor Sources	530	100%	1,052	100%	1,694	100%	1,164	100.0%
Wage and salary disbursements	394	74%	810	77%	1,305	77%	911	78.3%
Proprietors' income	113	21%	212	20%	329	19%	216	18.6%
Nonfarm proprietors' income	101	19%	212	20%	332	20%	231	19.9%
Farm proprietors' income	12	2%	(1)	0%	(3)	0%	(15)	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 2006 Table CA05N and CA30

Definitions:

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

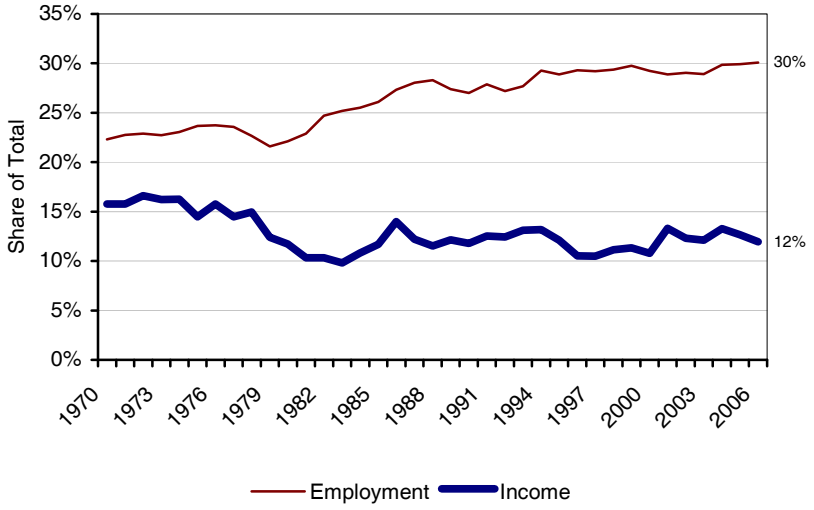
Are proprietors an important indicator of economic health?

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.

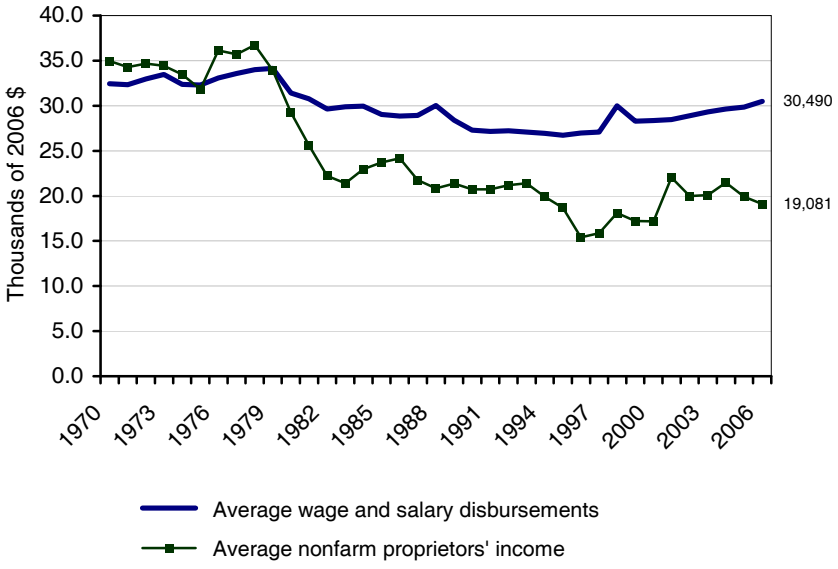
Proprietors' Share of Total (Income vs. Employment)

- In 2006, proprietors' share of total employment (30%) was higher than proprietors' share of total income (12%) .
- From 1970 to 2006, proprietors' income share of total fell by 24.1%, while proprietors' employment share of total grew by 34.9%.



How are Proprietors Doing?

- From 1970 to 2006, average wage and salary disbursements fell at an annualized rate of 0.2% (adjusted for inflation), declining slower than average nonfarm proprietors' income which fell by 1.7%.
- In 2006, average wage and salary disbursements were $30,490 (adjusted for inflation), more than average nonfarm proprietors' income ($19,081).
- In 1970, it was the other way around. Average nonfarm proprietors' income was $34,953 (adjusted for inflation), more than average wage and salary disbursements ($32,438).
- If these shares vary widely, it suggests that proprietors and wage earners have different earnings.



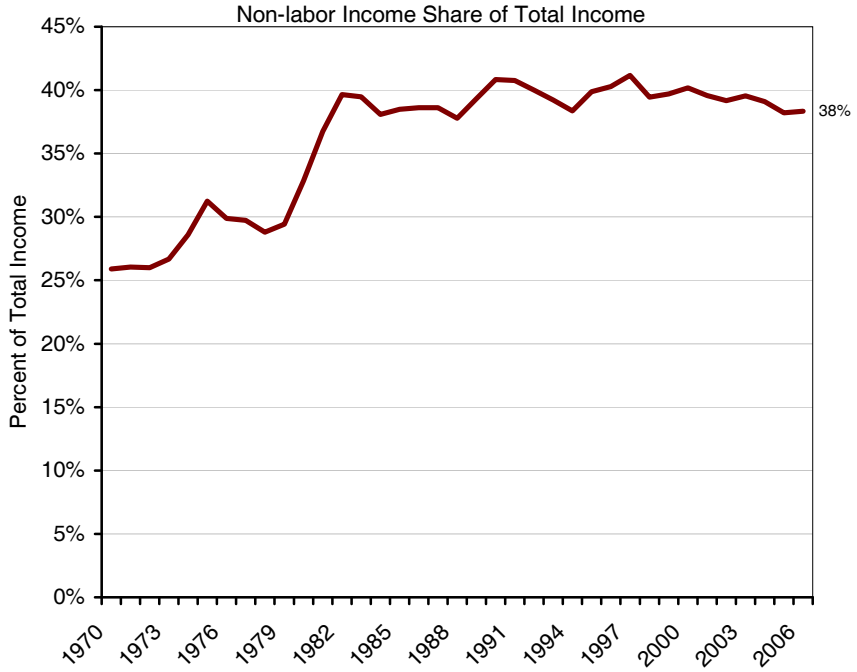
Source: BEA REIS 2006 Table CA30

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.

- In the last 36 years, non-labor sources grew at an annual rate of 4.9%, outpacing labor sources which grew at a 3.3% rate.
- 38.3% of total personal income in 2006 was from non-labor sources.
- 42.7% of new income from 1970 to 2006 was from non-labor sources.



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

Labor vs. Non-Labor

All income in millions of 2006 dollars	1970	1970 % of Total	1995	1995 % of Total	2006	2006 % of Total	New Income 70-06	% of New Income	% Chg Ann. Rate 70-06	% Chg Ann. Rate 95-06
Total Personal Income	715	100%	1,750	100%	2,747	100%	2,033	100.0%	3.8%	4.2%
Labor Sources	530	74%	1,052	60%	1,694	62%	1,164	57.3%	3.3%	4.4%
Non-Labor Sources	185	26%	698	40%	1,053	38%	868	42.7%	4.9%	3.8%
Dividends, interest, and rent	110	15%	419	24%	645	23%	535	26.3%	5.0%	4.0%
Personal current transfer receipts	75	11%	279	16%	408	15%	333	16.4%	4.8%	3.5%

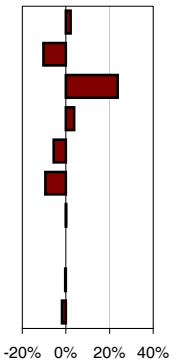
Percentages do not add to 100 because of adjustments made by BEA, such as residence, social security, and others.

Source: BEA REIS 2006 Table CA30

Components of Transfer Payments

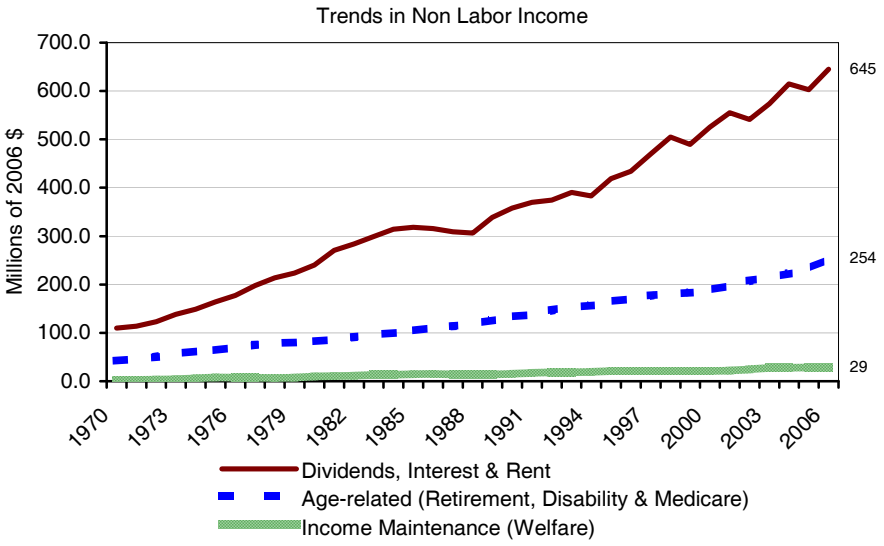
All figures in millions of 2006 dollars	1970	% of Total TP	2006	% of Total TP	New Payments 1970 to 2006	% of New Pay-ments
Total transfer payments	75.1		408.3		333.2	
Government payments to individuals	70.2	93%	390.6	96%	320.4	96.2%
Retirement & disab. insurance benefit payments	43.4	58%	193.7	47%	150.3	45.1%
Medical payments	8.2	11%	141.0	35%	132.9	39.9%
Income maintenance benefit payments ("welfare")	2.5	3%	28.6	7%	26.1	7.8%
Unemployment insurance benefit payments	5.4	7%	6.6	2%	1.2	0.3%
Veterans benefit payments	10.4	14%	17.7	4%	7.3	2.2%
Federal educ. & trng. asst. pay. (excl. vets)	0.4	0.6%	2.7	0.7%	2.2	0.7%
Other payments to individuals	0.1	0.2%	0.3	0.1%	0.2	0.1%
Payments to nonprofit institutions *	2.7	4%	13.6	3%	10.9	3.3%
Business payments to individuals	2.2	3%	4.1	1%	2.0	0.6%
Age-related (Retirement, Disability & Medicare)	42.2	56%	253.9	62%	211.7	63.5%

Change in Share of Total (1970 - 2006)



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 2006 welfare represented 7.0% of transfer payments, and 1.0% of total personal income. This is up from 1970 and up slightly from 1980.



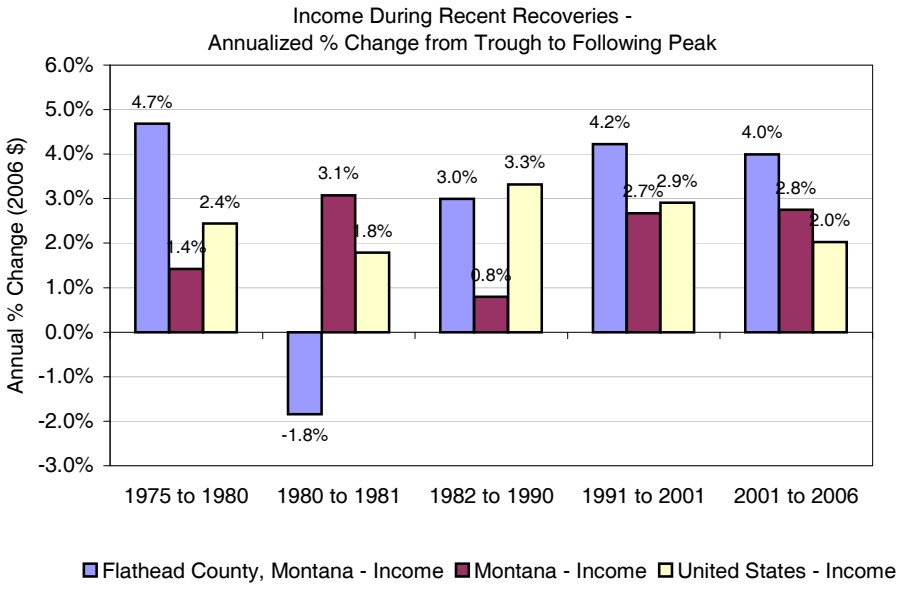
Components of Transfer Payments

- In 2006, 62% of Transfer Payments were from age-related sources (retirement, disability, insurance payments, and Medicare), while 7.0% was from welfare.

Source: BEA REIS 2006 Table CA35

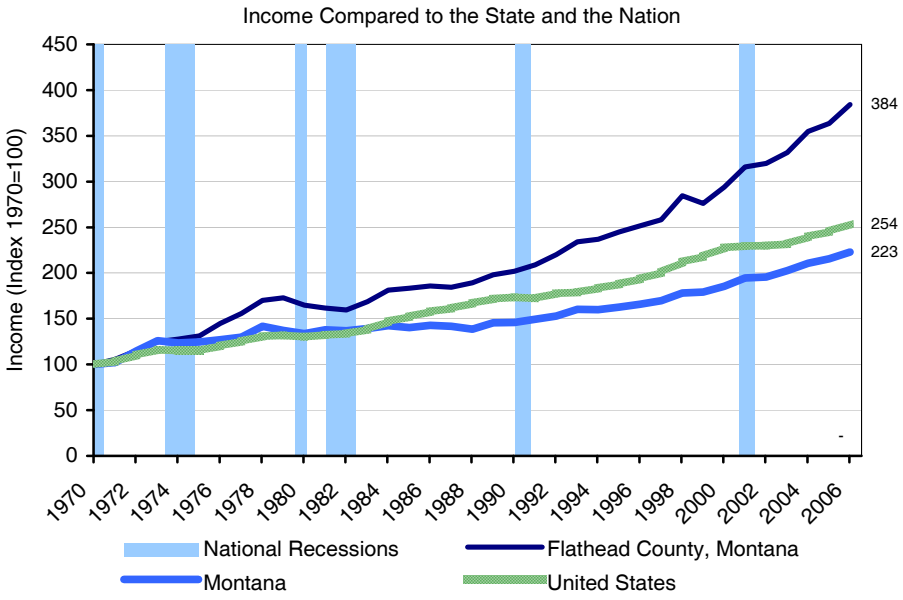
How well do we recover from recessions?

- In the latest recovery (2001 to 2006), income growth in Flathead County, Montana (up 4.0%) outpaced Montana and the United States.
- Similarly, in the last recovery (1991 to 2001), Flathead County, Montana (up 4.2%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 3.3%) grew the fastest.



Income Growth Compared to the State and the Nation

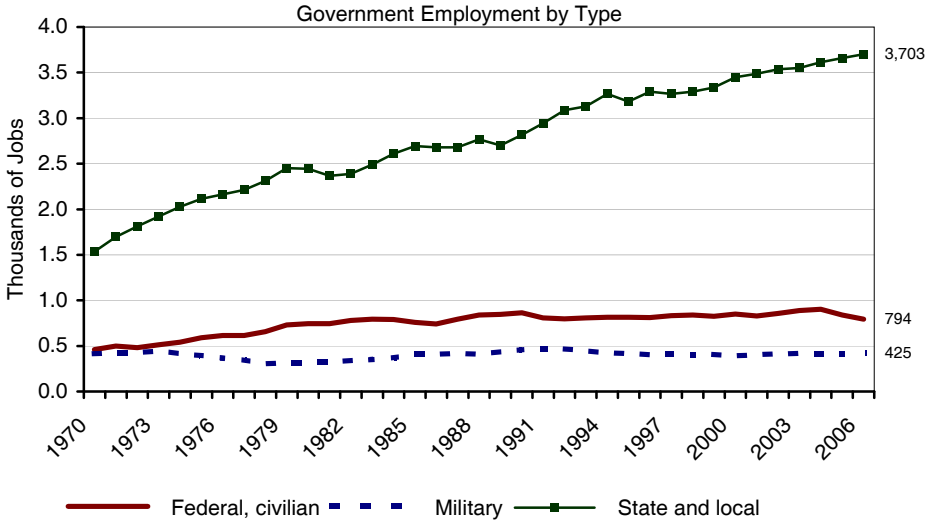
- Over the last 36 years income growth in Flathead County, Montana has outpaced Montana and the nation.
- Some areas can experience income gains even during the recessions. If so, check to see how much of the change is due to changes in earnings per job, employment, migration and population changes.



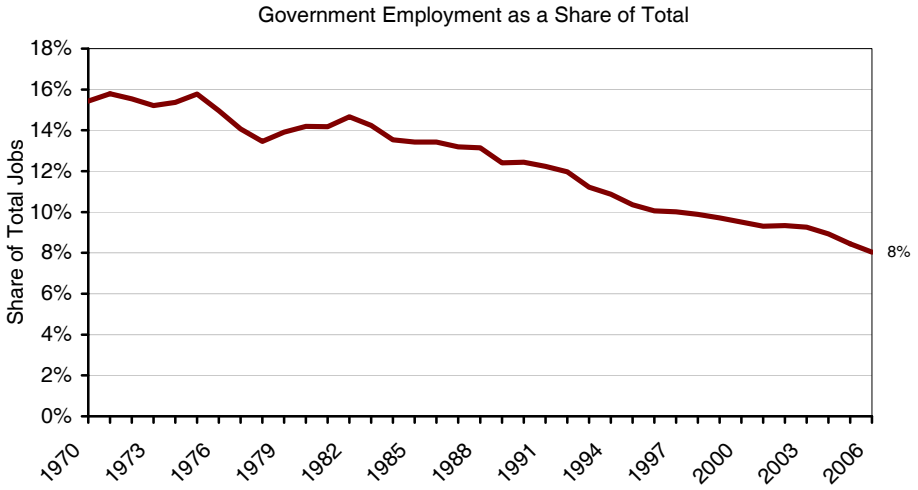
Source: BEA REIS 2006 Table CA30

Government Employment

- The majority of the growth in government employment since 1970 has been in state and local government (2,169 jobs).



- 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?

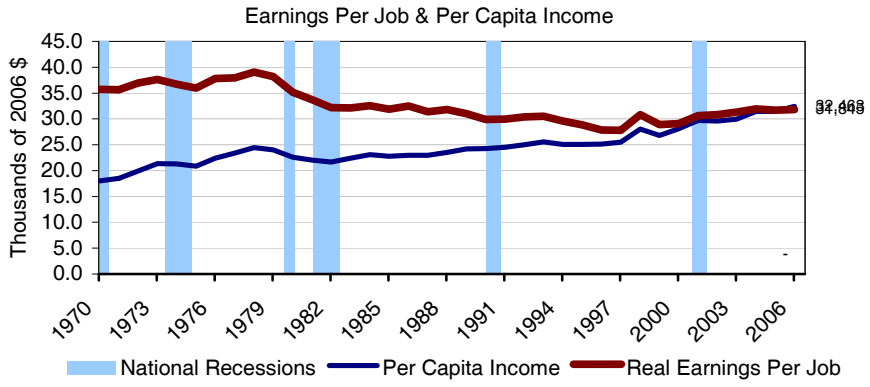


Source: BEA REIS 2006 Table CA25 and CA25N

Earnings Per Job

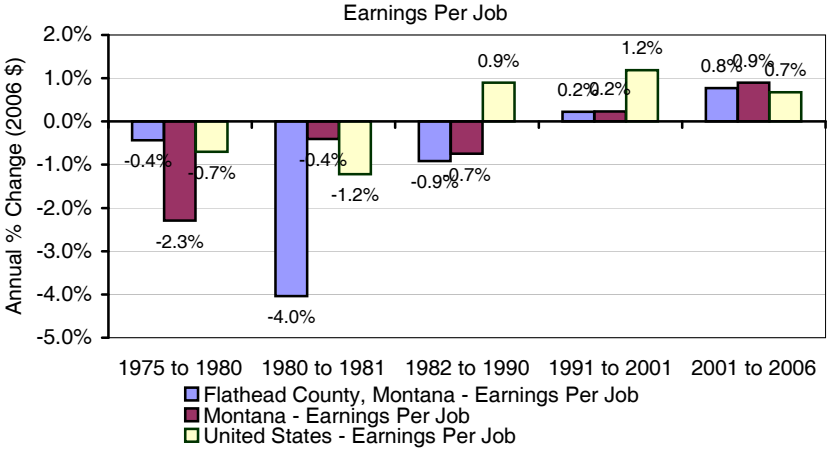
$$\text{Average Earnings per Job} = \frac{\text{Total Wages Earned}}{\text{Total \# of Workers}}$$

- Average earnings per job, adjusted for inflation, have fallen from $35,722 in 1970 to $31,845 in 2006.
- In 2006, Average earnings per job in Flathead County, Montana ($31,845) were lower than the state ($32,764) and the nation ($47,286).



How well do we recover from recessions?

- In the current recovery (2001 to 2006), earnings per job growth in Montana (up 0.9%) have outpaced Flathead County, Montana and 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.



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.

Source: BEA REIS 2006 Table CA30

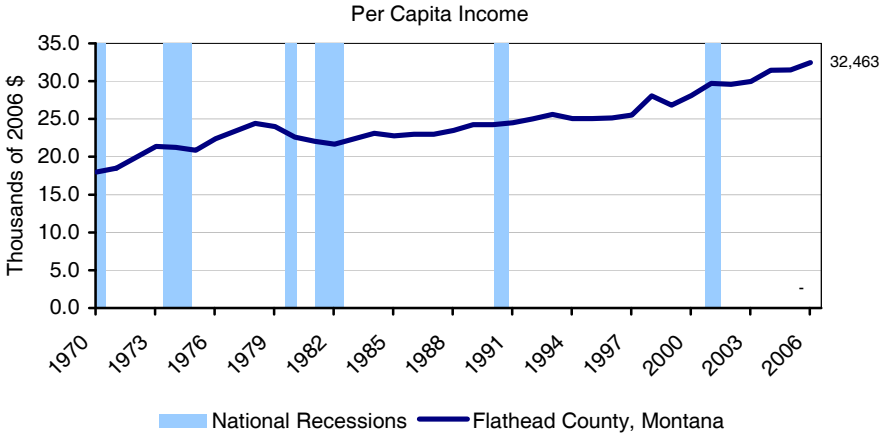
Per Capita Income

$$PCI = \frac{\text{Total Personal Income}}{\text{Population}}$$

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:

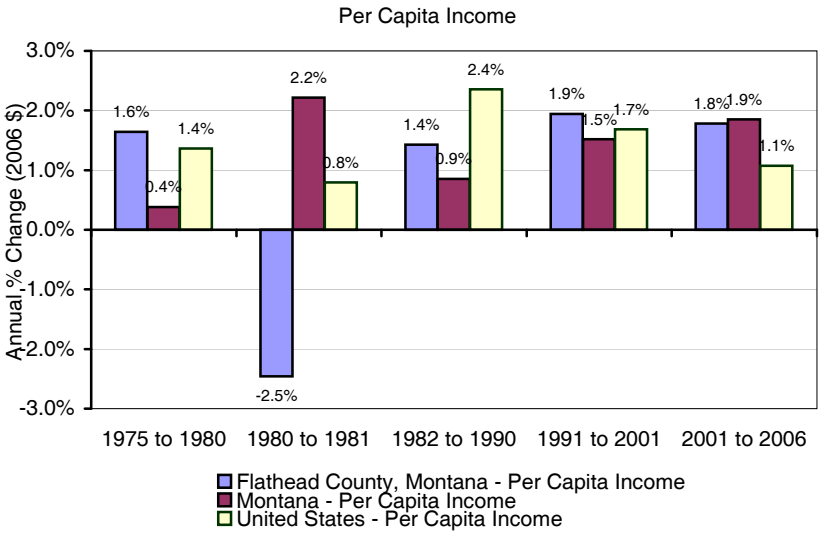
Since total personal income includes income from 401(k) plans as well as other non-labor income sources like transfer payments, dividends, and rent, it is possible for per capita income to rise, even if the average wage per job declines over time. In other words, non-labor sources of income can cause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

- Per capita income, adjusted for inflation, has risen from $17,999 in 1970 to $32,463 in 2006.
- In 2006, per capita income in Flathead County, Montana ($32,463) was higher than the state ($30,790) and lower than the nation ($36,714).



How well do we recover from recessions?

- In the current recovery (2001 to 2006), per capita income growth in Montana (up 1.9%) has outpaced Flathead County, Montana and the United States.
- Alternatively, in the last recovery (1991 to 2001), Flathead County, Montana (up 1.9%) grew the fastest.
- In the recovery from 1982 to 1990, the United States (up 2.4%) grew the fastest.



Source: BEA REIS 2006 Table CA30

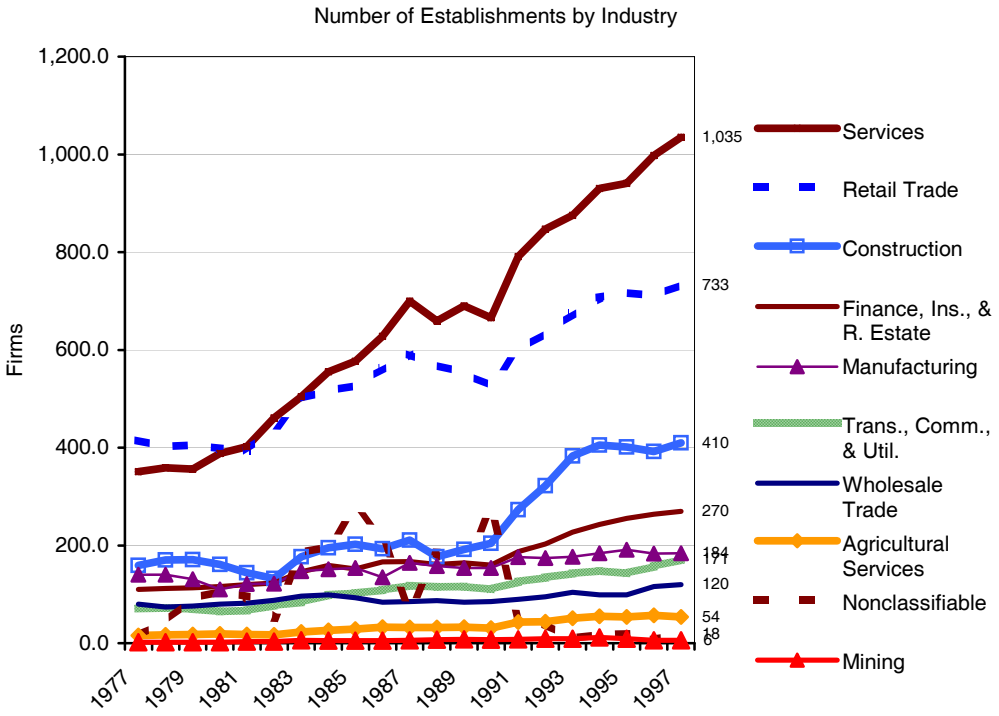
The advantage of this data source is that it never has disclosure restrictions. This source also releases data for hundreds of sectors (available on demand). The data on this page are from the US Census County Business Patterns, which unlike the REIS data, does NOT include proprietors, government, household 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 25.8% in 1977 to 34.5% in 1997.

Decline

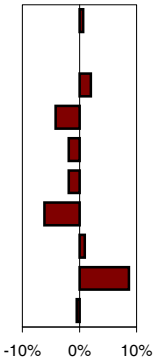
- The category whose share of total shrank the most was retail trade, which went from 30.5% in 1977 to 24.4% in 1997.



Firms by Industry

	1977	Shr. of Total	1987	Shr. of Total	1997	Shr. of Total	New Firms 77-97	New Firms Shr of Tot
Total	1359		2141		3001		1642	
Agricultural Services	16	1.2%	32	1.5%	54	1.8%	38	2.3%
Mining	2	0.1%	6	0.3%	6	0.2%	4	0.2%
Construction	159	11.7%	211	9.9%	410	13.7%	251	15.3%
Manufacturing	140	10.3%	164	7.7%	184	6.1%	44	2.7%
Trans., Comm., & Util.	71	5.2%	118	5.5%	171	5.7%	40	2.4%
Wholesale Trade	80	5.9%	85	4.0%	120	4.0%	40	2.4%
Retail Trade	415	30.5%	591	27.6%	733	24.4%	318	19.4%
Finance, Ins., & R. Estate	110	8.1%	167	7.8%	270	9.0%	160	9.7%
Services	351	25.8%	700	32.7%	1035	34.5%	684	41.7%
Nonclassifiable	15	1.1%	67	3.1%	18	0.6%	3	0.2%

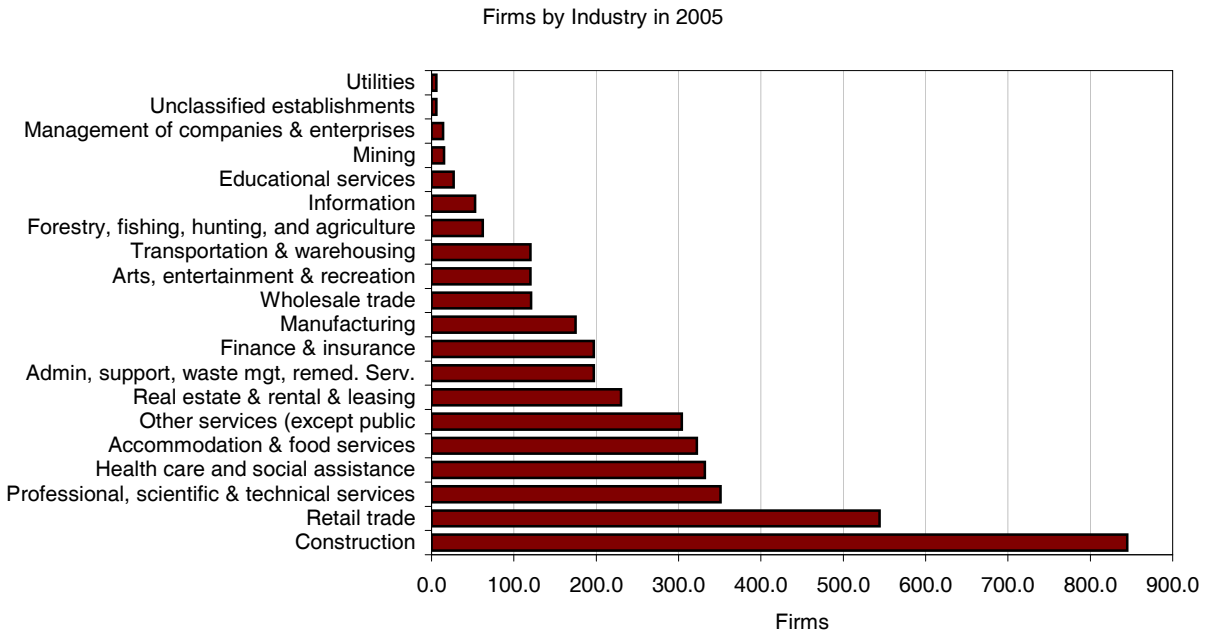
Change in Share of Total



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)



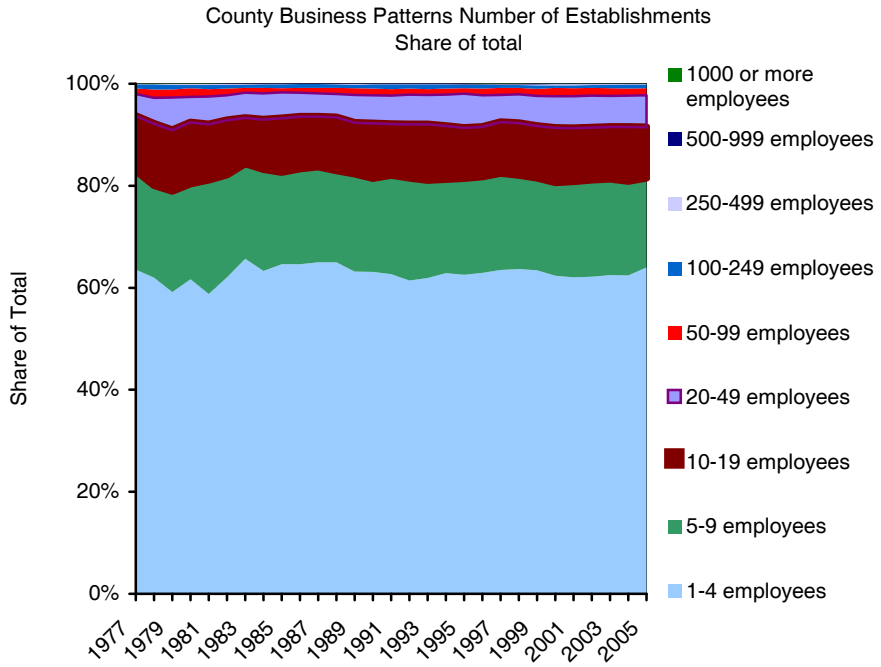
Firms by size and industry in 2005

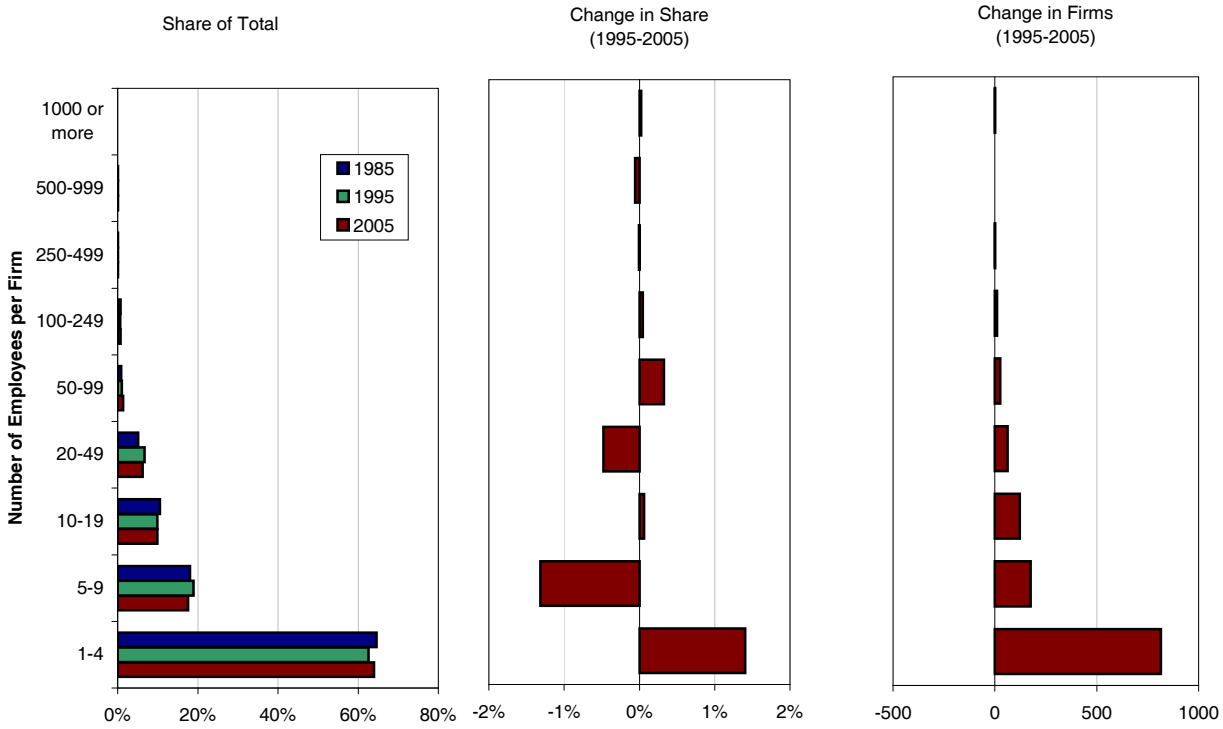
		Number of Employees per Firm								
	Total	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Forestry, fishing, hunting, and ag. support	62	41	13	5	3	0	0	0	0	0
Mining	15	8	1	5	1	0	0	0	0	0
Utilities	6	4	0	1	0	0	1	0	0	0
Construction	845	639	123	52	26	4	1	0	0	0
Manufacturing	175	101	30	22	12	3	5	1	1	0
Wholesale trade	121	65	24	17	14	1	0	0	0	0
Retail trade	544	269	135	73	45	14	7	1	0	0
Transportation & warehousing	120	78	25	9	7	1	0	0	0	0
Information	53	31	9	7	4	1	1	0	0	0
Finance & insurance	197	126	37	17	14	1	2	0	0	0
Real estate & rental & leasing	230	195	20	10	1	4	0	0	0	0
Professional, scientific & technical services	351	273	44	26	6	1	0	1	0	0
Management of companies & enterprises	14	5	3	0	4	1	1	0	0	0
Admin, support, waste mgt, remed. Serv.	197	138	29	16	11	0	1	1	1	0
Educational services	27	14	4	2	3	4	0	0	0	0
Health care and social assistance	332	186	72	43	18	6	6	0	0	1
Arts, entertainment & recreation	120	75	20	9	10	4	2	0	0	0
Accommodation & food services	322	130	51	68	62	9	2	0	0	0
Other services (except public administration)	304	201	71	19	11	2	0	0	0	0
Unclassified establishments	6	6	0	0	0	0	0	0	0	0
Total	4041	2,585	711	401	252	56	29	4	2	1

Source: Census County Business Patterns

Firms by Size

- The size category that grew the most was 1-4 employees.
- As a share of total, the size category that gained the most was 1-4 employees.
- In 2004, 91% of firms had fewer than 20 employees.

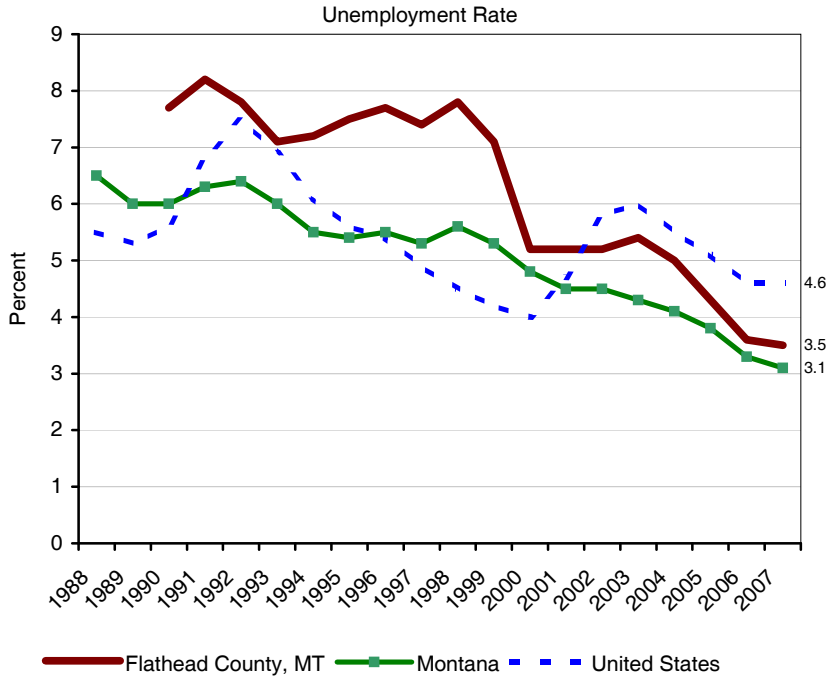




Source: Census County Business Patterns

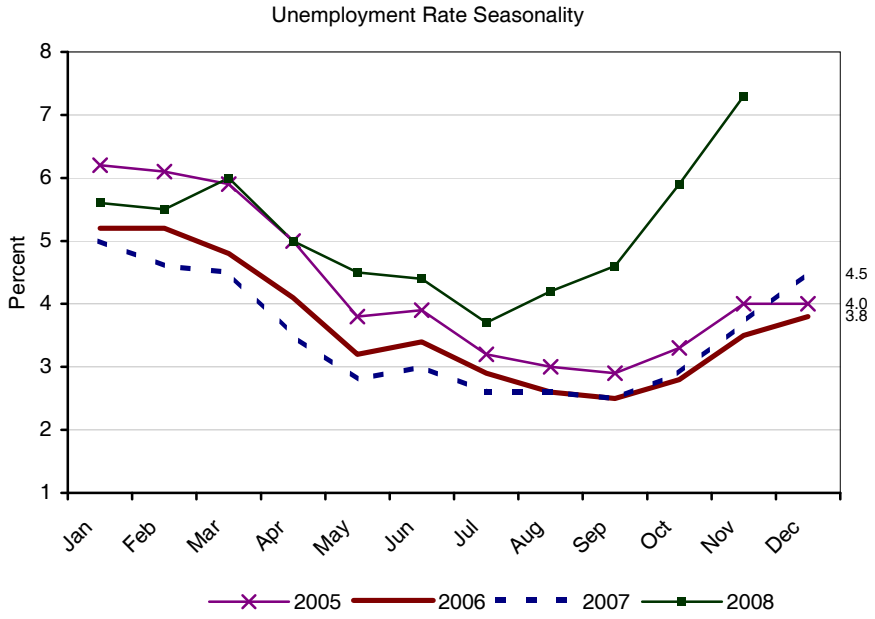
Annual Average Unemployment Rate Compared to the State and the Nation

- In 2007, the unemployment rate was 3.5%, compared to 3.1% in the state and 4.6% in the nation.
- Since 1990, the unemployment rate varied from from a low of 3.5% in 2007 to a high of 8.2% in 1991



Unemployment Rate Seasonality

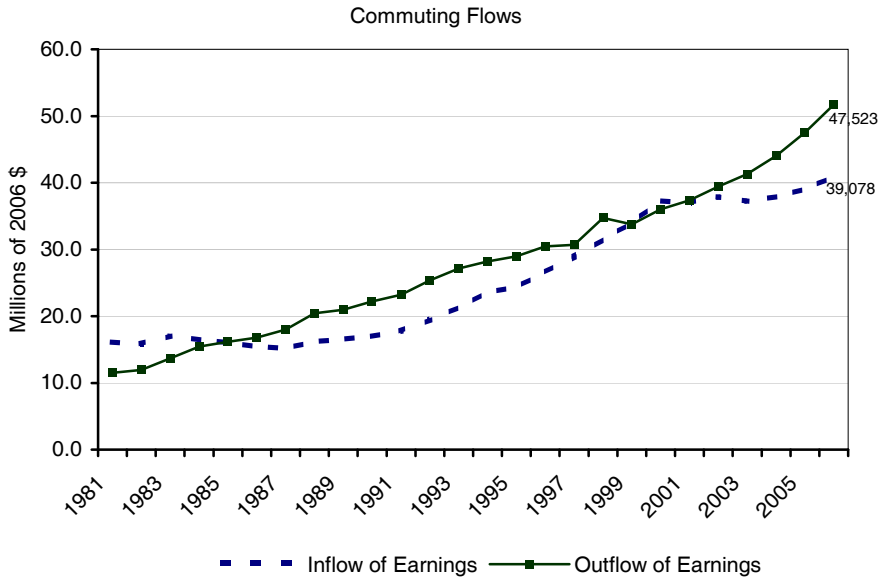
- This graph illustrates the seasonal variation in the unemployment rate over the last three years. In 2007, the unemployment rate varied from from a low of 2.5% in September 2007 to a high of 5.0% in January 2007



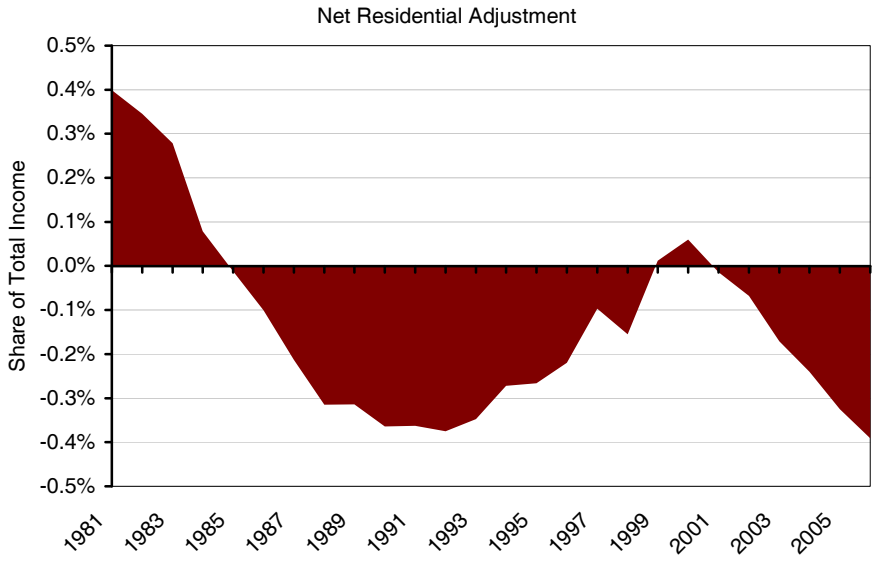
Source: Bureau of Labor Statistics

Inflow & Outflows

- Commuting is a minor factor (The Net Residential Adjustment is 0.4% of total income).



- A negative Net Residential Adjustment indicates in-commuting for work from other 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.

Source: BEA REIS 2006 Table CA91

Agriculture (Business Income)

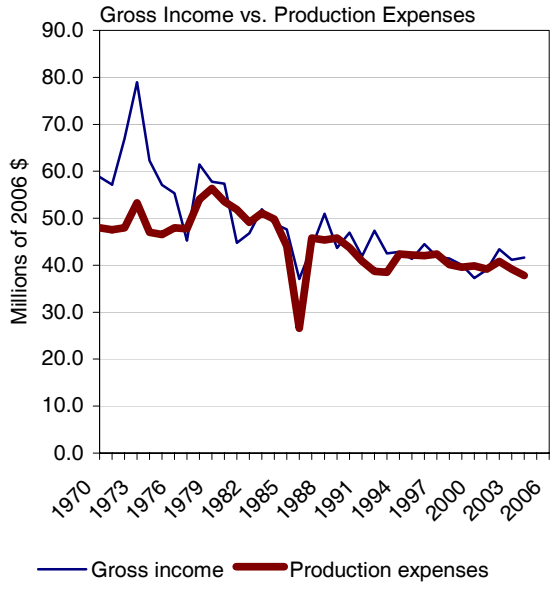
Farm income figures presented on this page reflect income from farming *enterprises* (income of the business). The term "farm" includes farming and ranching, but not agricultural services such as soil preparation services and veterinary services. In contrast, farm income figures presented in the next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

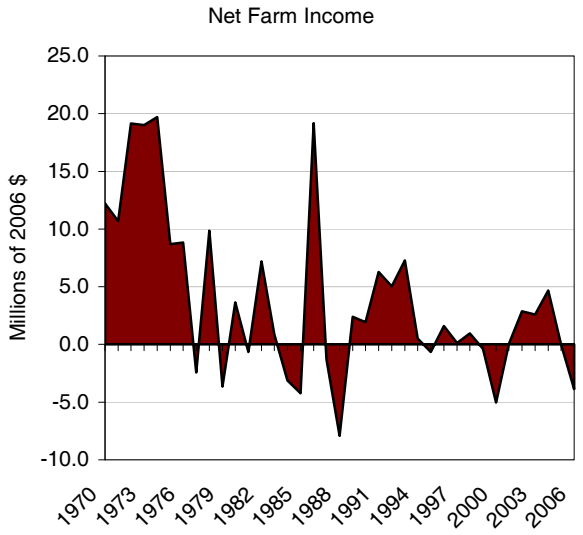
Gross Income, Expenses, and Net Income from Farming and Ranching

All figures in thousands of 2006 dollars	1970	% of Gross Income	1995	% of Gross Income	2006	% of Gross Income	70-06 Change in Share
Gross Income (Cash + Other)	58,771		41,335		40,443		
Cash Receipts from Marketings	52,151	89%	37,120	90%	32,501	80.4%	-8%
Livestock & Products	39,068	66%	13,920	34%	8,797	21.8%	-45%
Crops	13,083	22%	23,200	56%	23,704	58.6%	36%
Other Income	6,620	11%	4,215	10%	7,942	19.6%	8%
Government Payments	4,614	8%	564	1%	1,365	3.4%	-4%
Imputed Rent & Rent Received	2,006	3%	3,651	9%	6,577	16.3%	13%
Production Expenses	47,989		42,173		42,798		
Realized Net Income (Income - Expenses)	10,781		(839)		(2,355)		
Value of Inventory Change	1,439	2%	175	0%	(1,516)	NA	NA
Total Net Income (Inc. corporate farms)	12,221		(664)		(3,871)		

Gross Income vs. Production Expenses



Net Farm Income



Source: BEA REIS 2006 CD Table CA45

Relative Performance Comparisons

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

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.

Flathead County, Montana is diverse, with a specialization score of 51. By comparison, a county that is structured identically to the US would have a score of 0 (very diverse). The largest observed score in the U.S. is 3,441 (very specialized).

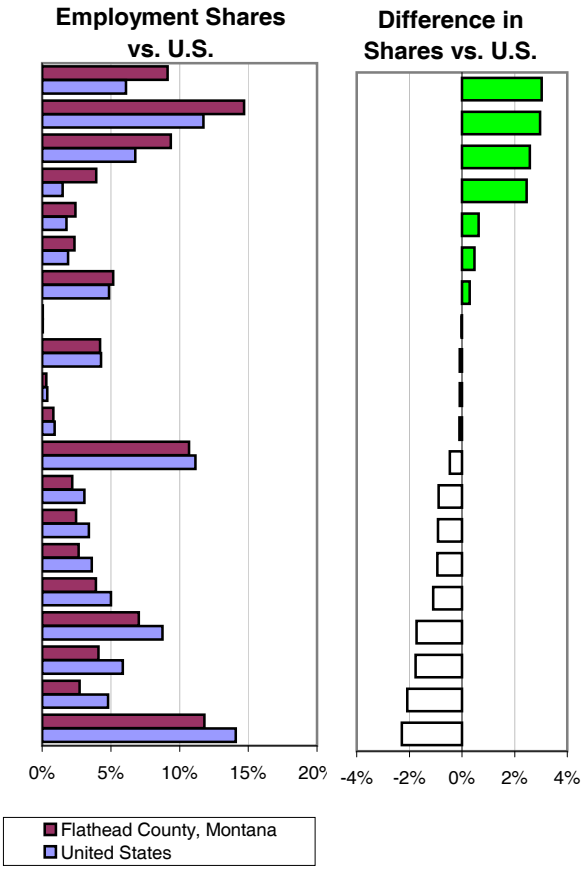
The sectors that most diverge from the US norm are:

- Over reliance on accommodation and food services (9.1% compared to 6.1% in the US)
- Over reliance on retail trade (14.7% compared to 11.7% in the US)
- Over reliance on construction (9.4% compared to 6.8% in the US)
- Over reliance on agriculture, forestry, fishing and hunting (3.9% compared to 1.5% 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)

	Study Area	U.S.	Difference in Share
Accommodation and food services	9%	6%	3%
Retail trade	15%	12%	3%
Construction	9%	7%	3%
Agriculture, forestry, fishing and hunting	4%	1%	2%
Arts, entertainment, and recreation	2%	2%	1%
Real estate and rental and leasing	2%	2%	0%
Other services (except public administration)	5%	5%	0%
Management of companies and enterprises	0%	0%	0%
Transportation and warehousing	4%	4%	0%
Mining	0%	0%	0%
Utilities	1%	1%	0%
Health care and social assistance	11%	11%	0%
Information	2%	3%	-1%
Admin & support & waste management services	2%	3%	-1%
Wholesale trade	3%	4%	-1%
Finance and insurance	4%	5%	-1%
Educational services	7%	9%	-2%
Professional, scientific, and technical services	4%	6%	-2%
Public administration	3%	5%	-2%
Manufacturing	12%	14%	-2%

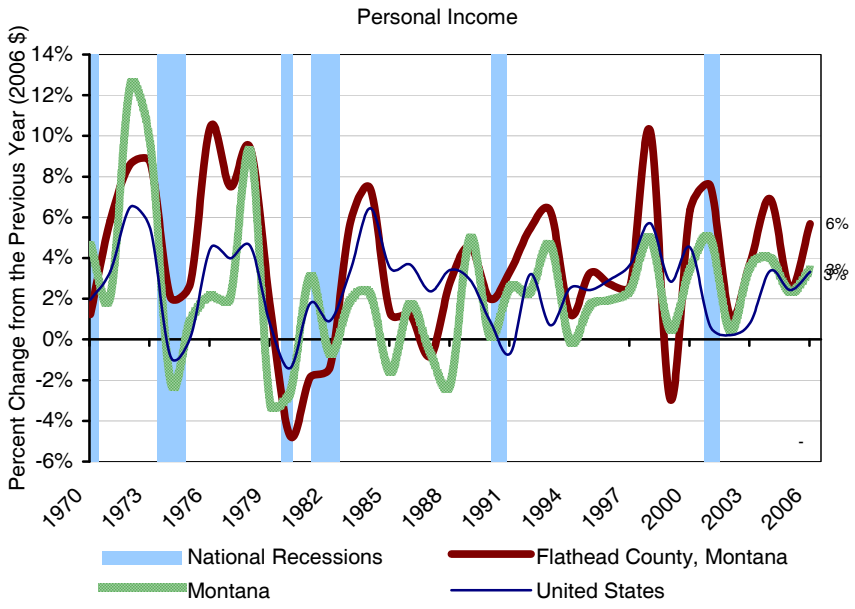


The above index uses a new improved methodology relative to earlier versions of EPS. It was calculated by summing the squares of the difference in shares between the local economy and the US for the 20 sectors.

Source: Census 2000 SF3 Table P49.

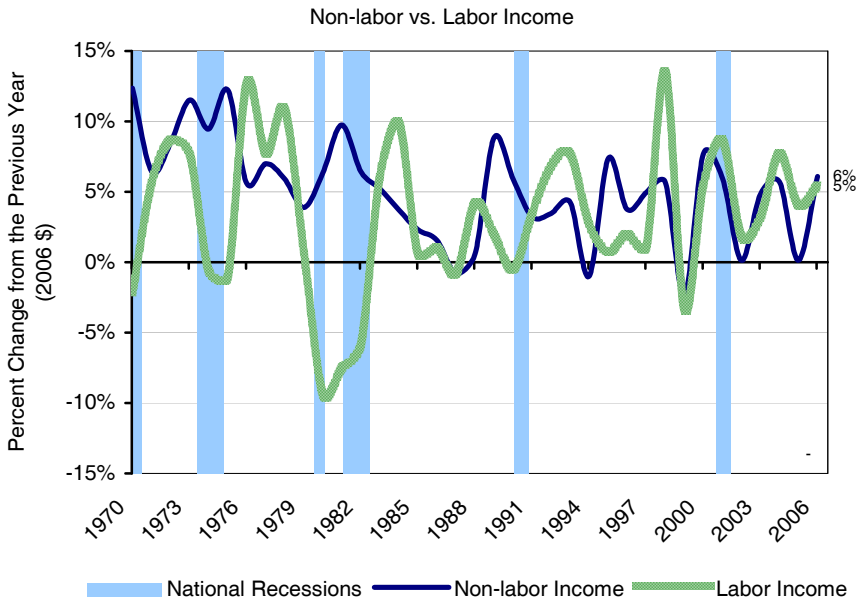
Stability vs. State and Nation

- 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

- Non-labor income sources can have a stabilizing effect on the economy and are sometimes, but not always, counter-cyclical to labor income.

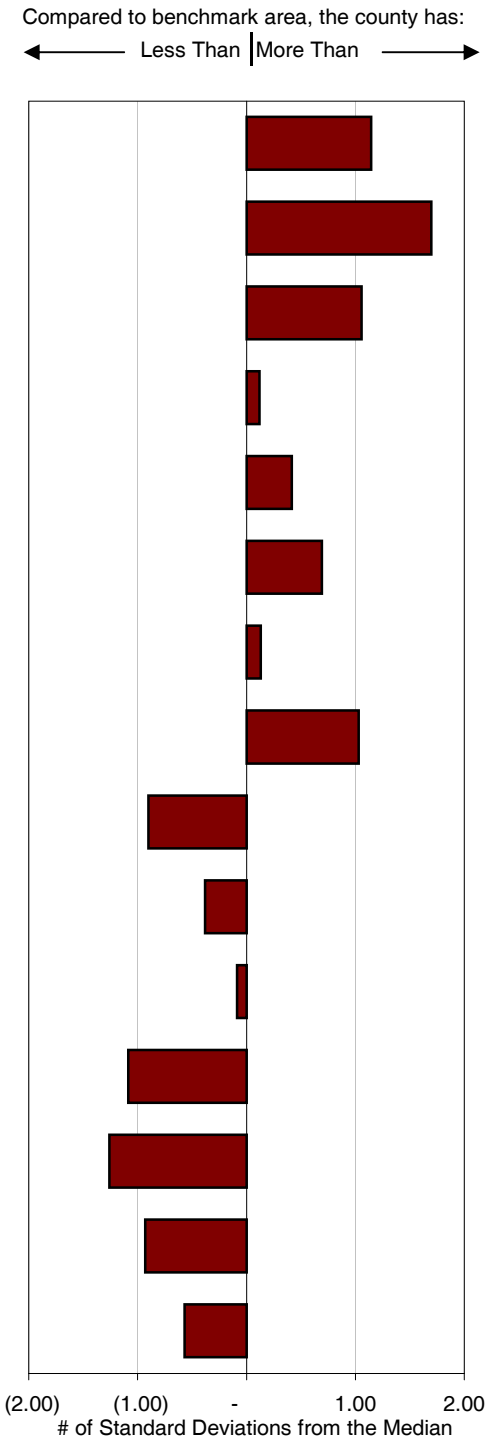


Source: BEA REIS 2006 Table CA30

Performance Comparisons

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

	Flathead County, Montana	US Median
Population Growth (Annualized rate, 1970-2006)	2.1%	0.6%
Employment Growth (Annualized rate, 1970-2006)	3.9%	1.4%
Personal Income Growth (Adjusted for Inflation, Annualized rate, 1970-2006)	3.8%	2.2%
Non-labor Income Share of Total in 2006	38.3%	37.4%
Median Age*	39	37.3
Per Capita Income (2006)	$ 32,463	$ 27,413
Average Earnings Per Job (2006)	$ 31,845	$ 30,604
Education Rate* (% of population 25 and over who have a college degree)	22.4%	14.5%
Education Rate* (% of population 25 and over who have less than a high school diploma)	12.6%	21.0%
Employment Specialization*	51	155
Rich-Poor Ratio* (for each household that made over $100K, how many households made less than $30K)	7.3	8.7
Housing Affordability in 2000 (100 or above means that the median family can afford the median house)*	115	186
Change in Housing Affordability* (% Change in index from 1990 to 2000) Positive means the area is getting more affordable.	-13.1%	10.3%
Government share of Total employment	8%	15%
Unemployment Rate in 2007**	3.5%	4.7%



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.

In the following pages (28-32) you will learn about:

1. Long-term employment and personal income trends, from 1970 to 2006
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.

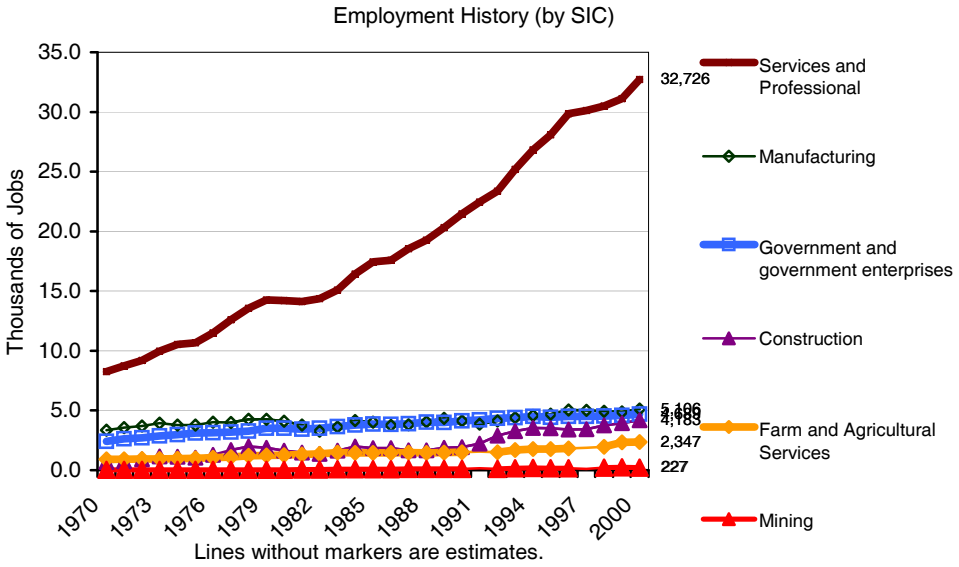
Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

Growth

- The employment category whose share of total gained the most was services (health, legal, business, others), which went from 15.9% in 1970 to 31.7% in 2000.

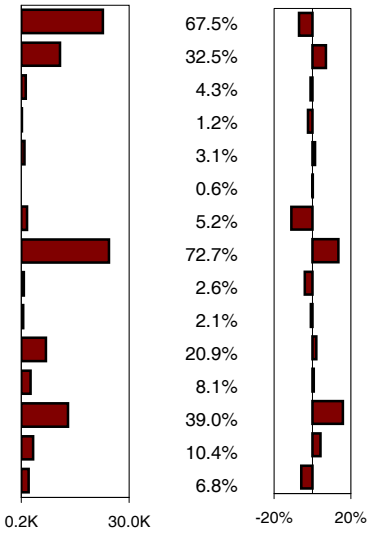
Decline

- The category whose share of total shrank the most was manufacturing (incl. forest products) *, which went from 21.4% in 1970 to 10.4% in 2000.



Employment by Industry
Changes from 1970 to 2000

	1970	% of Total	2000	% of Total	New Employment	% of New Employment	Change in Share
Total Employment	15,627.0		49,278.0		33,651.0		
Wage and Salary Employment	12,143.0	77.7%	34,864.0	70.7%	22,721.0	67.5%	
Proprietors' Employment	3,484.0	22.3%	14,414.0	29.3%	10,930.0	32.5%	
Farm and Agricultural Services	899.0	5.8%	2,347.0	4.8%	1,448.0	4.3%	
Farm	730.0	4.7%	1,124.0	2.3%	394.0	1.2%	
Ag. Services *	169.0	1.1%	1,223.0	2.5%	1,054.0	3.1%	
Mining	40.0	0.3%	227.0	0.5%	187.0	0.6%	
Manufacturing (incl. forest products) *	3,345.0	21.4%	5,106.0	10.4%	1,761.0	5.2%	
Services and Professional	8,258.0	52.8%	32,726.0	66.4%	24,468.0	72.7%	
Transportation & Public Utilities	1,327.0	8.5%	2,205.0	4.5%	878.0	2.6%	
Wholesale Trade	501.0	3.2%	1,198.0	2.4%	697.0	2.1%	
Retail Trade	2,831.0	18.1%	9,873.0	20.0%	7,042.0	20.9%	
Finance, Insurance & Real Estate	1,115.0	7.1%	3,850.0	7.8%	2,735.0	8.1%	
Services (Health, Legal, Business, Others)	2,484.0	15.9%	15,600.0	31.7%	13,116.0	39.0%	
Construction	674.0	4.3%	4,183.0	8.5%	3,509.0	10.4%	
Government	2,411.0	15.4%	4,689.0	9.5%	2,278.0	6.8%	



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 2006 CD Table CA25

Growth

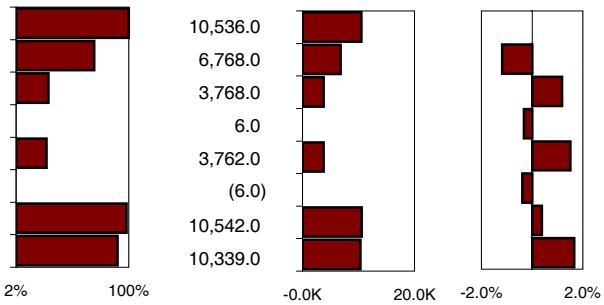
- The employment category whose share of total gained the most was construction, which went from 9.6% in 2001 to 12.9% in 2006.

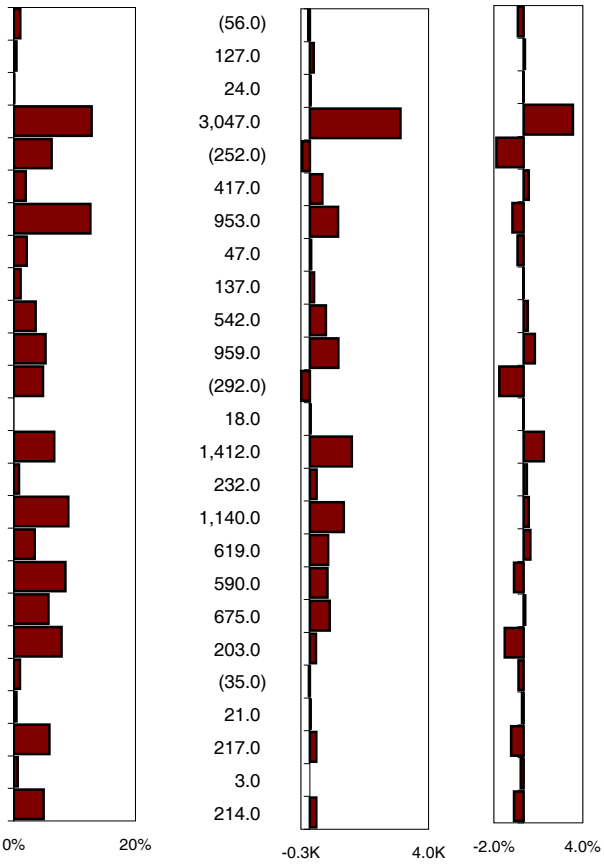
Decline

- The employment category whose share of total shrank the most was manufacturing, which went from 8.2% in 2001 to 6.4% in 2006.

Employment by Industry (NAICS)
Changes from 2001 to 2006 Share of Total

Category	2001	2006	2006 Share of Total	New Jobs	Change in Share of Total (2006 - 2001)
Total employment	50,674.0	61,210.0	100%	10,536.0	
Wage and salary employment	36,039.0	42,807.0	70%	6,768.0	
Proprietors employment	14,635.0	18,403.0	30%	3,768.0	
Farm proprietors employment	994.0	1,000.0	2%	6.0	
Nonfarm proprietors employment	13,641.0	17,403.0	28%	3,762.0	
Farm employment	1,115.0	1,109.0	2%	(6.0)	
Nonfarm employment	49,559.0	60,101.0	98%	10,542.0	
Private employment	44,840.0	55,179.0	90%	10,339.0	
Forestry, fishing, related activities, and oth	881.0	825.0	1%	(56.0)	
Mining	304.0	431.0	1%	127.0	
Utilities	176.0	200.0	0%	24.0	
Construction	4,845.0	7,892.0	13%	3,047.0	
Manufacturing	4,180.0	3,928.0	6%	(252.0)	
Wholesale trade	939.0	1,356.0	2%	417.0	
Retail Trade	6,805.0	7,758.0	13%	953.0	
Transportation and warehousing	1,398.0	1,445.0	2%	47.0	
Information	728.0	865.0	1%	137.0	
Finance and insurance	1,790.0	2,332.0	4%	542.0	
Real estate and rental and leasing	2,356.0	3,315.0	5%	959.0	
Professional and technical services	3,379.0	3,087.0	5%	(292.0)	
Management of companies and enterprise:	123.0	141.0	0%	18.0	
Administrative and waste services	2,784.0	4,196.0	7%	1,412.0	
Educational services	457.0	689.0	1%	232.0	
Health care and social assistance	4,432.0	5,572.0	9%	1,140.0	
Arts, entertainment, and recreation	1,634.0	2,253.0	4%	619.0	
Accommodation and food services	4,707.0	5,297.0	9%	590.0	
Other services, except public administratio	2,922.0	3,597.0	6%	675.0	
Government and government enterprises	4,719.0	4,922.0	8%	203.0	
Federal, civilian	829.0	794.0	1%	(35.0)	
Military	404.0	425.0	1%	21.0	
State and local	3,486.0	3,703.0	6%	217.0	
State government	570.0	573.0	1%	3.0	
Local government	2,916.0	3,130.0	5%	214.0	





Source: BEA REIS 2006 CD Table CA25N

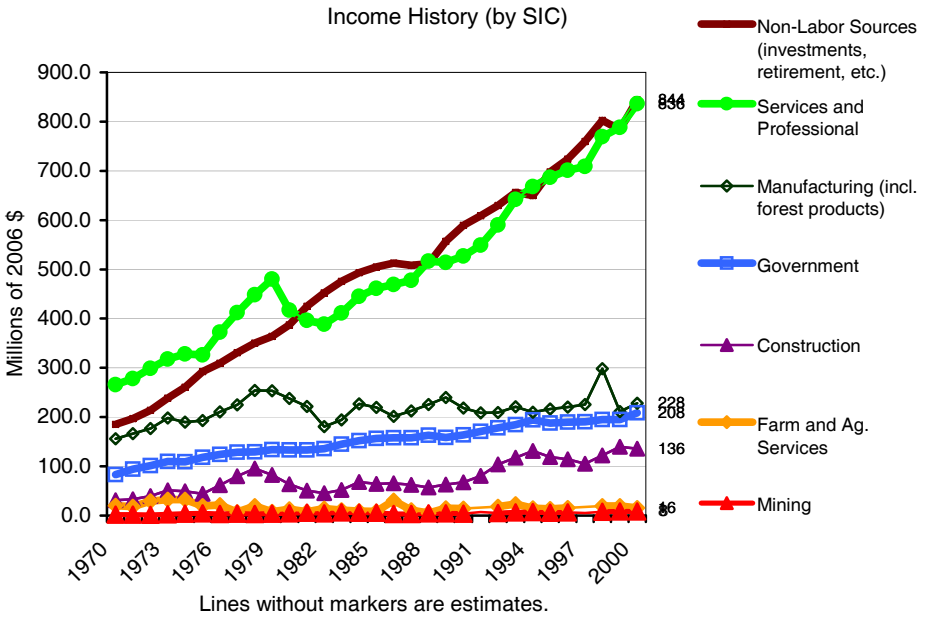
Data ends in 2000 because the BEA switched to a different classification system (NAICS) in 2001.

Growth

- The income category whose share of total gained the most was non-labor income, which went from 25.9% in 1970 to 40.2% in 2000.

Decline

- The category whose share of total shrank the most was manufacturing (incl. forest products), which went from 21.8% in 1970 to 10.9% in 2000.



New Income by Type

All figures in millions of 2005 dollars	1970	% of Total	2000	% of Total	New Income 1970 to 2000	% of New Income	Change in Share
Total Personal Income*	714.9		2,100.2		1,385.3		
Farm and Agricultural Services	20.2	2.8%	15.9	0.8%	(4.4)	NA	
Farm	15.9	2.2%	0.0	0.0%	(15.9)	NA	
Ag. Services	4.3	0.6%	15.8	0.8%	11.6	1%	
Mining	2.2	0.3%	8.5	0.4%	6.3	0%	
Manufacturing (incl. forest products)	156.0	21.8%	227.9	10.9%	71.8	5%	
Services and Professional	265.5	37.1%	836.2	39.8%	570.7	41%	
Transportation & Public Utilities	70.4	9.8%	101.4	4.8%	31.1	2%	
Wholesale Trade	21.7	3.0%	41.4	2.0%	19.7	1%	
Retail Trade	87.2	12.2%	191.3	9.1%	104.1	8%	
Finance, Insurance & Real Estate	16.3	2.3%	110.2	5.2%	93.9	7%	
Services (Health, Legal, Business, Oth.)	70.0	9.8%	391.9	18.7%	321.9	23%	
Construction	31.1	4.3%	135.9	6.5%	104.8	8%	
Government	83.2	11.6%	208.4	9.9%	125.2	9%	
Non-Labor Income	185.0	25.9%	843.9	40.2%	658.9	48%	
Dividends, Interest & Rent	109.9	15.4%	525.4	25.0%	415.4	30%	
Transfer Payments	75.1	10.5%	318.5	15.2%	243.4	18%	

-20.0 700.0 -20% 20%

* 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.

Source: BEA REIS 2006 CD Table CA05

Growth

- The income category whose share of total gained the most was construction, which went from 6.8% in 2001 to 9.4% in 2006.

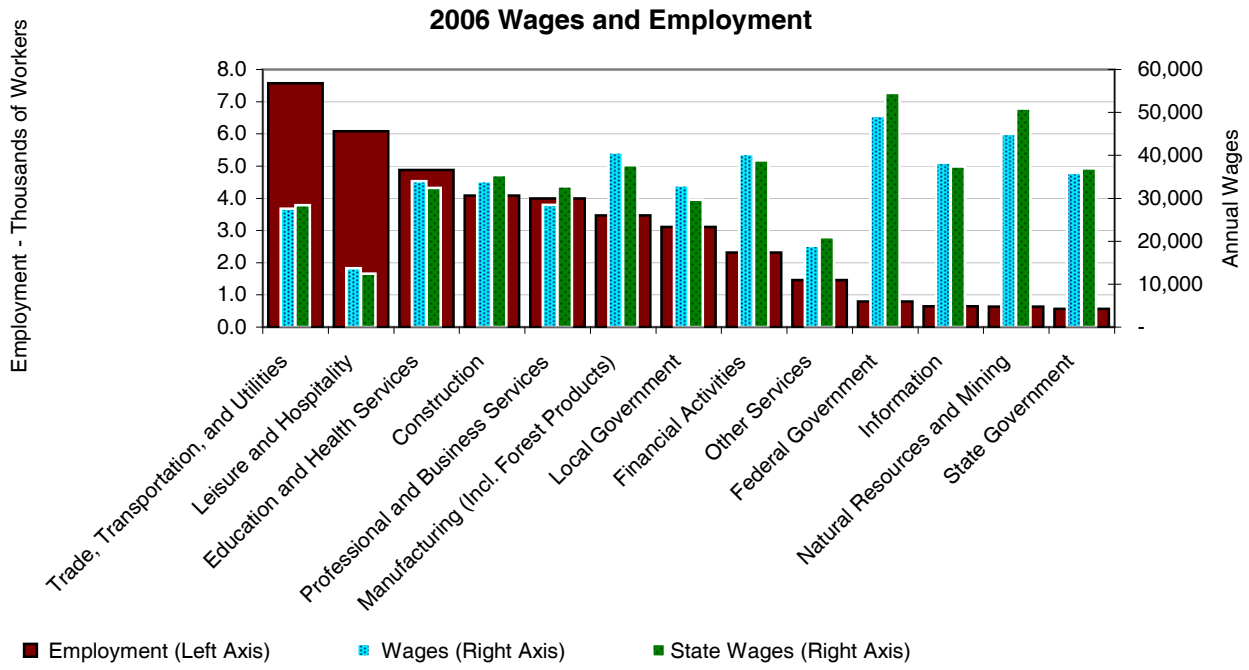
Decline

- The income category whose share of total shrank the most was manufacturing, which went from 8.7% in 2001 to 6.7% in 2006.

Income by Industry (NAICS)
Changes from 2001 to 2006 Share of Total

All figures in millions of 2006 dollars	2001	2006	2006 Share of Total	New Income	Change in Share of Total (2006 - 2001)
Personal income	2,258.9	2,747.4	100%	488.6	
Wage and salary disbursements	1,025.2	1,305.2	48%	279.9	
Proprietors' income	300.6	328.7	12%	28.1	
Farm proprietors'	0.0	(3.4)	0%	(3.4)	
Nonfarm proprietor	300.6	332.1	12%	31.5	
Farm earnings	4.4	1.7	0%	(2.7)	
Nonfarm earnings	1,548.4	1,947.6	71%	399.2	
Private earnings	1,340.5	1,702.8	62%	362.3	
			-0% 100%	-4.0 500.0	-2.0% 3.0%
Forestry, fishing, related act., and oth	27.5	27.9	1%	0.4	
Mining	17.0	31.2	1%	14.2	
Utilities	32.1	39.1	1%	7.0	
Construction	153.7	258.3	9%	104.6	
Manufacturing	195.6	185.1	7%	(10.5)	
Wholesale trade	33.9	59.1	2%	25.1	
Retail Trade	161.6	187.8	7%	26.2	
Transportation and warehousing	64.7	69.5	3%	4.8	
Information	27.7	34.4	1%	6.7	
Finance and insurance	64.9	103.5	4%	38.6	
Real estate and rental and leasing	93.0	82.1	3%	(10.9)	
Professional and technical services	103.2	107.9	4%	4.7	
Management of companies & enterp.	5.8	7.7	0%	1.9	
Administrative and waste services	50.8	93.0	3%	42.2	
Educational services	8.1	12.7	0%	4.5	
Health care and social assistance	163.2	228.9	8%	65.7	
Arts, entertainment, and recreation	21.2	30.5	1%	9.3	
Accommodation and food services	71.5	89.5	3%	18.0	
Other services, except public admin.	44.8	54.7	2%	9.9	
Government and government enterp.	207.8	244.8	9%	36.9	
Federal, civilian	59.6	61.2	2%	1.6	
Military	7.8	15.0	1%	7.2	
State and local	140.5	168.6	6%	28.1	
State government	21.9	27.3	1%	5.5	
Local government	118.6	141.3	5%	22.6	
			0% 10%	-20.0 200.0	-2.0% 3.0%

Source: BEA REIS 2006 CD Table CA05N



- Of the major categories, the highest paying sector is federal government. It accounts for 2.2% of total employment and pays $49,189 per year.
- Of the major categories, the largest employment sector is trade, transportation, and utilities. It accounts for 19.1% of total employment and pays $27,560 per year.
- Goods-producing employees (8,197 workers) were paid an average of $37,676.
- Service-providing employees (26,973 workers) were paid an average of $26,626.
- Note that these data do not include proprietors or the value of benefits.
- Wages in the public sector ($36,249) exceeded wages in the private sector ($29,201) by 24.1%.

County Wages and Employment in 2006

	Employment	% of Total	Average Annual Wages
Total Private & Public	39,633	100%	29,995
Total Private	35,169	89%	29,201
Goods-Producing	8,197	21%	37,676
Natural Resources and Mining	640	2%	45,032
Agriculture, forestry, fishing & hunting	387	1%	43,066
Mining	253	1%	48,035
Construction	4,086	10%	33,954
Manufacturing (Incl. Forest Products)	3,470	9%	40,702
Service-Providing	26,973	68%	26,626
Trade, Transportation, and Utilities	7,574	19%	27,560
Information	646	2%	38,306
Financial Activities	2,316	6%	40,358
Professional and Business Services	4,000	10%	28,476
Education and Health Services	4,882	12%	33,987
Leisure and Hospitality	6,086	15%	13,708
Other Services	1,462	4%	18,895
Unclassified	7	0.02%	51,474
Total Public	4,464	11%	36,249
Federal Government	791	2%	49,189
State Government	563	1%	35,909
Local Government	3,110	8%	33,019

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.
  http://bea.gov/bea/regional/data.htm
  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
  http://www.census.gov
  Tel. 303-969-7750

- **County Business Patterns (CBP)**
  Bureau of the Census, U.S. Department of Commerce.
  http://www.census.gov/epcd/cbp/view/cbpview.html
  Tel 301-763-2580

- **County Business Patterns (Before 1986)**
  University of Virginia, Geospatial and Statistical Data Center:
  http://fisher.lib.virginia.edu
  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 self-employed 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**
• Services	• Information • 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 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:

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

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

- Total Personal Income = 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.
- Wage and salary = monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401K plans.
- Other labor income = payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees.
- Proprietors' income = 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

- Transfer payments = 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.
- Retirement & disab. insurance benefit payments = 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.
- Unemployment insurance benefit payments = 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.
- Federal education and training assistance = Job Corps payments, interest payments on Guaranteed Student Loans, federal fellowship payments, and student assistance for higher education.
- Other government payments = compensation of survivors of public safety officers and compensation of victims of crime. In Alaska this item includes Alaska Permanent Fund payments.
- Payments to nonprofit institutions = payments for development and research contracts. For example, it includes payments for foster home care supervised by private agencies.
- Business payments to individuals = 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.
- Median = "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%.
- Mode = 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").