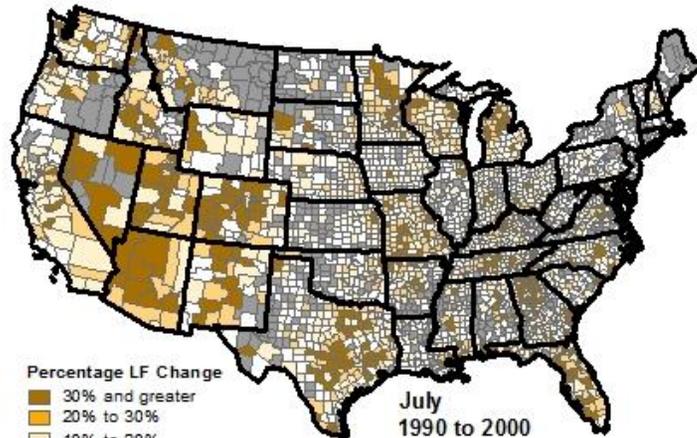


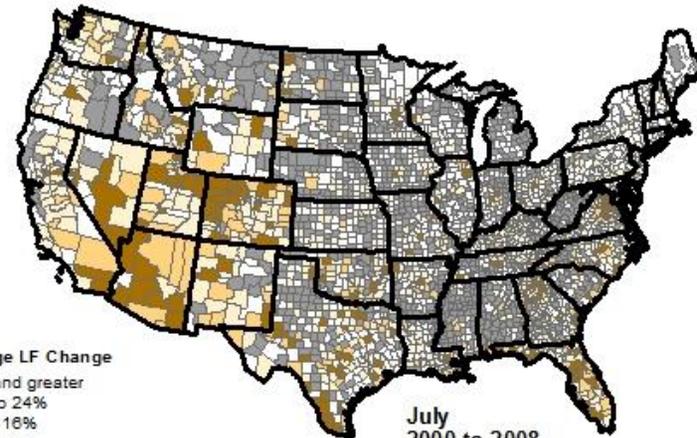
## Area Labor Force Expansion Patterns Over Time in the U.S.



Percentage LF Change

- 30% and greater
- 20% to 30%
- 10% to 20%
- 0% to 10%
- Decline

July  
1990 to 2000

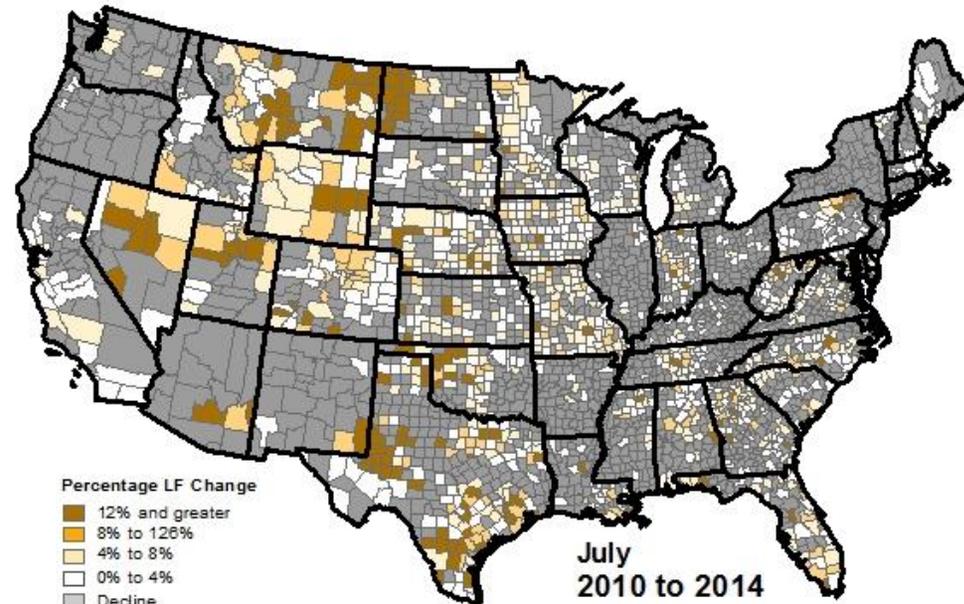


Percentage LF Change

- 24% and greater
- 16% to 24%
- 8% to 16%
- 0% to 8%
- Decline

July  
2000 to 2008

These maps show patterns of labor force growth or decline for different periods in time including 1990 to 2000, 2000 to 2008 (pre-recession period), and 2010 to 2014 (the post-recession recovery period). Many areas of the U.S. are seeing no increases in the size of their area labor forces and this dates back to the early '90s. All counties shown in gray saw declines in the size of their labor forces in the periods noted. Areas in dark orange or brown, medium orange, and light orange have growing labor forces.



Percentage LF Change

- 12% and greater
- 8% to 12%
- 4% to 8%
- 0% to 4%
- Decline

July  
2010 to 2014



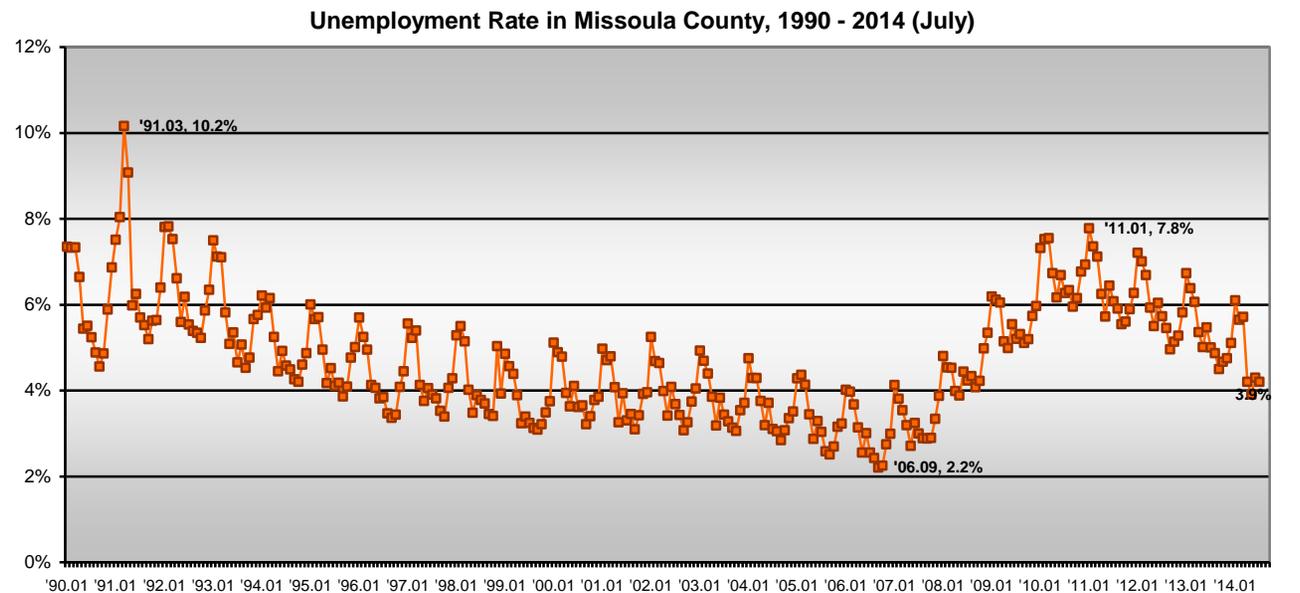
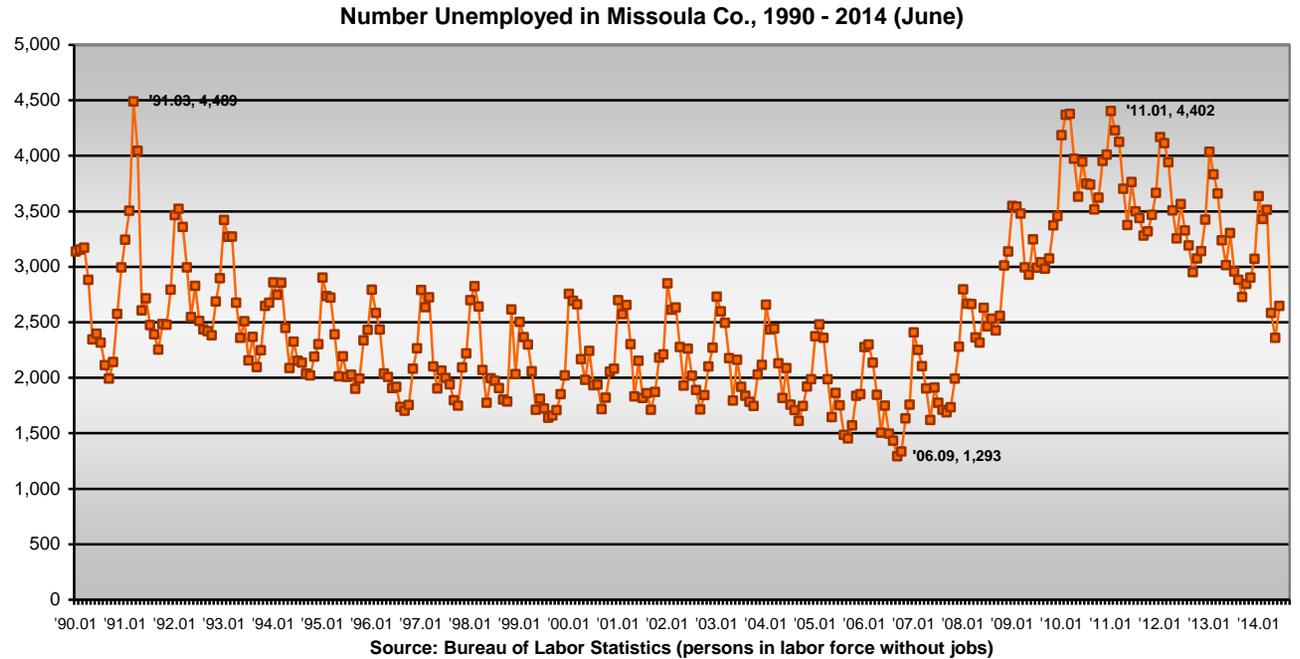
Source: Bureau of Labor Statistics

## B. Trends in Levels and Rates of Area Unemployment

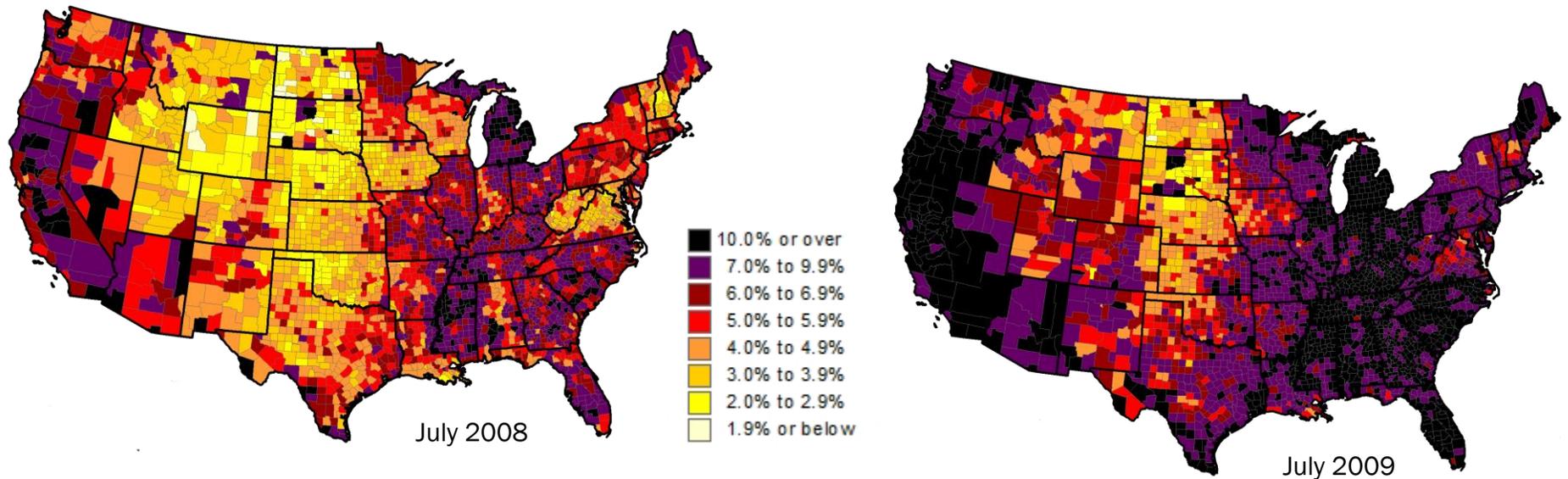
The upper chart shows the number of persons in the workforce who were unemployed on a monthly basis over an extended period of time in Missoula County (1990 to June, 2014). Over this very long period of time the monthly high in the number of unemployed was reached back in March of 1991 (4,499 unemployed). This compares with a more recent high of 4,402 in January, 2011.

The lower chart translates these unemployment levels into rates. Because the labor force is considerably larger today than in the early '90s, the unemployment rate peaked at a high of over 10% in March of 1991. The more recent high in January of 2011 resulted in unemployment of 7.8%.

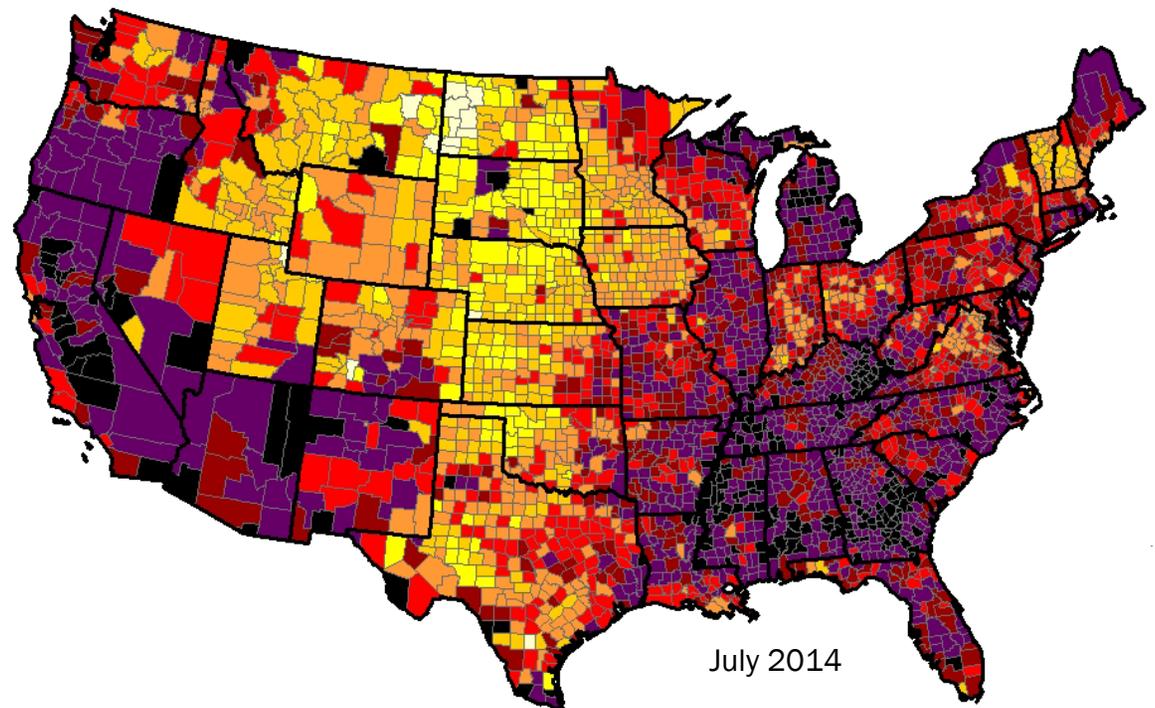
The lowest unemployment rate over this period was in September of 2006, a year prior to the onset of the national recession, when unemployment fell to as low as 2.2% in Missoula County. A “full employment economy” is one where unemployment is as high as 4%. This is considered normal and allows for some people moving between jobs on a constant basis. Unemployment rates as low as 2% reflect very “tight” labor market conditions. Missoula’s unemployment rate recently fell below 4%.



## Regional Patterns of Area Unemployment in the U.S. – Pre- and Post- Recession



Areas shown in light and medium yellow have very low unemployment rates of less than 3.0% in the months featured in the maps – July of 2008 (early into the national recession which began in December of 2007), July of 2009 (the recession officially ended in June of 2009) and more recently in July of 2014 (post-recession recovery). Areas shown in black and dark purple have very high unemployment rates of 7.0% and greater.



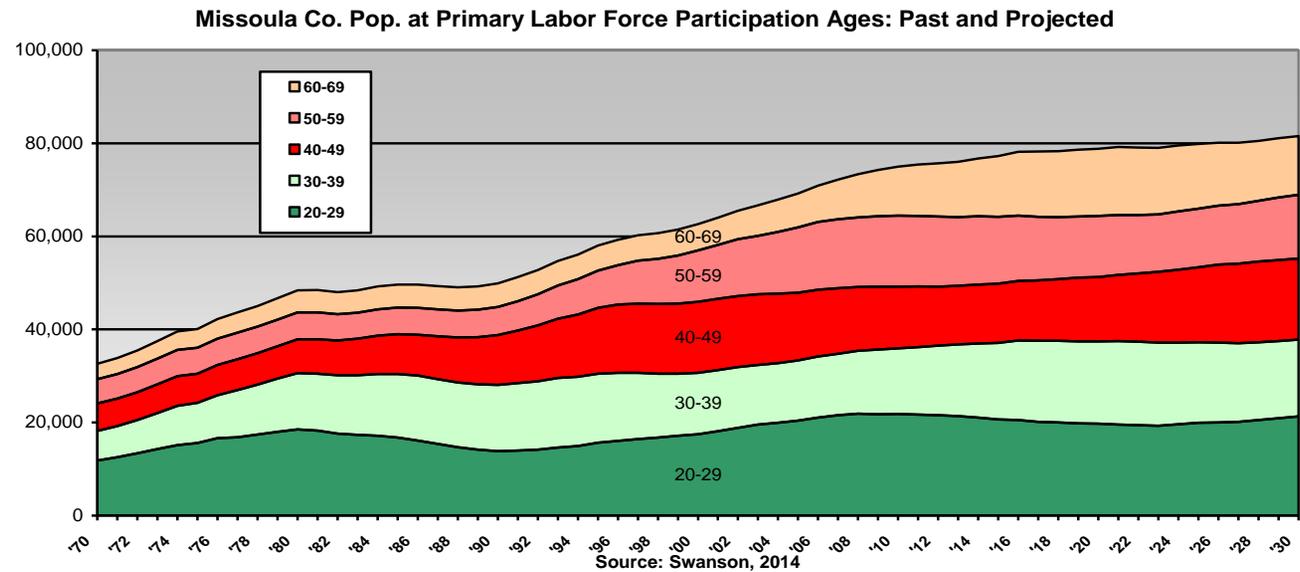
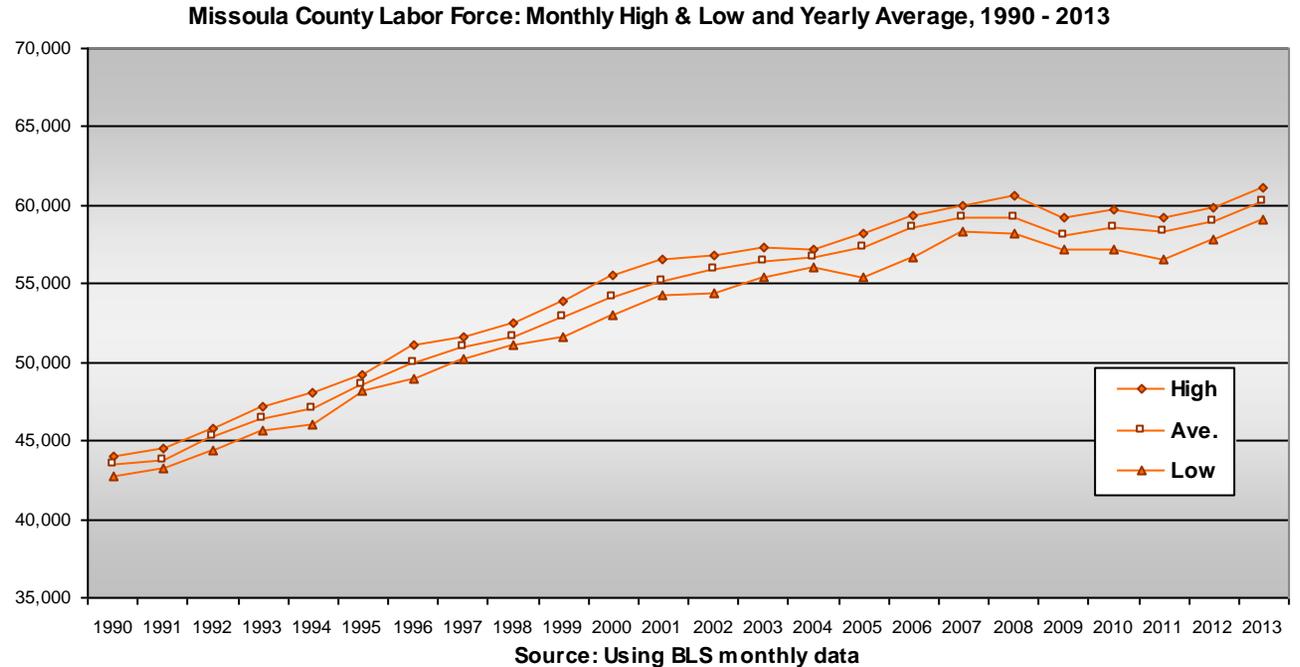
## B. Labor Force and Population Growth

A growing economy will steadily add jobs and employ more people. As this occurs the labor force must grow to accommodate this growth in the economy. When economic growth is relatively fast, it can out-pace growth in the labor market, leading to very low unemployment rates (ones under 3%) and tight labor markets.

The larger region in which Missoula County is located had very low unemployment rates entering the national recession and the region will likely have some of the lowest unemployment rates once the economy fully recovered. It is very possible unemployment in Missoula County will be at or near 3% by mid-summer of next year (2015).

The upper chart shows yearly high and low labor force levels in Missoula County over time, along with yearly average monthly labor force levels. Labor force growth is clearly slowing since 2000 and this partly reflects a slowdown in growth in the area population at prime ages for workforce participation (lower chart).

As the population ages, areas without growing populations will actually see shrinking work forces. With moderate growth, Missoula County's work force is likely to continue to grow, but more slowly than in the past.



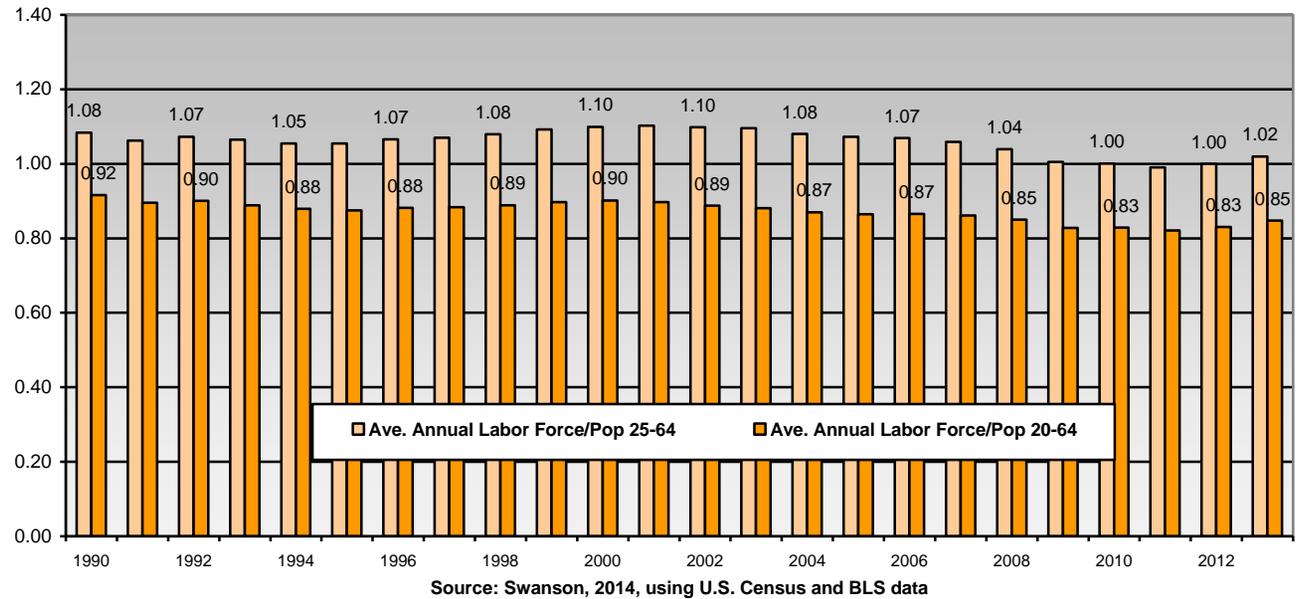
## B. Labor Force as a Share of the Population

The upper chart uses average annual yearly labor force levels in Missoula County and relates these to past population levels for working age adults. As a share of the population of the county between 20 and 64 years of age the average annual labor force has ranged from 83% of the total in recent years to as high as 90 to 92% in the early '90s.

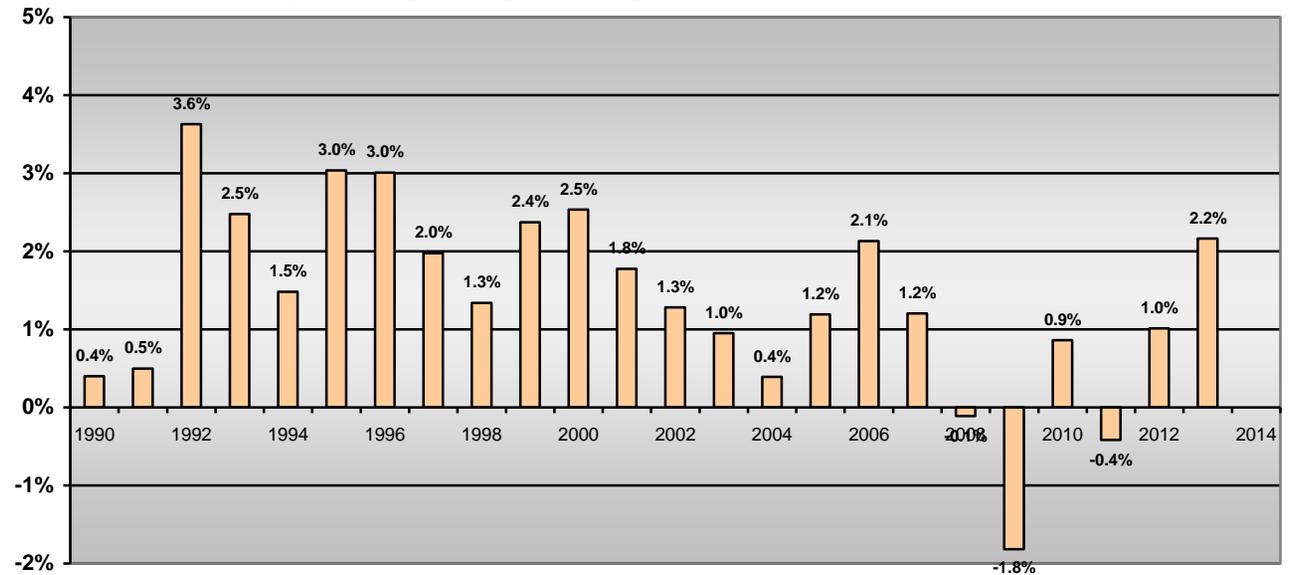
The ratio over time of the labor force to the population between 25 and 64 has been as high as 1.10 from 2000 to 2002 to as low as 1.00 in more recent years. This lower ratio more recently is partly the result of the recession and slower growth, but it also reflects gradual population aging. And growth in the future will occur faster among the older age groups than most of the younger ones. So there will be more constrained growth in the workforce in future years.

The lower chart shows annual labor force growth in Missoula County, using BLS monthly data and annual averages. Even before the recent recession, growth in the labor force was slowing. After the economy is fully recovered, labor force growth is likely to be around 1% a year. By the mid-2020s, this growth will be even slower, fed mainly by influxes of new workers and residents from outside.

Historical Ratios of Labor Force to Working Age Adult Pops in Missoula Co., 1990-2013



Yearly Percentage Change in Average Annual Labor Force in Missoula Co.



## B. Part-time vs. Full-time Employment in Missoula Co.

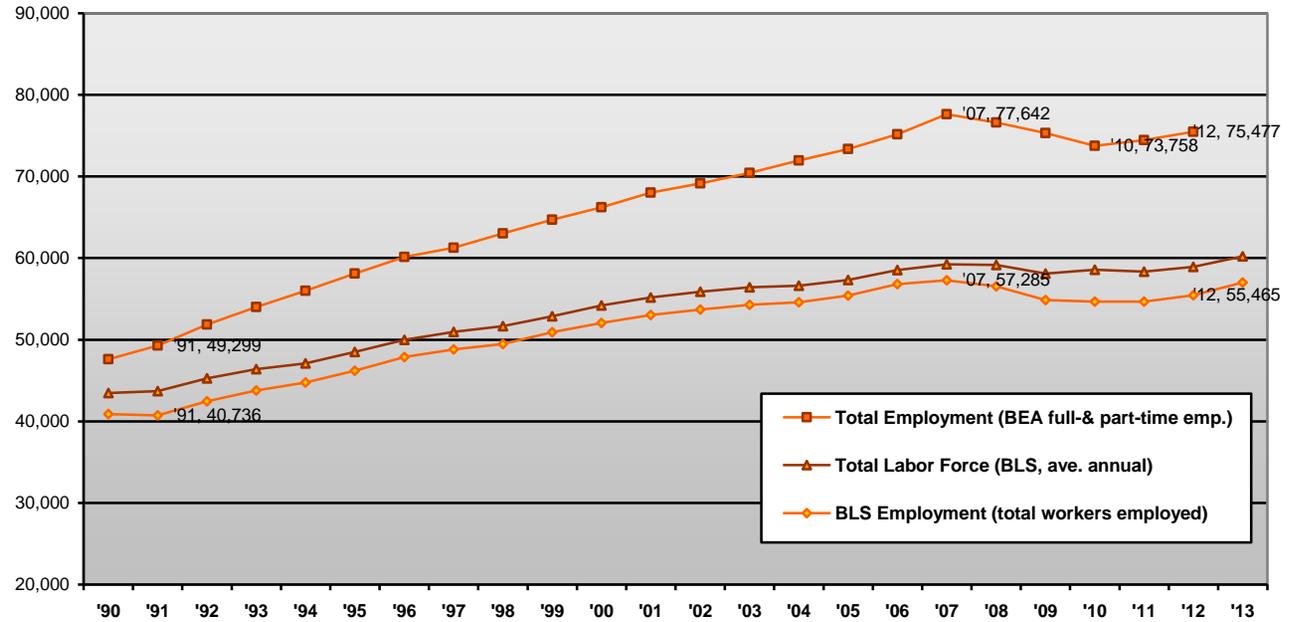
The Bureau of Labor Statistics (BLS) compiles monthly data on the number of persons employed, counting each person employed only once irrespective of whether they have one job or two.

The Bureau of Economic Analysis (BEA) in compiling quarterly and annual data on area employment counts all jobs, meaning that for workers holding two part-time jobs, both jobs are counted in arriving at estimates for area total employment.

By comparing BEA annual average employment estimates (that count all full- and part-time jobs) with BLS average annual employment estimates (that count all workers who are employed), it is possible to gauge the magnitude of area part-time employment.

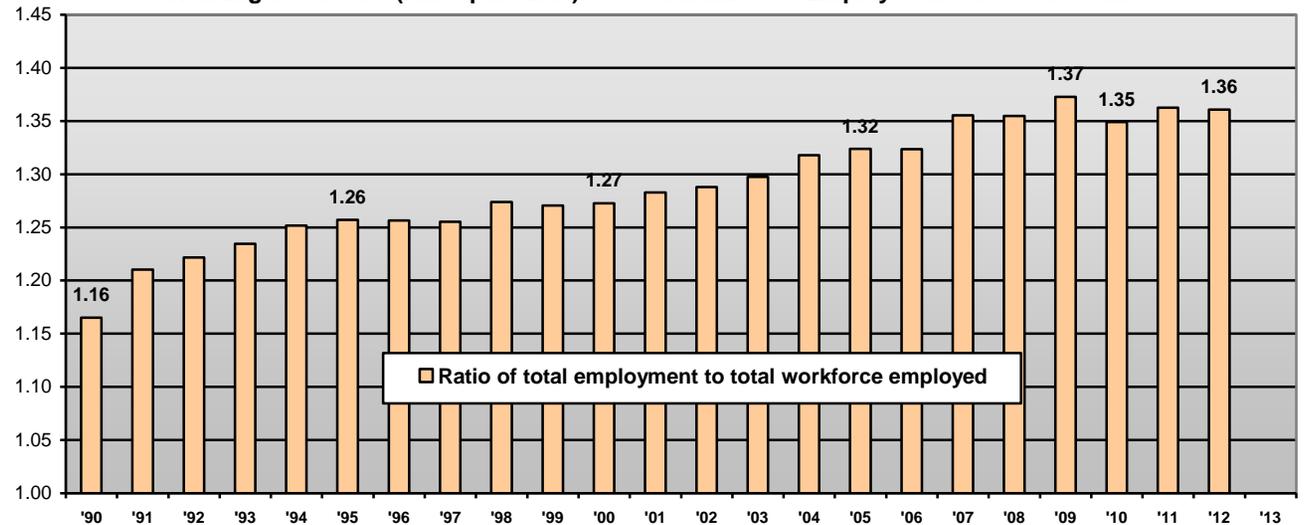
The upper chart shows BEA total employment for Missoula County in relation to the average annual number of employed workers and labor force compiled by BLS. The ratio of BEA total employment to BLS workers employed is steadily increasing (lower chart). This ratio was 1.16 in 1990 (all full- and part-time jobs exceeded the total number of employed workers by 16%) and rose to as high as 1.37 in 2009.

All Full- & Part-time Employment vs. Labor Force & Employed Labor Force in Missoula Co.



Source: Using BEA, U.S. Commerce Dept., and BLS Labor Force data (yearly figures are annual averages)

Relating Total Jobs (full & part-time) to Total Number of Employed Workers Over Time



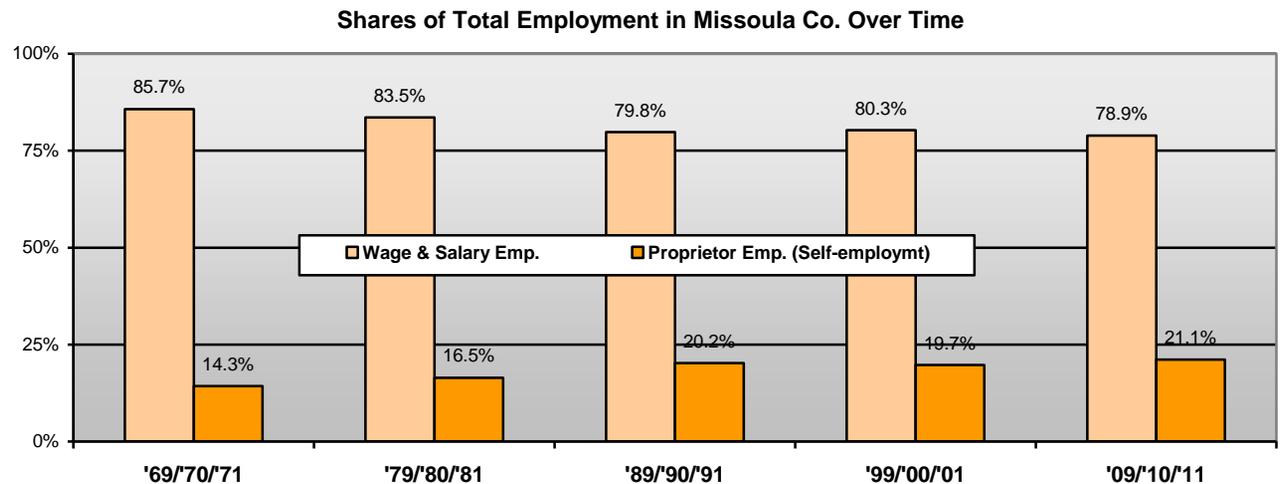
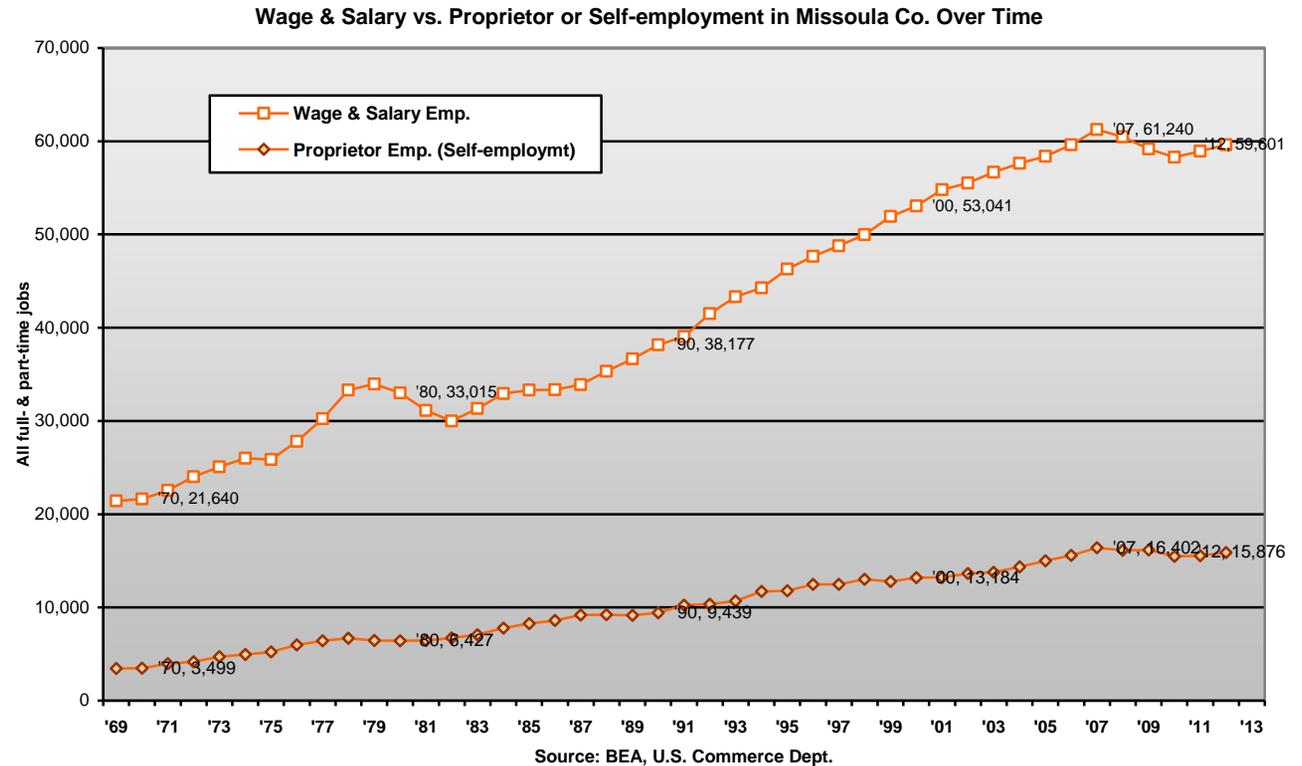
## B. Wage & Salary vs. Proprietor Jobs in Missoula Co.

The two major types of jobs in the economy are ones involving work for others (wage and salary jobs) and jobs involving self-employment (proprietors). Not surprisingly, most people work for others and are wage and salary workers. The same is true in Missoula County, as shown in the top chart at the right.

The chart shows levels of wage and salary employment, including all full- and part-time jobs, and proprietor employment levels over time. The lower chart shows the shares of total employment each type accounted for during different period.

Wage and salary employment grew from 38,000 in 1990 (about 80% of all jobs) to 53,000 in 2000 (also about 80% of all jobs) and to over 61,000 in 2010 (just under 80%). Proprietor employment has grown steadily as well, maintaining its 20% share of all jobs in the county.

High levels of self-employment in an area may, in part, indicate entrepreneurship is happening. But these high levels can also suggest that wage and salary jobs are inadequate and necessitate workers finding other income by adding to these with self-employment jobs that are often part-time.



## B. Self-employment Levels among Western Peers

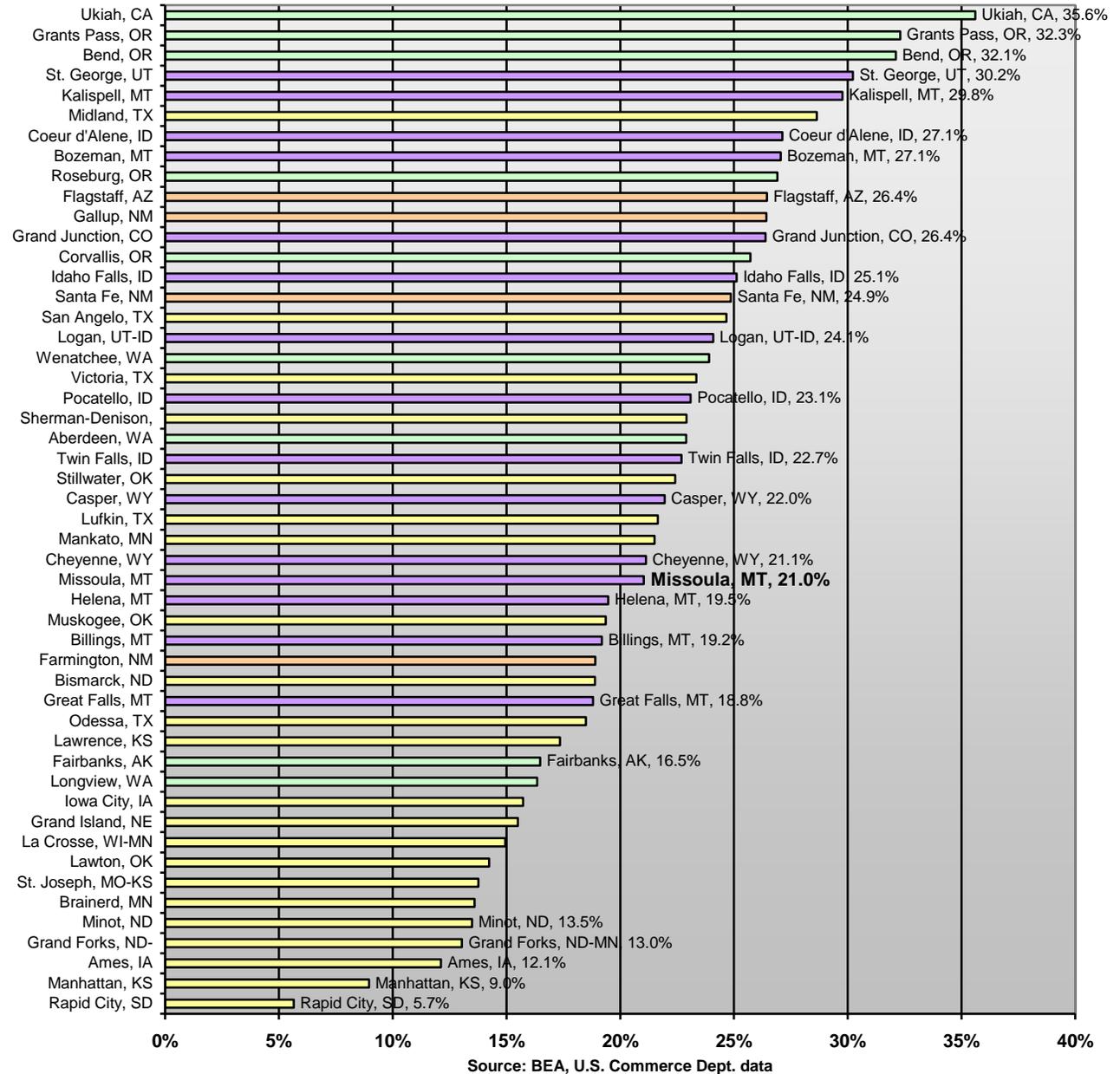
This chart compares shares of total employment accounted for by self-employment or proprietor employment across all 50 western population peers for Missoula County.

In 2012 about 21% of all jobs in Missoula County were proprietor jobs or self-employment. In gauging whether this should be considered relatively high, average, or relatively low, comparisons are made in levels of self-employment among the 50 western population peers assembled for this use in this study.

Among the 50, Missoula County ranks 29<sup>th</sup> in the share of jobs that are self-employment. Those with the highest levels of self-employment include Ukiah, CA, at nearly 36% and Grants Pass and Bend in Oregon, each at over 32%. Rapid City has the lowest share among the peers at 5.7%.

Kalispell (Flathead Co.) has the highest share of self-employment among the six Montana counties at nearly 30% – 5<sup>th</sup> highest among the peers. Self-employment also is relatively high in Bozeman at 27% – 8<sup>th</sup> among peers. Great Falls has the lowest share of total employment accounted for by proprietors among the Montana peers at 18.8% – 35<sup>th</sup> among the 50 peers. Billings has 19.2% – 32<sup>nd</sup> highest.

Western Pop. Peers: Proprietors or Self-employed Share of Total Employment, 2012

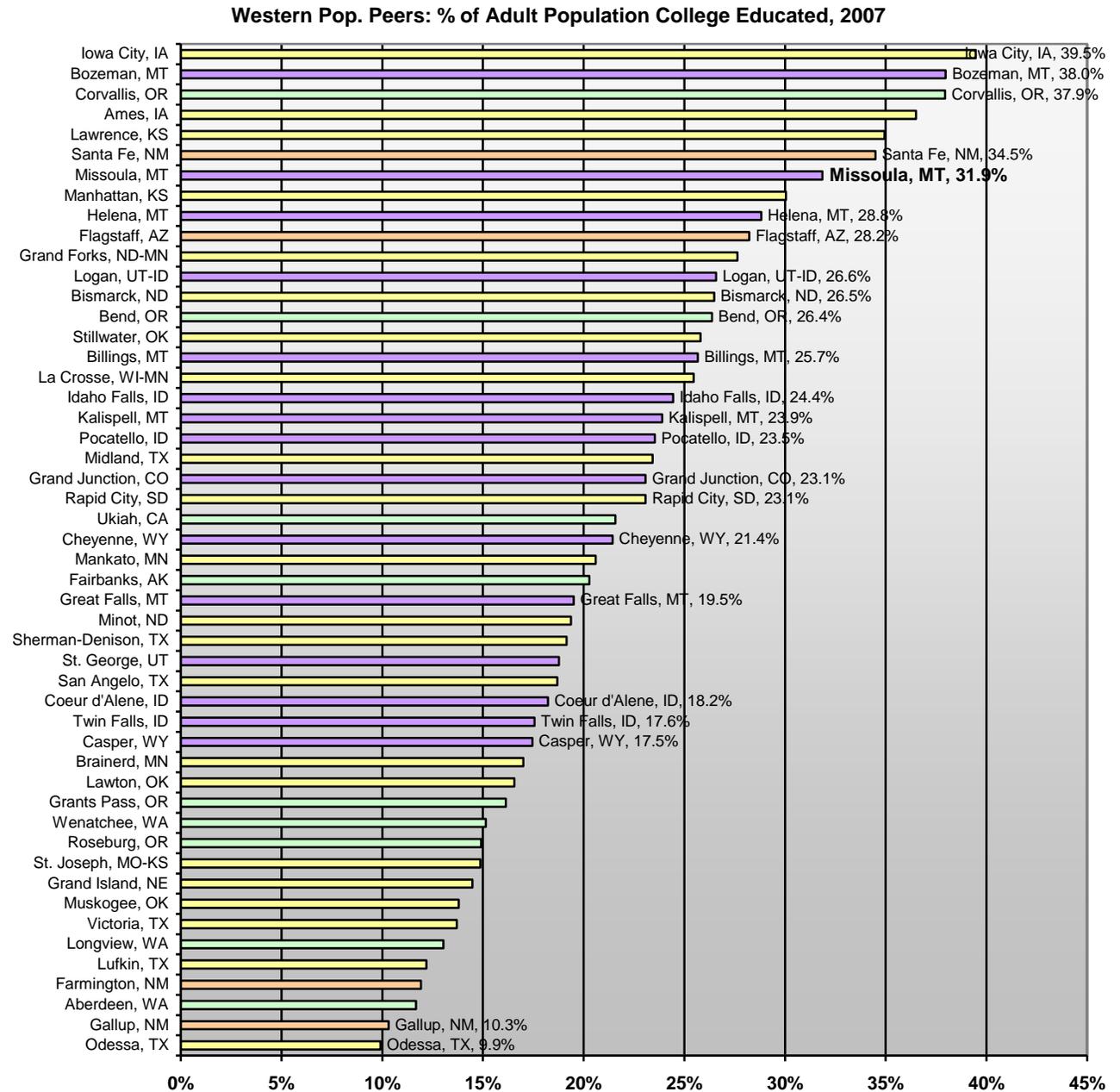


## B. Educational Attainment Levels among Missoula Peer Counties – College Educated Populations

It is well-established that income levels among individuals and families correlate with education attainment levels – people in the work force who are well-educated tend to have higher paying jobs and higher income levels. Those with minimal educations, say, less than high school diplomas, tend to have much lower incomes than persons who are college educated.

The chart at the right compares and ranks western peer counties by what percent of their adult populations are college educated (have an undergraduate degree). In 2007 when these data were compiled 31.9% of Missoula County's adult population was college educated. This ranked Missoula 7<sup>th</sup> highest among the 50 peers. Iowa City, Bozeman, and Corvallis ranked highest, each with a major university. Ranking lowest is Odessa, TX, at 9.9%, followed by Gallup, NM, at 10.3%.

Among Montana peers, Great Falls ranked lowest at 19.5% – 28<sup>th</sup> among the 50 peers. Kalispell was next at 23.9% – 19<sup>th</sup> among all the peers.



## B. Peer Rankings for High School Educated Adult Populations

Western population peers also are compared in terms of their high school educated populations. To be moderately successful in finding and maintaining employment in the economy, at a minimum most individuals should have at least a high school education.

The chart compares western peer counties based upon the share of their adult populations that failed to attain at least a high school diploma. In 2007 an estimated 6.8% of Missoula County's adult residents had not attained this level of education. This ranked Missoula 8<sup>th</sup> among the 50 peers in terms of the lowest percents without high school diplomas. Ames, Bozeman, Lawrence, and Iowa City, all with major universities, all had the lowest percentages at less than 4.5%.

Counties with the highest shares of their adult populations without this basic level of education include Odessa, TX (27.8%); Lufkin, TX (24.8%); and Gallup, NM (24%).

Among Montana peers, Kalispell ranked the lowest with 11.7% of its adult population having less than a high school diploma.

Western Population Peers: % of Adult Population without H.S. Diplomas, 2007

