

# **Montana's Changing Economy**

## **Regional Variability in Economic and Population Trends**

**Dr. Larry Swanson**

O'Connor Center for the Rocky Mountain West  
The University of Montana

**Status of the Current Economic Slowdown**

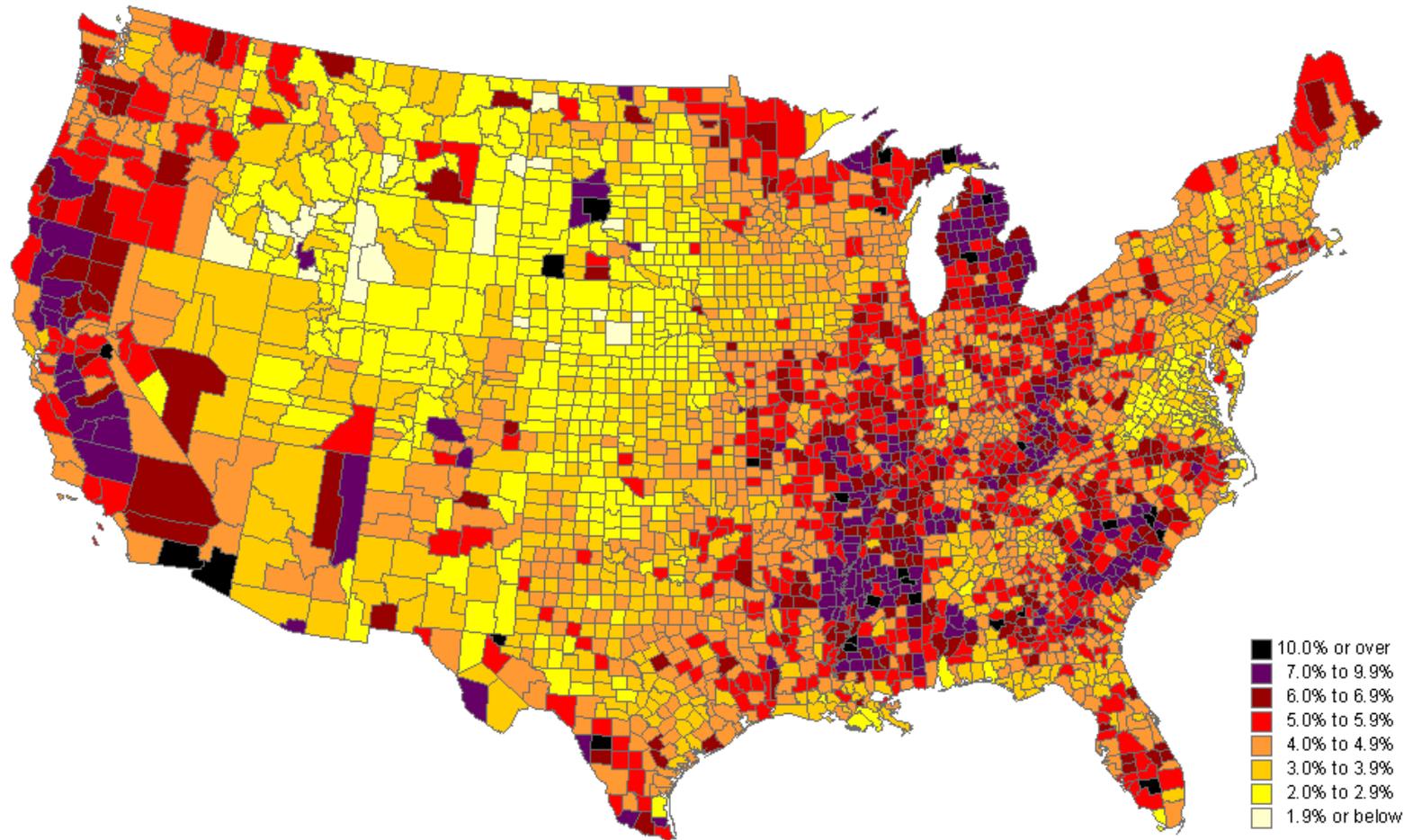
**Key Trends and Patterns in Growth and Change**

**Understanding Regional Variability in Change**

**Future Job Growth Patterns**

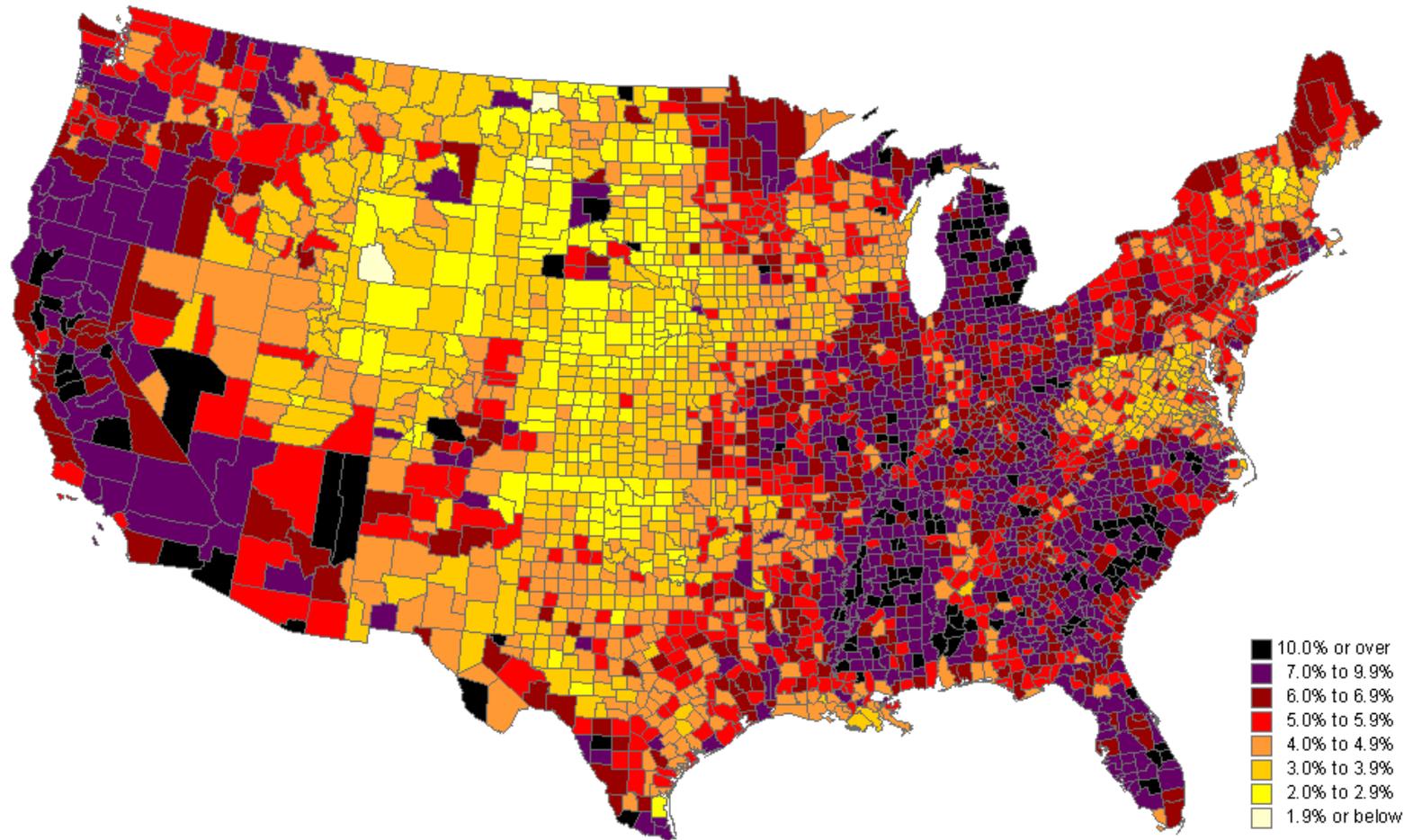
**Montana Association for Rehabilitation**  
**Missoula, October, 2010**

# Unemployment rates by county. August, 2007



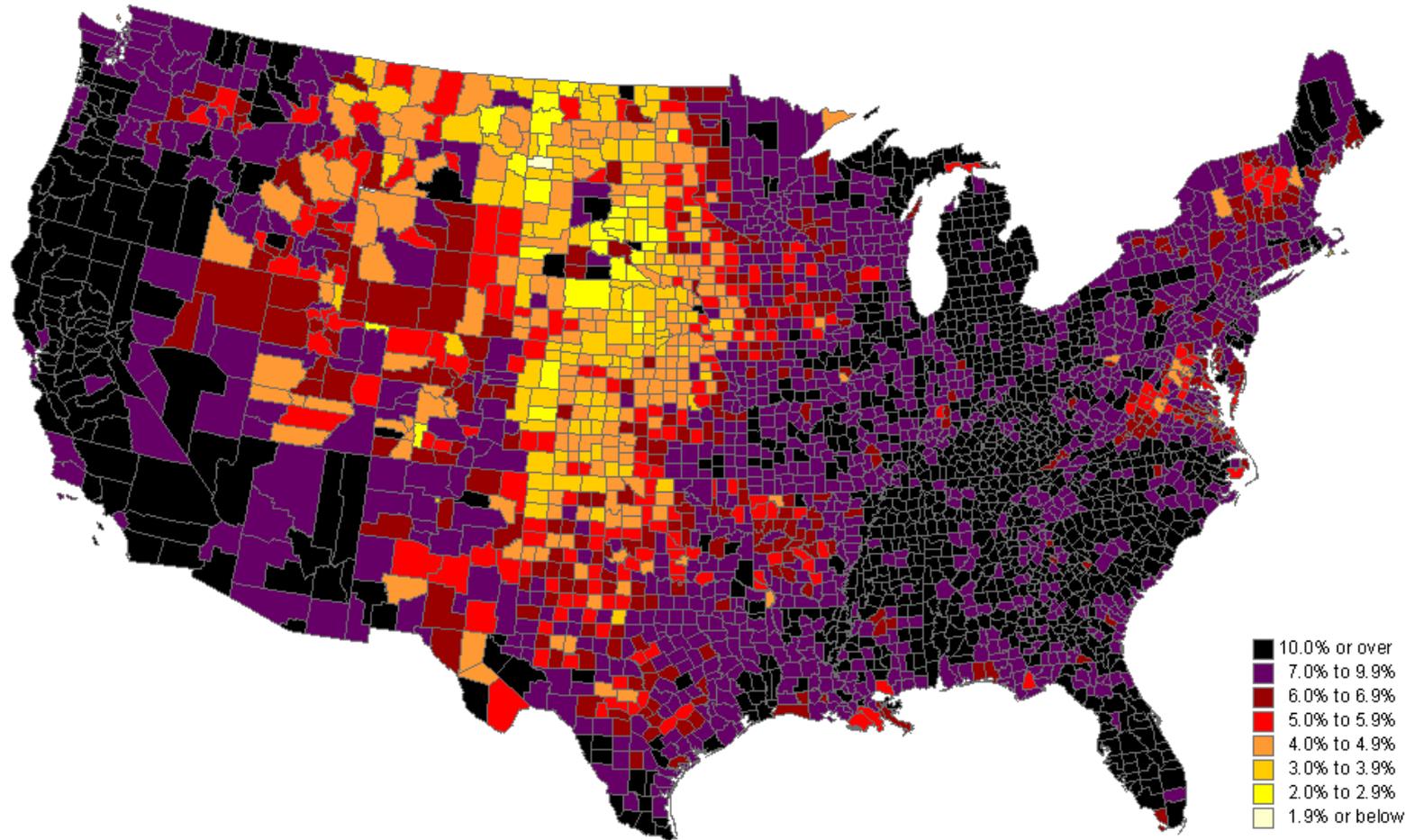
SOURCE: Bureau of Labor Statistics  
Local Area Unemployment Statistics

# Unemployment rates by county. August, 2008



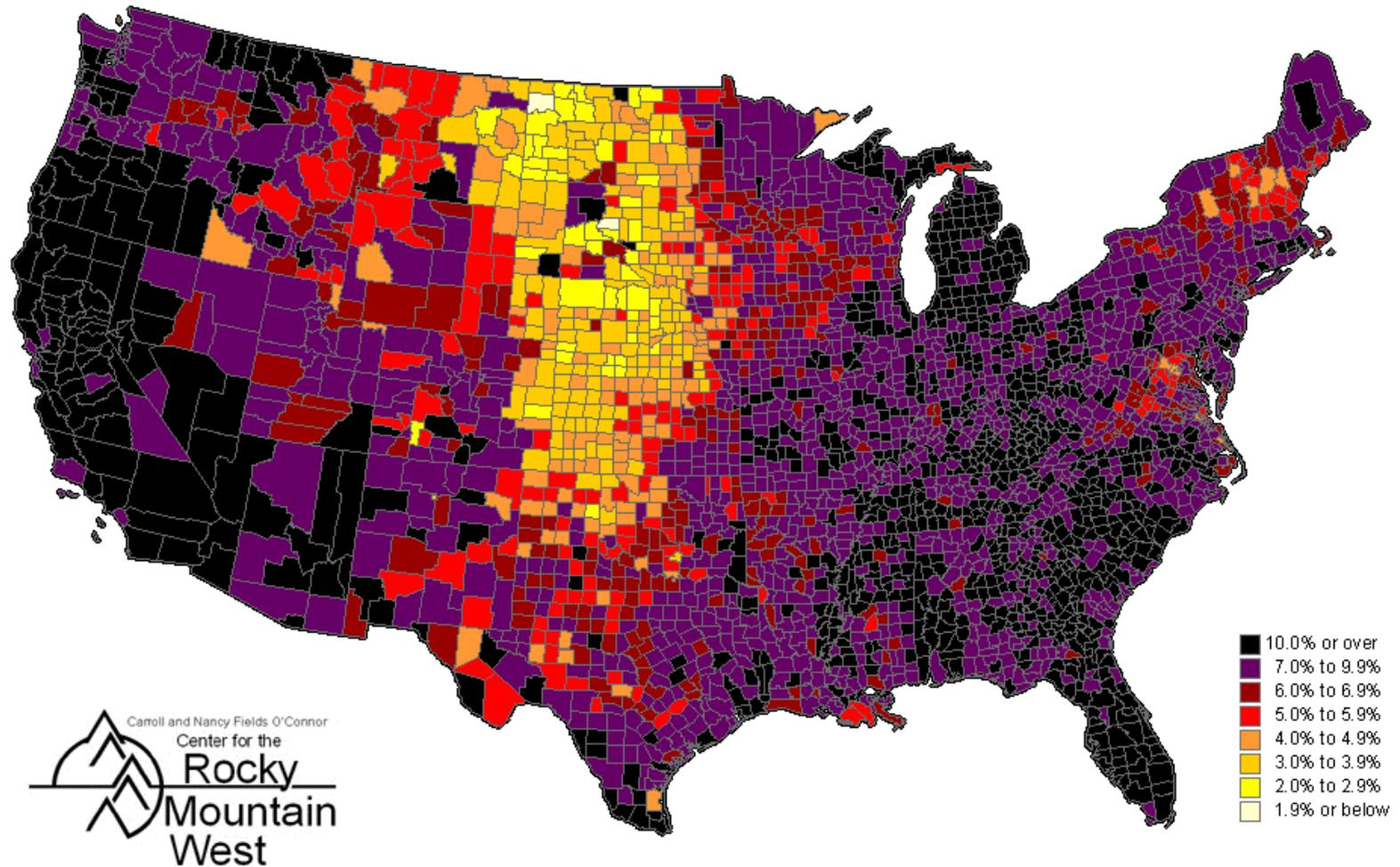
SOURCE: Bureau of Labor Statistics  
Local Area Unemployment Statistics

# Unemployment rates by county. August, 2009



SOURCE: Bureau of Labor Statistics  
Local Area Unemployment Statistics

# Unemployment rates by county. August, 2010

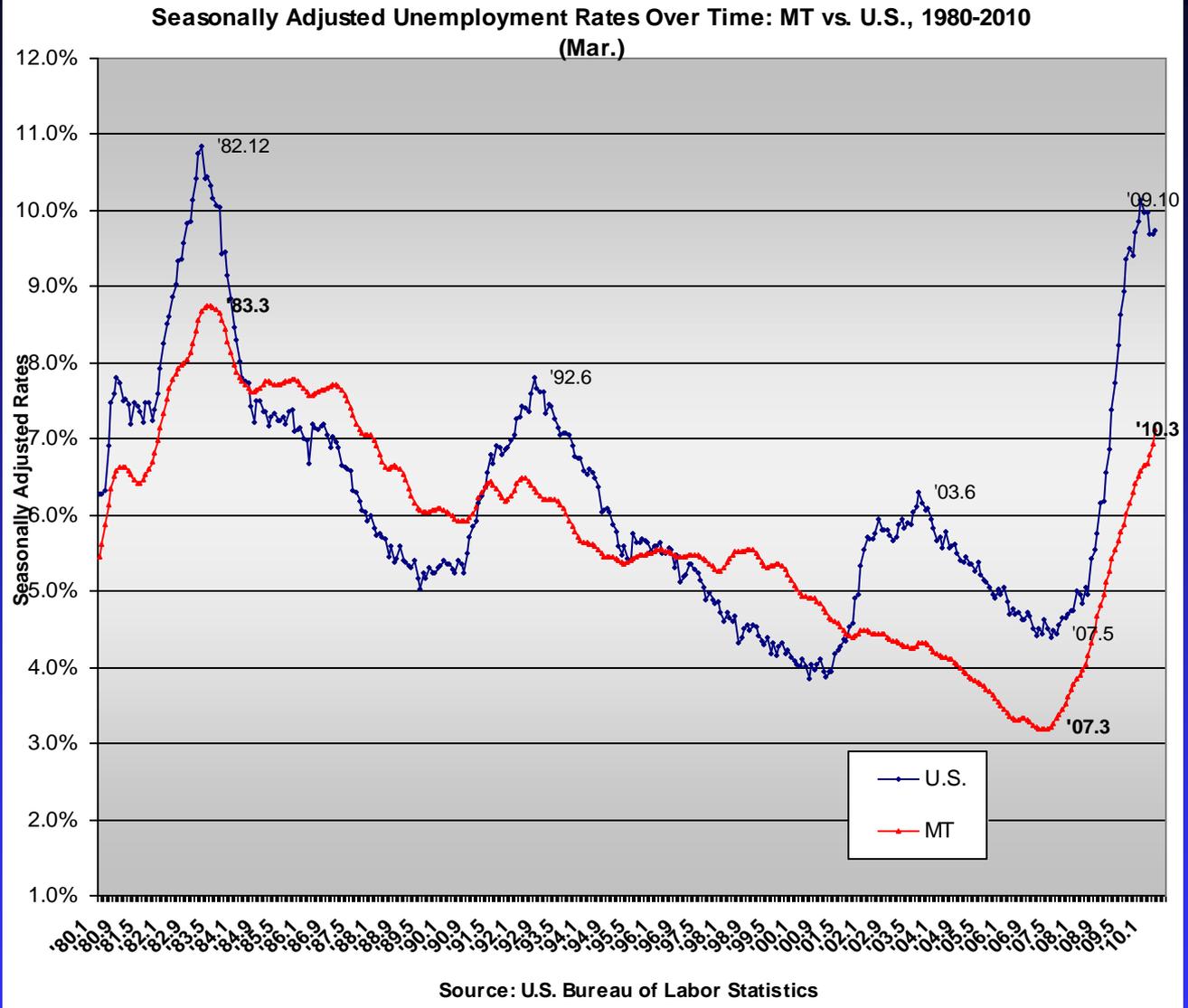


SOURCE: Bureau of Labor Statistics  
Local Area Unemployment Statistics

## Unemployment in Montana vs. the U.S. Over Time, 1980 – 2010 – “Seasonally Adjusted”

The chart shows unemployment rates for Montana and the U.S. as a whole each month since 1980. The data used in this chart are “seasonally adjusted,” that is, they are adjusted to account for seasonal variations in unemployment that normally occur in a year.

The unemployment rate in Montana currently is about 7.0%. This is almost three percentage points lower than nationally. This 7.0% unemployment seems high in relation to the very low unemployment Montana had in 2007. However the state has had much higher unemployment rates in its past.

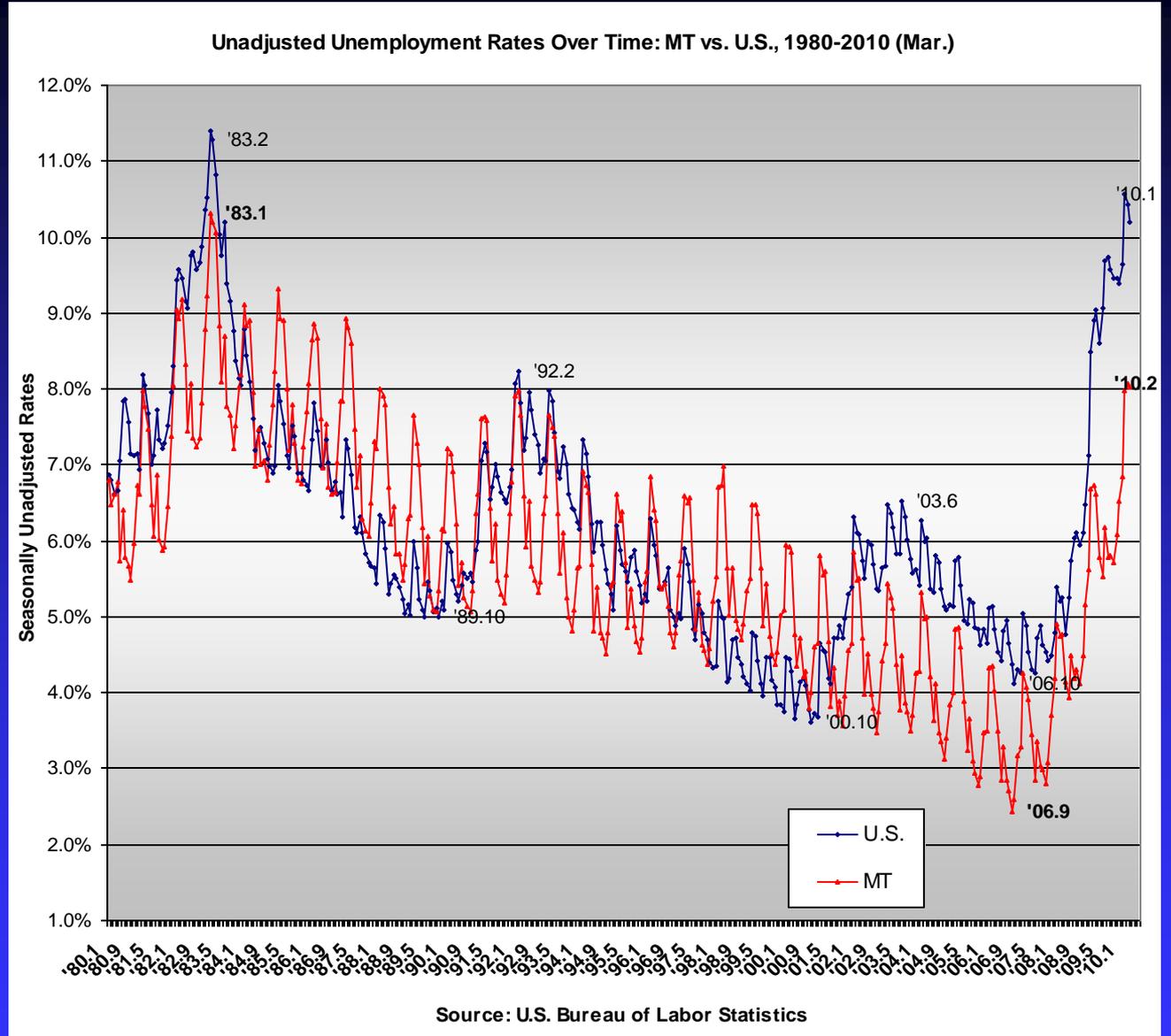


## Seasonally Unadjusted Unemployment Rates in Montana and the U.S. Over Time

This chart shows monthly unemployment rates for Montana and the U.S. with the data unadjusted for seasonality, which is reflected in the large variation in rates each year.

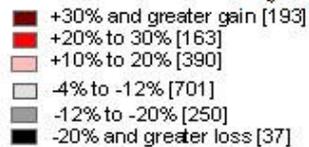
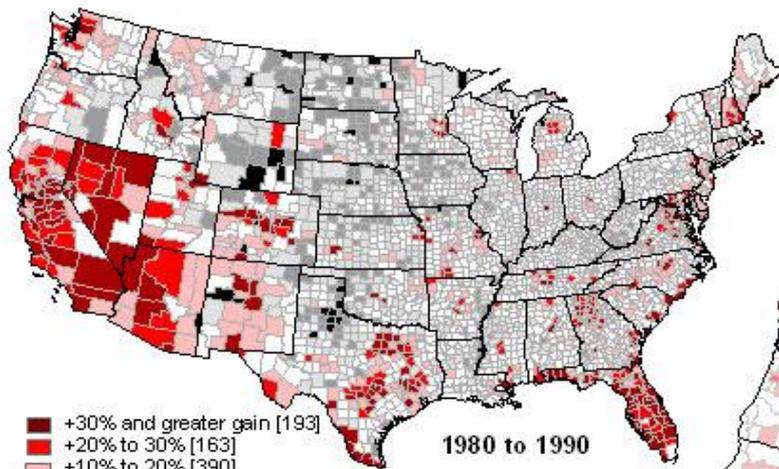
Montana had worked its way into a fairly tight labor market just prior to the national recession, which officially began in December of 2007. Unemployment has risen in Montana, following the trend nationally, but the rate of unemployment is much lower in Montana.

Unemployment statewide should gradually fall over the Spring and Summer and into early Fall.

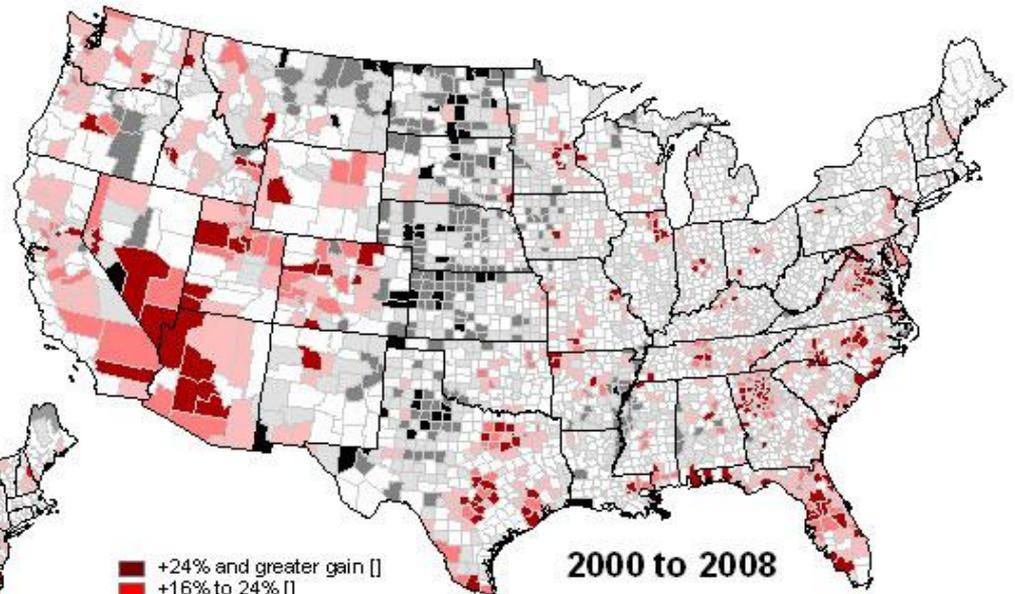


## Areas of Rapid Growth or Decline

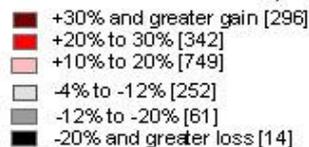
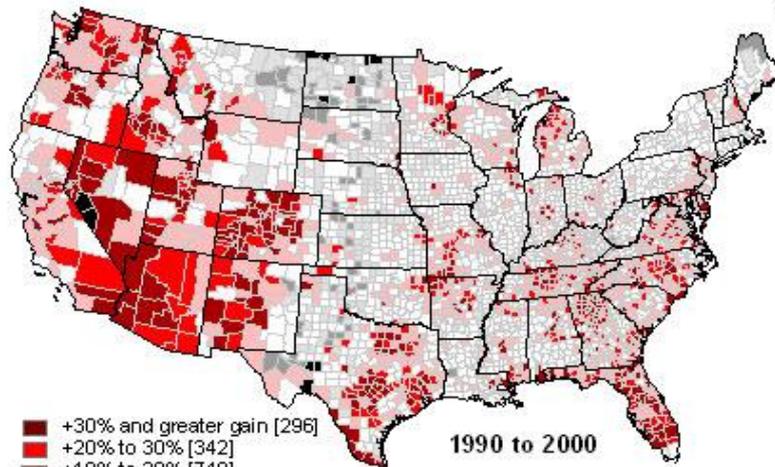
Patterns of population growth tend to shift from place to place over time. The maps show where growth or decline were focused during the '80s, '90s, and since 2000. In the '90s, population growth accelerated significantly throughout the western U.S., and spread into many areas with smaller cities. However, since 2000, population growth is becoming more focused in fewer places and population decline has begun to re-accelerate in portions of the central and northern Plains.



1980 to 1990



2000 to 2008

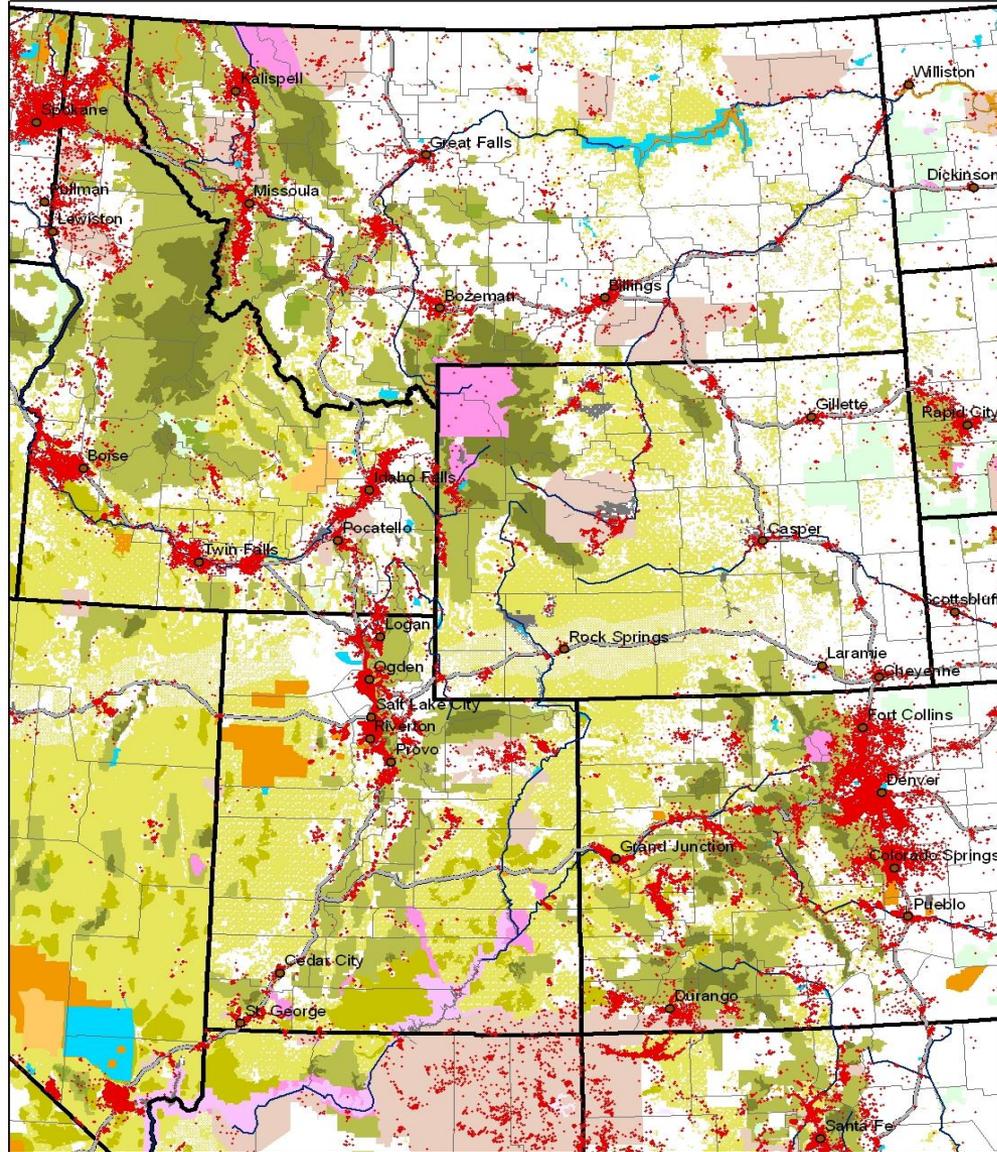


1990 to 2000



Source: Bureau of Census U.S. Dept. of Commerce.

# Features of the Rocky Mountain West Region



- |  |                                 |
|--|---------------------------------|
| National Park (NPS)                      | Department of Defense (DOD)     |
| National Forest Service (NFS)            | Fish and Wildlife Service (FWS) |
| Forest Service Wilderness (FSW)          | Bureau of Land Management (BLM) |
| Department of Energy (DOE)               | Bureau of Indian Affairs (BIA)  |
| National Forest Service Grasslands (NFS) |                                 |
- = 200 people

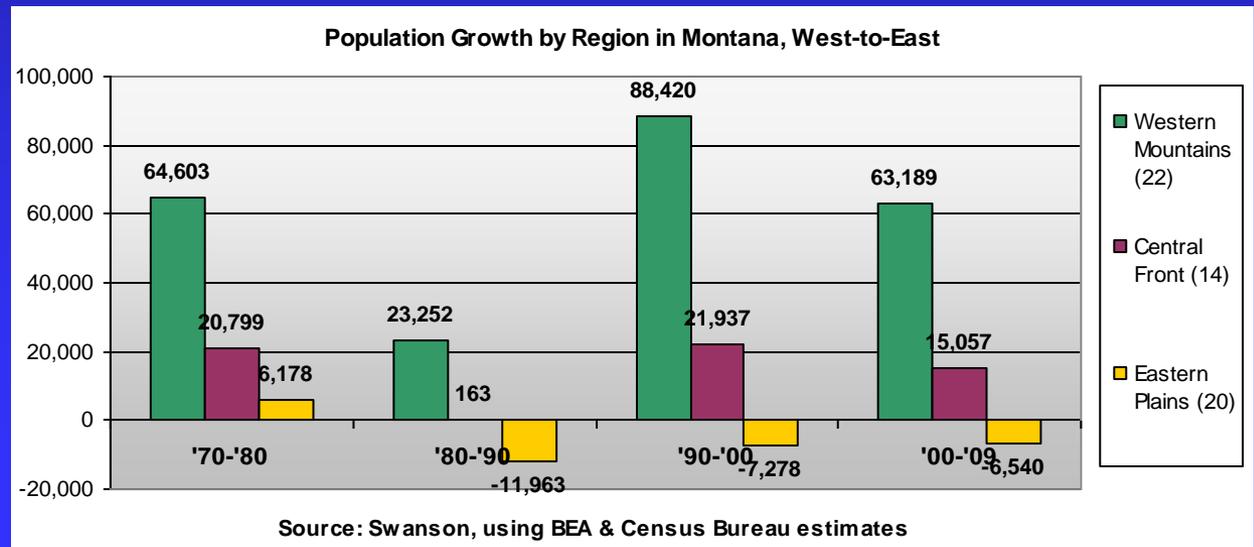
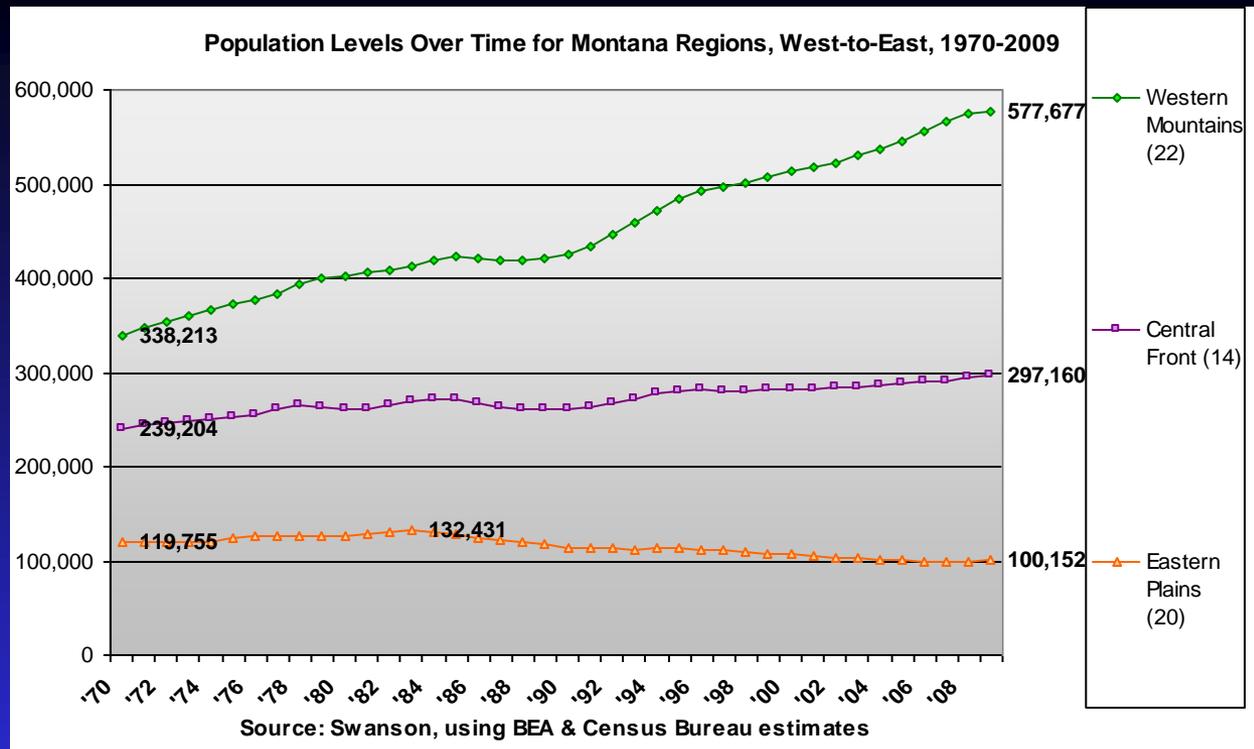
Carroll and Nancy Fields O'Connor  
 Center for the  
**Rocky Mountain West**  
 Features of the larger region.mxd

# Population Change in Montana Over Time, Western Mountains vs. Central Front vs. Eastern Plains

The upper chart shows population levels over time for Montana's three primary regions. The 22-county "western mountain" region runs from Flathead County in the north to Lewis and Clark County moving south and to Carbon County moving further south. It includes five of the state's seven regional center counties including Missoula, Flathead, Lewis and Clark, Silver Bow, and Gallatin

The 14-county "central front" region includes Great Falls and Cascade County in the north and Billings and Yellowstone County in the south. The 20-county "eastern plains" region covers the remainder of the state.

The western region had 59% of the total population in 2009. It accounted for 86% of all state-wide growth in the '90s and 88% since 2000.

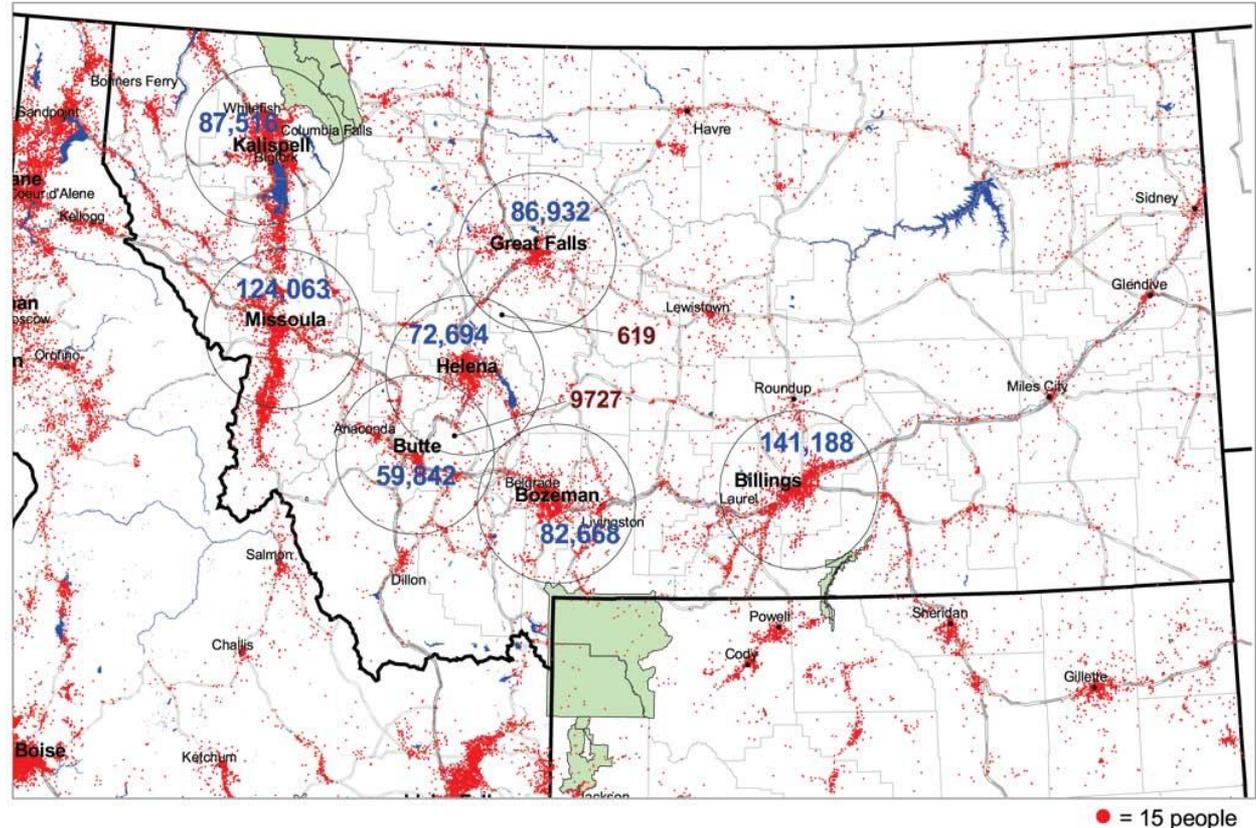


# Most Montanans Live in or Nearby One of the State's Seven Major Cities

At the time of the 2000 Census, there were approximately 900,000 people residing in Montana. Although the fourth largest state in geographic size, Montana has one of the smallest populations among states (six states have smaller populations).

Because of the state's large size and small population, Montanans have almost always thought of themselves as largely rural. Adding to this is the fact that the state has no large cities. While having no truly large cities, Montana does have several modest size cities. The largest of these is Billings with an incorporated area population of over 90,000. Next is the City of Missoula with a population of over 60,000 and Great Falls with a population of over 56,000. Many more people live nearby these cities.

Over 70% of all residents live in or within 40 miles of the state's seven major population centers. Altogether, about 645,000 of Montana's 902,000 residents in 2000 (71% of the total) lived within 40 miles of the seven cities.



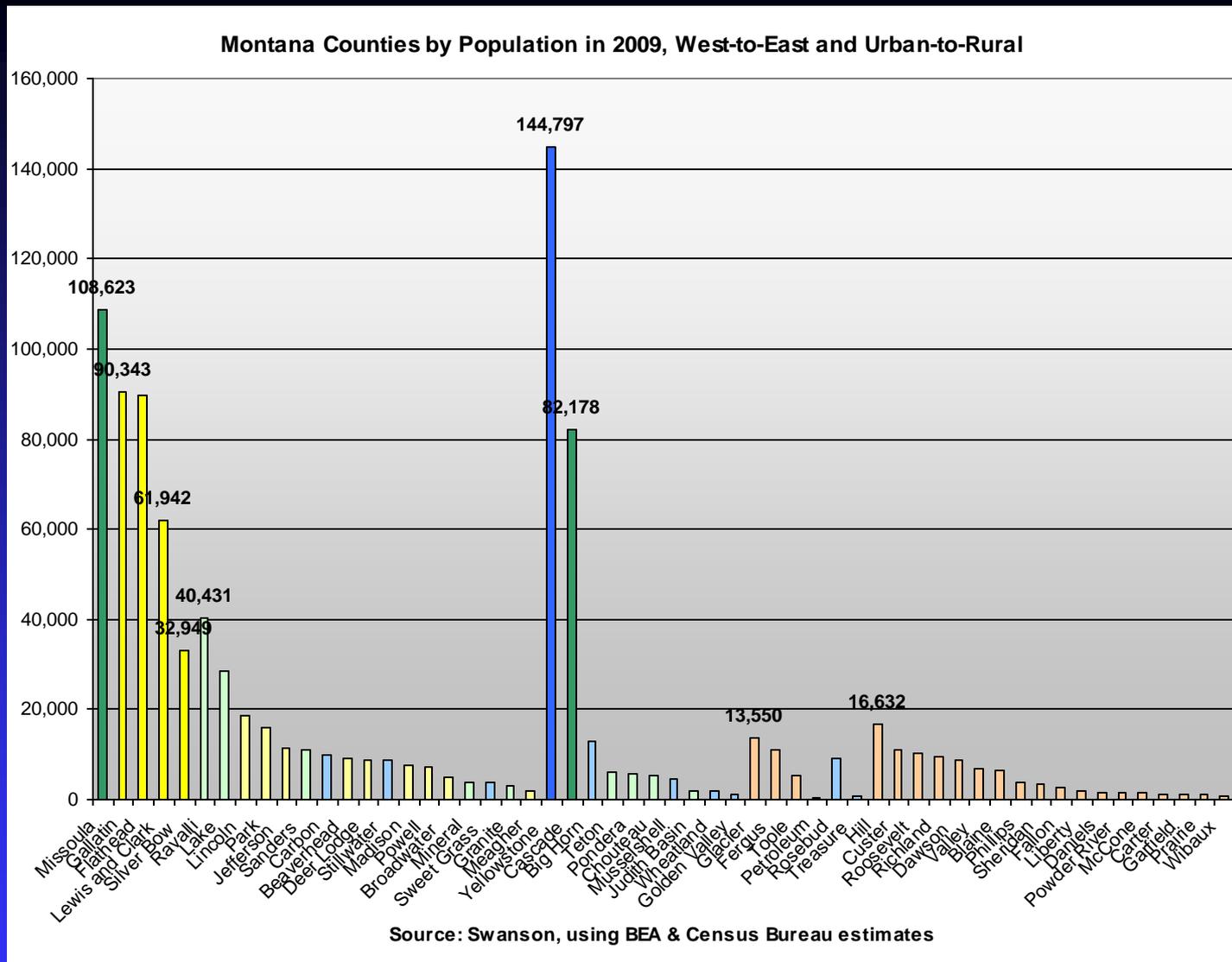
2000 Census populations mapped at the Census block level.  
Each red dot represents 15 persons.

Source: O'Connor Center for the Rocky Mountain West, U. of Montana, 2005 (using U.S. Census Bureau data).

# Montana Population Distribution by County, West-to-East and Urban-to-Rural

The chart shows county populations in Montana for 2009 with the 22 counties in the “western mountain” region at the left arrayed from urban to rural and from most populated to least populated.

The 14 counties in the “central front” region are arrayed in the center of the chart, including Yellowstone and Cascade Counties. And the 20 counties in the “eastern plains” region are arrayed at the right with counties nearby regional centers shown followed by more isolated ones.

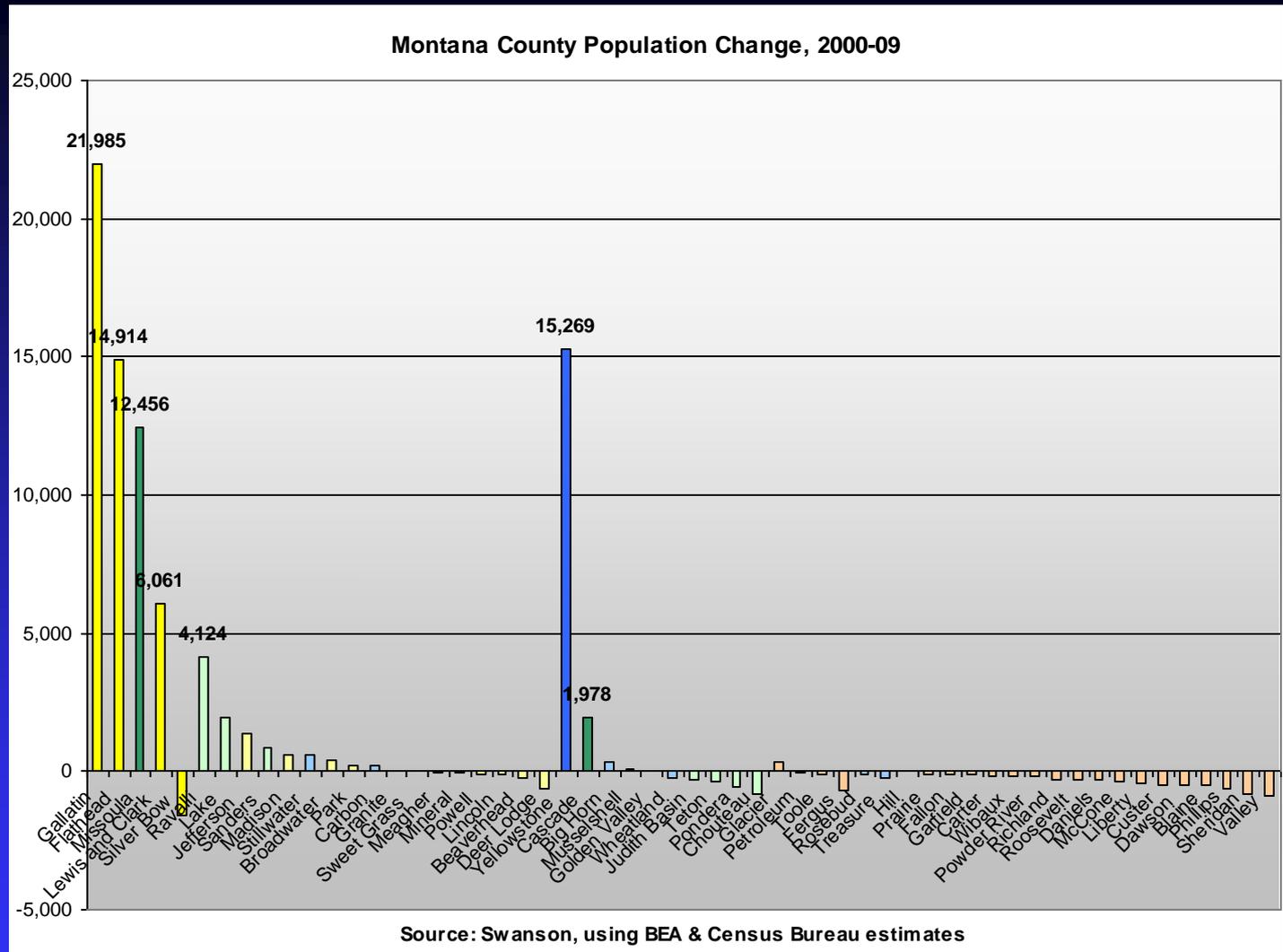


The single most populated county is Yellowstone, shown in blue near the center where “central front” counties are arrayed, with a total population of nearly 145,000. The 2<sup>nd</sup> most populated county is Missoula with nearly 109,000, shown at the left along with other “western mountain” region counties. Counties are color-coded to reflect their urban-rural classifications. Counties in dark blue, green, and yellow are “regional center” counties.

## Montana Population Change by County between 2000 and 2009

The chart shows counties by population change with counties in the “western mountain” region at the left and those in the “eastern plains” at the right.

Gallatin County had the biggest increase, rising by nearly 22,000 (shown in dark yellow at the left). Yellowstone in the state’s “central front” region had the 2<sup>nd</sup> biggest increase (shown in dark blue), closely followed by Flathead County in the west. Nearly all of the counties in isolated rural areas lost population.



Nearly all of Montana’s population growth is focused in or nearby one of its seven major regional population centers. Five of these centers saw significant population growth over the period, led by Bozeman and Gallatin County, Billings and Yellowstone County, Kalispell and Flathead County, and Missoula and Missoula County. Helena and Lewis and Clark County also grew. Great Falls and Cascade County experience only moderate growth, while Butte-Silver Bow saw continued decline.

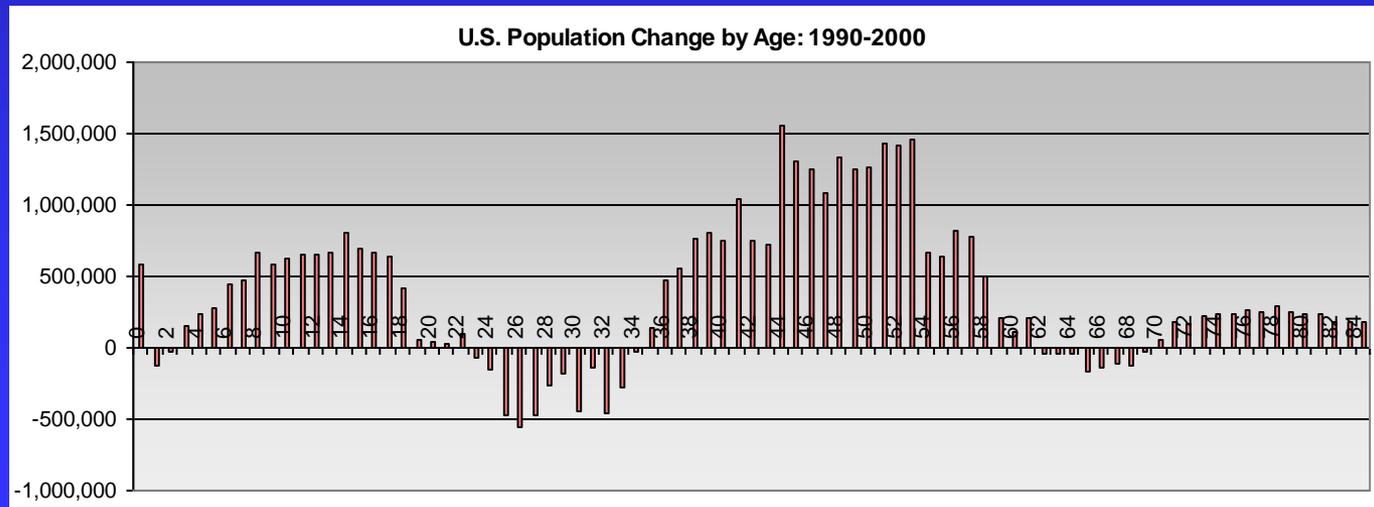
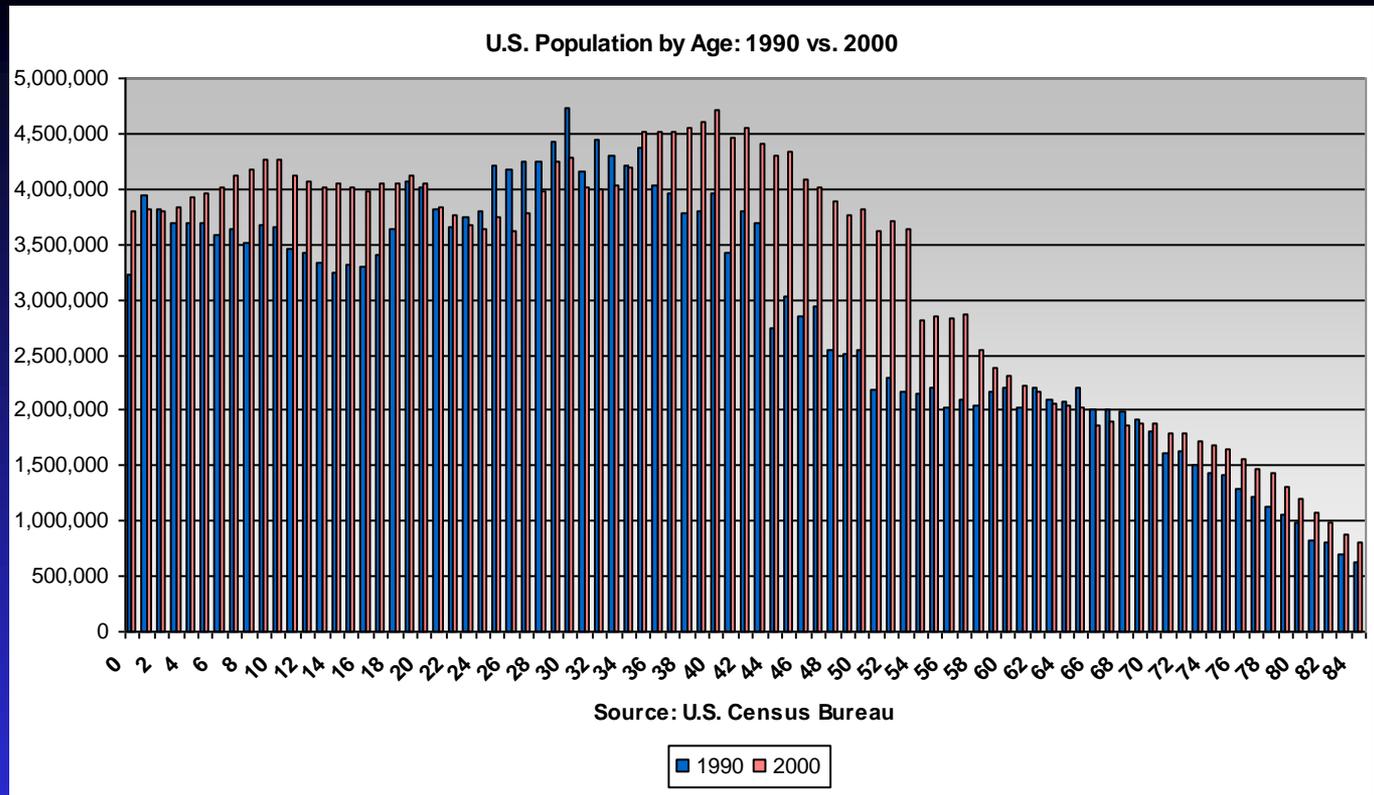
## Age Shifts Among the U.S. Population

The upper chart shows the number of people living in the U.S. by single age in 1990 and ten years later in 2000. The lower chart then shows changes in the number of persons for each age during the decade of the '90s.

The greatest growth in the population occurred among persons in their early 40s to early 60s. These are classic “baby boomers” or persons born after W.W. II between 1947 and 1963.

The tremendous rise in the number of births during this post-war period has skewed the distribution of the U.S. population, making baby boomers the largest age group among the population. The next largest is the children of boomers or the “echo” group.

These bulges in the U.S. population age profile are continuing to ripple forward and are contributing to the accelerated aging of the population.



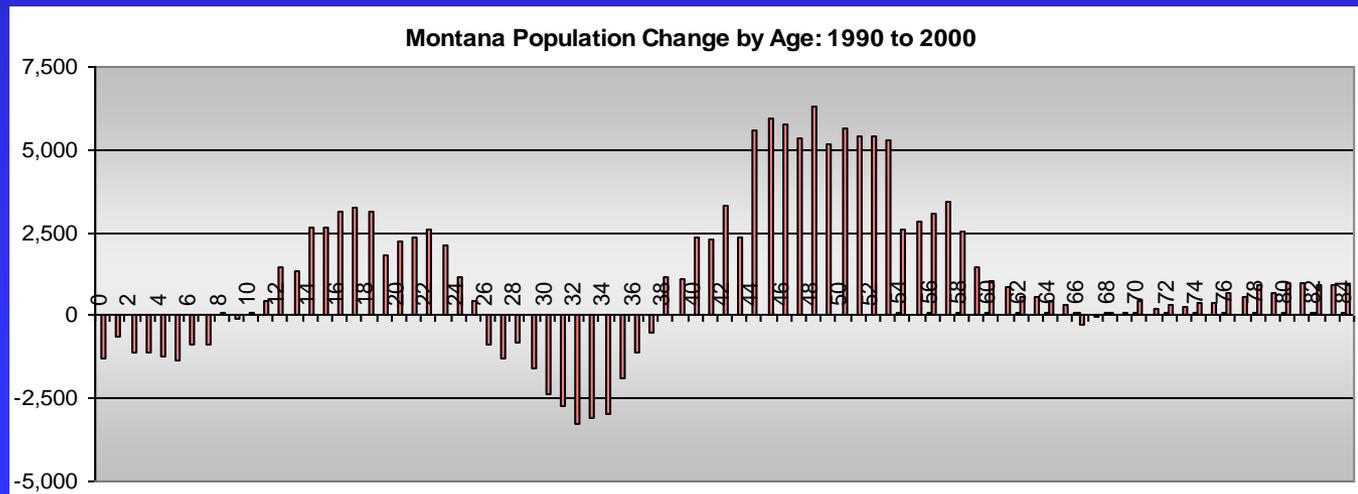
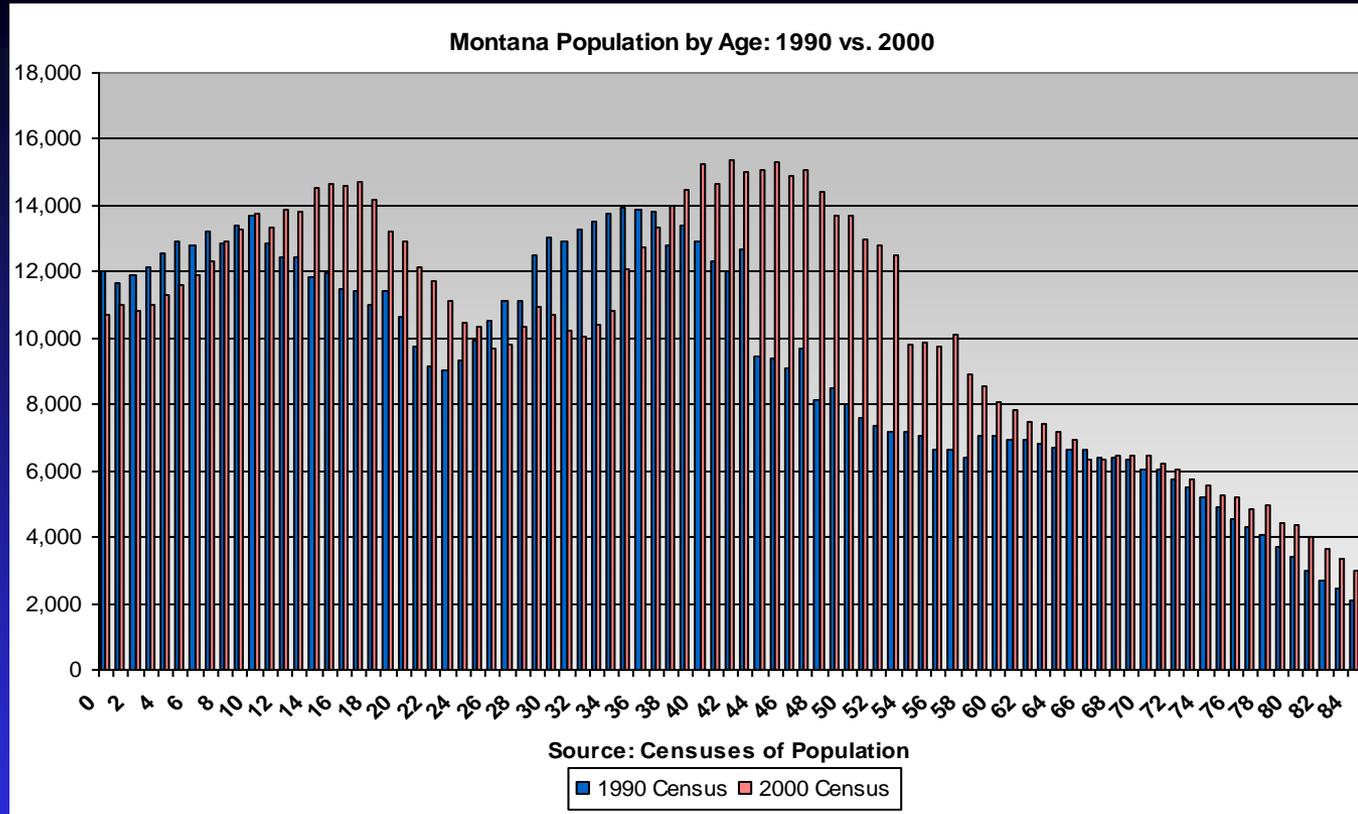
## Montana Population by Age, 1990 vs. 2000

The upper chart shows the number of persons residing in Montana by single age from youngest to oldest in 1990 and ten years later in 2000. The lower chart shows how population changed for each age during this ten-year period.

Most of the state's population growth during the '90s was among persons at ages between their early 40s and late 50s – classic “baby boomers” or persons born between 1947 and 1963. Some population growth also concentrated among children and young adults between the ages of 12 and 25. This latter group is the children of baby boomers or the boomer “Echo” population.

Considerable population decline actually occurred for persons at ages between the boomer group and echo group. There also was a fall-off in population for young children.

These “ripples” or “waves” in the population age profile will continue to play out in the future.

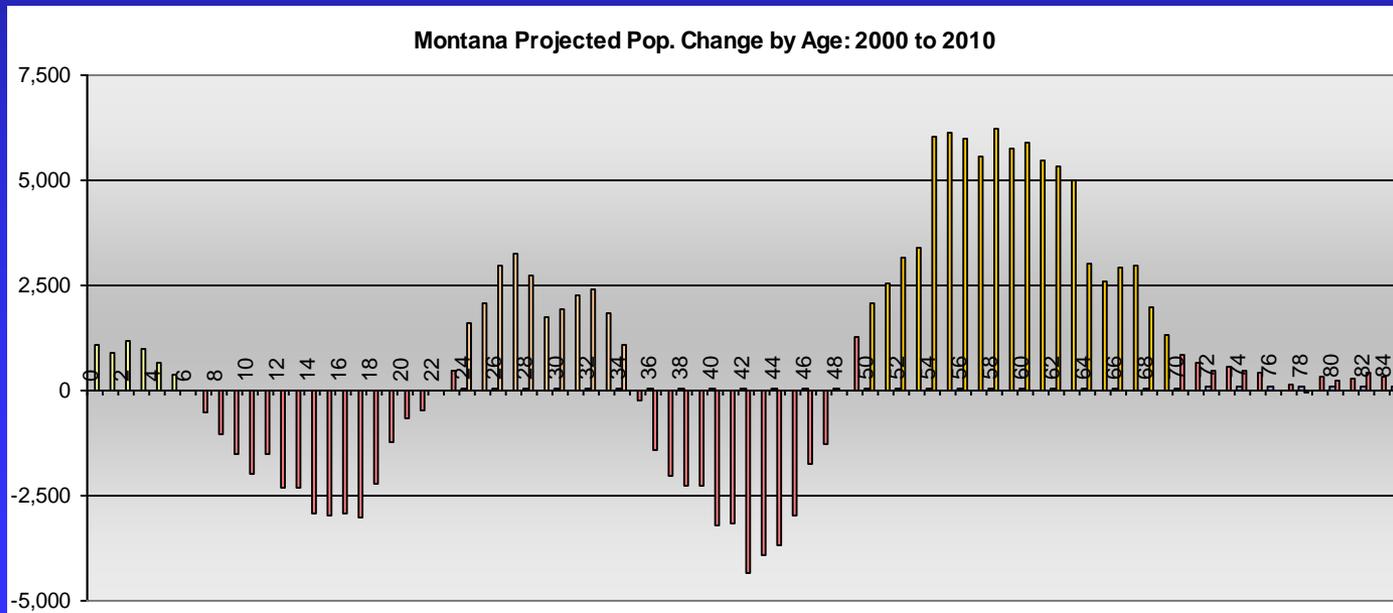
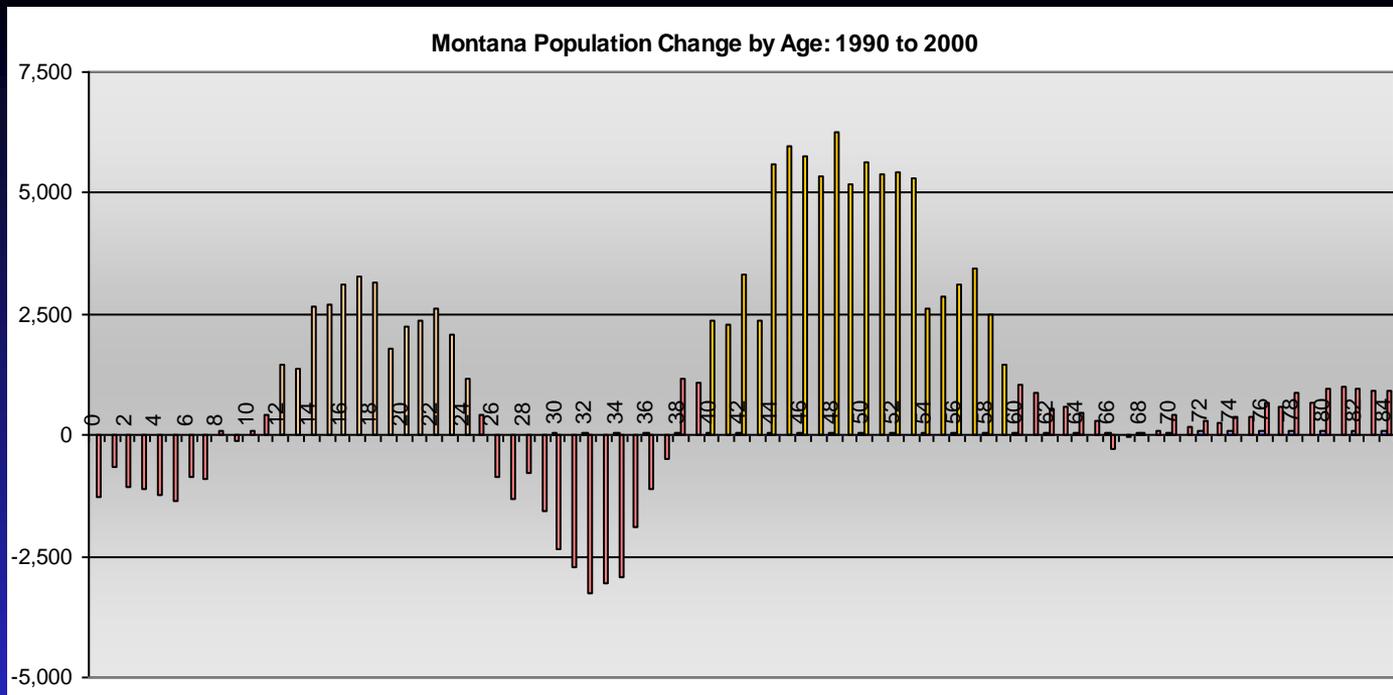


## Projected Shifts in the Population of Montana by Age

The upper chart shows how population changed in Montana by single age from youngest to oldest between 1990 and 2000. The lower chart shows how population is projected to change by the U.S. Census Bureau (March, 2005, projections) between 2000 and 2010.

The growth in population that was concentrated among persons between their early 40s and late 50s in the '90s is projected to be concentrated between persons in their early 50s to late 60s in the current decade.

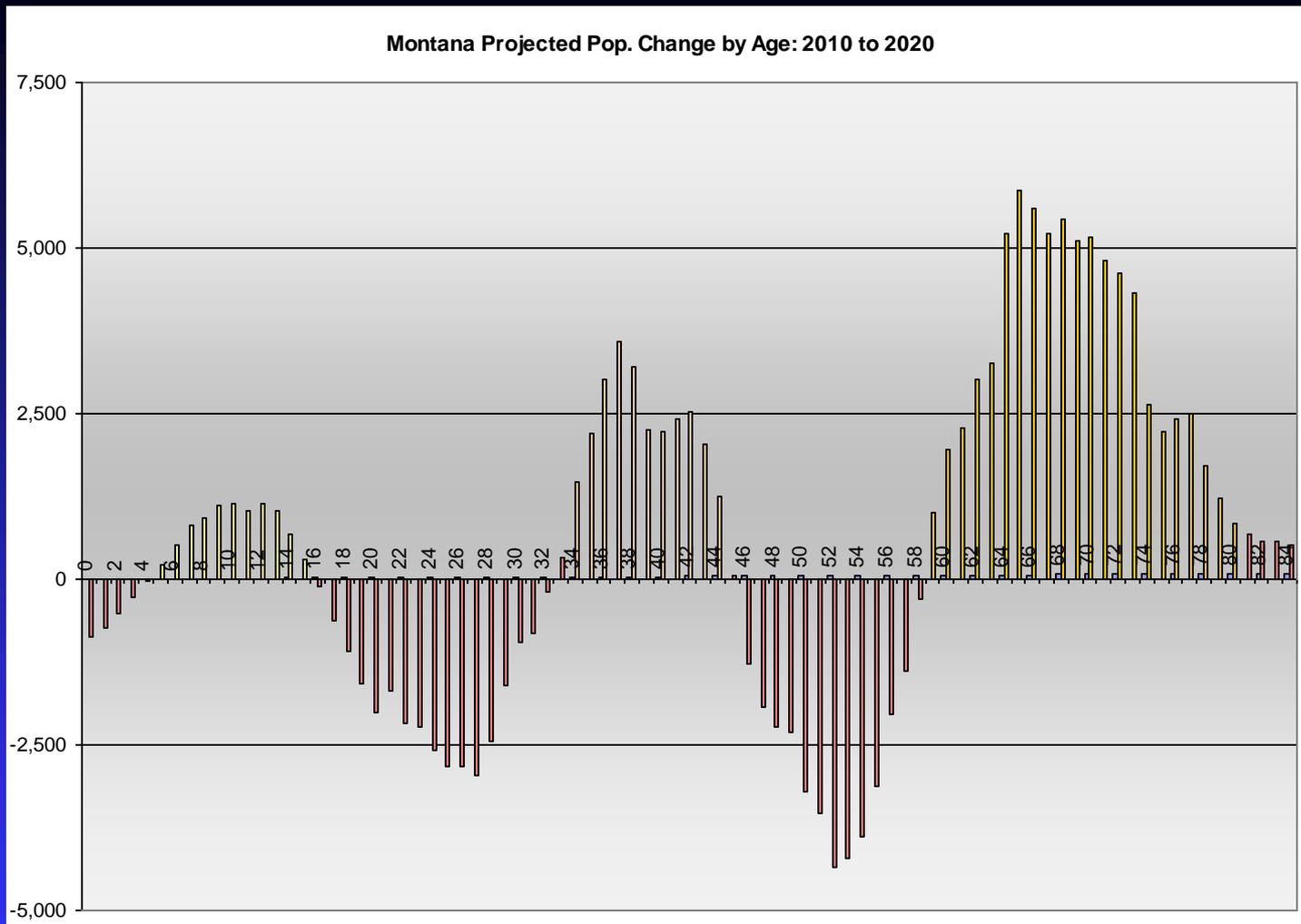
The echo population also will continue to age, shifting growth to persons between their early 20s and mid-30s. And during the current decade the "echo-echo" population will come into being, reflected in the recent increase in births.



## Projected Population Growth by Age in the Next Decade – 2010 to 2020

The chart at the right shows how Montana's population is projected to change by age between 2010 and 2020. During the next decade growth in the state's population will shift to persons in their early 60s to late 70s and Montana is in fact projected to have one of the largest populations 65 and older as a percent of its total by 2020.

The echo group or the children of boomers is shown in growth among persons from their early 30s to mid 40s. However, this echo group is projected by the Census Bureau to be much smaller than the boomer group. In turn, the "echo-echo" group is projected to be much smaller than the echo group.



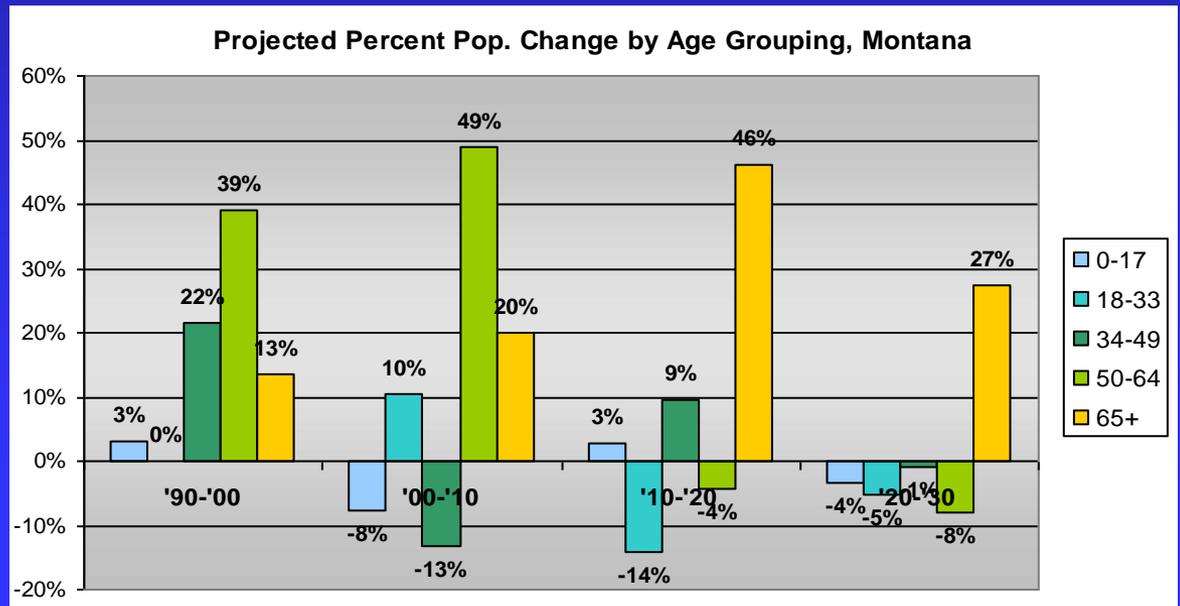
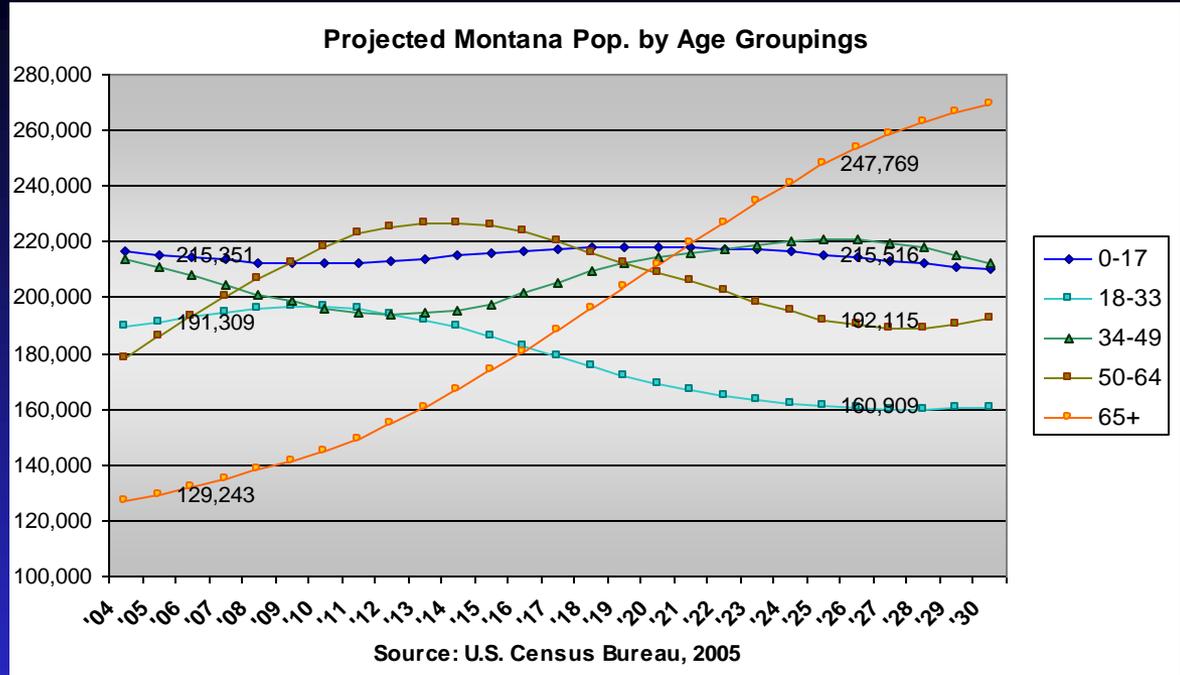
As we look out in front of us, we can see that population growth will continue to manifest itself in ripples and waves, with each successive wave of growth smaller than its immediate predecessor. This pattern of growth has significant implications. The fastest growth will occur among seniors and health care demand will continue to rise and housing needs will change. The number of persons at will move up and down at ages where college students are primarily drawn, as well as for high schools and elementary schools. The labor force of Montana will very likely shrink in size in the future as more and more persons leave the workforce for retirement and there are not enough persons entering the workforce to replace them.

# Future Pop. Change in Montana by Age Grouping

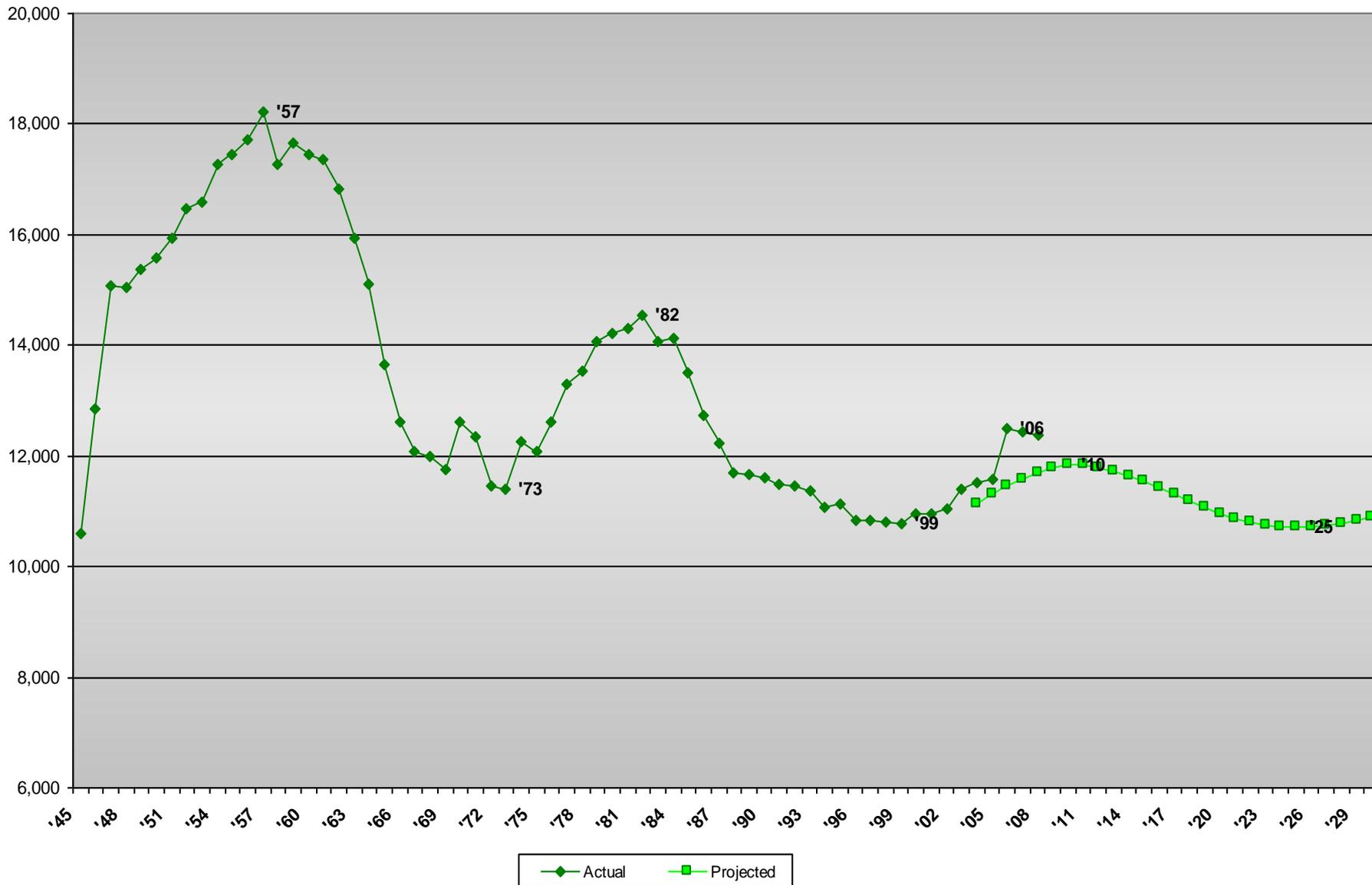
The projected aging of Montana's population over the next 20 years can be viewed by examining how the population is expected to change by age grouping. The upper chart shows the population under 18 (high school and younger), the population 18 to 33 (young post-high school adults and those at ages of family formation and childrearing), the population 34 to 49 (young and middle-age adults), the population 50 to 64 (older adults at pre-retirement ages), and the population 65 and older.

The under 18 population, which grew by only 3% in the '90s, is projected to fall by 8% between 2000 and 2010, then grow slightly in the subsequent two decades. The young adult population, which saw very little change in the last decade, would grow by 10% in the current decade before declining in each of the subsequent periods. The older adult working age population between 50 and 64, which saw massive growth in the '90s will also see very high growth in the current period before beginning a decline. And the 65 and older population, which grew by only 13% in the '90s, will grow by 20%, 46%, and 27% in the subsequent three decades.

As a result of these age shifts, Montana will have one of the largest populations over 65 of any state in the country in future years.



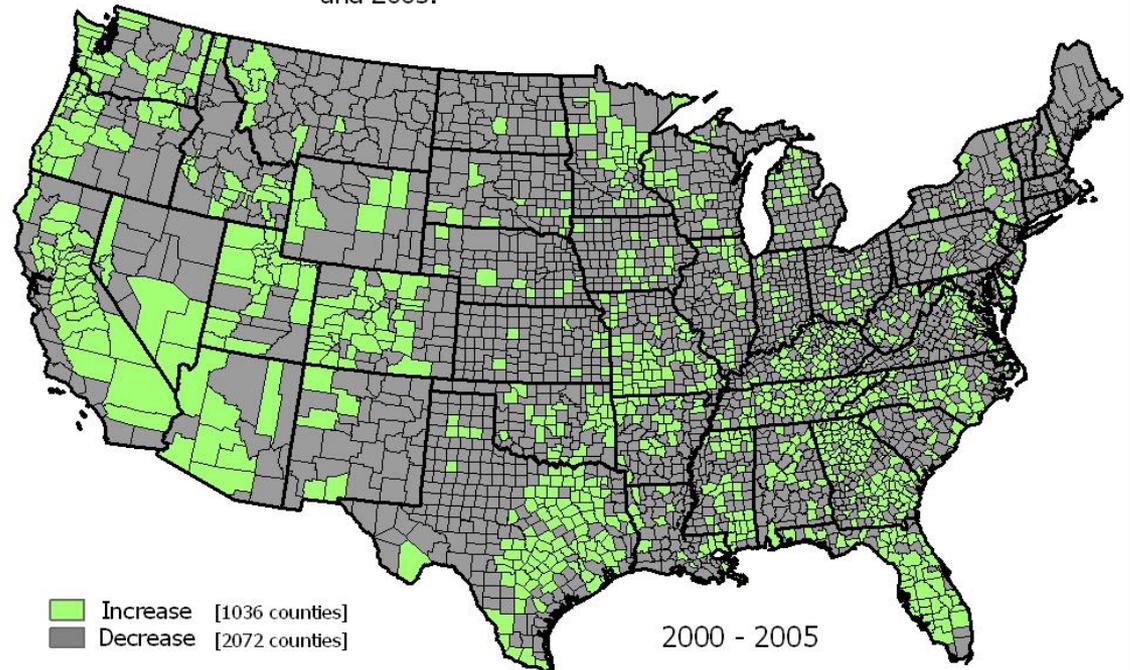
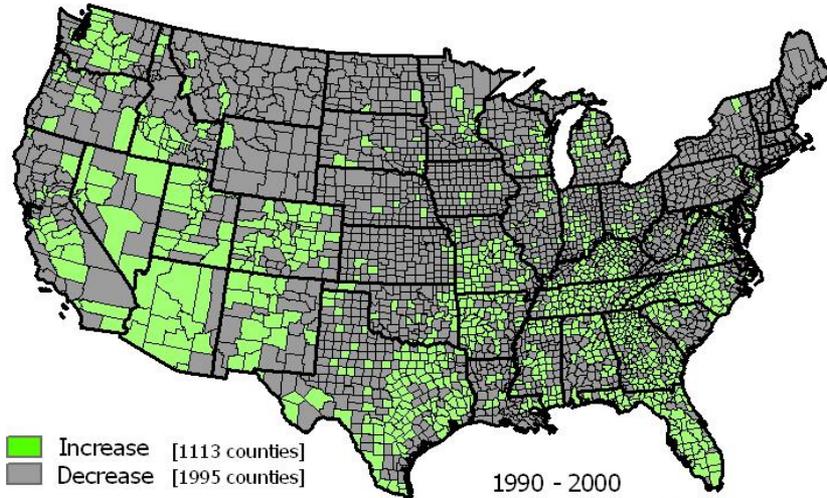
Actual and Projected Annual Births in Montana, 1945-2030



## Area of Growth or Decline in the Young Adult Population

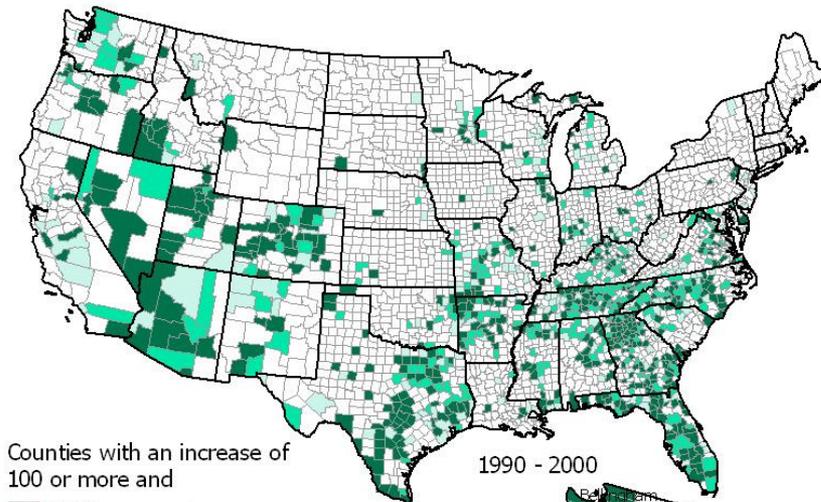
Much of the population growth in the U.S. since 1990 has been among baby boomers and their children. At the time of the 2000 Census, baby boomers were at ages between 37 and 53 and in January of 2006 the front edge of boomers turned 60 years of age. The maps show areas where the much smaller age group coming after baby boomers - young adults between 25 and 39 - is actually increasing in size.

During the '90s, 1,113 counties had increases in their population of young adults while 1,995 had decreases. The number of counties with decreases expanded to 2,072 between 2000 and 2005.



## Places of Opportunity for Young Adults in the U.S.

As the U.S. population continues to age, under the influence of a large and aging "baby boom" population, it is sometimes difficult to find areas where there is actually growth occurring in the young adult age population. The maps show areas where there are significant increases occurring in this young adult population, in particular, those between 25 and 39 years of age. The smaller maps show these "areas of opportunity" during the '90s and the larger map shows where growth in this population is occurring since the 2000 Census. Areas in white are ones with stagnant or declining populations of young adults.

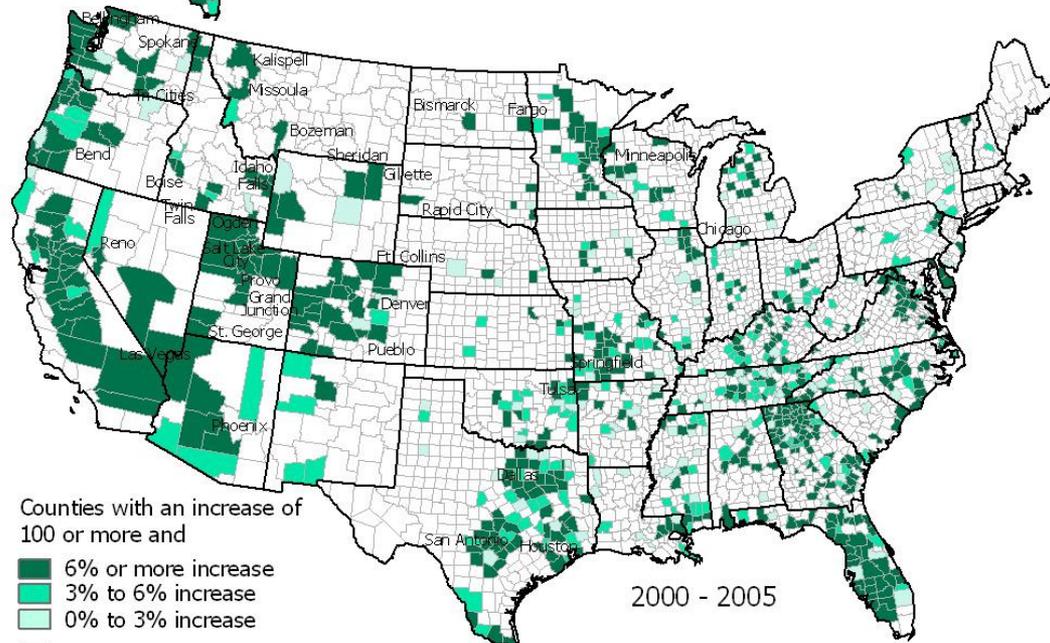


Counties with an increase of 100 or more and

- 12% or more increase
- 6% to 12% increase
- 0% to 6% increase

Counties with less than 100 increase in this age group

1990 - 2000



Counties with an increase of 100 or more and

- 6% or more increase
- 3% to 6% increase
- 0% to 3% increase

Counties with less than 100 increase in this age group

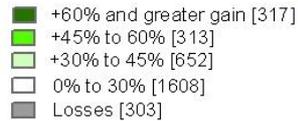
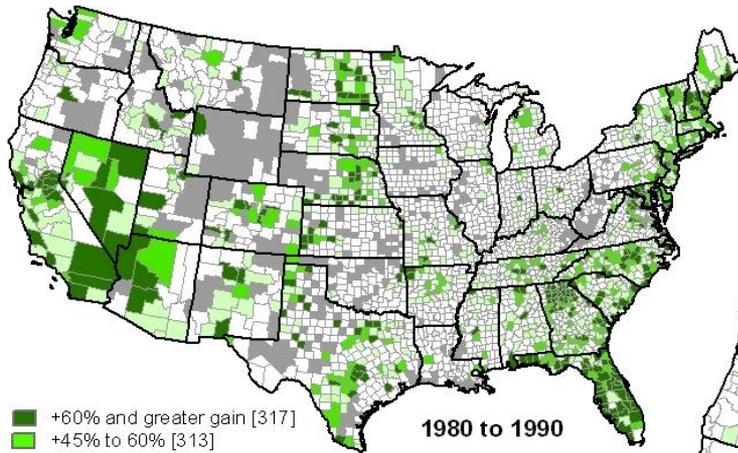
2000 - 2005



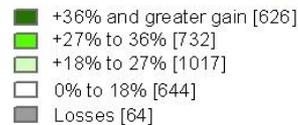
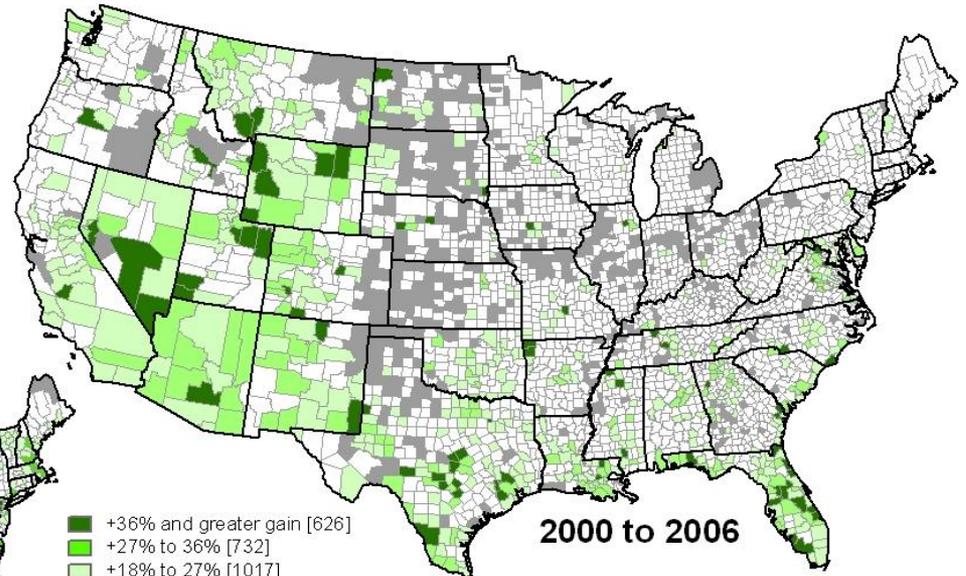
## Areas of Personal Income Growth and Decline

Personal income includes all income from all sources actually received in a given year by private households and individuals. Much of this comes in the form of employment earnings. Some comes from investments as in dividends and savings withdrawals. And some is from transfer payments like payments through Social Security, Medicare and Medicaid, and other programs.

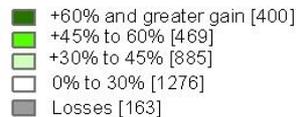
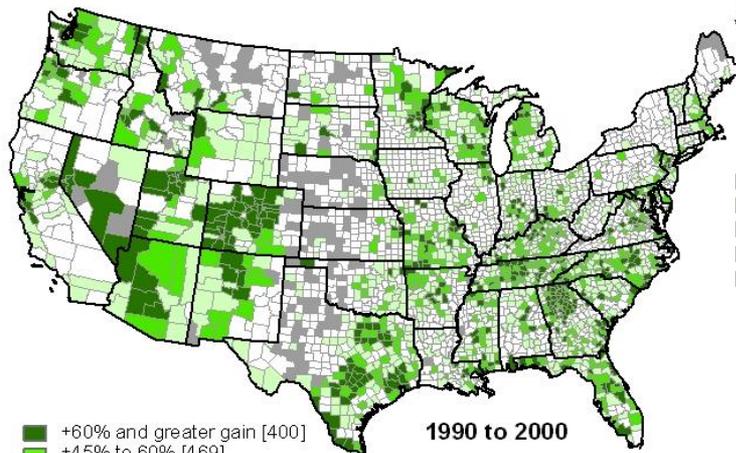
The green areas in each map are ones where personal income grew the most in those periods. Gray ones are where income actually fell in inflation-adjusted dollars. White areas are where income didn't fall but also didn't rise substantially.



1980 to 1990



2000 to 2006

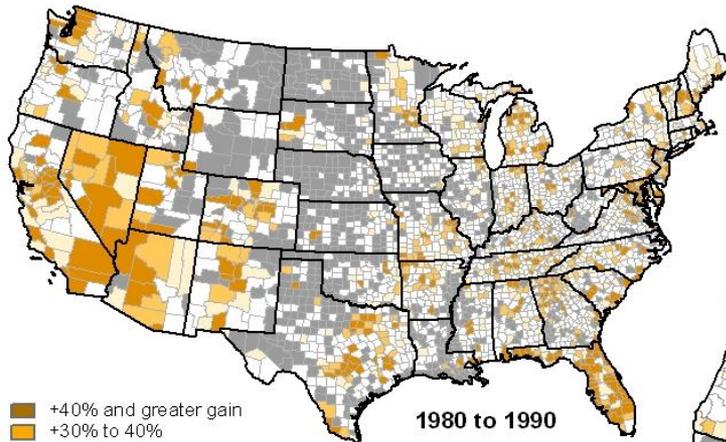


1990 to 2000

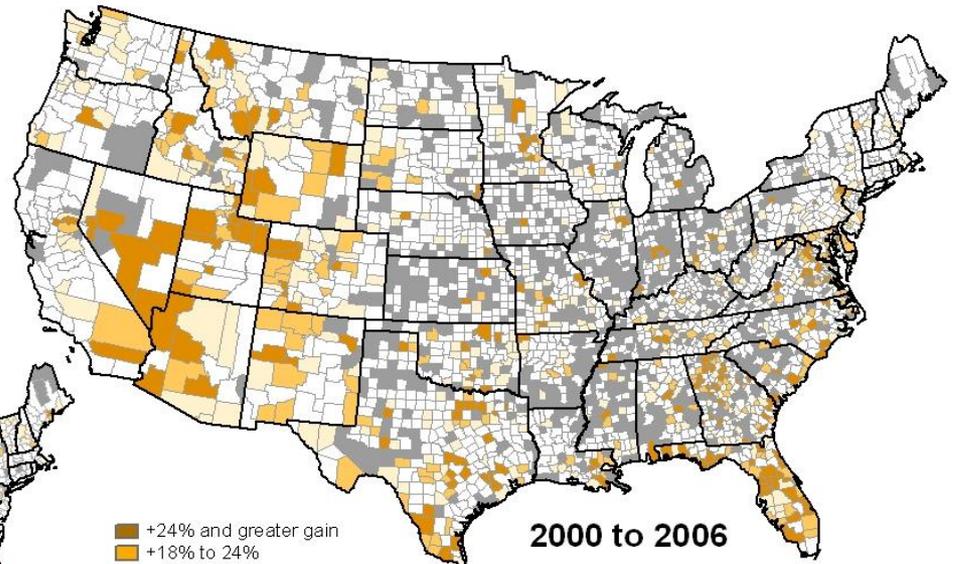
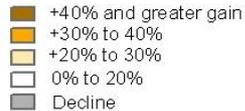


## Regional Patterns of Employment Growth in the U.S.

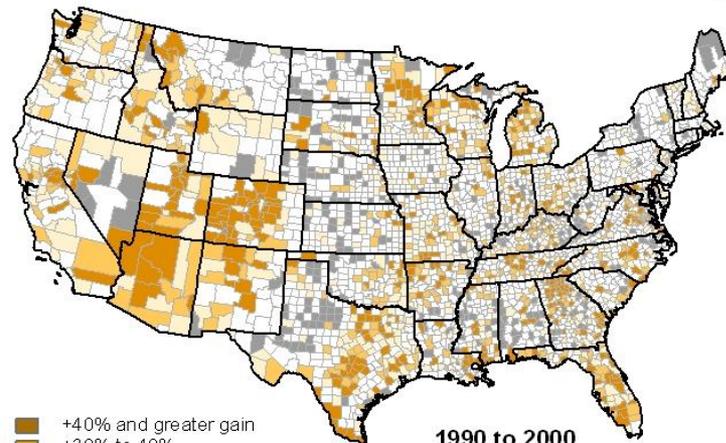
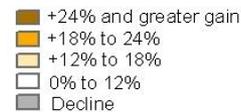
In tracking patterns of economic growth across the U.S. it is useful to examine change in total employment levels from one period to the next. The maps show where total employment growth has been relatively strong in recent periods dating back to the 1980s (dark and medium orange counties). Employment growth was much stronger in the Interior West region in the '90s than in the '80s. Many areas in Arizona, New Mexico, Colorado, and Utah have had very strong employment growth. Idaho and portions of Montana and Wyoming also are sharing in this growth. As a result, the larger Rocky Mountain West region has one of the tightest labor markets in the country, with very low unemployment rates.



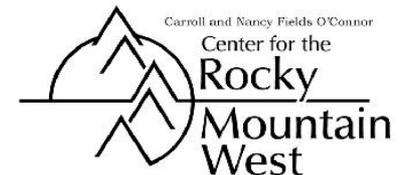
1980 to 1990



2000 to 2006



1990 to 2000



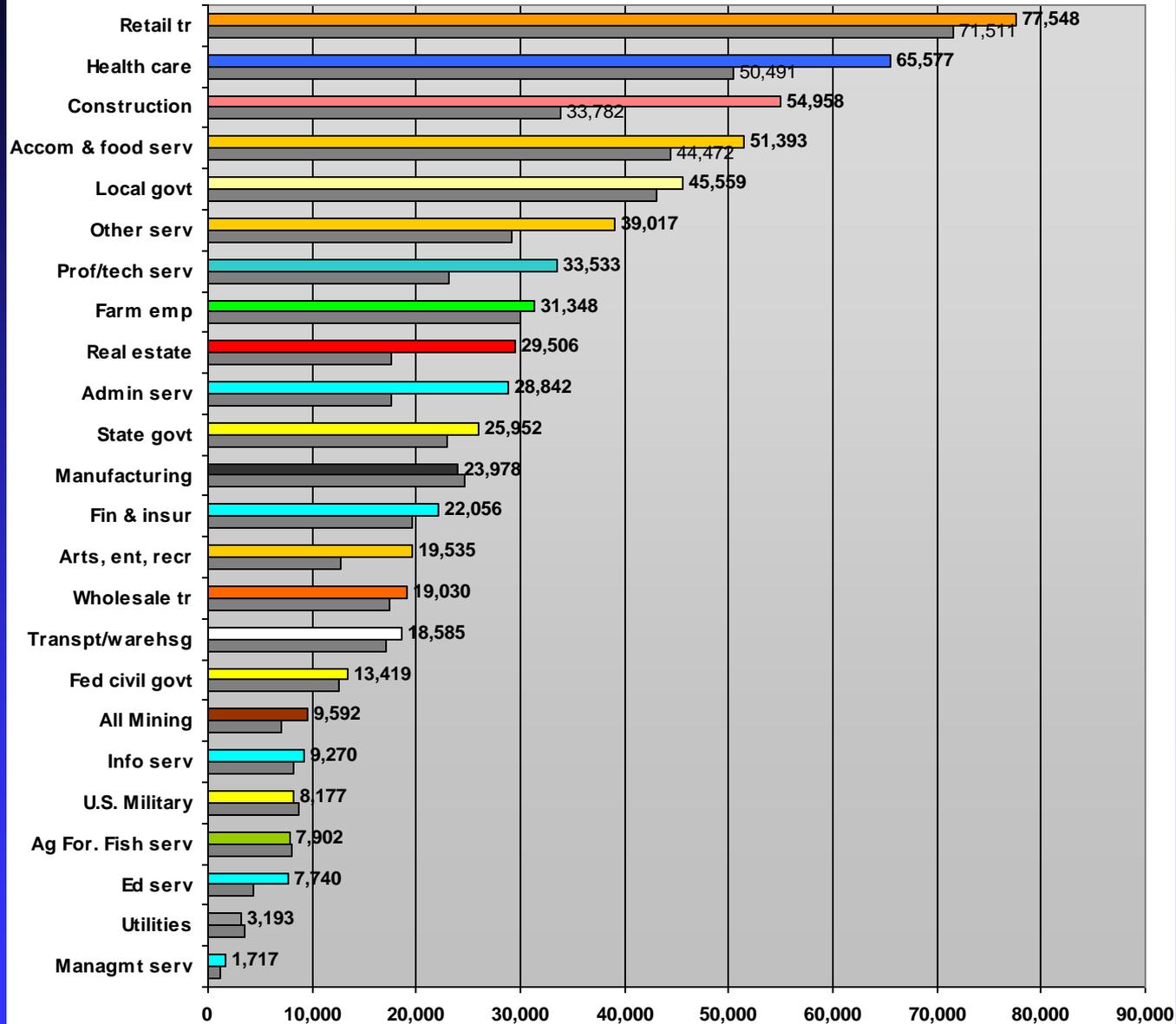
# Employment by Major NAICS Sector in Montana, 1997 vs. 2007

The chart shows total employment, both full- and part-time, for all of the major sectors of the economy in Montana. The 24 separate NAICS sectors are ordered in the chart from top to bottom based upon size, as measured by total employment in 2007.

Two bars are shown for each sector. The gray bars are total employment for a sector in 1997. The colored bars show levels of employment in 2007 with employment including all full and part-time jobs. Government sectors are shown in "yellow". Business service are shown in "teal blue". Health care is in "blue". Construction and real estate are in "red".

Retail trade has the largest number of jobs at 77,548, followed by Health care at 65,577, Construction at 55,000 jobs and Accommodations and food services at 51,393.

Montana Employment by Major NAICS Sector, 1997 vs. 2007



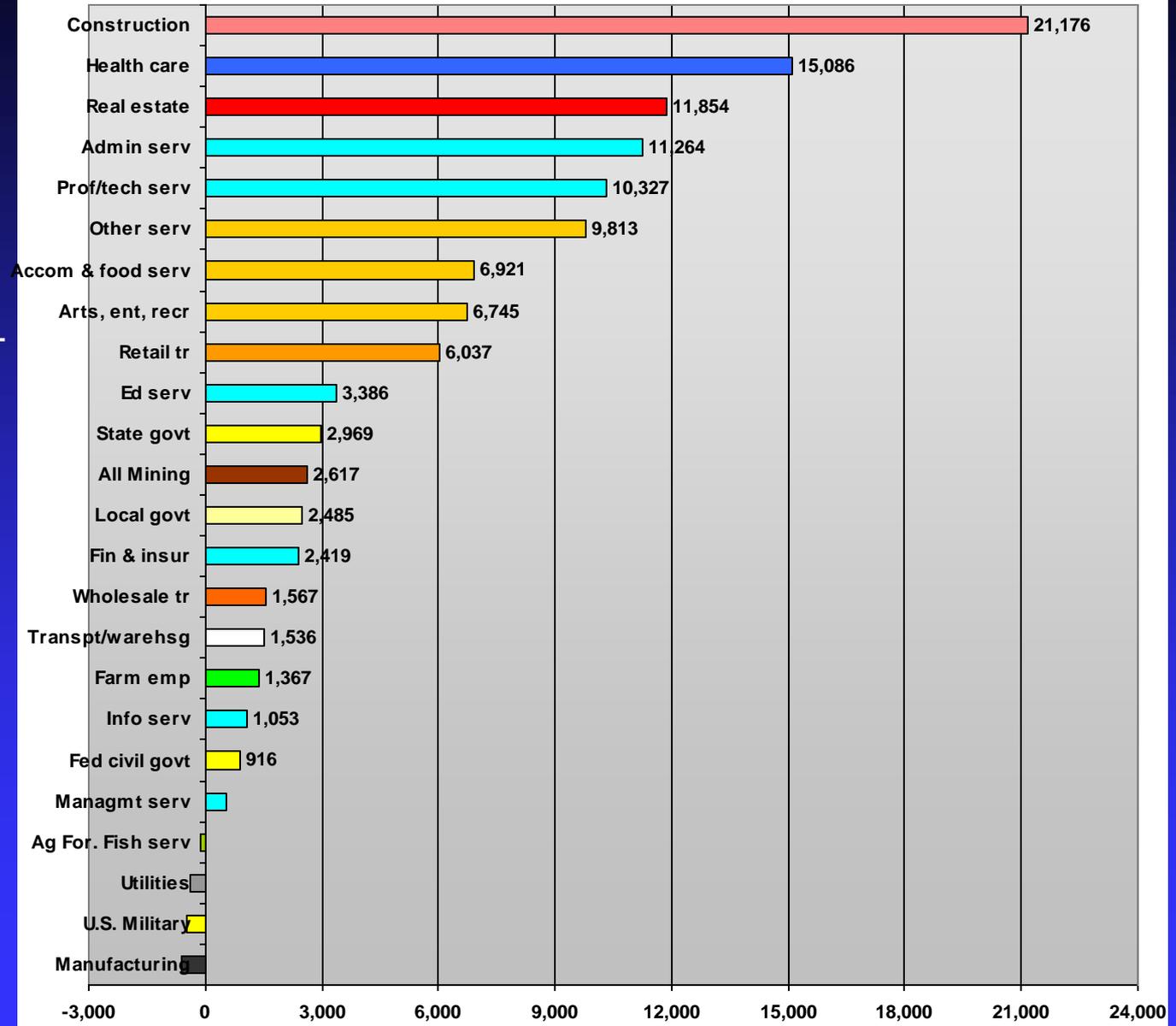
Source: BEA, U.S. Commerce Dept.

# Employment Growth by Major NAICS Sector, 1997 – 2007

The upper chart shows the change in the total number of jobs for each major sector over a ten-year period from 1997 to 2007. Construction jobs grew by over 21,000 – an increase of 63% - exceeding job growth in any other sector. Health care jobs grew by over 15,000 – up 30%. Real estate is 3rd in job growth, up 67%; followed by Administrative services, up 64%; and Professional and technical services, up by 45% and more than 10,000 jobs.

Much of the state's job growth during this period is concentrated in "growth-dependent" sectors like Construction and Real estate, shown in "red", which rank 1st and 3rd in job expansion. Various categories of business services also expanded considerably, shown in "teal blue". Health care employment also is seeing considerable growth.

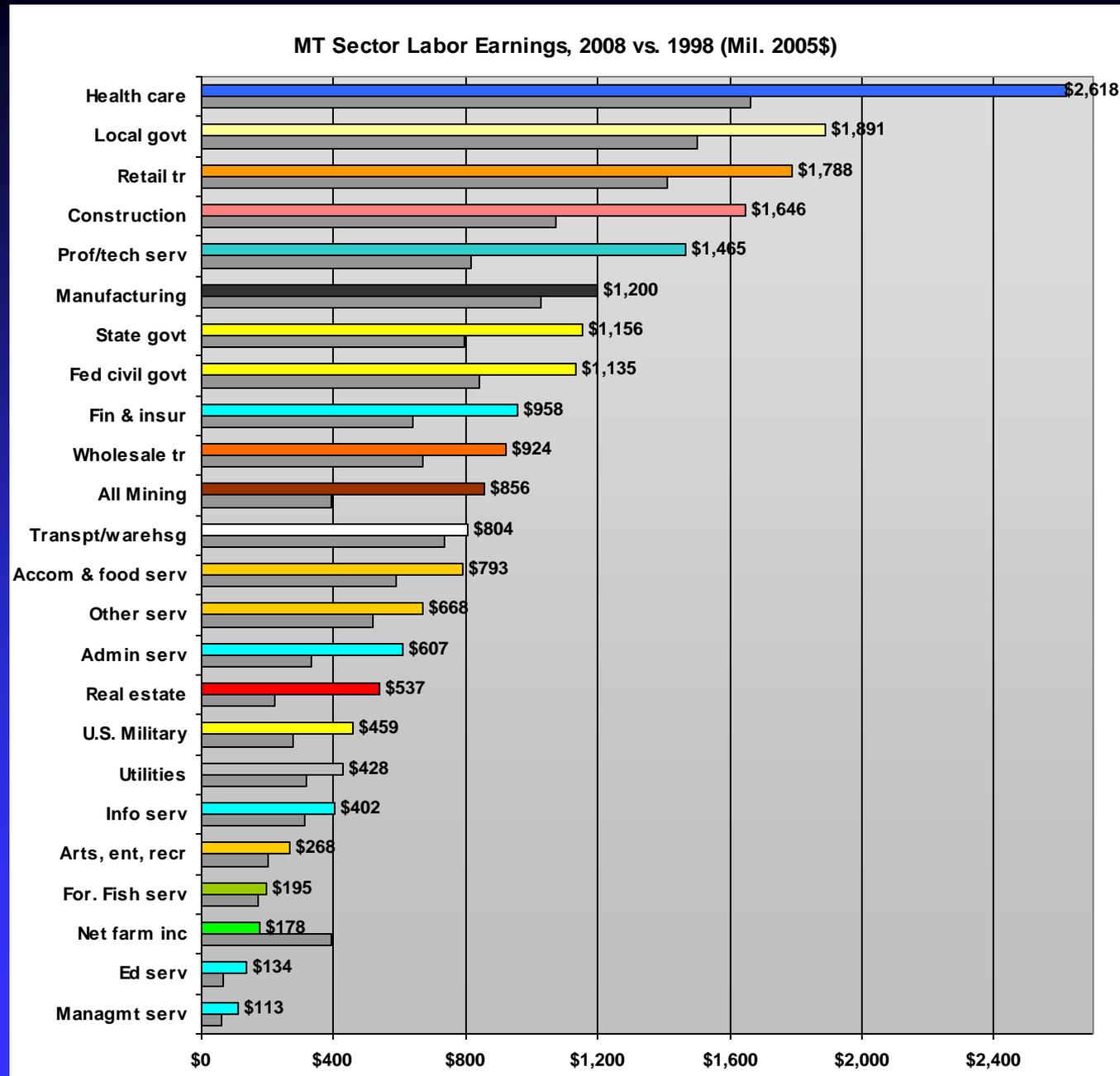
Employment Growth in Montana by Major NAICS Sector, 1997-2007



# Sector Labor Earnings in Montana, 1998 vs. 2008

The chart shows annual labor earnings for each major NAICS sector in 2005 inflation-adjusted dollars in 2008 and ten years earlier in 1998. Sectors are rank ordered in the chart from largest to smallest, as measured in total labor earnings.

Health care in the state's single largest sector measured in this way with labor earnings in 2008 exceeding \$2.6 billion, up from about \$1.7 billion in 1998. Only four of the 24 sectors exceed \$1.6 billion in labor earnings. Besides Health care, these include Local government, Retail trade, and Construction. Two of the sectors exceed \$1.2 billion – Professional and technical services and Manufacturing.



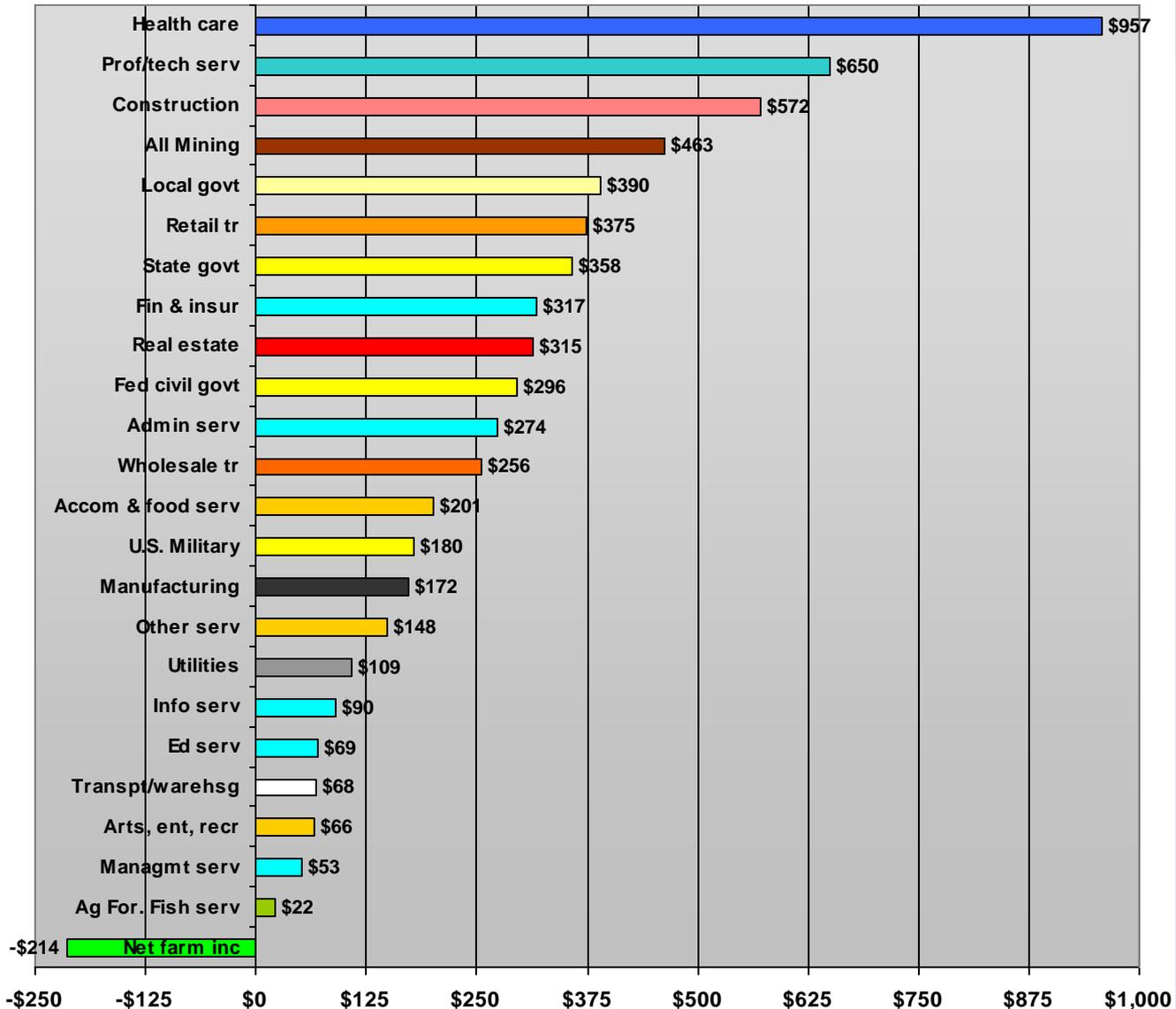
# Growth in Labor Earnings by Major Sector in Montana, 1998 – 2008

The chart at the right focuses simply on labor earnings growth for each sector over the period from 1998 to 2008. Figures in the chart are adjusted for inflation.

Health care had the largest increase in labor earnings, rising by \$957 million over the ten-year period. Considerably behind in 2nd place is Professional and technical services, with labor earnings growth of \$650 million. Construction is 3rd, growing by over \$570 million.

All of the sectors shown in “teal blue” are some part of the larger segment of the economy made up of professional, technical, financial, insurance, and other business services. Those shown in yellow are government sectors. Those in orange are trade sectors – both retail and services trade. Those in red are particularly “growth dependent” sectors.

MT Labor Earnings Growth by Sector, 1998 to 2008 (Millions of 2005 dollars)



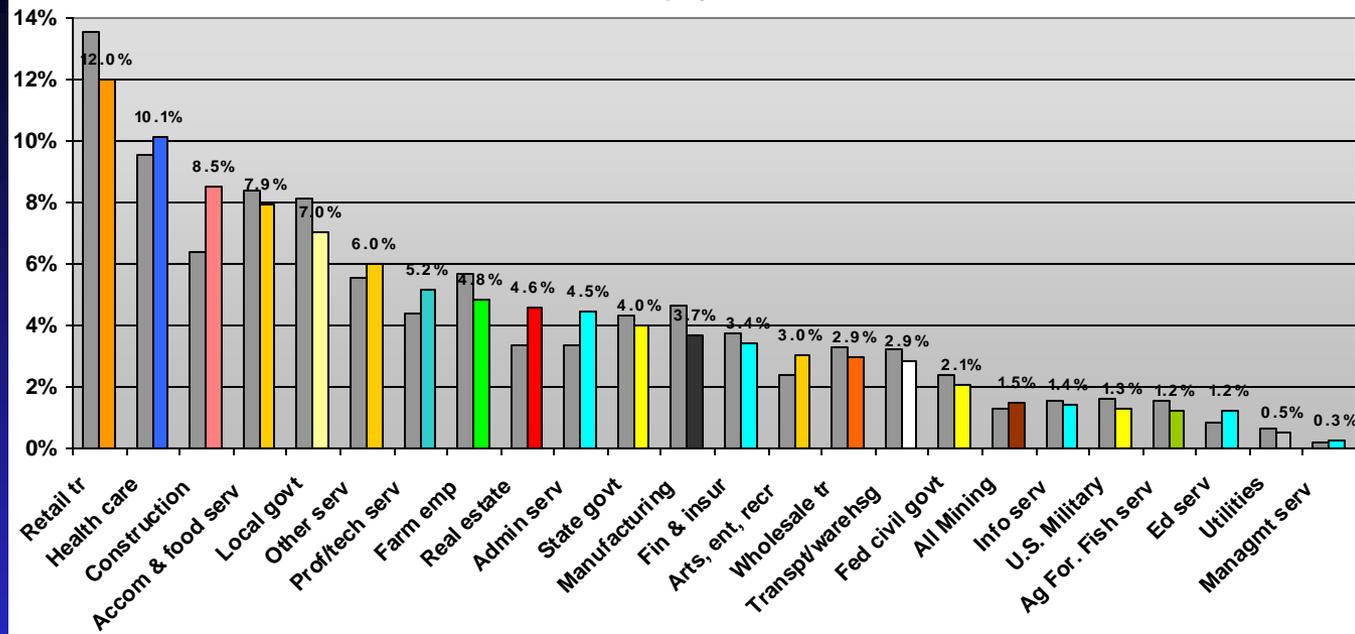
# Sector Shares of Total Employment and Total Labor Earnings in Montana

The upper chart shows sector shares of total employment represented by each of the major NAICS sectors in 1997 and 2007. Retail trade is 1st, accounting for 12% of total jobs. Retail trade has the 3rd largest share of total labor earnings, shown in the lower chart, at 8.4%. Health care has the 2nd largest share of jobs at 10.1% and the 1st largest share of labor earnings at 12.3%.

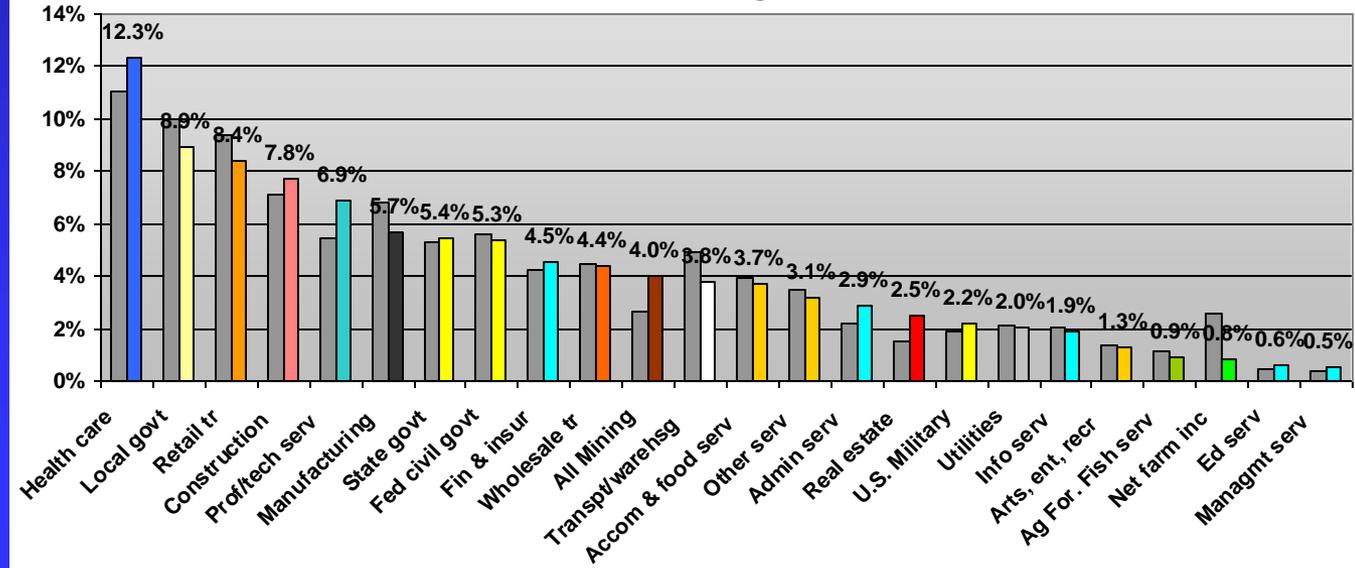
Some of the sectors are increasing their shares of both employment and earnings, including Health care, Construction, Professional and technical services, Real estate, and Administrative services.

Others are declining in both categories and these shifts reflect "restructuring" of the state's economy.

Sector Shares of Total Employment in MT, 1997 vs. 2007



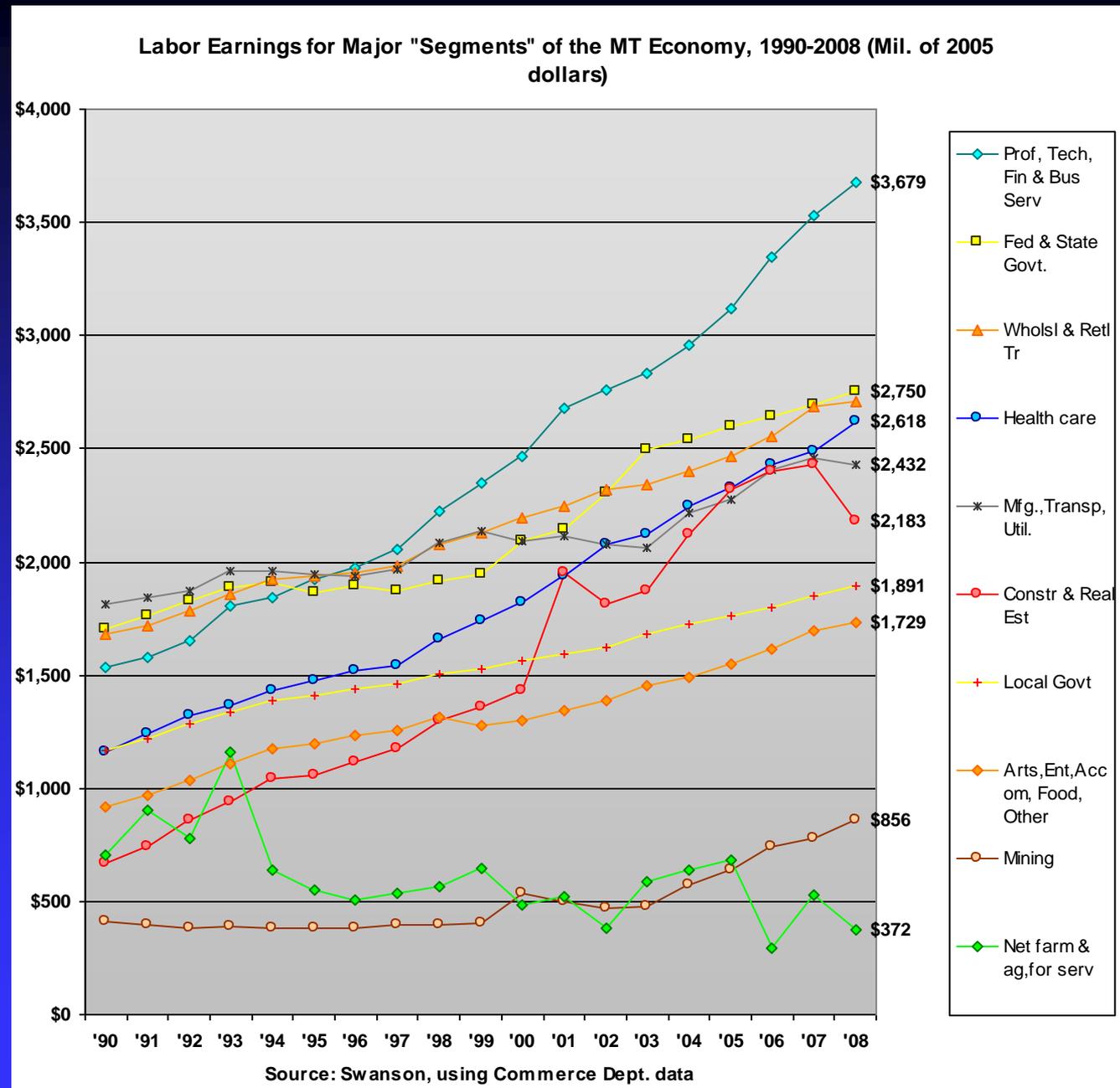
Sector Shares of Total Labor Earnings in MT, 1998 vs. 2008



# Economic Change in Montana by Major Segment of the Economy

By combining several major NAICS sectors together into larger segments, a more simplified view of the economy can be portrayed. The chart shows levels of annual labor earnings for major segments with services that are largely “business services” or services for business combined. These include Professional and technical services, financial services, management and administrative services, etc. Federal and state government are combined, shown in yellow. Wholesale and retail trade are combined, shown in orange. Manufacturing is combined with utilities and transportation into an overall “primary sectors” segment. Construction and real estate are combined and shown in red.

The segment that includes a wide range of business services is Montana’s largest single segment of the economy.



# Economic Growth in Montana by Major Segment, 1998 – 2008

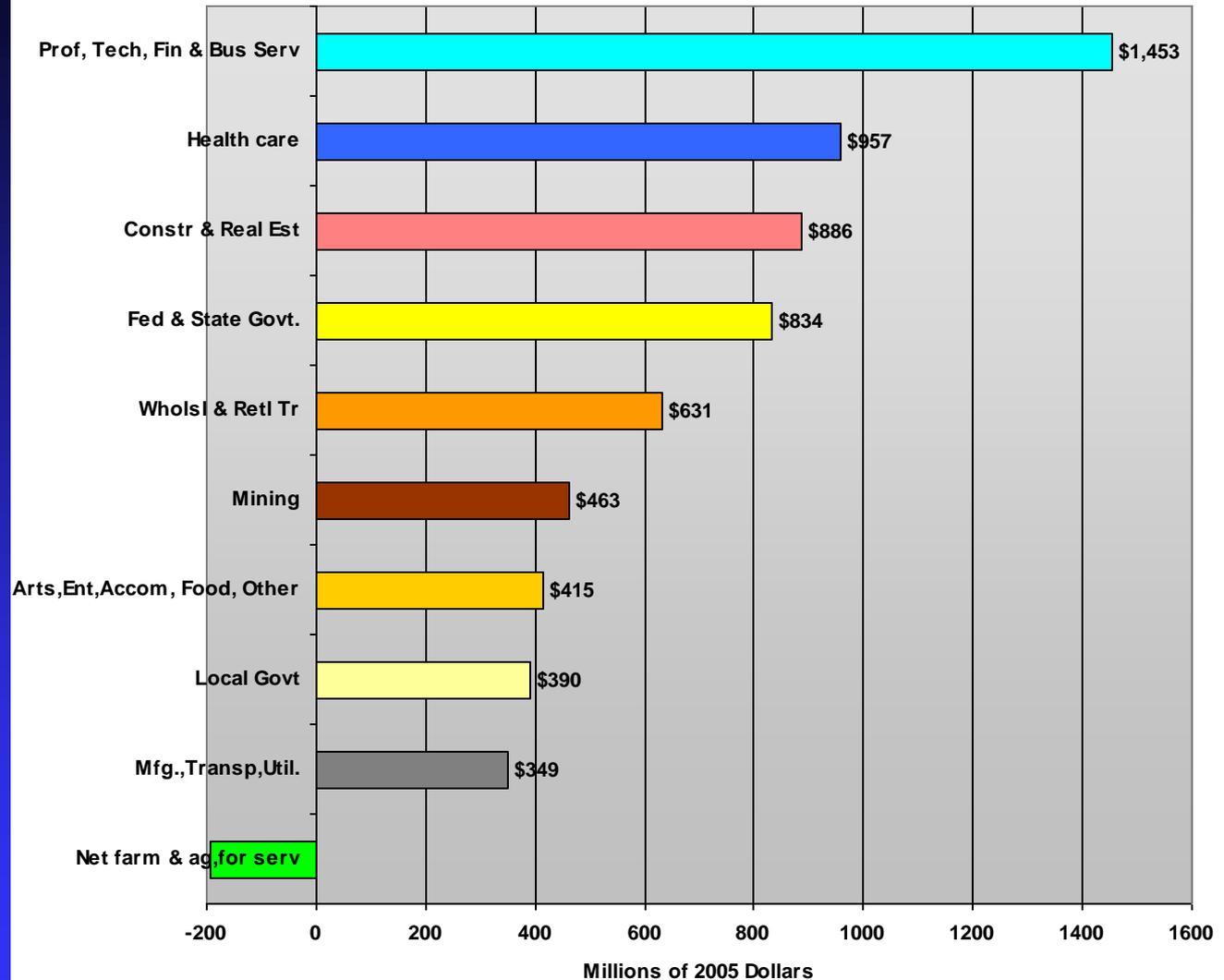
The chart focuses on growth only in total labor earnings for each of the ten major segments of the economy over the ten-year period from 1998 to 2008. Figures are in 2005 inflation-adjusted dollars.

The segment including professional, technical, financial, insurance, and other business services grew by almost \$1.5 billion, more than any other segment and an increase of 65%.

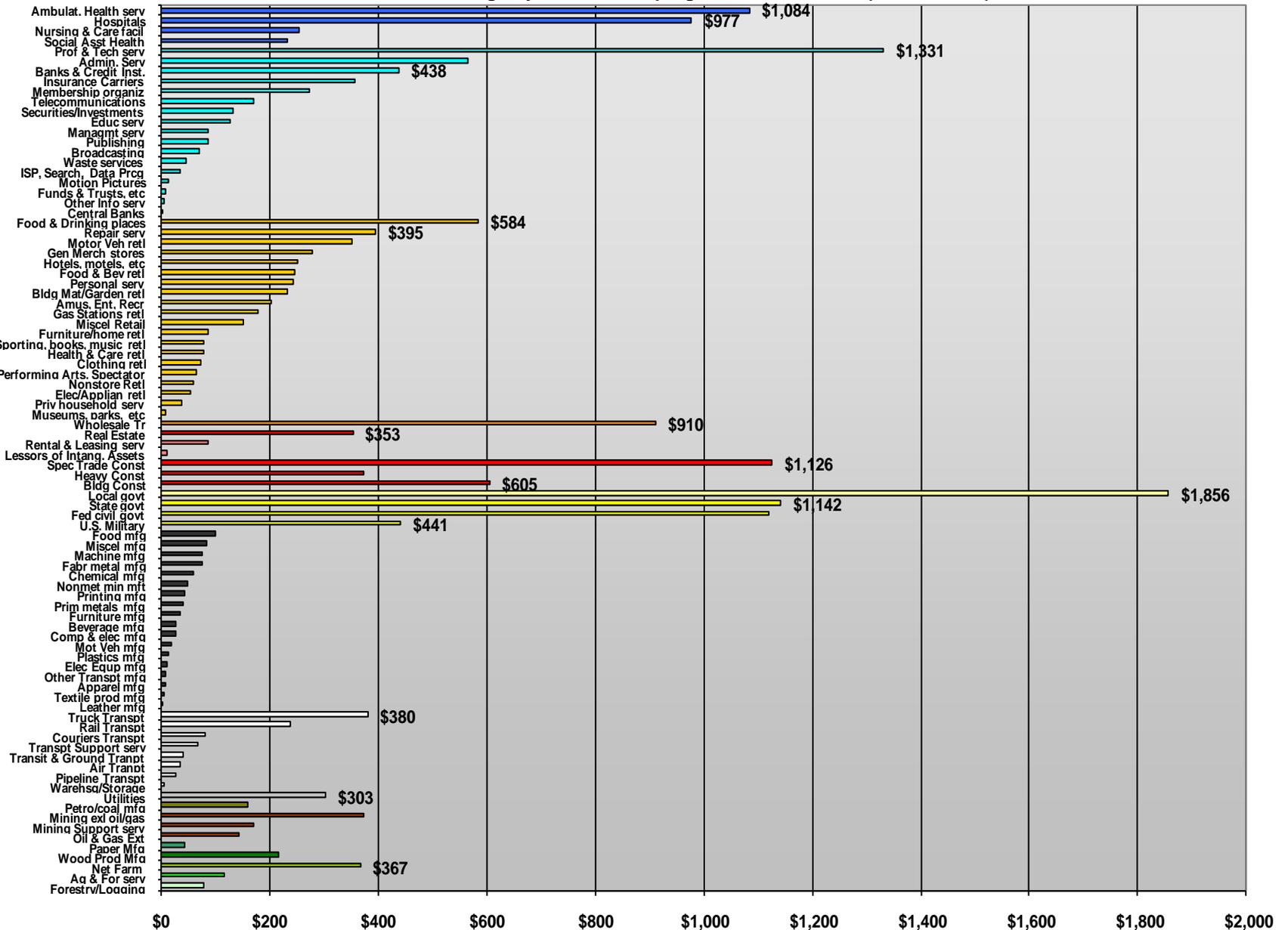
Health care growth was 2nd with an increase of almost \$1 billion, up by 58%. Growth in construction and real estate closely followed, rising by \$886 million and an increase of 68%. Federal and state government labor earnings grew by \$834 million, an increase of 44%.

Labor earnings in agriculture declined and there was only a 17% increase in labor earnings by the primary sectors.

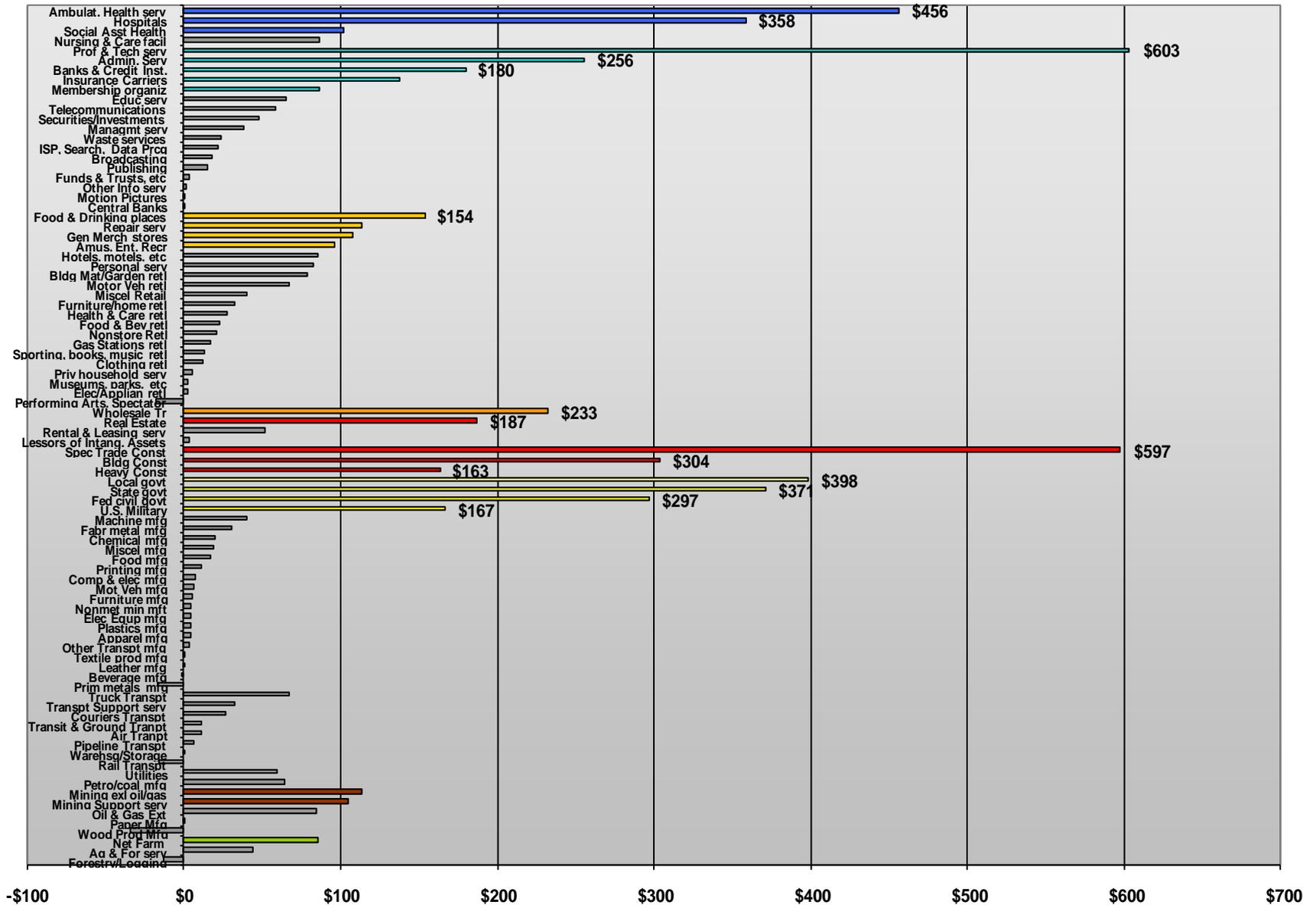
Change in Labor Earnings by Major Economic Segment in MT, 1998-2008



Subsector Labor Earnings by Sector Grouping in Montana, 2007 (Mil. of 2005\$)



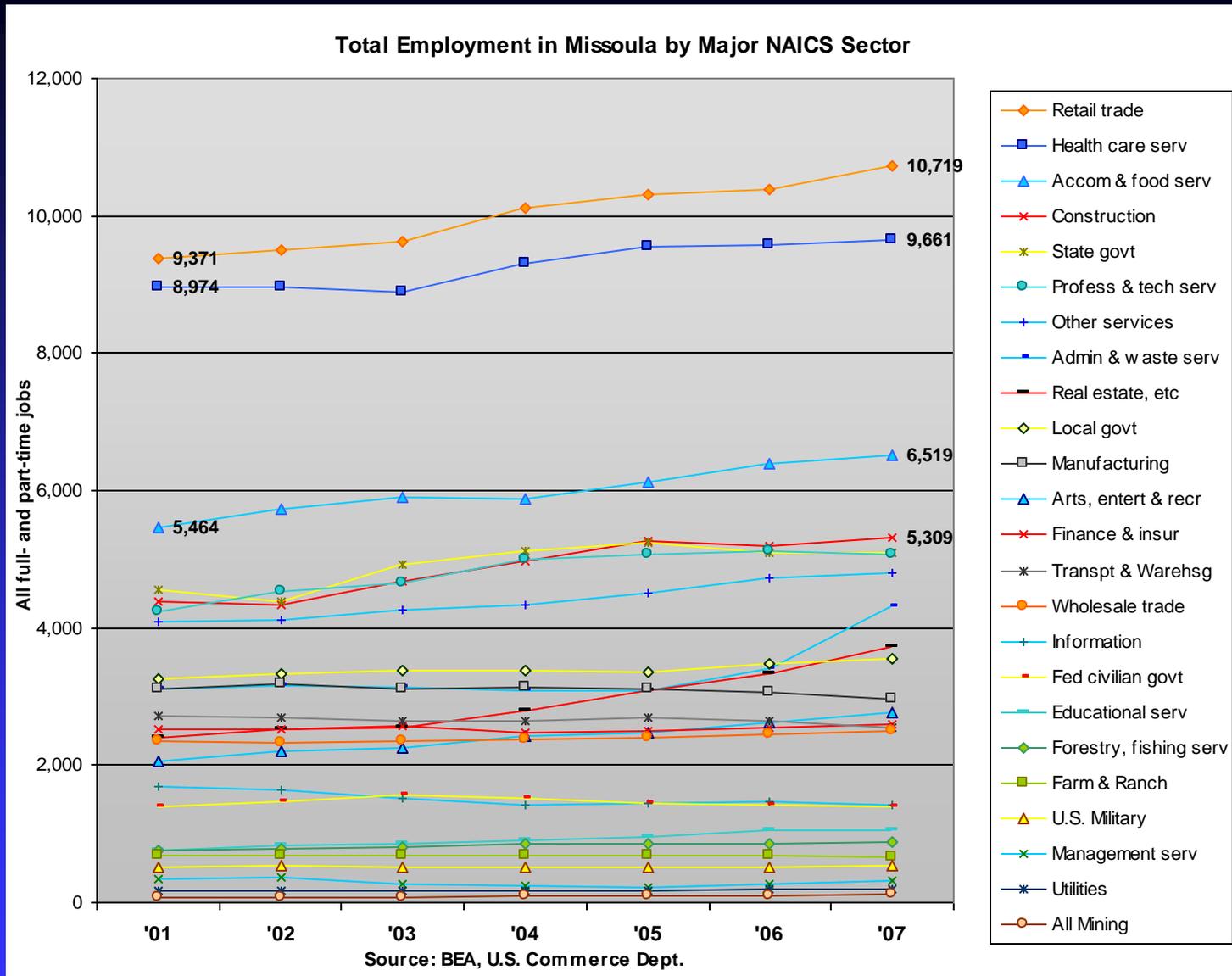
### Growth in Subsector Labor Earnings by Sector Grouping in MT, 1997-2007 (Mil. of 2005\$)



# Employment by Major NAICS Sector in Missoula Co.

The chart shows levels of total employment – both full- and part-time employment – in each major sector of the economy in Missoula County since 2001. The sector with the highest total employment is Retail trade, followed by Health care services. Considerably back from these in 3rd is Accommodations and food services.

All sectors that are some type of “service” are shown in “blue” in the chart. All government sectors are shown in yellow. Construction, real estate, and finance are shown in red. Primary sectors are shown in black or gray. Agriculture is shown in green.



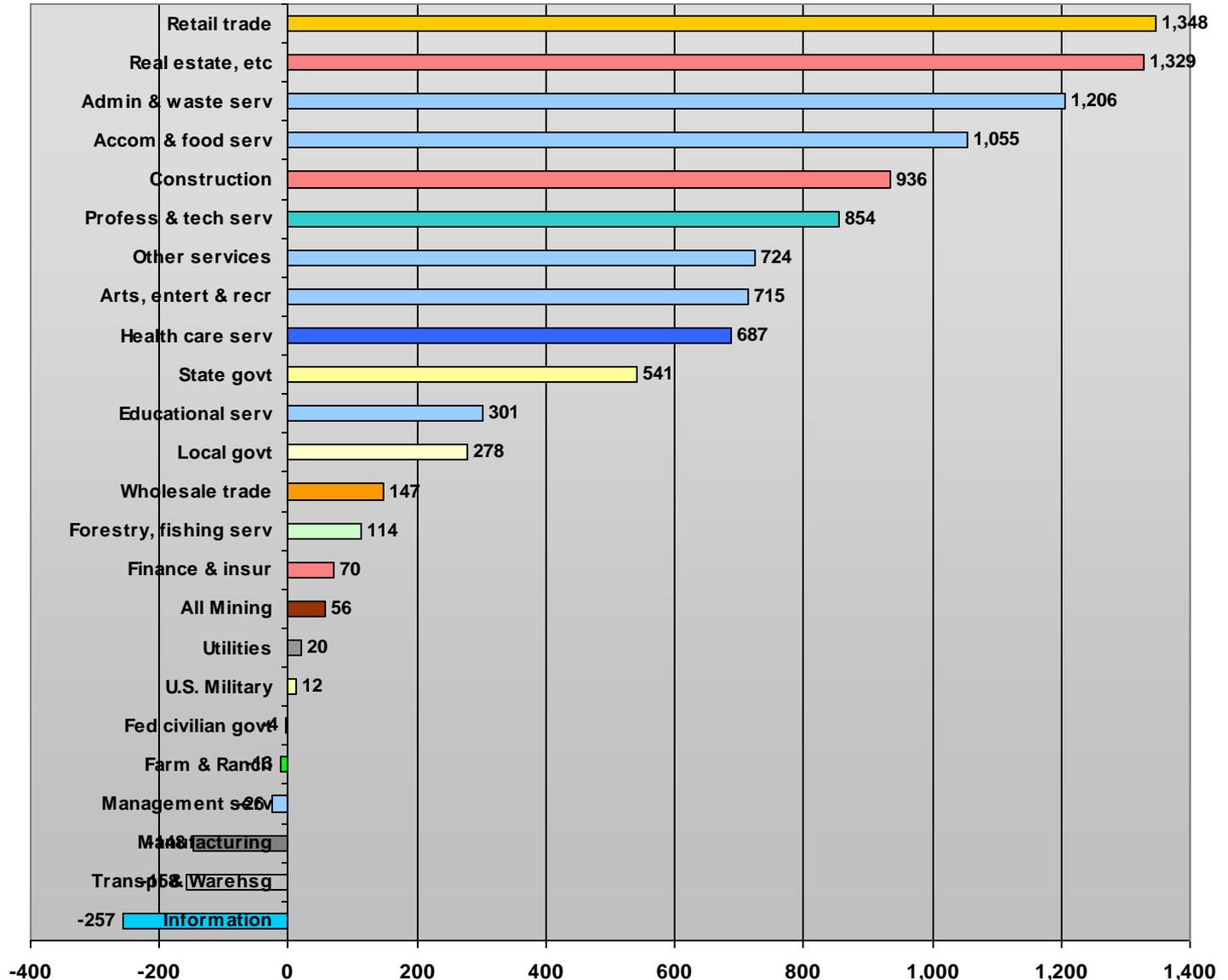
# Recent Growth in Employment in Missoula Co. by Major NAICS Sector

The chart shows change in total employment by sector between 2001 and 2007. The two sectors with the biggest increases in employment are Retail trade – up 1,348 jobs – and Real estate, which includes sales, rentals, and leasings – up 1,329.

Administrative and waste services grew by 1,206, ranking it 3rd in growth. Next was Accommodations and food services followed by Construction and then by Professional and technical services.

Several major sectors had declines in overall employment, including Information services, Transportation and warehousing, and Manufacturing.

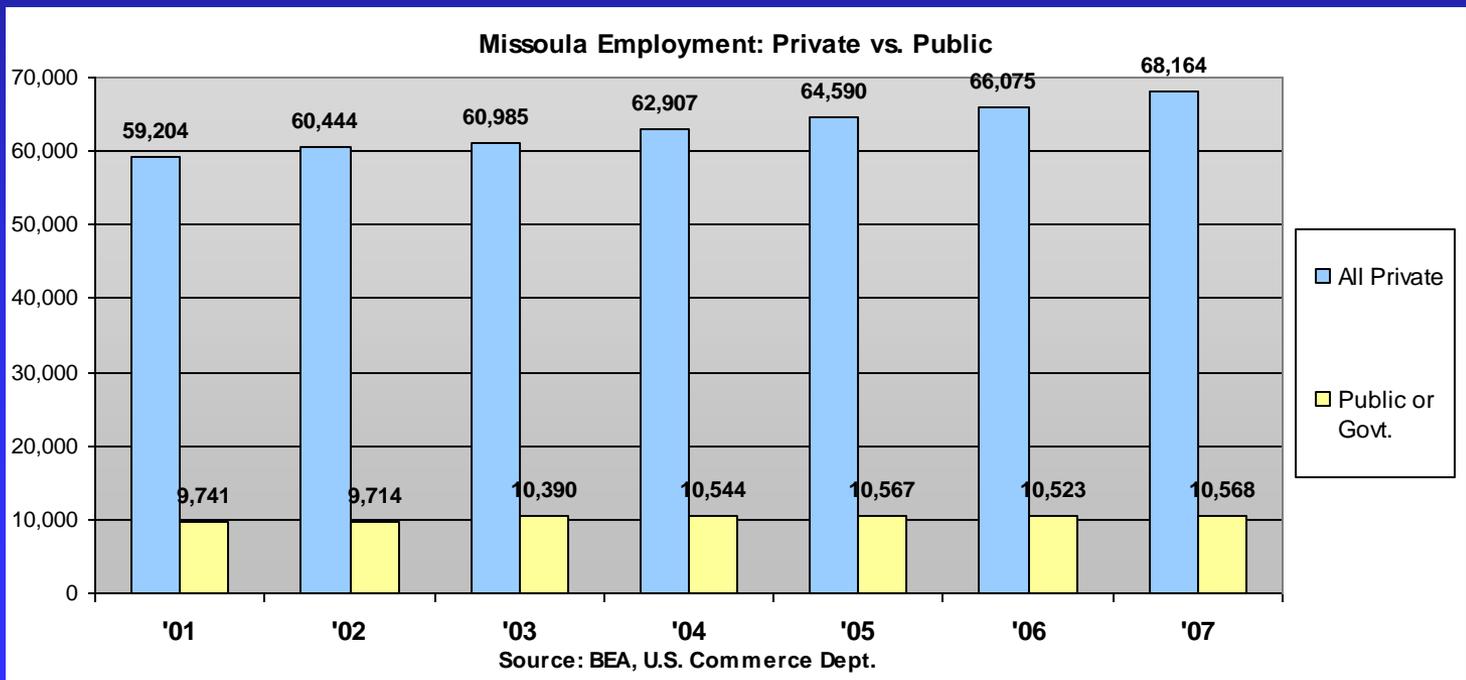
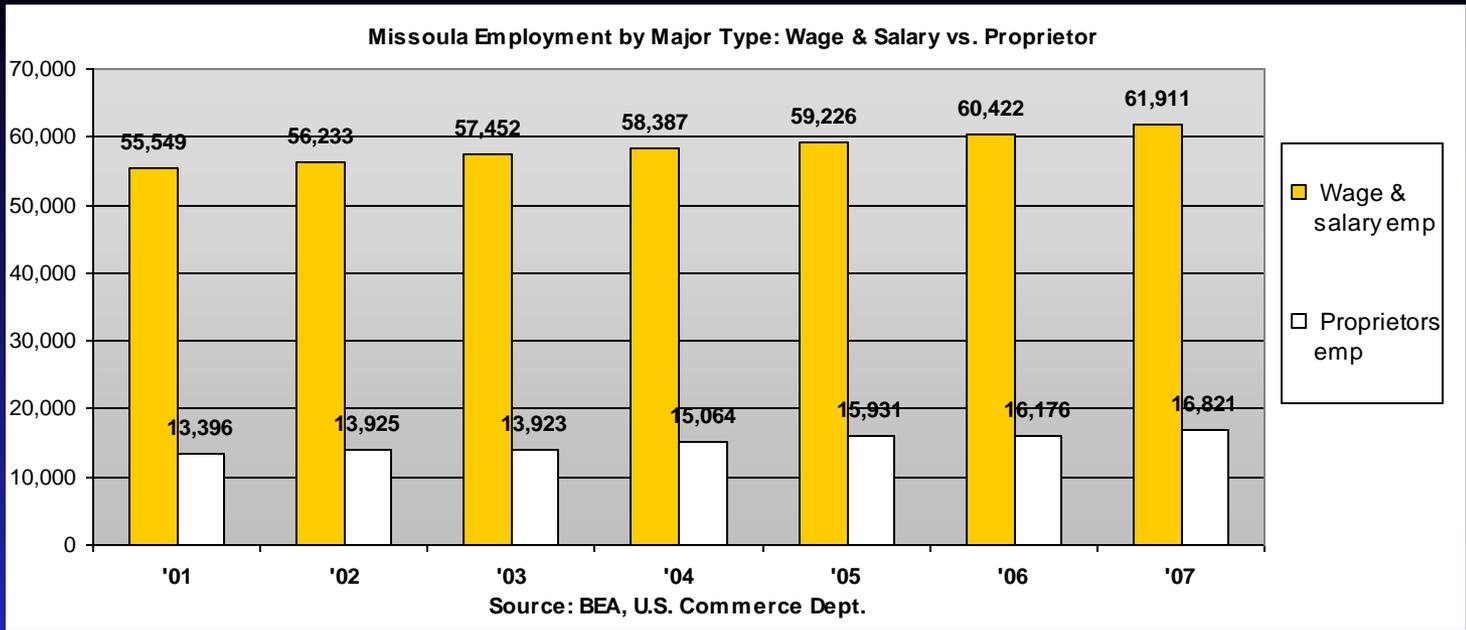
Growth in Employment by Major NAICS Sector in Missoula, 2001-07



# Employment in Missoula Co. by Major Type

The upper chart shows levels of employment, both full and part-time, in Missoula County in recent years for both wage and salary workers and proprietors or self-employed. Most of the employment is wage and salary or people who work for others who pay them a wage or salary.

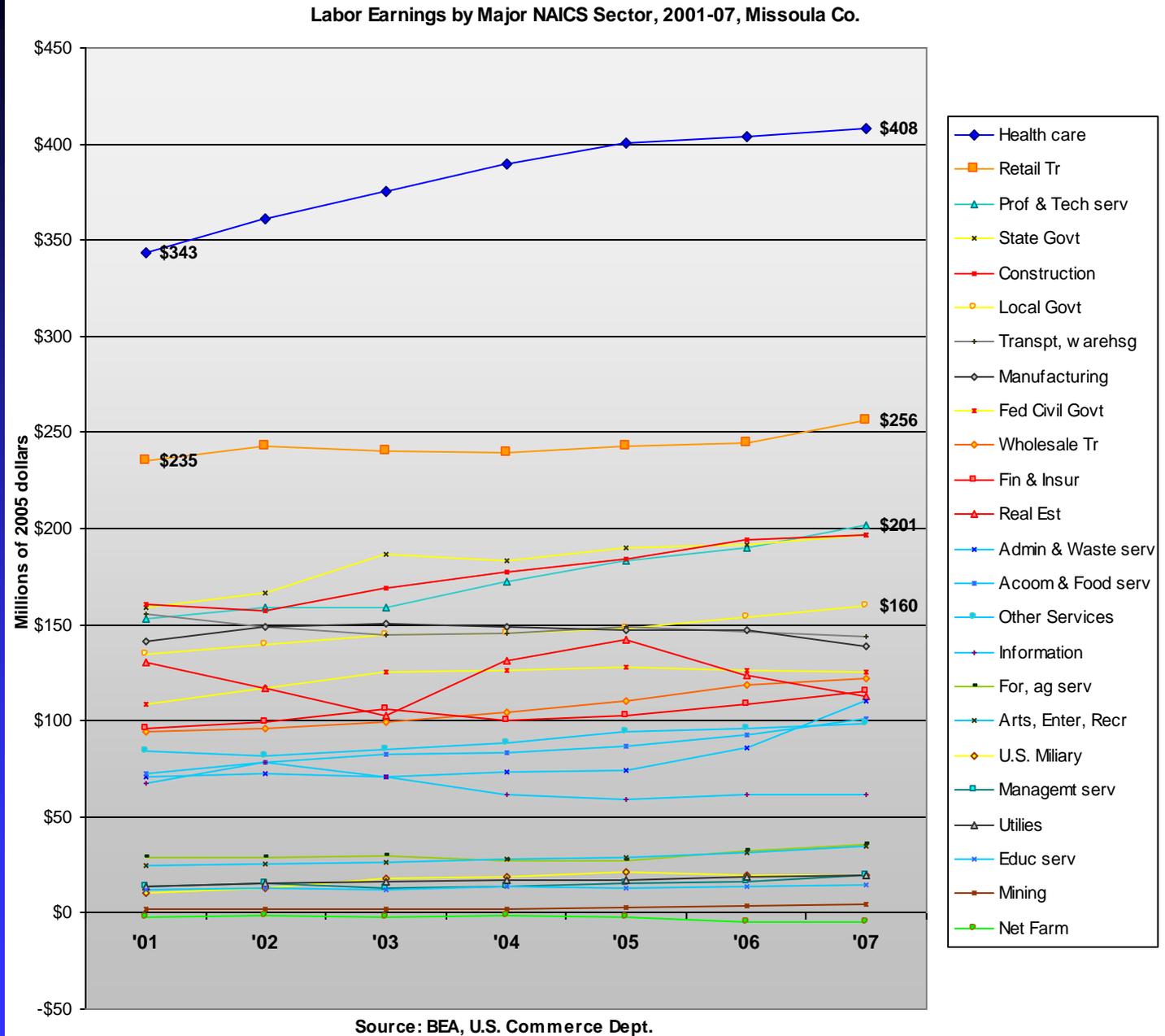
The lower chart compares private employment to public or government employment. Most of the county's employment is in the private sector and this is where most of the growth is occurring.



# Recent NAICS Sector Growth in Missoula County

Area employment data are now compiled for NAICS codes rather than SIC codes. There are 24 NAICS sectors and the chart shows labor earnings for these from 2001 through 2007.

The services sector was split into nine separate sectors in NAICS. These are all shown in some color of blue. The largest is health care, which grew from \$343 million in 2001 to over \$400 million in 2007. The 2nd largest is retail trade with labor earnings of \$256 million in 2007. Professional and technical services, State government, which includes the University and Construction are 3rd, 4th, and 5th in size.

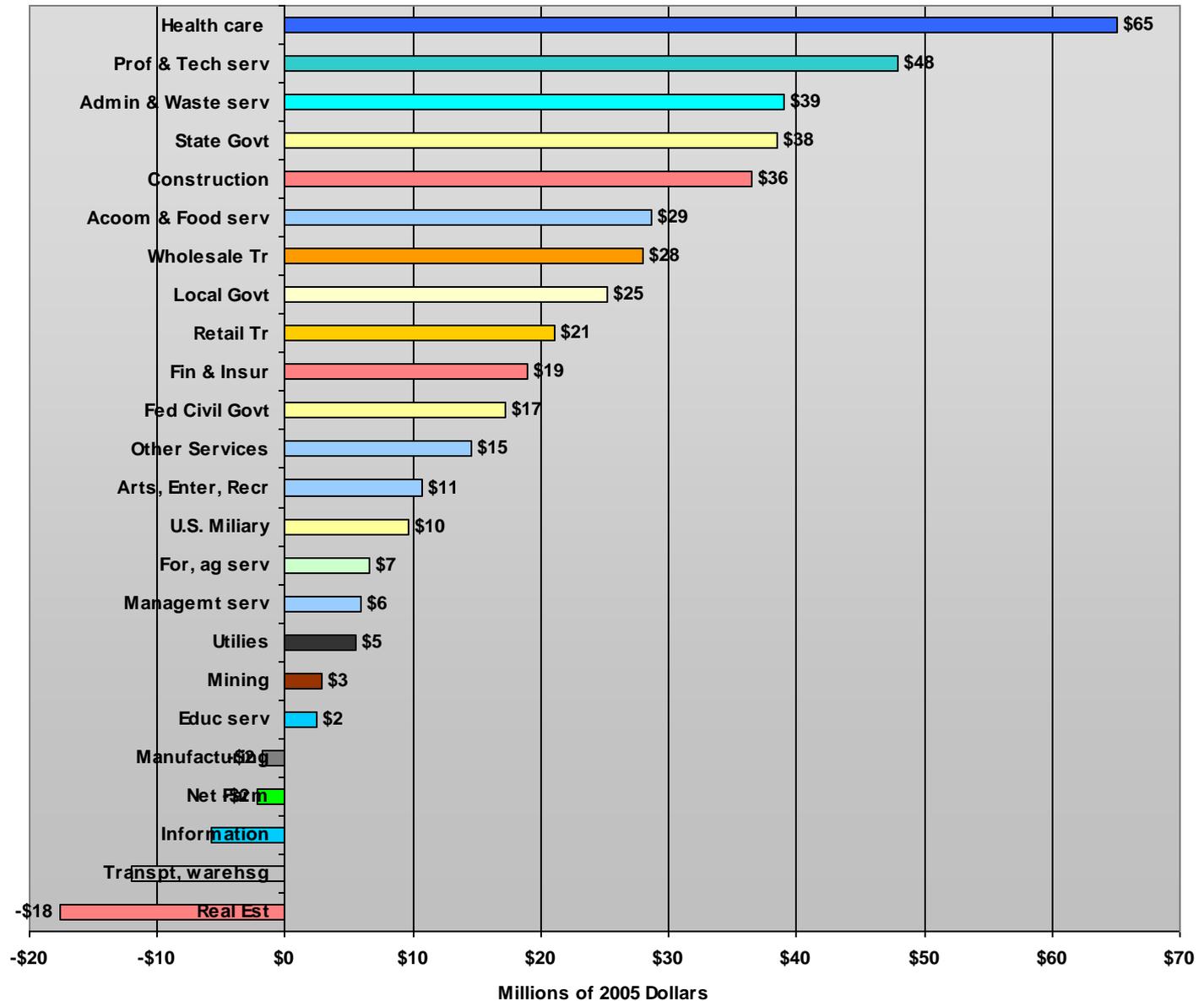


## Recent Growth in Sector Labor Earnings in Missoula Co.

Over the 6-year period from 2001 to 2007, labor earnings in health care services led all sectors of the Missoula economy, increasing by \$65 million, adjusted for inflation.

Professional and technical services – engineers and architects, accountants, lawyers, computer technicians, etc. - grew by \$48 million followed by growth in Administrative and waste services and State government, which includes the University of Montana. Construction grew by \$36 million. All of the sectors in some type of “blue” are services. Govt. sectors are shown in yellow.

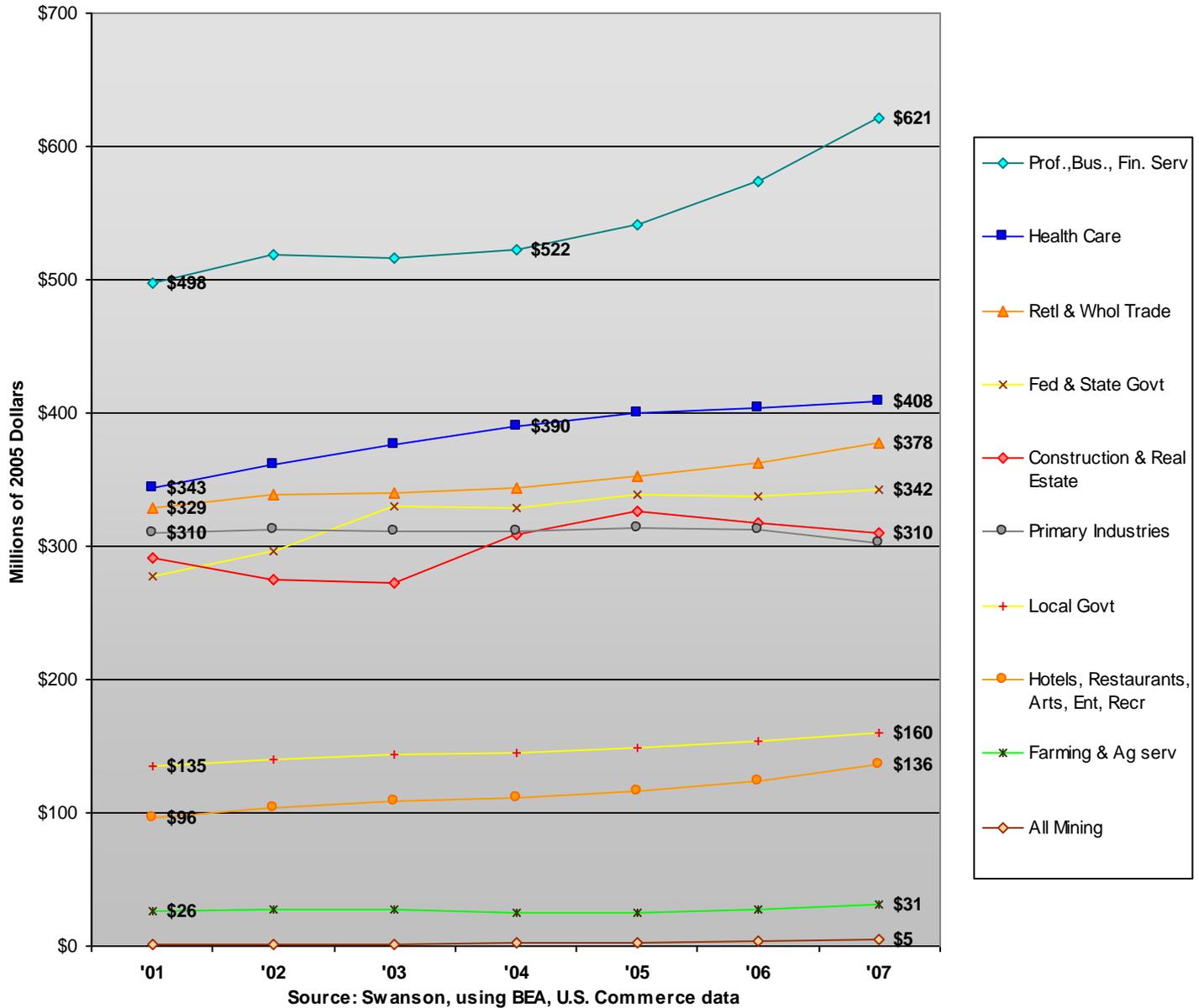
NAICS Sector Labor Earnings Growth, 2001-07, Missoula Co.



# Major “Segments” of the Missoula Economy

Using NAICS sectors, the Missoula economy is further examined by combining these in some cases into more meaningful “segments”. Professional and technical services are joined with Finance and insurance, Administrative and waste services, Management services, Information services, and other business services. Retail and Wholesale trade are joined. Hotels and other lodging are joined with restaurants and arts and entertainment services. Construction is joined with Real Estate. And Manufacturing is joined with Utilities and Transportation services to create the “Primary Industries” segment.

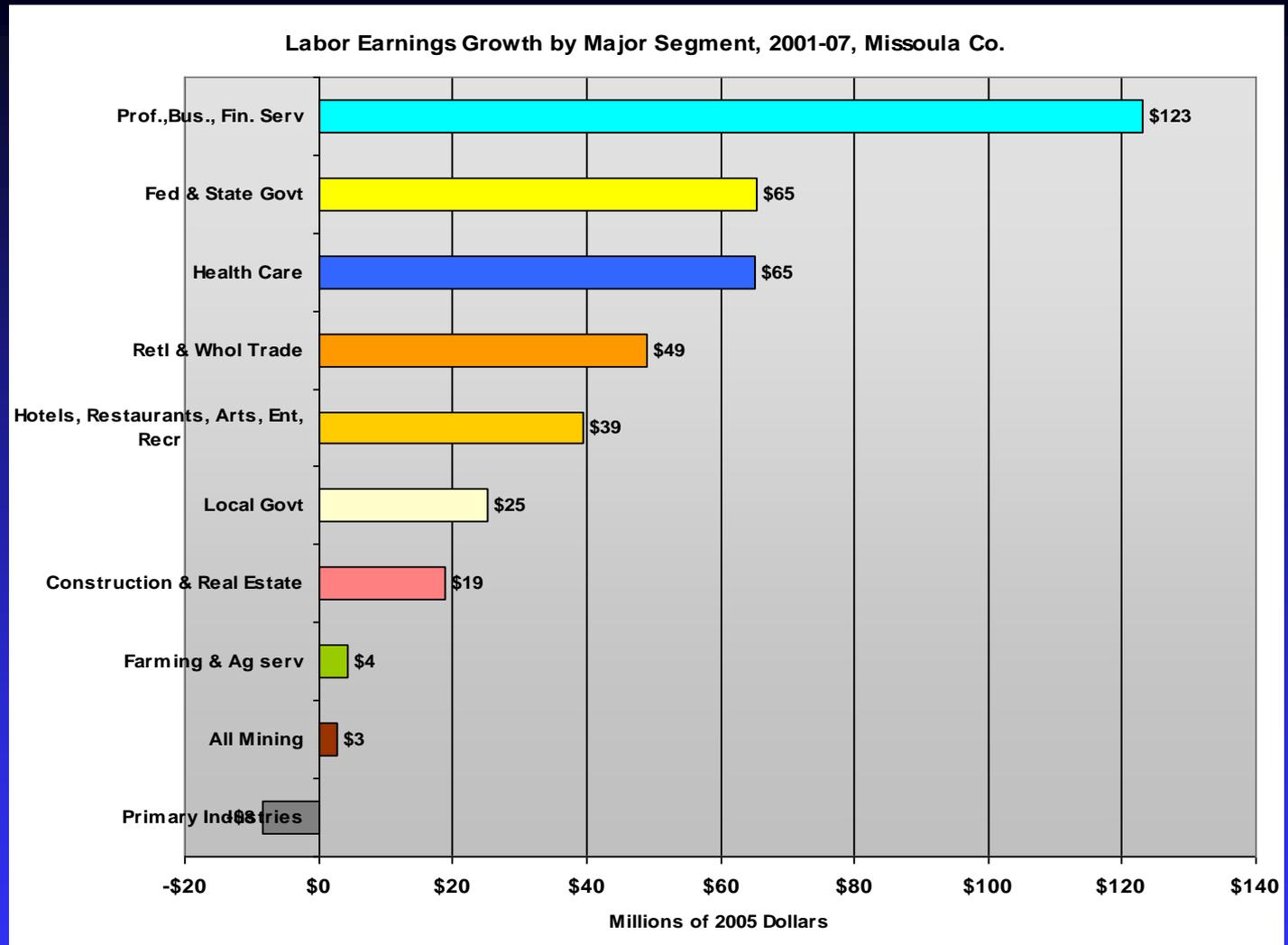
Major Segments of the Missoula County Economy, 2001-07



## Recent Growth in the Missoula Economy by Major Segment

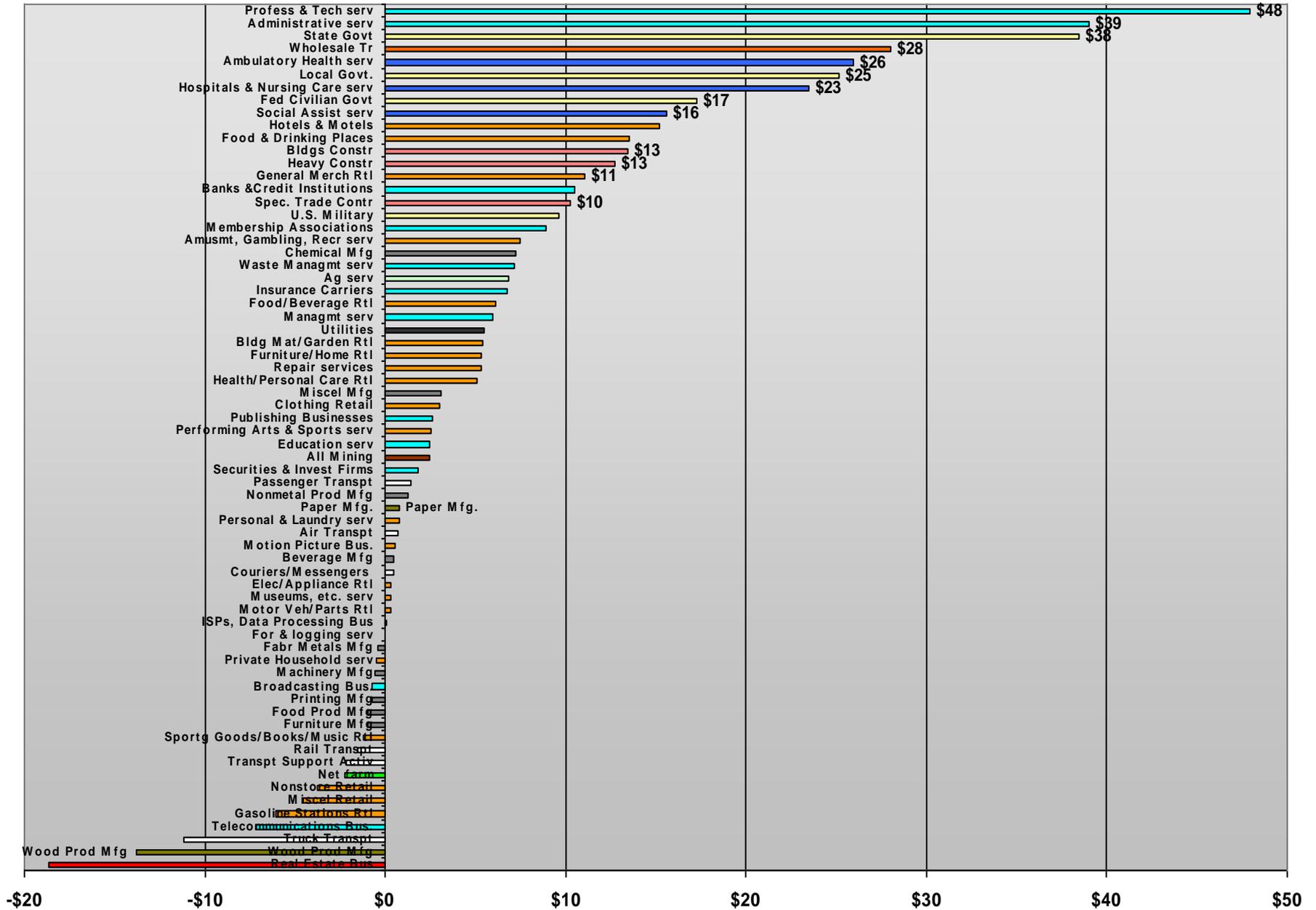
The chart at the right shows growth in labor earnings by each major segment of the Missoula economy between 2001 and 2007. The greatest growth by far is in Professional, Business, and Financial services – which grew by \$123 million over the 6-year period.

The segment composed of all Federal and State government offices in Missoula grew by \$65 million during this period, as did Health care services. These were followed by Retail and Wholesale trade at \$49 million and by Hotels, Restaurants, Arts, Entertainment, and Recreation – up by \$39 million.

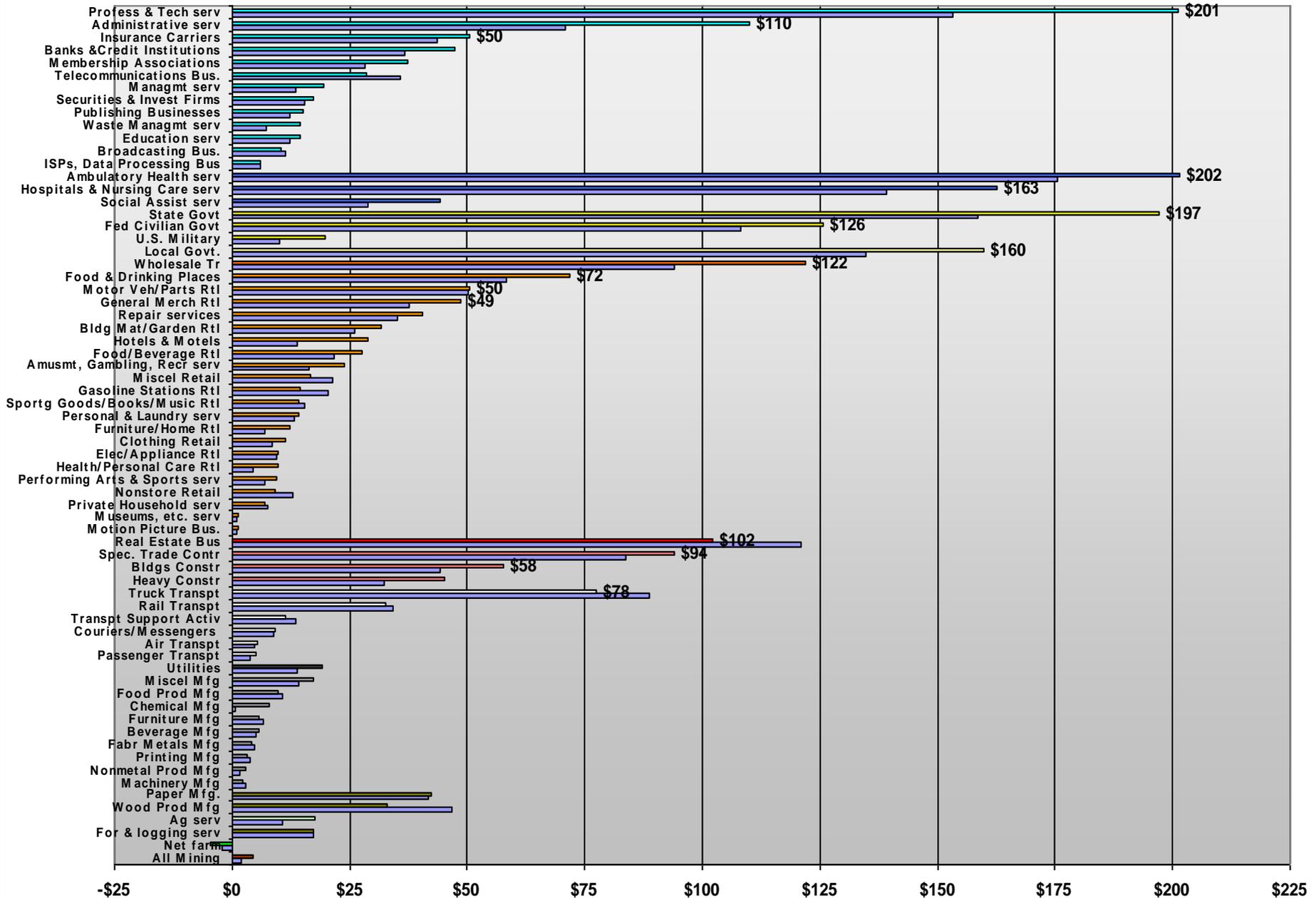


If these figures mean anything, they tell us that Missoula's recent growth is tied to its growing prowess at a center of business, finance, and professional and technical services. It also is a center of government, home to both the University of Montana and the regional office of the U.S. Forest Service. It is a growing health care center, with two large hospitals. It is a growing center of trade, both retail and wholesale. And it is a growing center of arts, entertainment, and recreation, with some of this tied to tourism. We can see this by breaking down these segments of the economy into their important "sub-sectors".

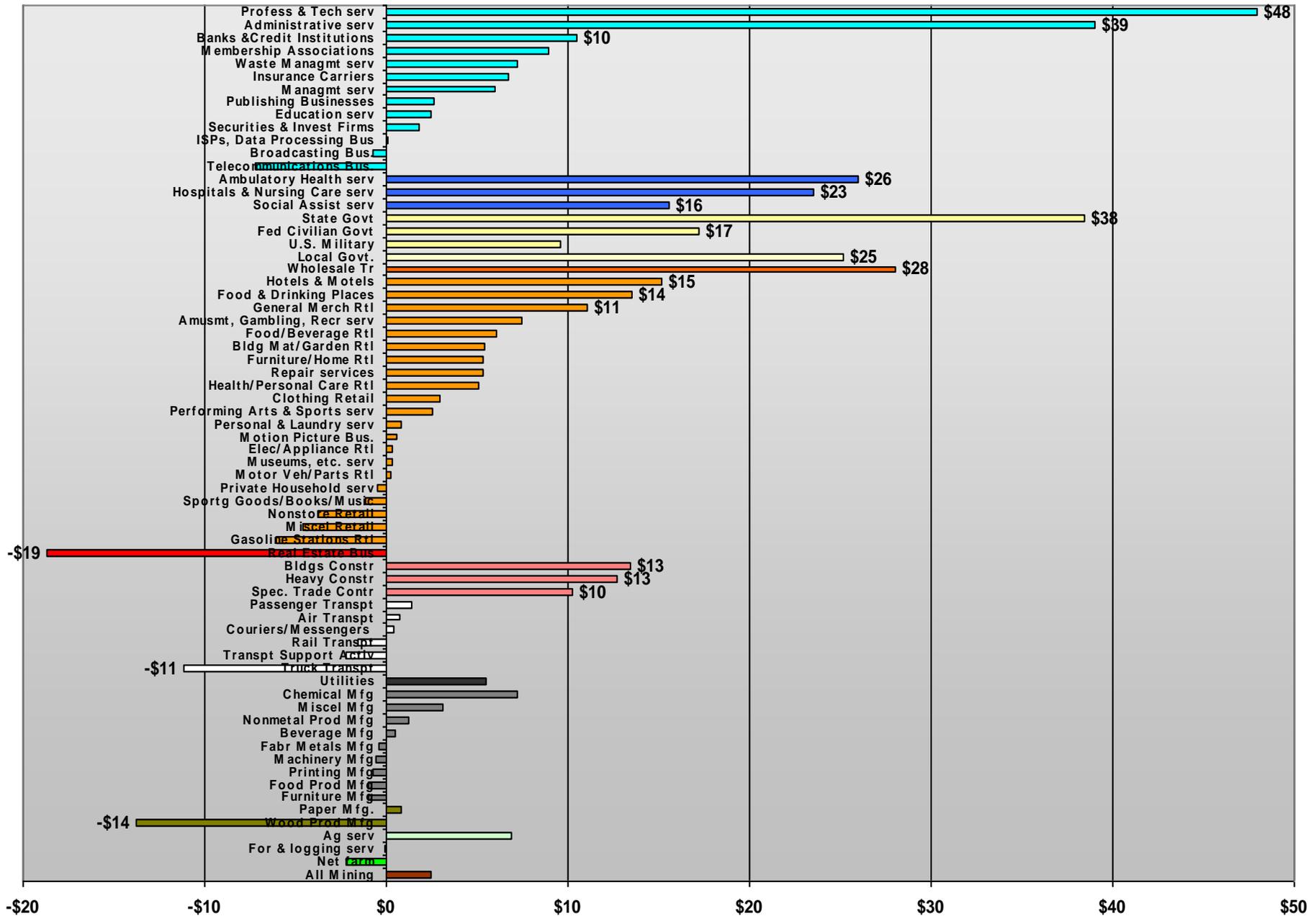
Sub-sectors of the Missoula Economy by Growth, 2001-07 (Mil. of 2005\$)



Missoula Economic Sub-sectors by Major Grouping, 2001 & 2007 (Millions of 2005 dollars)



Sub-sector Growth by Major Grouping in Missoula, 2001-07 (Mil. of 2005 dollars)



# Recent Employment Projections for the U.S., 2008 – 2018

*Slower population growth and a decreasing overall labor force participation rate are expected to contribute to a slowdown in labor force growth. The labor force is projected to grow by 8.2% for 2008-18 versus 12.1% for 1998- 2008.*

*Projected employment growth will be concentrated in the “service-producing” sector, continuing a long-term shift from the goods-producing sector of the economy. For 2008-18, service-producing industries are projected to add 14.6 million jobs – 96% of the projected increase.*

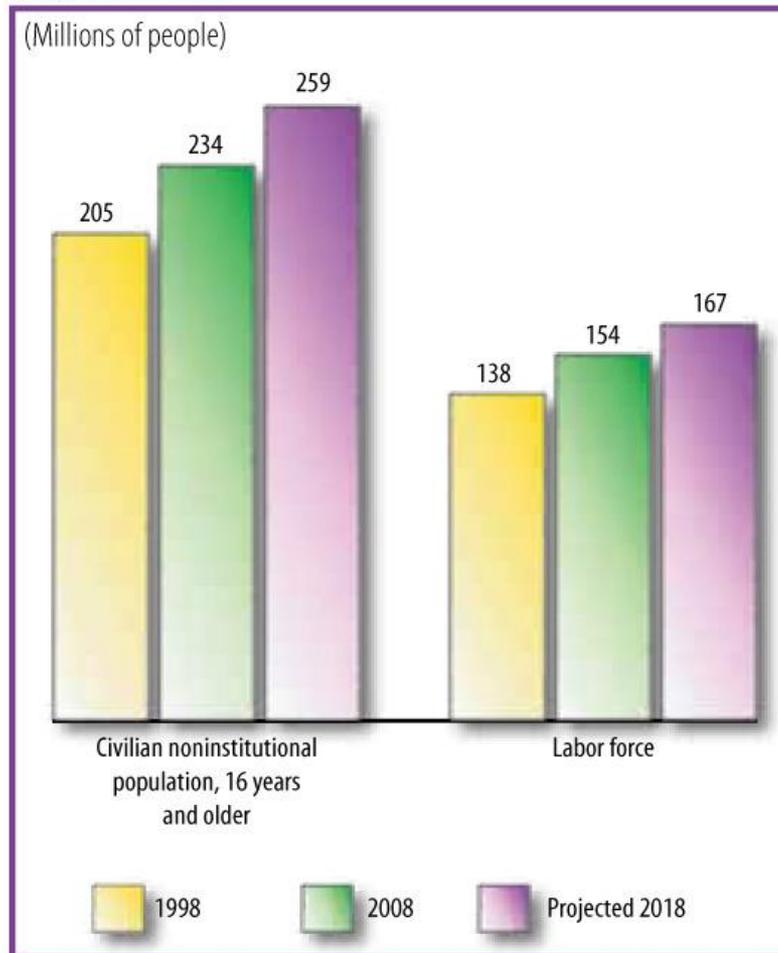
*The two industries projected to have the largest increases are: Professional and Business Services, and Health Care Services ... together adding over 8 million new jobs, over half of all new jobs in the U.S. economy.*

*At a more detailed level, 3 of the 10 detailed industries projected to have the largest job increases are in Professional and Business Services, including: management, scientific, and technical consulting; computer systems design; and employment services.*

*Four of the top 10 are in Health Care Services, including: physicians’ offices, home health care, services for the elderly and persons with disabilities, and nursing care facilities.*

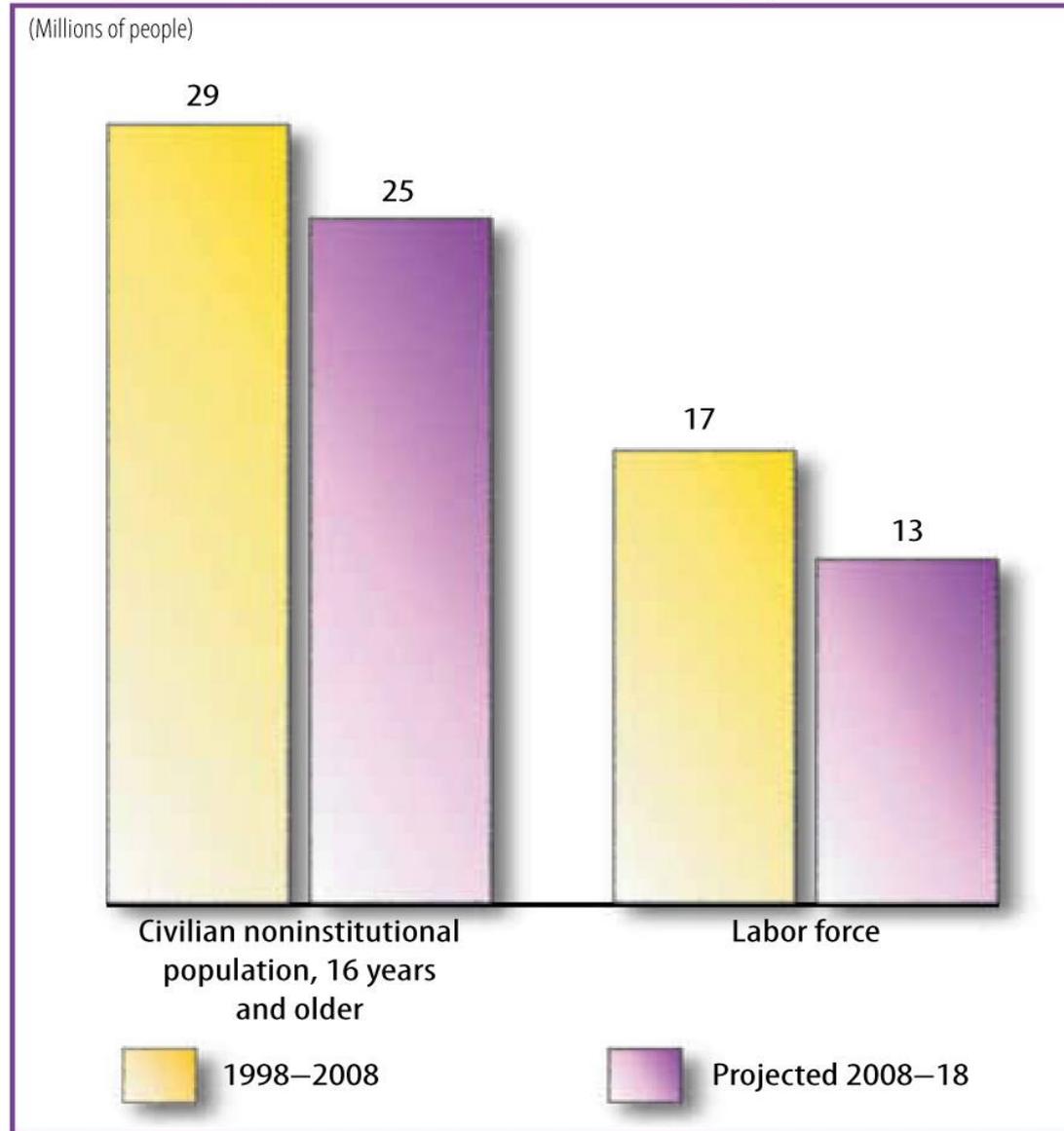
*Of the 10 detailed industries projected to have the largest declines, 4 are in manufacturing. But the one with the single largest decline in jobs is “department stores”.*

## Population and labor force, 1998, 2008, and projected 2018



Both the population and the labor force are projected to continue growing slowly. By 2018, the number of people working or looking for work is expected to reach about 167 million. That number excludes people who are active-duty members of the U.S. Armed Forces, are in institutions, or are younger than 16 years of age.

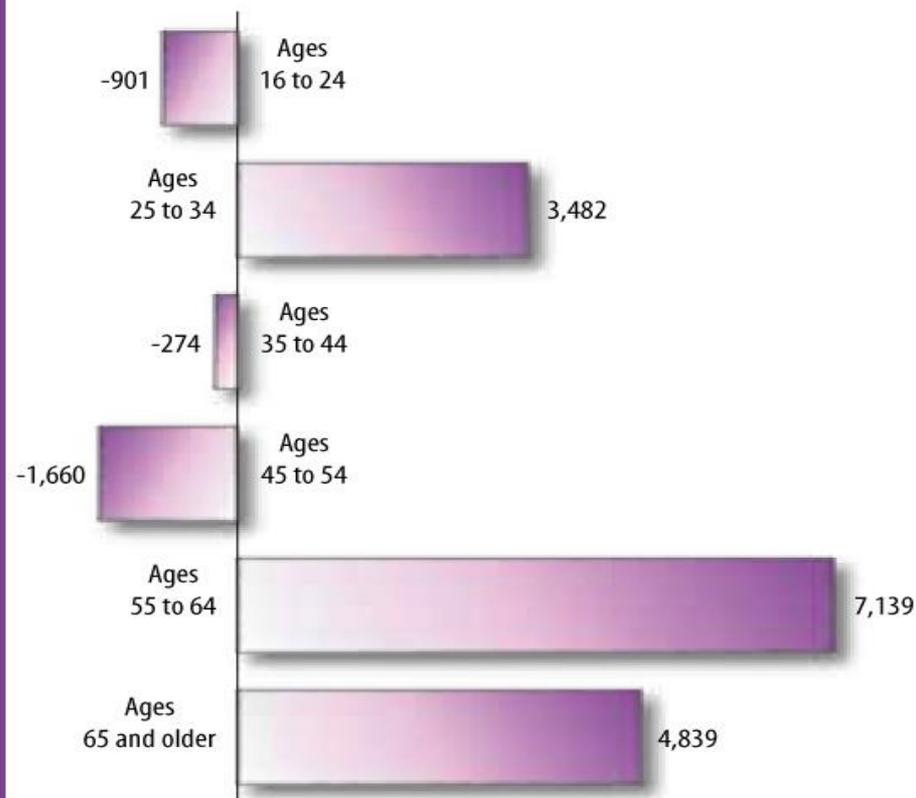
## Numeric growth in population and labor force, 1998-2008 and projected 2008-18



Between 2008 and 2018, both the population and the labor force are expected to grow less than they did during the previous decade.

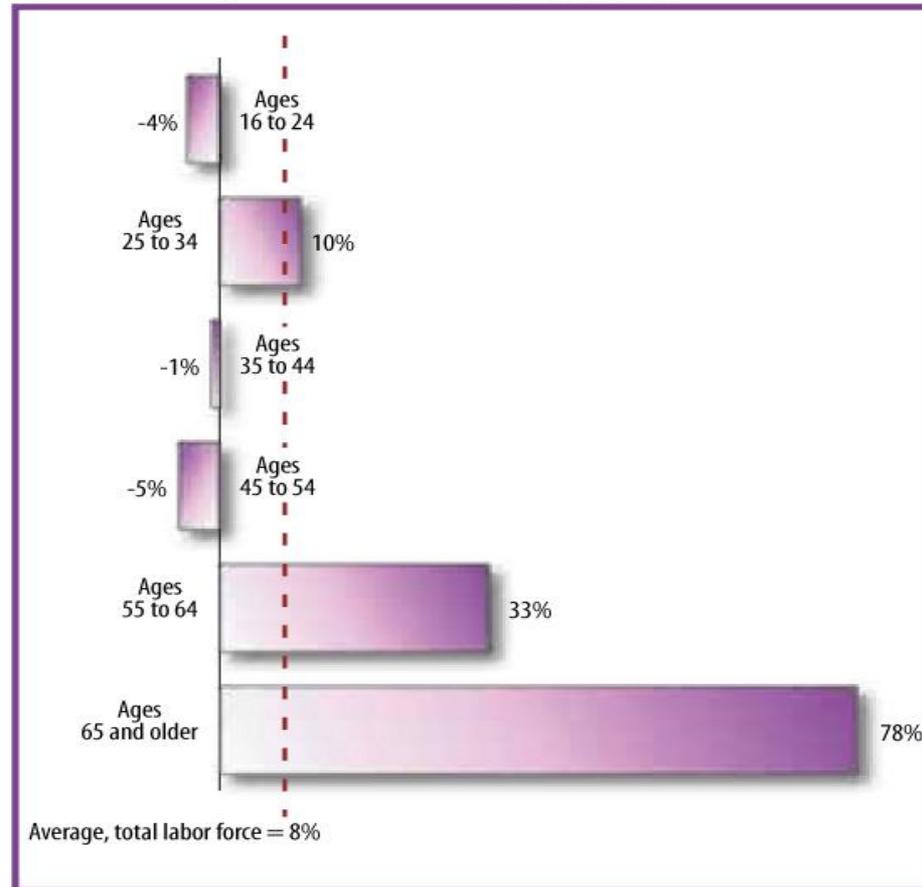
## Numeric change in labor force by age, projected 2008–18

(Thousands of people)



The baby-boom generation—those born between 1946 and 1964—is expected to remain in the labor force longer than previous generations. As this group ages, the number of people in the labor force aged 55 to 64 is expected to increase by more than 7 million during the projections decade, and the number of people aged 65 and older is projected to increase by almost 5 million. The numbers of 45- to 54-year-olds and 35- to 44-year-olds are expected to shrink as baby boomers age and shift into older groups.

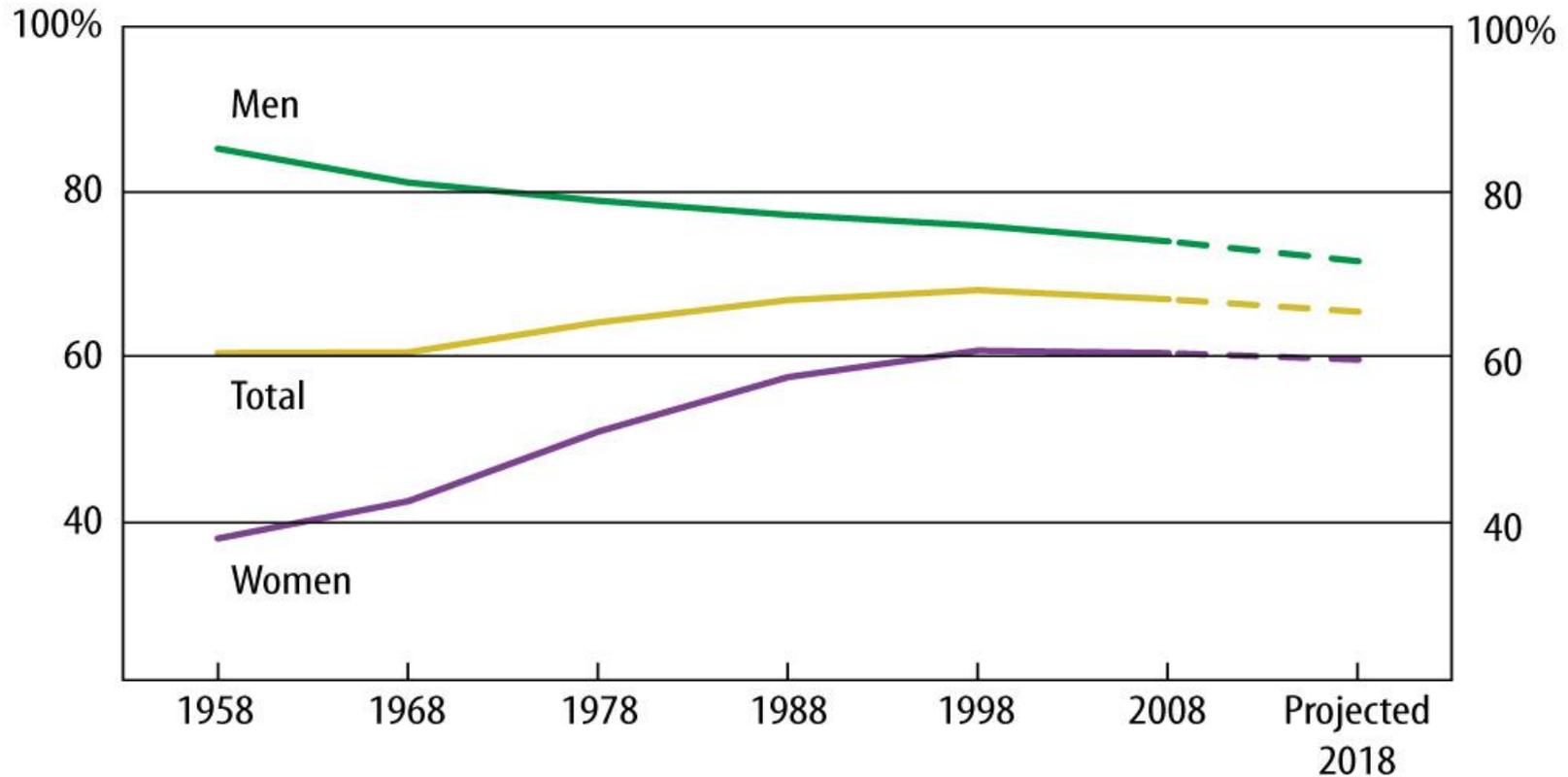
## Percent change in labor force by age, projected 2008–18



Thanks to advances in medicine, people now enjoy better health as they age and, as a result, are able to remain in the labor force longer than workers in previous generations did. And a variety of economic factors—an increase in the Social Security eligibility age, for example—create incentives for people to keep working. Because of such factors, the number of people in the labor force aged 65 and older is expected to grow about 10 times faster than the total labor force.

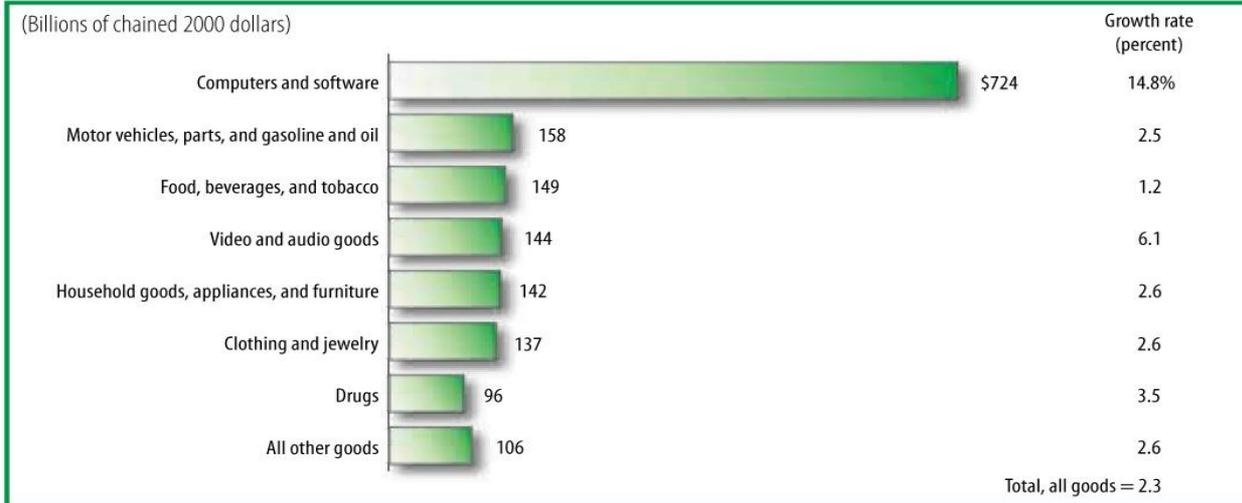
## Labor force participation rates for men and women, 1958–2008 and projected 2018

(Percent of people in the labor force)



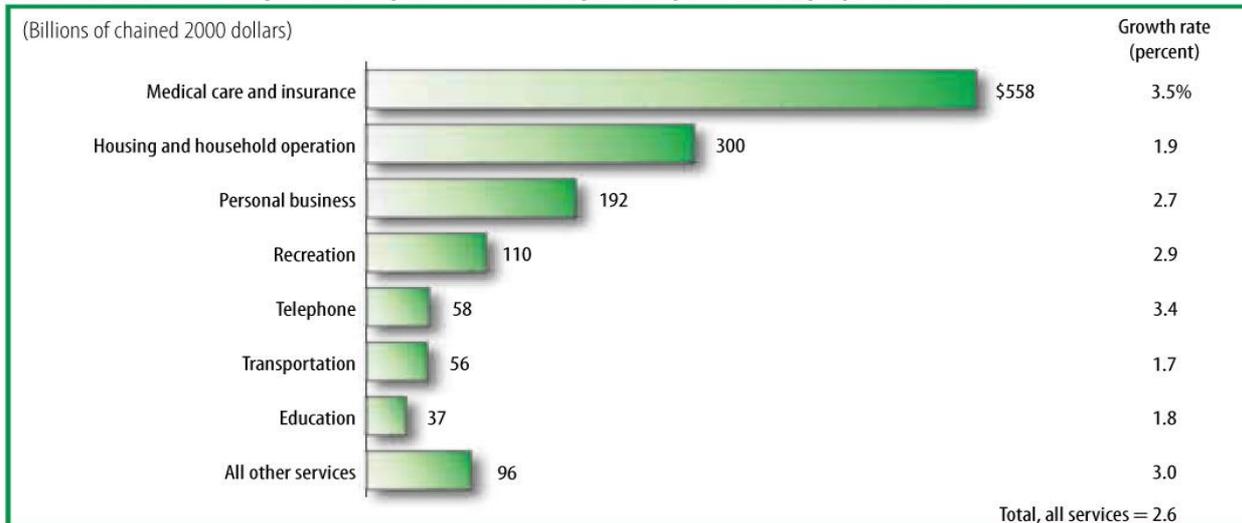
The labor force participation rates for both men and women are expected to decline slightly over the projections decade. By 2018, about 71 percent of men and 59 percent of women are expected to be in the labor force.

## Growth in goods components of personal consumption expenditures, projected 2008–18



Of all goods components, computers and software expenditures are expected to have the largest and the fastest growth. Contributing to this growth will be the continued expansion of the Internet and ongoing development of mobile technologies.

## Growth in services components of personal consumption expenditures, projected 2008–18



Of the services components, spending on medical care and insurance is expected to have the largest and fastest growth as the population ages.

# Major Sectors of the Economy

## Goods Producing vs. Services Producing

### Goods-producing Sectors:

**Construction** – construction companies, electrical contractors, other special trade contractors, etc.

**Manufacturing** – manufacturing of all types of goods

**Natural resources & mining** – farms and ranches, oil and gas extraction, other mining, etc.

### Services-producing Sectors:

**Educational services** – local, state, and private schools and other education providers

**Financial activities** – firms providing financial, and insurance services, and real estate and rental services

**Health care & social assistance** – public and private providers of health care including hospitals, doctors' offices, and assisted living facilities

**Information services** – print, software, and data publishing firms; movie, video, and sound production and distribution; broadcasting and telecommunications providers; and information and data processing firms

**Leisure & hospitality services** – hotels and other lodging, restaurants, sports teams, theme parks, performing arts, etc.

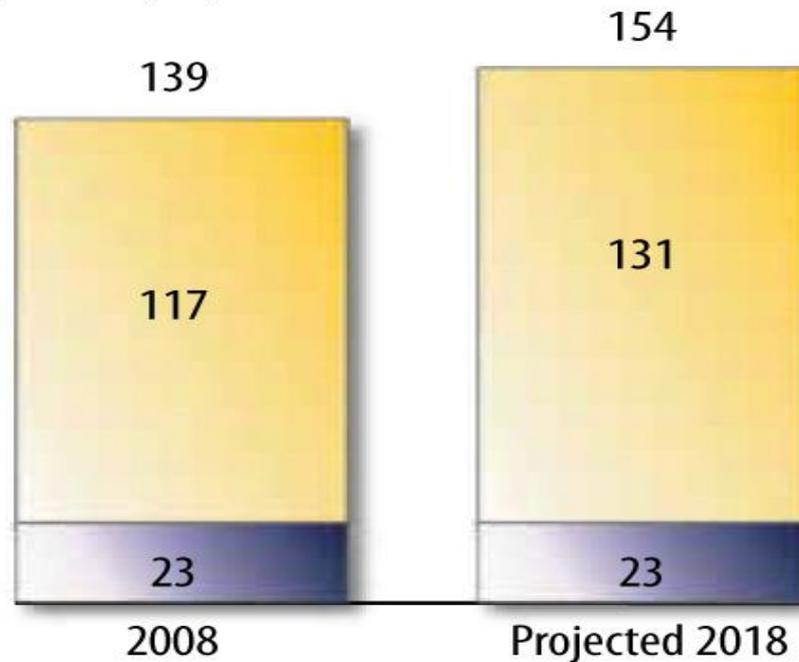
**Professional & business services** – consulting services, accountants, legal services, engineering, temporary help firms, etc.

**Public administration** – government establishments (federal, state, local) administering programs (except education & health)

**Trade, transportation & utilities** – wholesale and retail trade establishments, airports, messenger services, power plants, etc.

## Wage and salary employment by industry type, 2008 and projected 2018

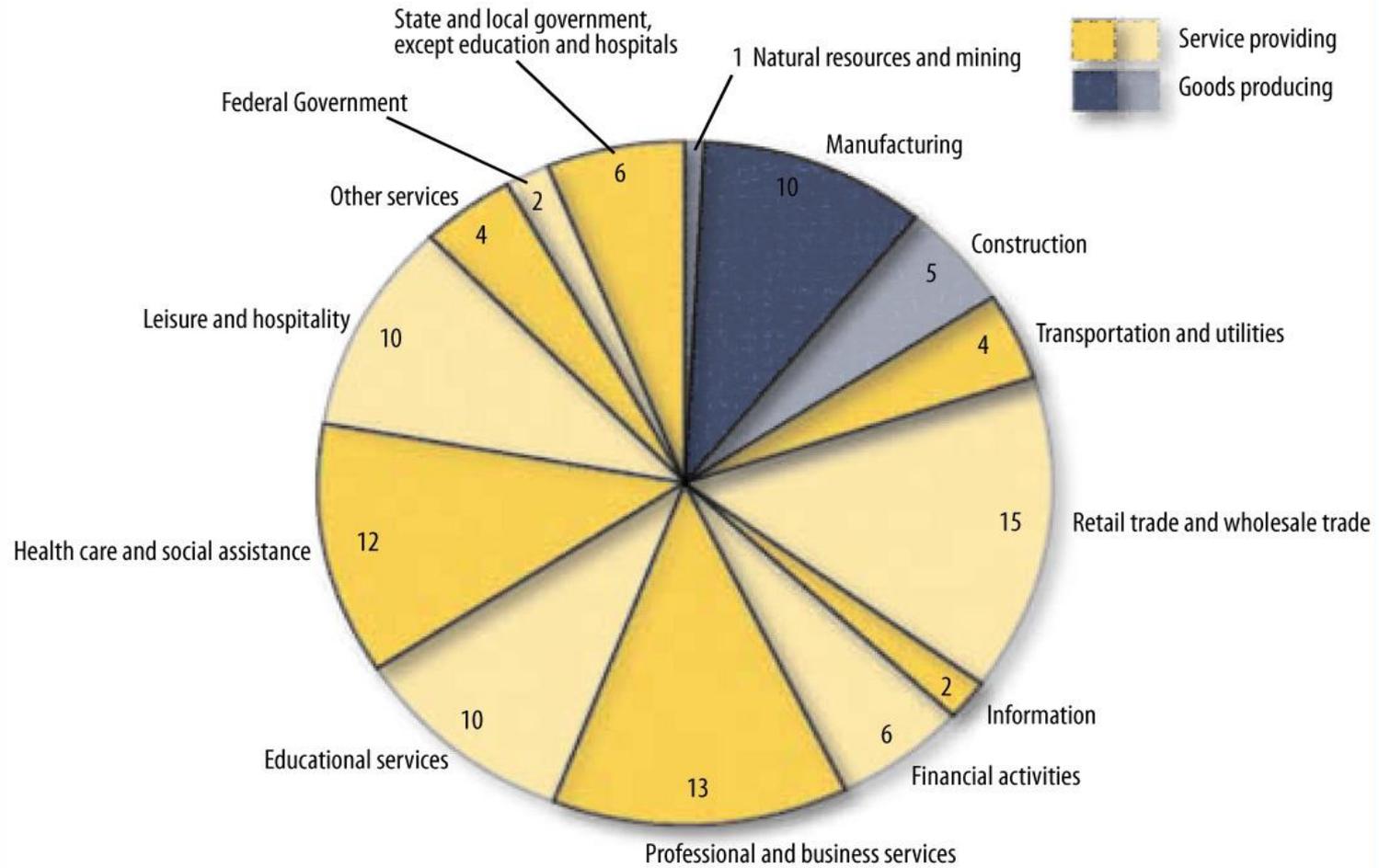
(Millions of jobs)



-  Service providing
-  Goods producing

Service-providing industries are projected to account for the most job growth between 2008 and 2018. In goods-producing industries, employment is projected to stay about the same over the decade.

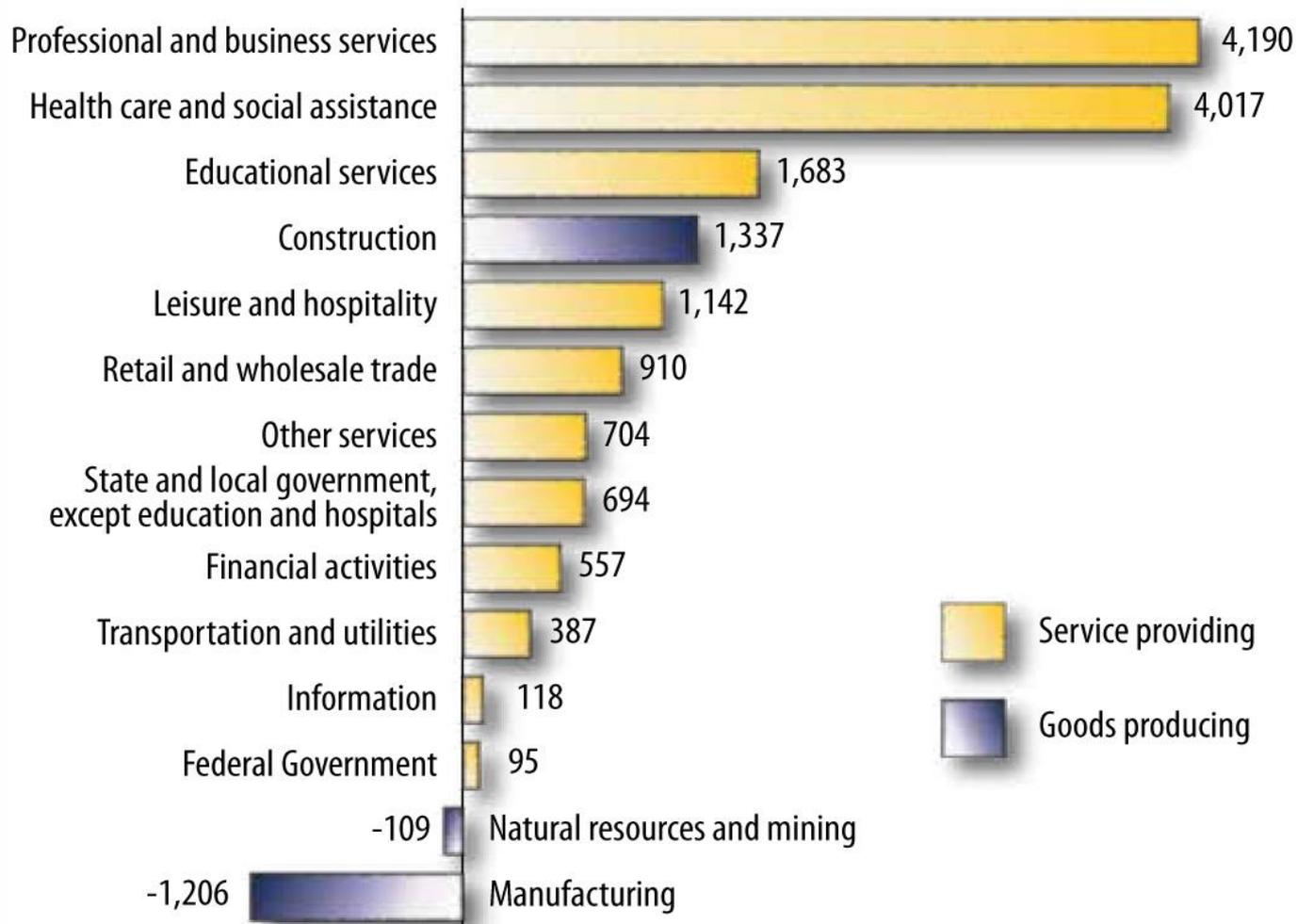
Percent distribution of wage and salary employment by industry sector, 2008



In 2008, about 15 percent of jobs were in retail and wholesale trade establishments.

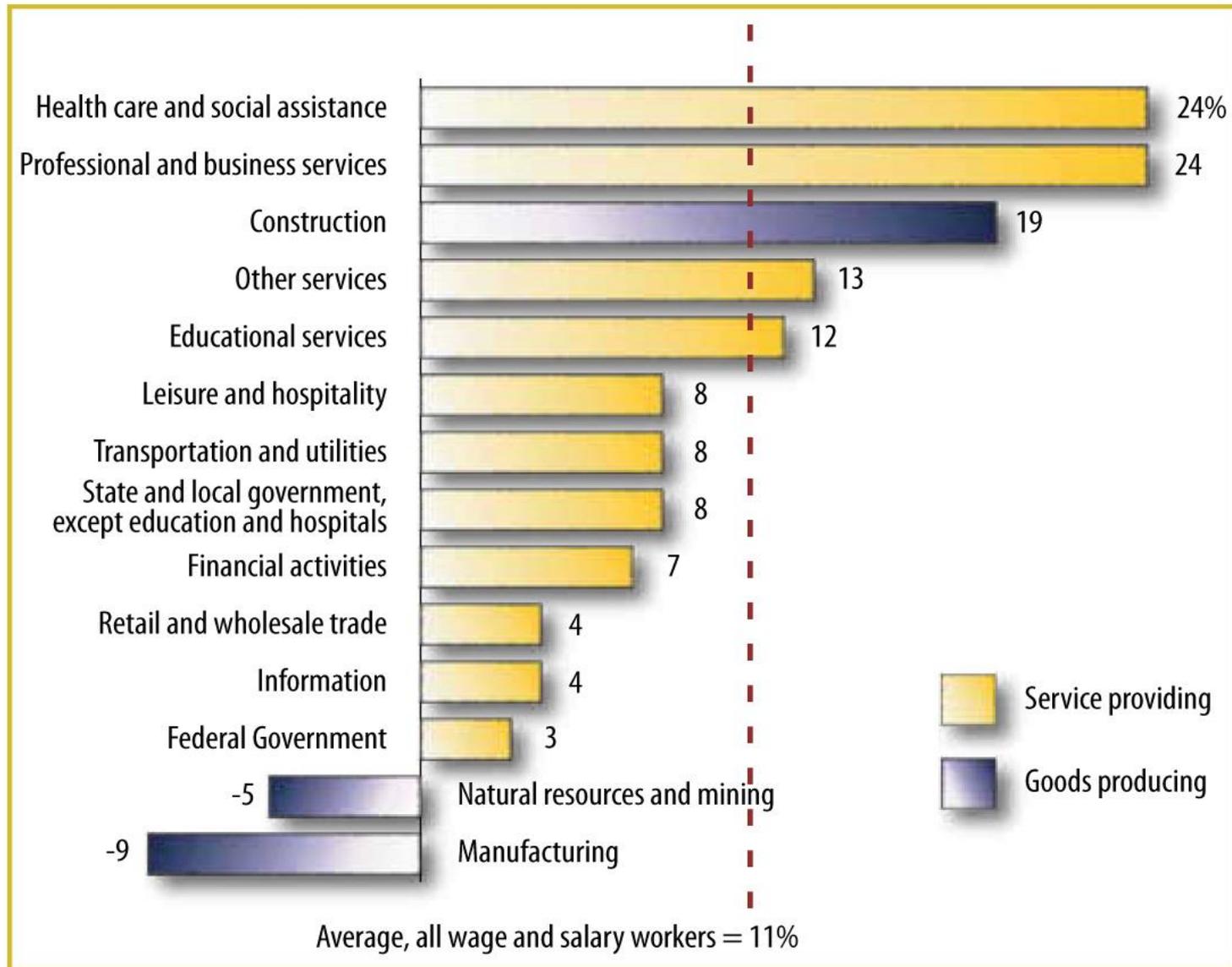
## Numeric change in employment of wage and salary workers by industry sector, projected 2008–18

(Thousands of jobs)



Employment is projected to increase by more than 4 million in both the professional and business services sector and the health care and social assistance sector. Growth in professional and business services is expected to be led by providers of administrative support services and consulting services. Growth in health care and social assistance is expected to be driven by increased demand from an aging population.

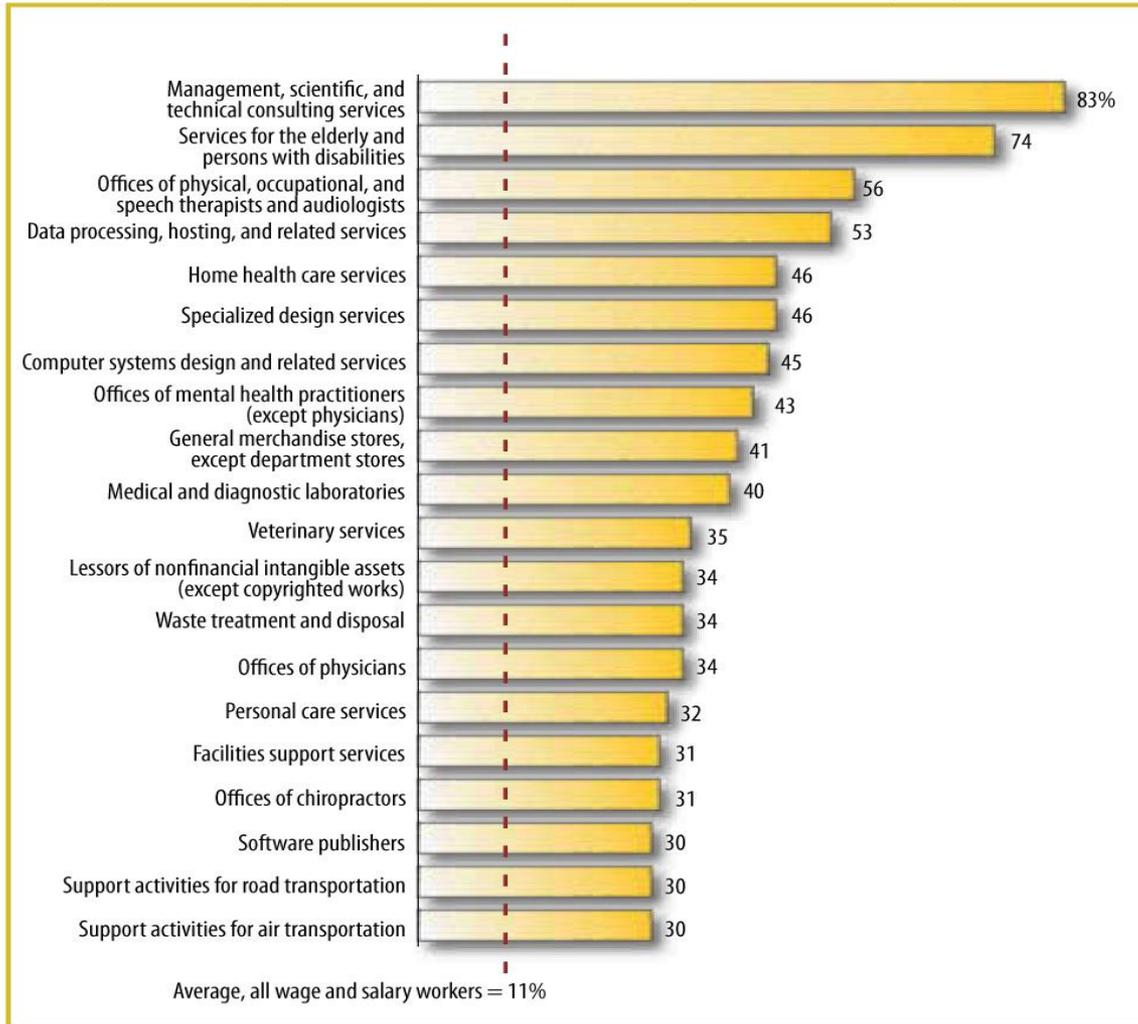
## Percent change in employment of wage and salary workers by industry sector, projected 2008–18



Both the health care and social assistance sector and the professional and business services sector are projected to grow more than twice as fast as the average for all industries between 2008 and 2018.

# Fastest growing industries

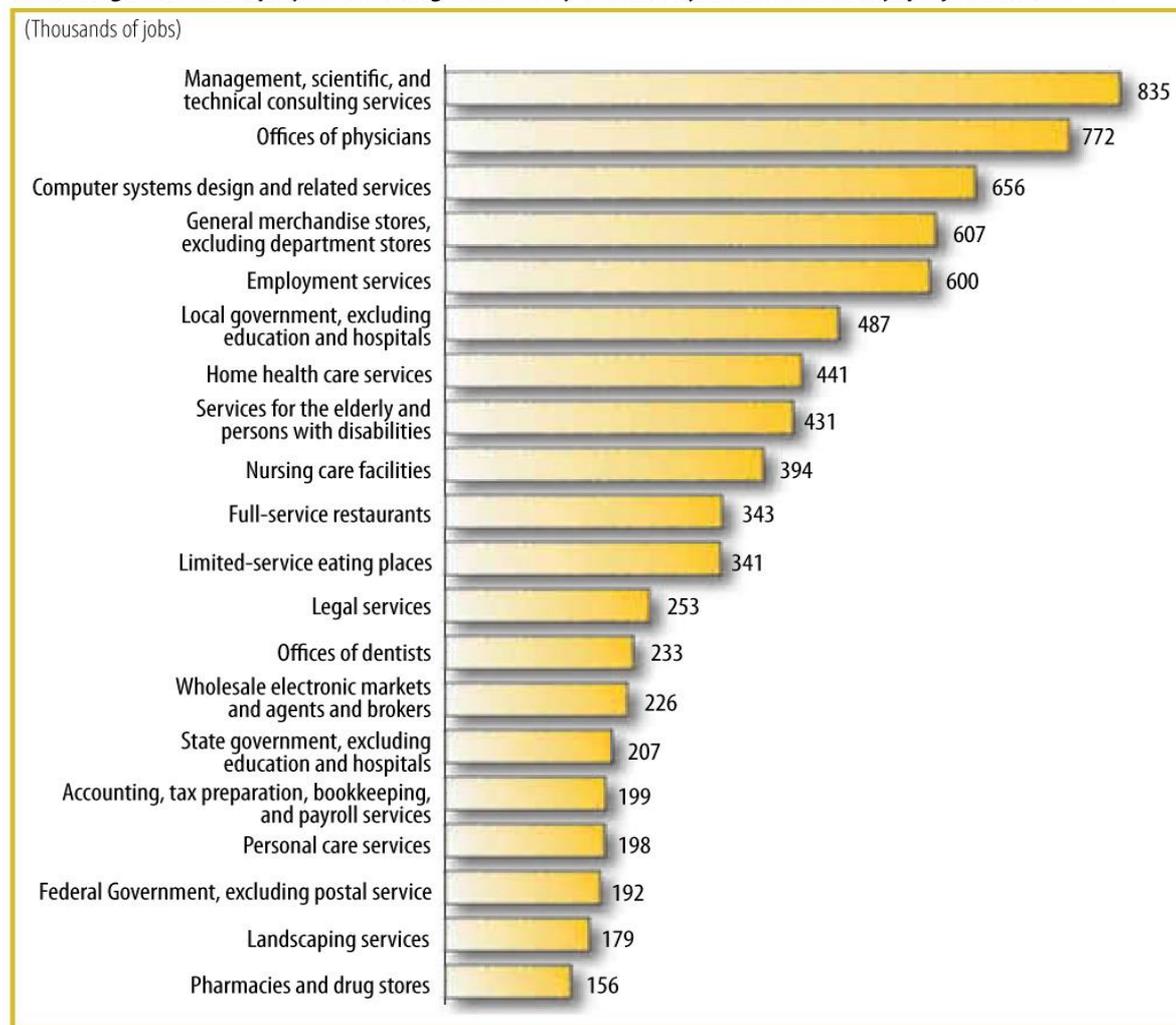
Percent growth in employment of wage and salary workers by detailed industry, projected 2008–18



As this and the next chart show, all of the detailed industries that are expected to have the fastest growth and the most gains in employment between 2008 and 2018 are service-providing ones. The management, scientific, and technical consulting services industry is projected to grow the fastest and to gain the most jobs. Firms in this industry help companies respond to globalization, technological changes, and other business challenges.

# Most new jobs

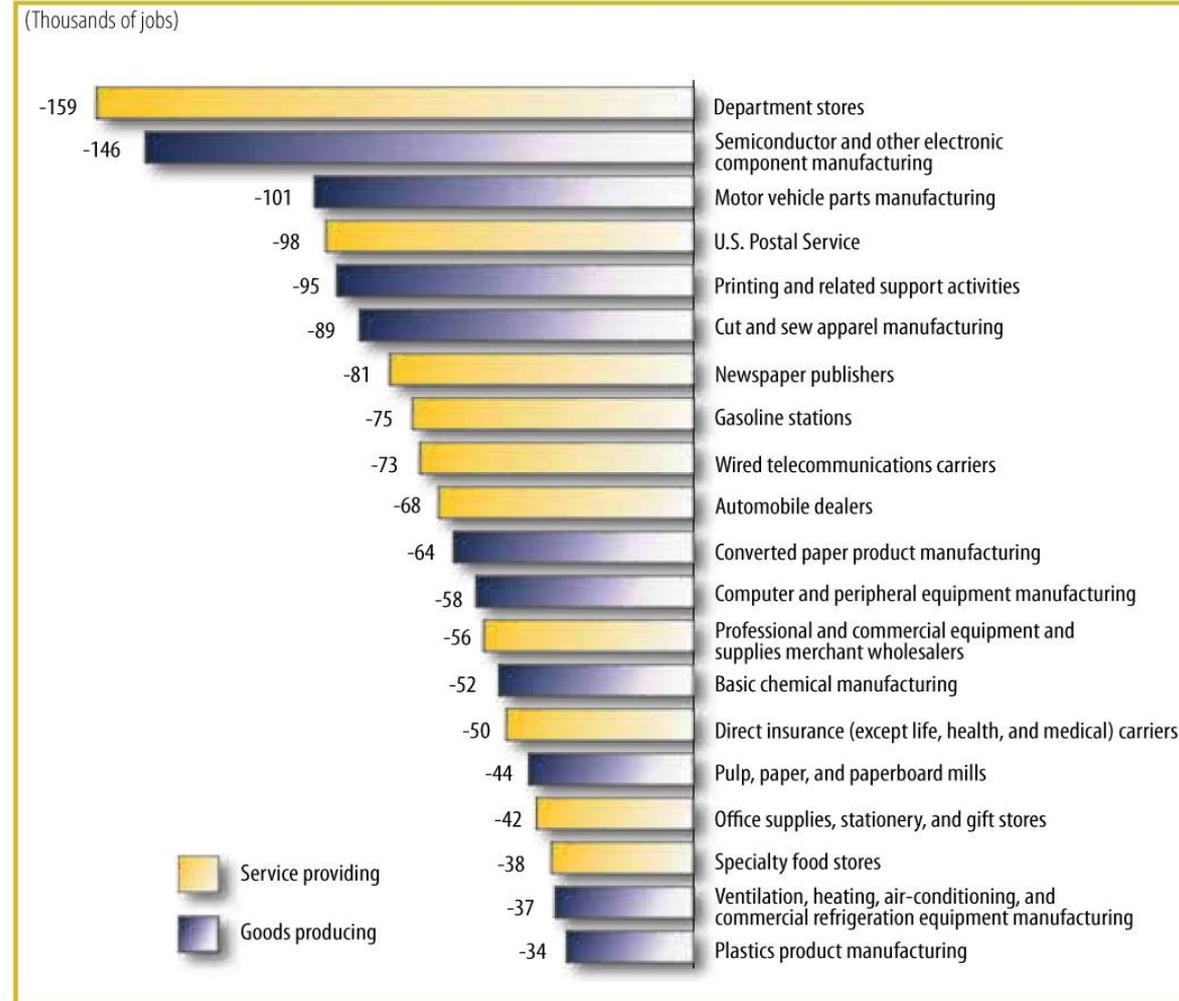
Numeric growth in employment of wage and salary workers by detailed industry, projected 2008–18



Of the 20 industries projected to gain the most jobs, 5 relate to health care. These industries are offices of physicians, home health care services, services for the elderly and persons with disabilities, nursing care facilities, and offices of dentists. The employment gains in these industries reflect an aging population's increasing demand for services.

# Most job losses

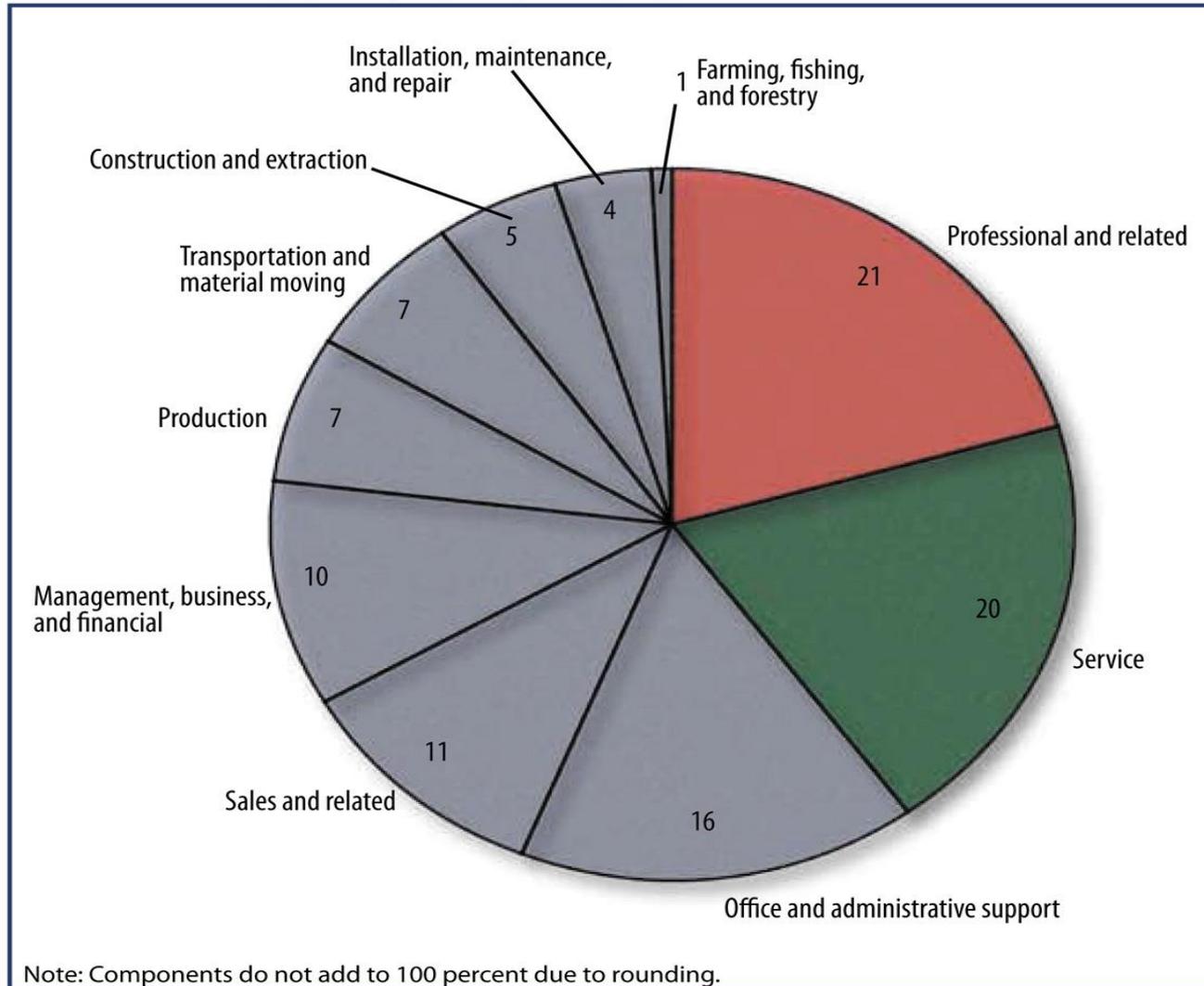
## Numeric decline in employment of wage and salary workers by detailed industry, projected 2008–18



Declines in industry employment are usually the result of falling demand for specific goods and services, increased imports that reduce domestic production, or the use of technology that increases worker productivity. Declining employment may lead to unfavorable job prospects, but the need to replace workers who leave an industry often creates some job openings.

# Employment, 2008

Percent distribution of employment by major occupational group, 2008



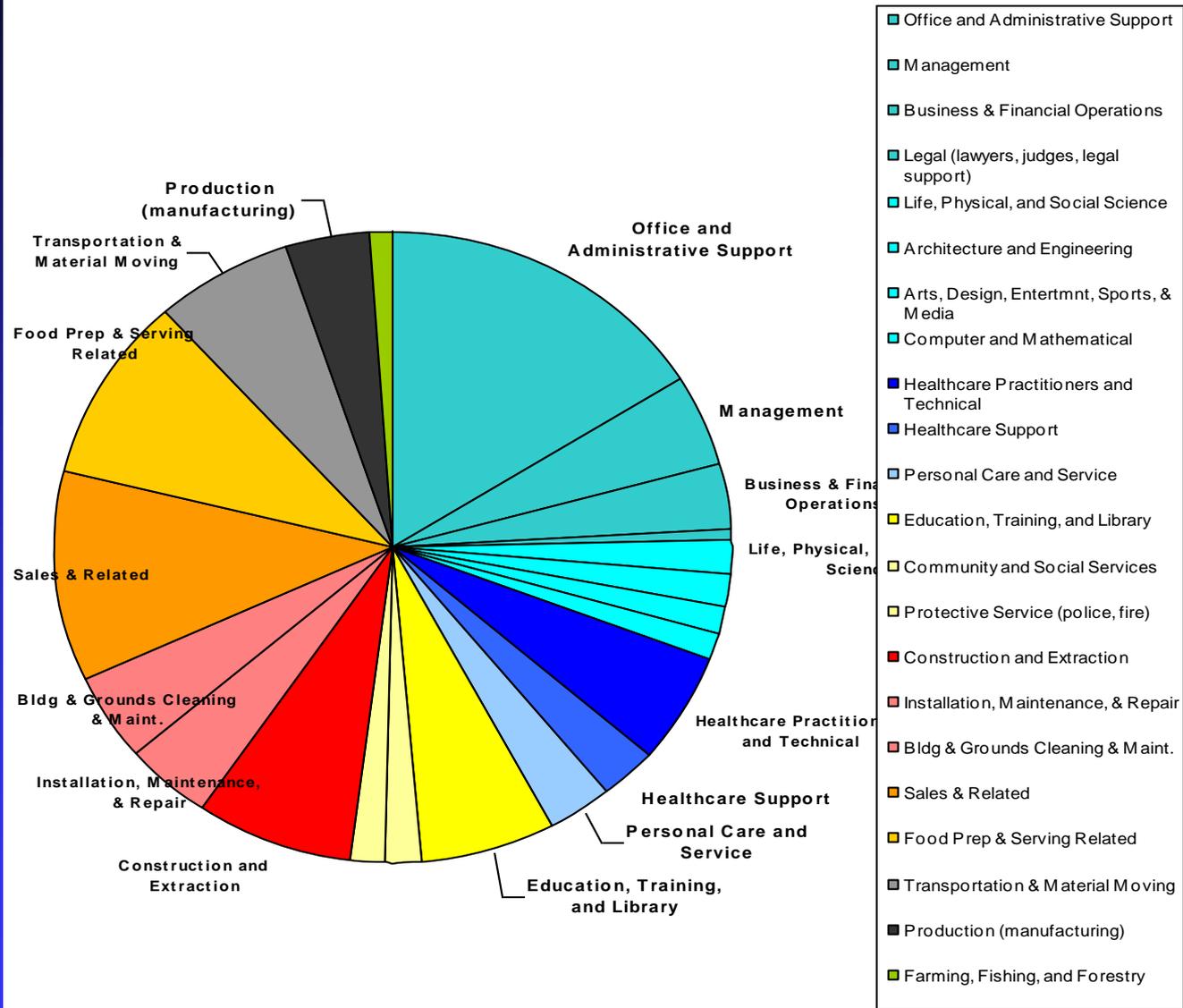
Occupations that have similar job duties are grouped according to the tasks that the workers in those occupations perform. Two major occupational groups—professional and related occupations and service occupations—accounted for almost half of total employment in 2008.

# Job Composition in Montana by Occupational Grouping, 2008

The pie chart shows the relative shares of all jobs in Montana accounted for by different occupational groupings, as estimated by the Montana Department of Labor and Industry for 2008. Occupational groupings are color-coded in the chart to reflect differing parts of the economy. Jobs in office administration, management, and business and financial services are shown in blue “teal”. Together they constitute the largest contributors to overall jobs in the economy.

Jobs in creative arts and sciences, broadly defined, are shown in bright “teal” (life scientist, engineers, artists, etc.). Ones related to health care are shown in blue. Ones in construction, building trades, and maintenance are shown in red and light red.

Shares of All Jobs by Major Occupational Category in Montana, 2008

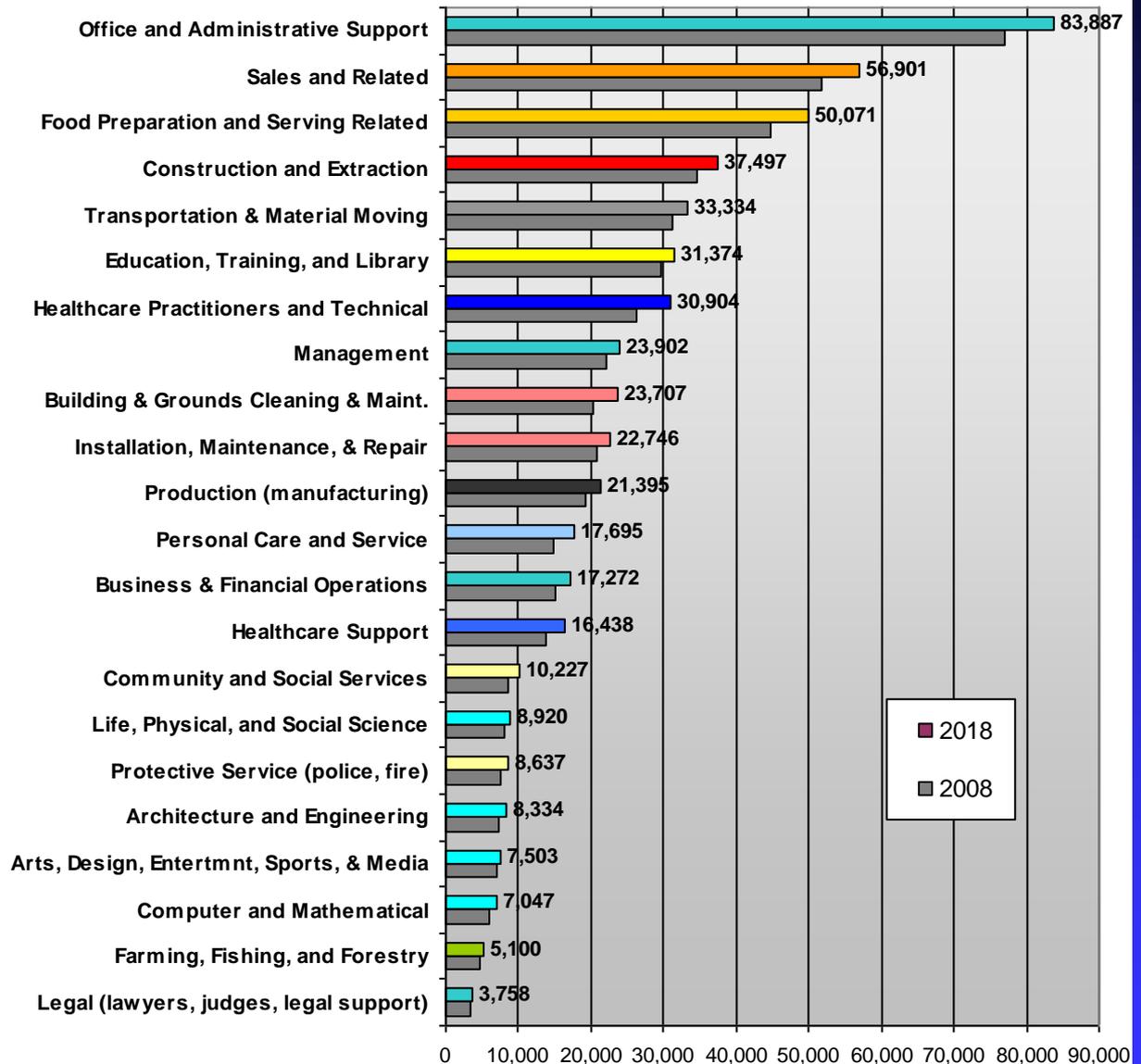


# Current & Projected Jobs in Montana by Occupational Grouping, 2008 vs. 2018

The number of jobs in Montana by “wage and salary establishments” totaled about 474,300 in 2008, according to estimates by the Montana Department of Labor and Industry. The Department recently estimated that these jobs would grow to about 526,600 over the next ten years, or by 2018. This would be an 11% increase in the total number of jobs.

The chart shows where these jobs are by major occupational category (22 major categories of occupational groupings). The largest number of jobs, now and projected, are in “office and administrative support” (office administrative, clerical, and operational personnel), 16% of all jobs. The 2<sup>nd</sup> largest category of jobs is “sales and jobs related to sales” (mainly retail and services trade workers), 11% of all jobs. Jobs in “food preparation and serving” represent 10% of all jobs.

Total Jobs, Current & Projected for Montana, 2008 & 2018



Source: Montana Dept. of Labor & Industry

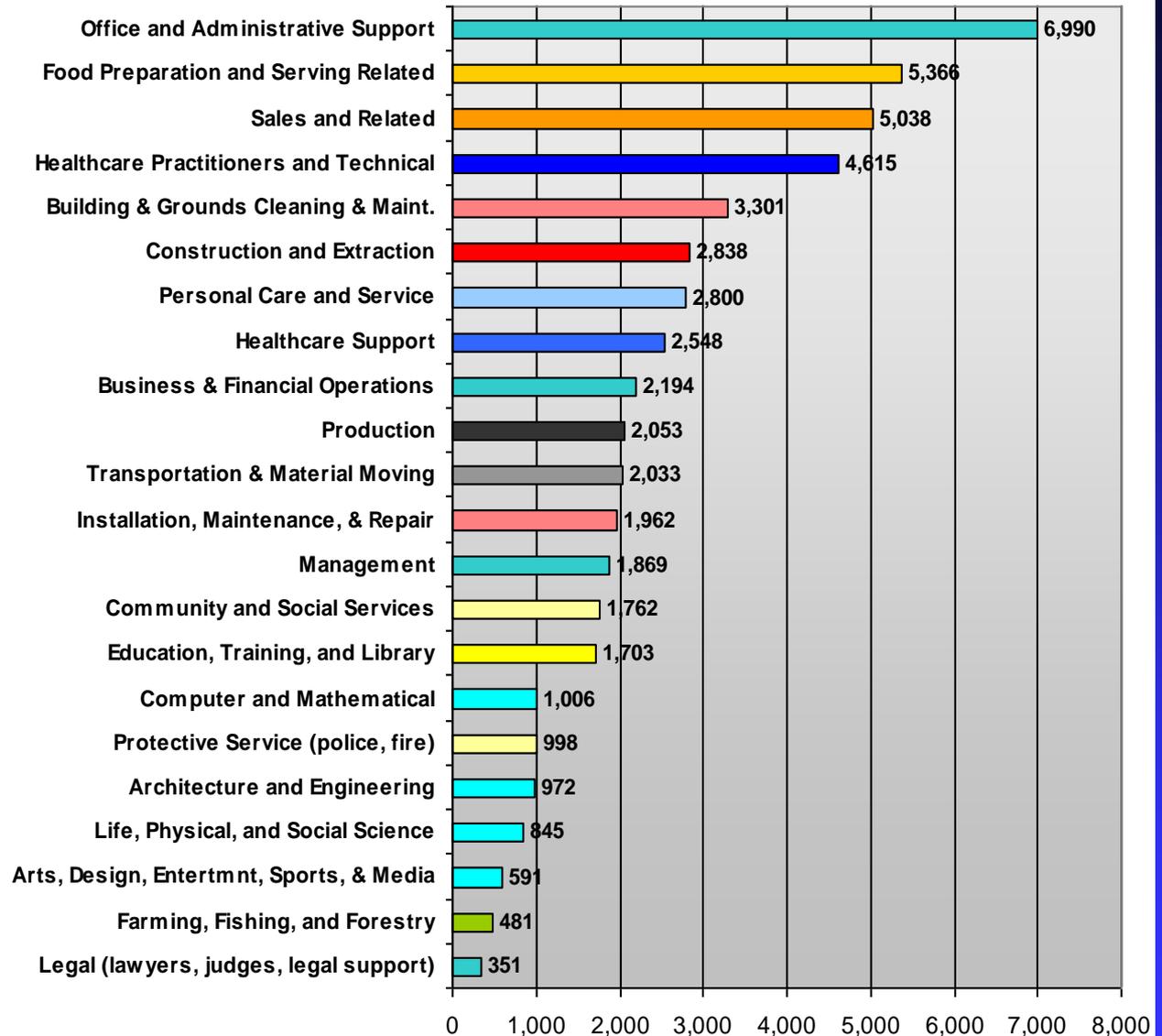
# Projected Job Growth in Montana Over the Next Ten Years, by Major Occupational Grouping

The chart shows projected growth in jobs in Montana by major occupational groupings, as estimated by the Montana Department of Labor.

The biggest increase in jobs will be in “office and administrative support”, which is currently the largest job provider in Montana. It will account for 13% of all new jobs. “Food preparation and serving” will account for 10% of all new jobs, as will “sales and related jobs”. “Healthcare practitioners and technical staff” will account for about 9% of new jobs. Together these four would account for about 42% of all new jobs in the Montana economy, under these projections.

Another third of all new jobs would come from the next seven categories, all with job growth exceeding 2000.

Projected Job Growth in MT by Major Occupational Area, 2008 - 2018



Source: Montana Dept. of Labor & Industry

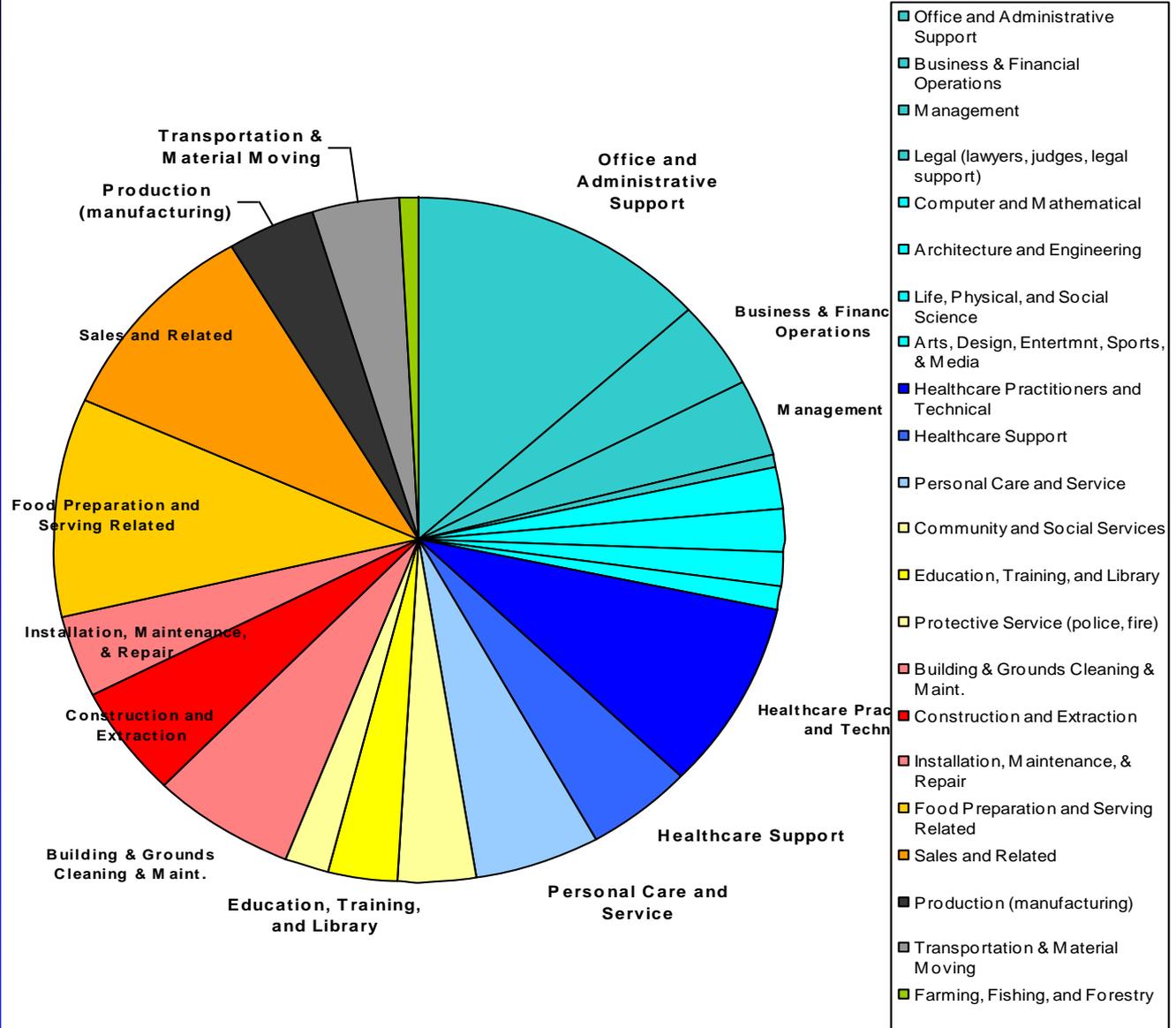
# Composition of Projected Job Growth in Montana, 2008-2018

The chart shows the expected composition or makeup of job growth in Montana by major occupational grouping or category, as estimated by the Montana Department of Labor and Industry.

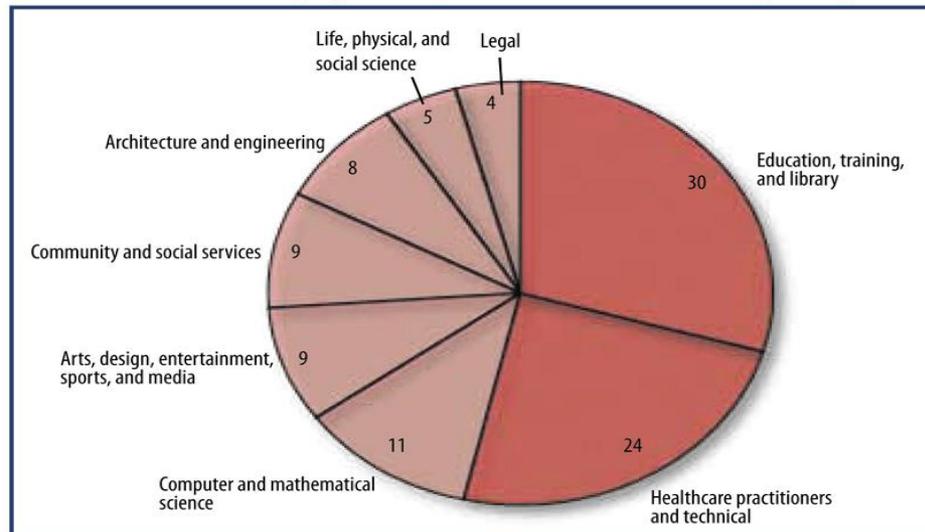
“Office and administrative support” accounts for 13% of all new jobs and along with “business and financial operations” (4%), “management”, and “legal”, accounts for 21% of all new jobs.

“Food preparation and serving” accounts for 10% of new jobs, 2<sup>nd</sup> only to office and administrative support. Job growth in “sales and related areas” has 10% of new jobs as well. Job growth in “healthcare practitioners” and “healthcare support” together account for 14% of new jobs.

Shares of All Job Growth in Montana by Major Occupational Category, 2008-2018

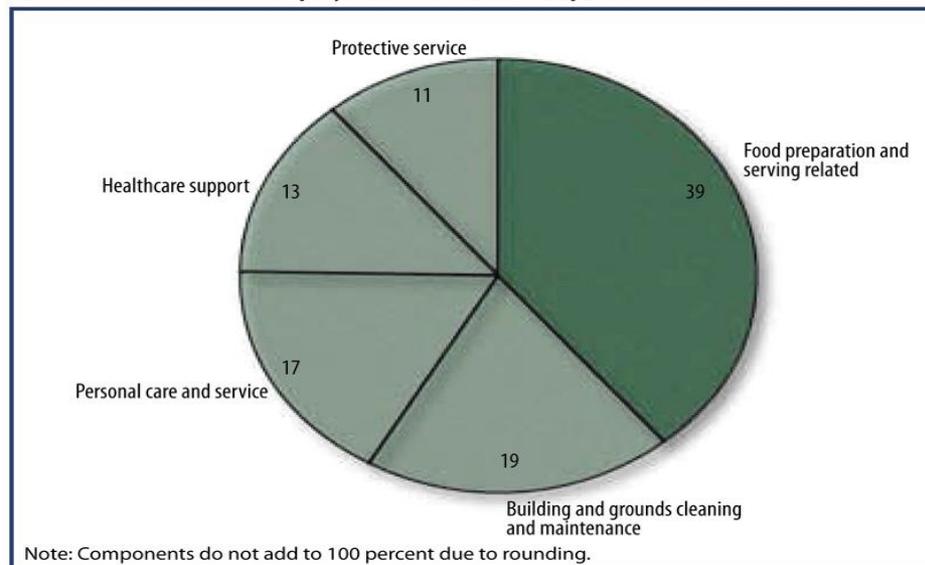


### Percent distribution of employment in professional and related occupations, 2008



Within the professional and related group, occupations related to education and healthcare accounted for the largest proportion of jobs in 2008.

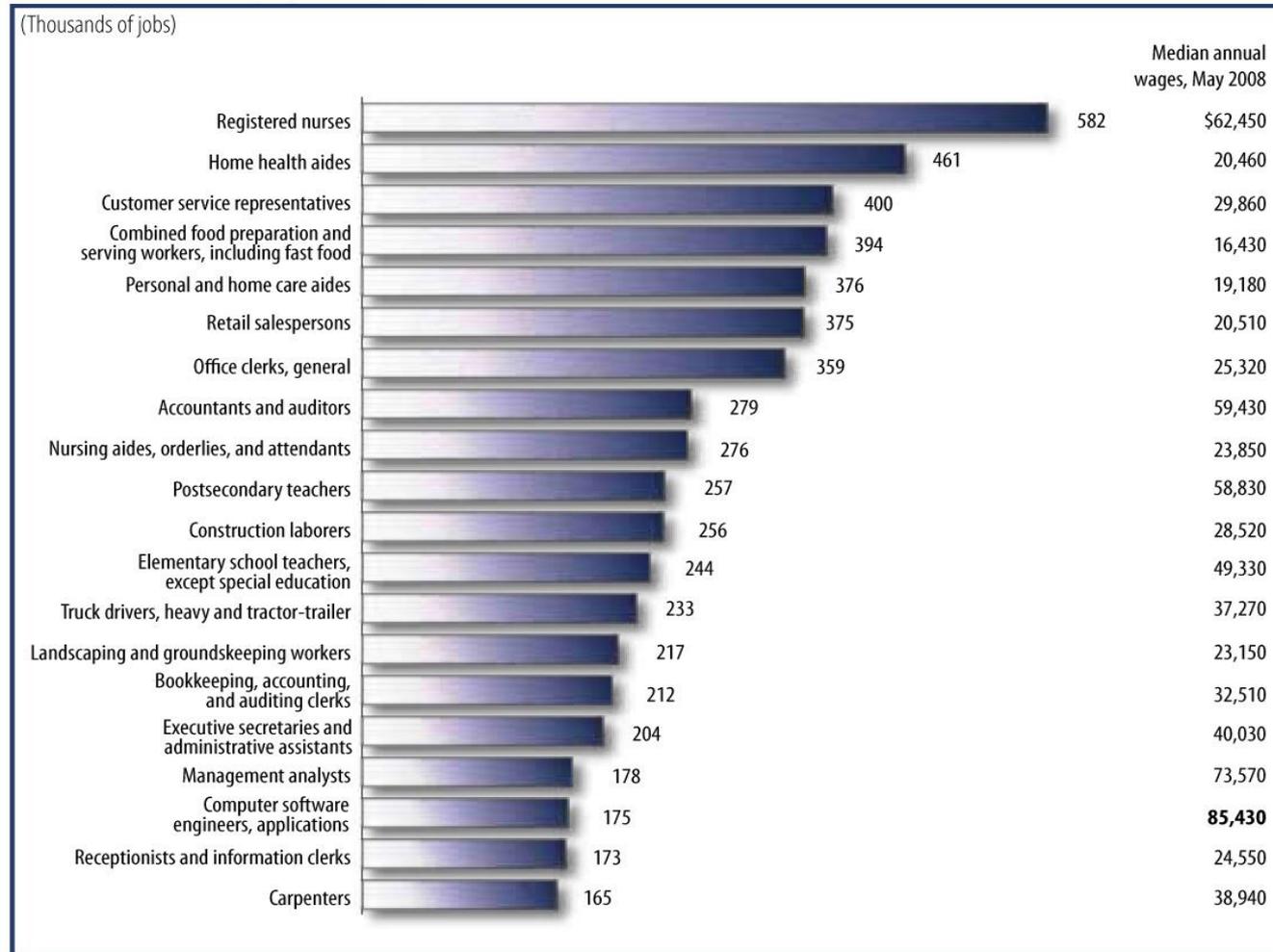
### Percent distribution of employment in service occupations, 2008



Workers involved in preparing and serving food made up the largest share of those in service occupations in 2008.

# Most new jobs

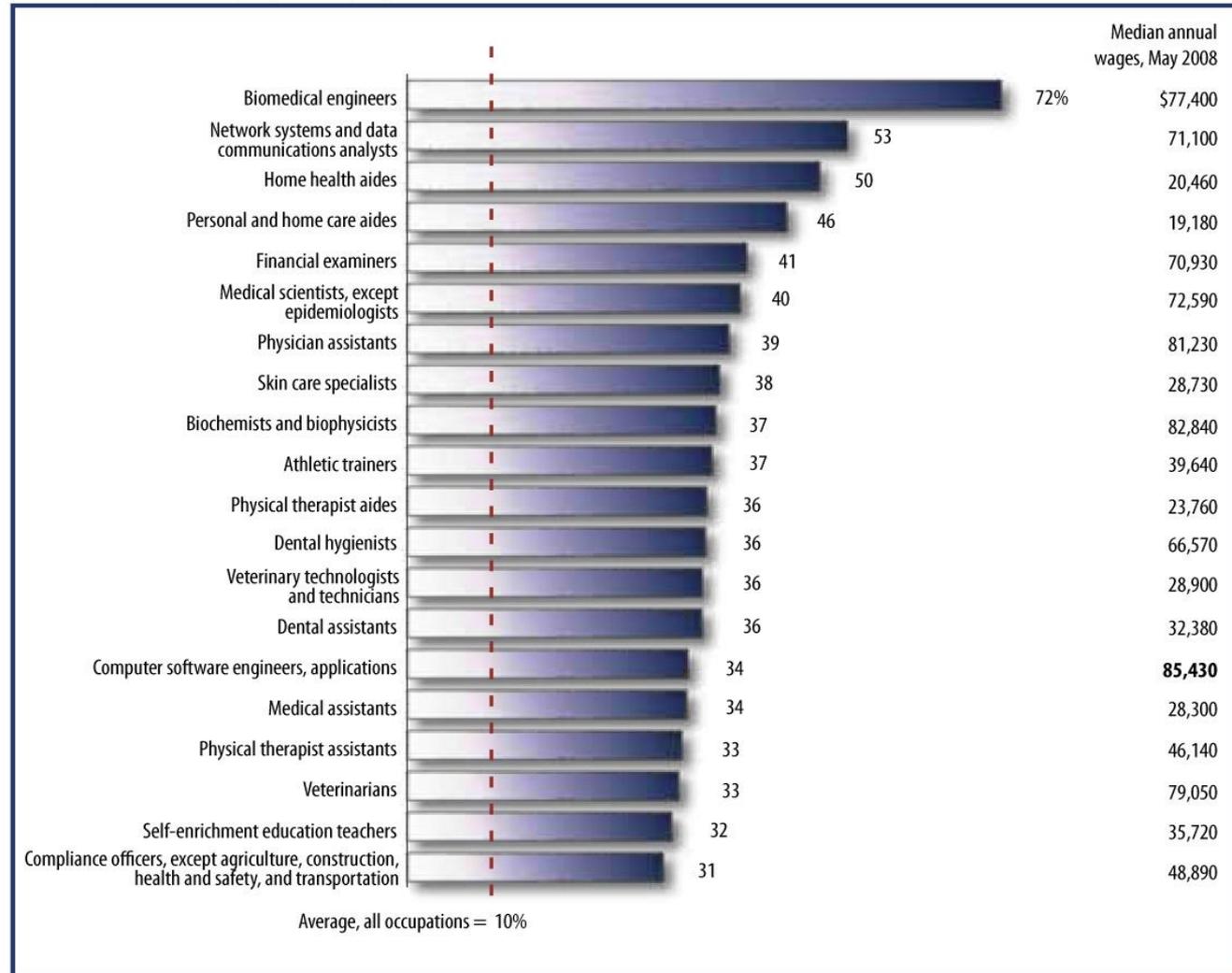
## Numeric growth in employment, projected 2008–18



These 20 occupations are projected to gain the most new jobs between 2008 and 2018 and account for almost 38 percent of all new jobs projected over the decade. Although these occupations have a range of wages, responsibilities, and education and training requirements, many relate to healthcare and care of the elderly. As with the projected fastest growing occupations, computer applications software engineers had the highest wage in May 2008 among occupations projected to gain the most new jobs.

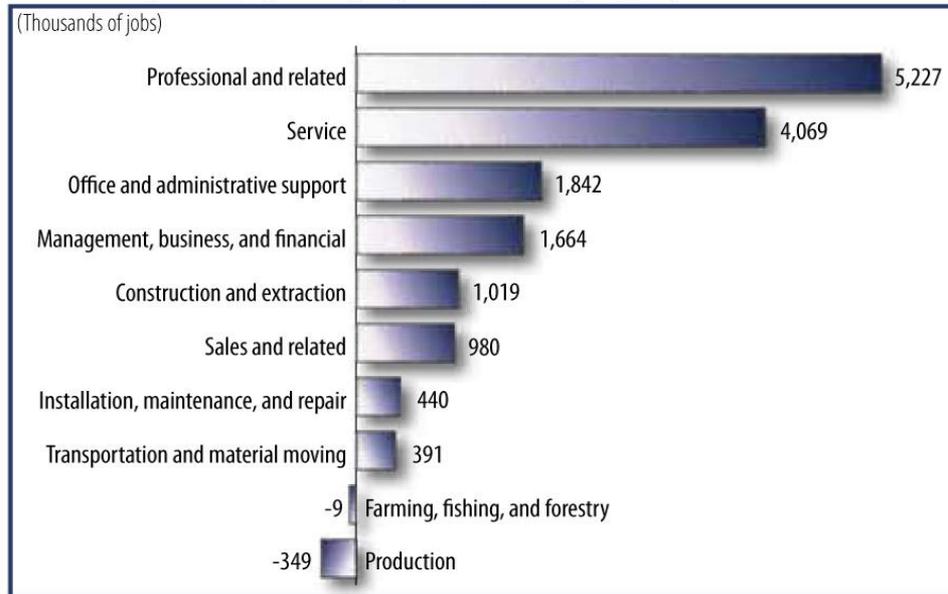
# Fastest growing occupations

Percent growth in employment, projected 2008–18



Many of the occupations projected to grow the fastest relate to healthcare and care of the elderly. Of all the projected fastest growing occupations, however, computer applications software engineers had the highest median annual wage in May 2008.

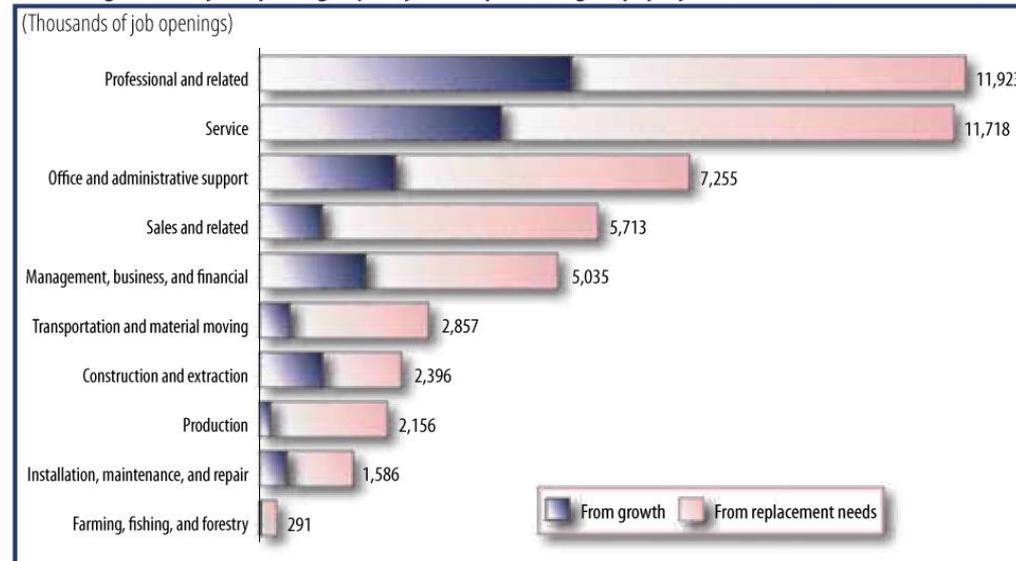
## Numeric change in employment by major occupational group, projected 2008–18



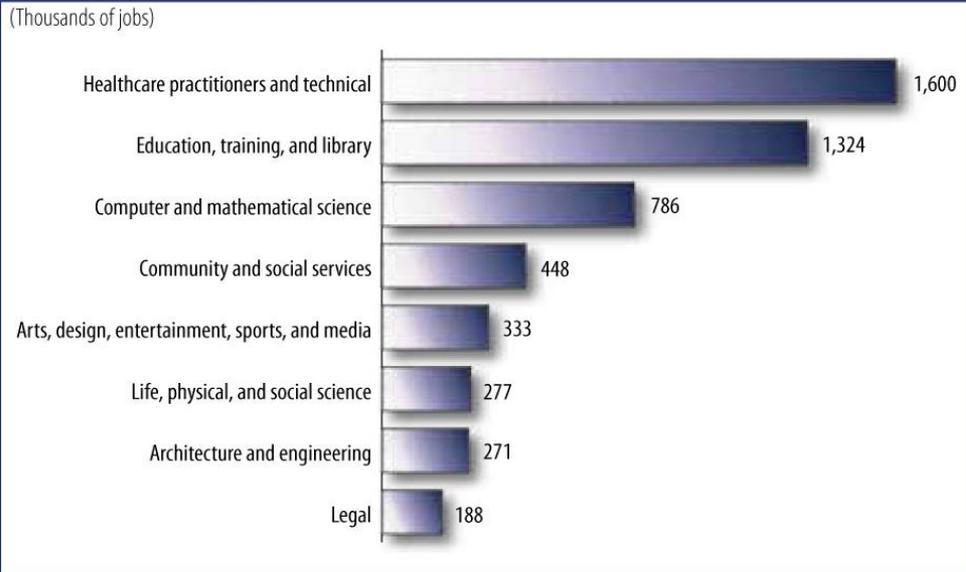
The two occupational groups that were the largest in 2008 are also projected to add the most new jobs to the U.S. economy between 2008 and 2018. Two occupational groups are projected to lose jobs, due in part to increasing worker productivity and an ongoing shift to a service-providing economy.

Employment prospects depend on more than job growth. Openings for new workers occur not only when jobs are added to the economy but also when current workers leave an occupation permanently. In fact, the need to replace workers who leave an occupation is expected to create more openings than job growth will.

## Numeric growth in job openings by major occupational group, projected 2008–18



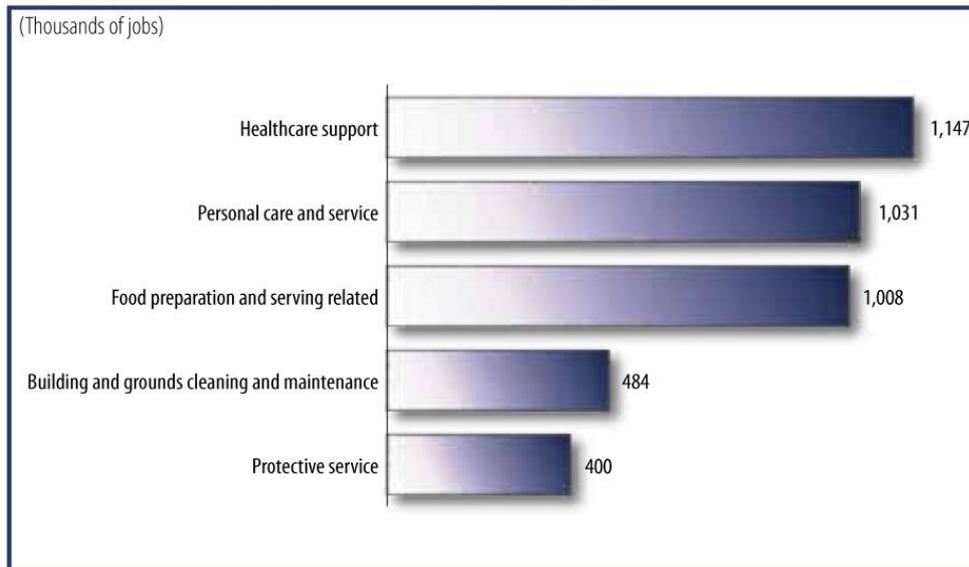
### Numeric growth in employment in professional and related occupations, projected 2008–18



Workers in professional and related occupations have a variety of specialized skills. Within this group, two occupations are each expected to gain more than 1 million new jobs between 2008 and 2018.

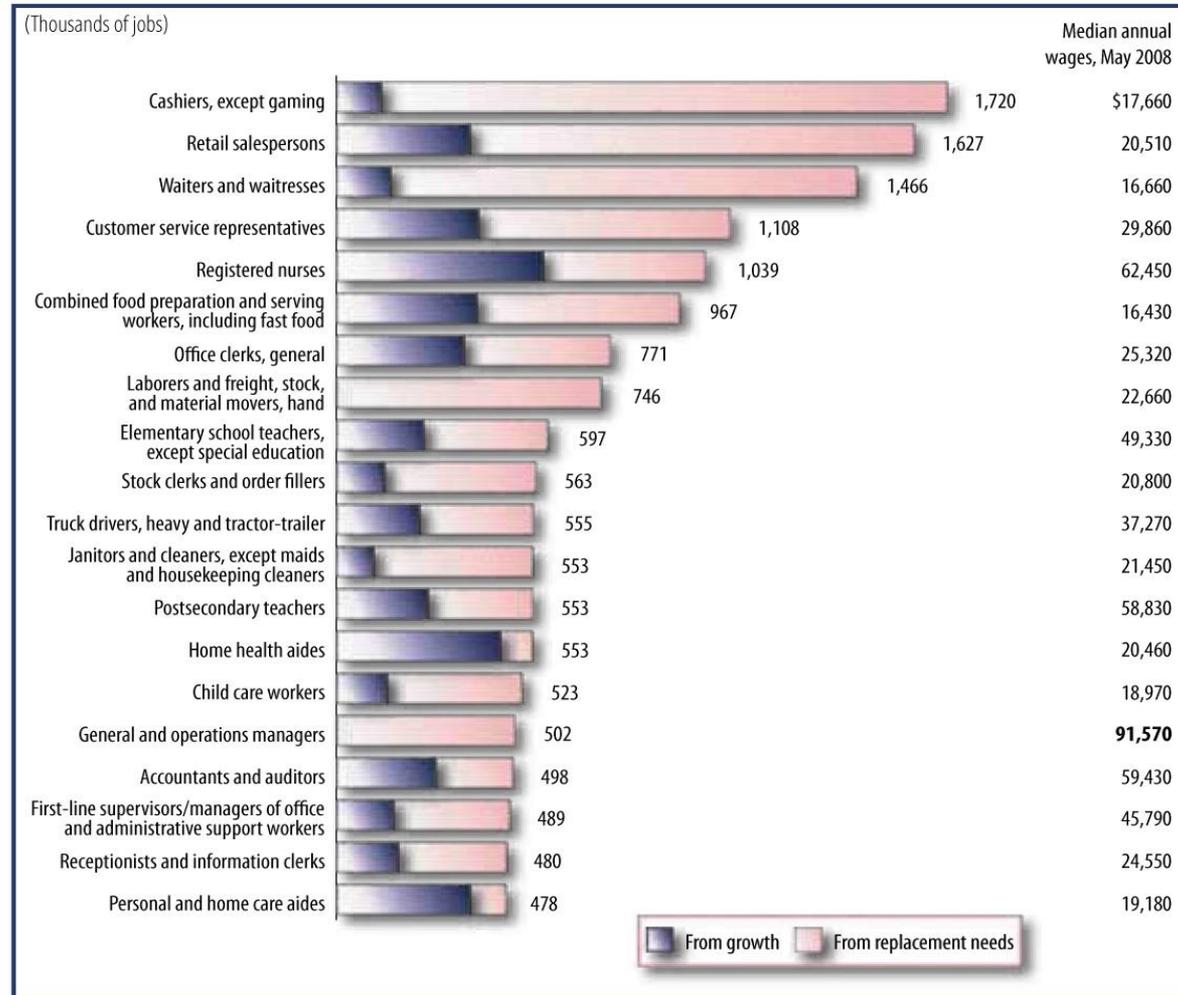
### Numeric growth in employment in service occupations, projected 2008–18

Three occupations within this group are expected to gain more than 1 million new jobs from 2008 to 2018. Much of the employment growth in healthcare support occupations will come from increased demand for basic medical services to older persons. Job growth in personal care and service occupations will be driven primarily by demand for personal and home care for the elderly and disabled and by demand for child care services.



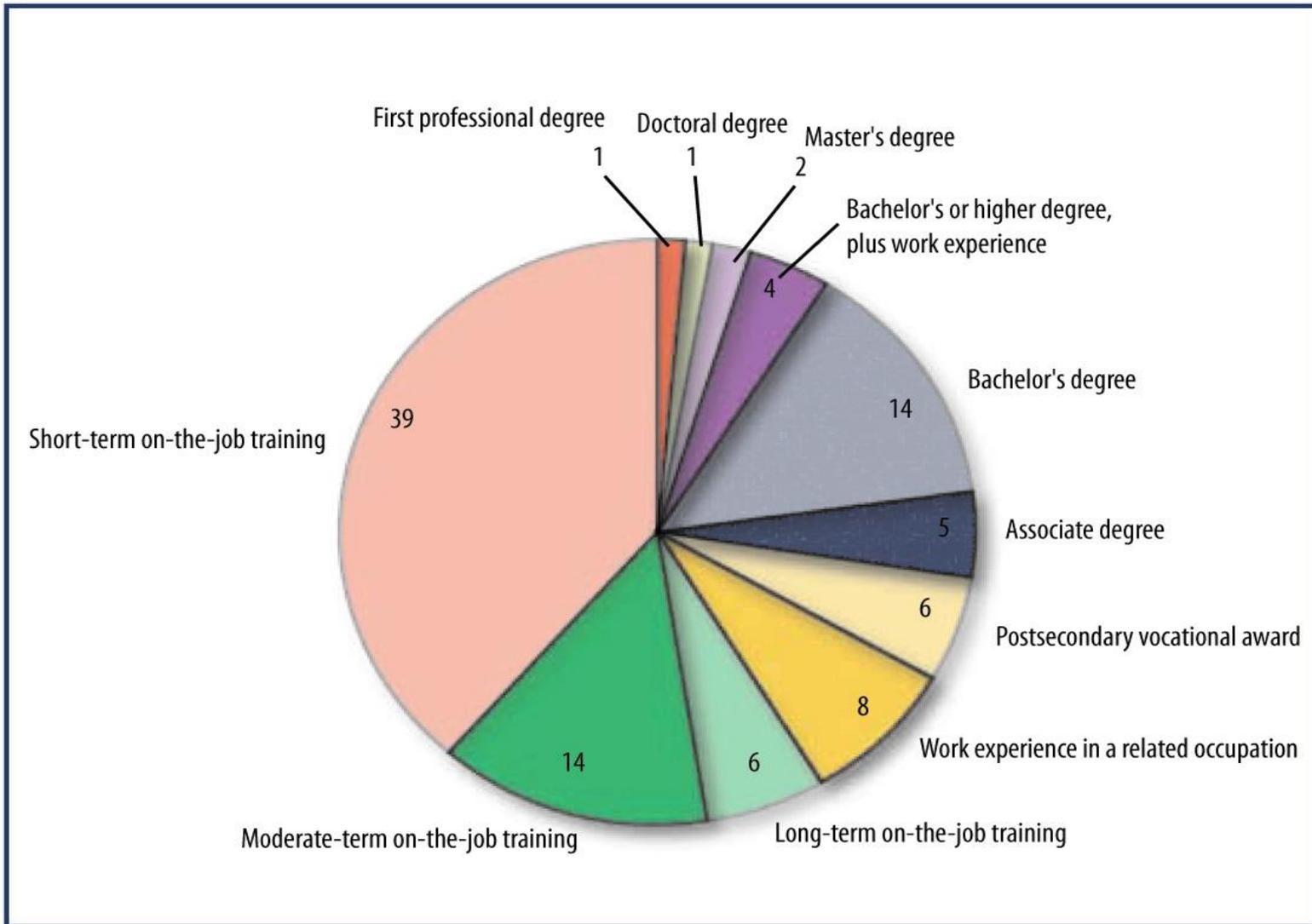
# Most job openings for workers new to an occupation

## Job openings due to growth and replacement needs, projected 2008–18



Two retail occupations—cashiers and retail salespersons—are expected to have the most job openings over the projections decade. For most of the occupations in this chart, the need to replace workers leaving the occupation is projected to create more openings than job growth will. Of the occupations shown, general and operations managers had the highest median annual wage in May 2008. All job openings in that occupation are expected to result from replacement needs.

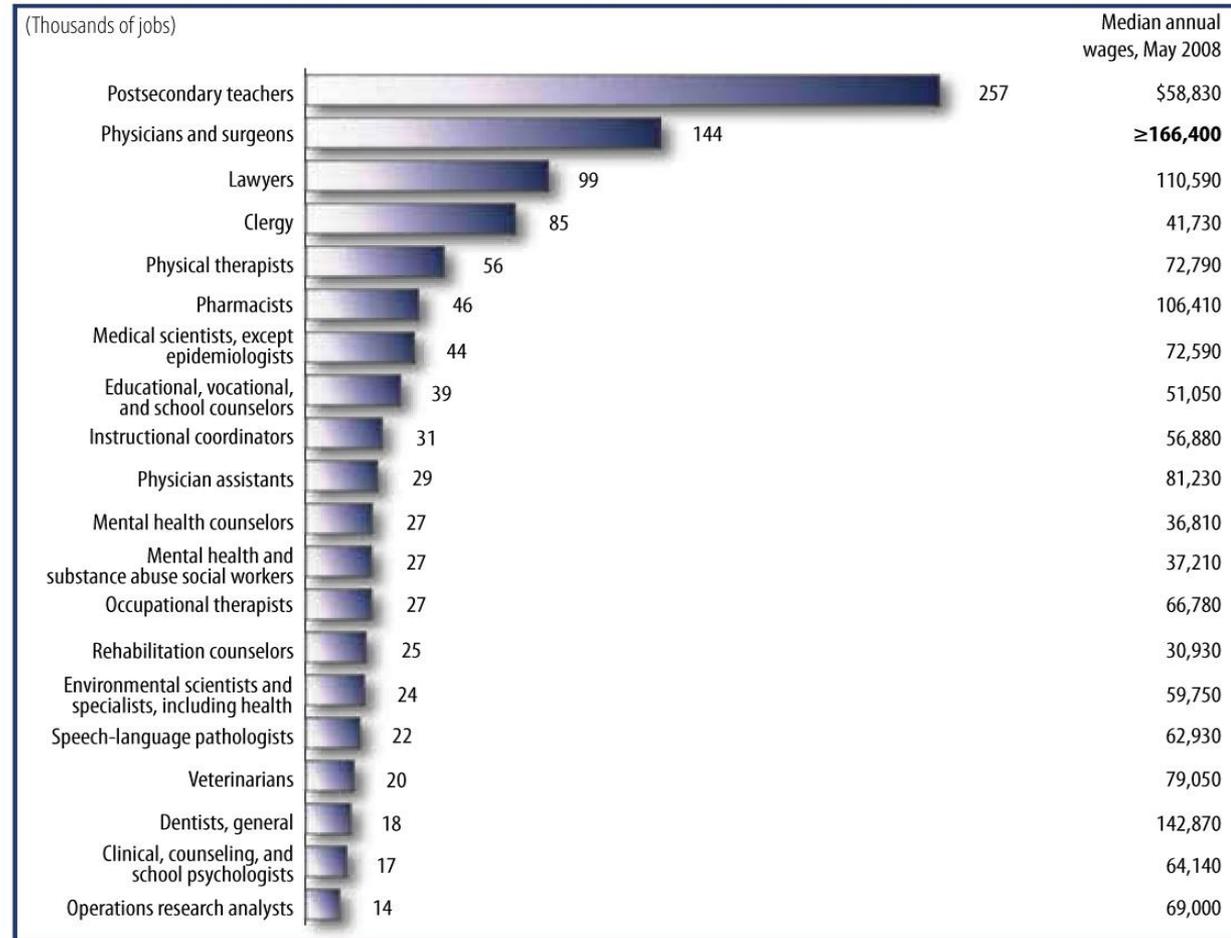
Percent distribution of job openings due to growth and replacement needs by education or training level, projected 2008–18



Most job openings over the projections decade will be in occupations that require short-term on-the-job training. Occupations requiring moderate-term on-the-job training and those requiring a bachelor's degree are also expected to have a large share of the projected job openings.

# Graduate degree

Occupations that have the most growth and that usually require a master's, doctoral, or first-professional degree, projected 2008–18

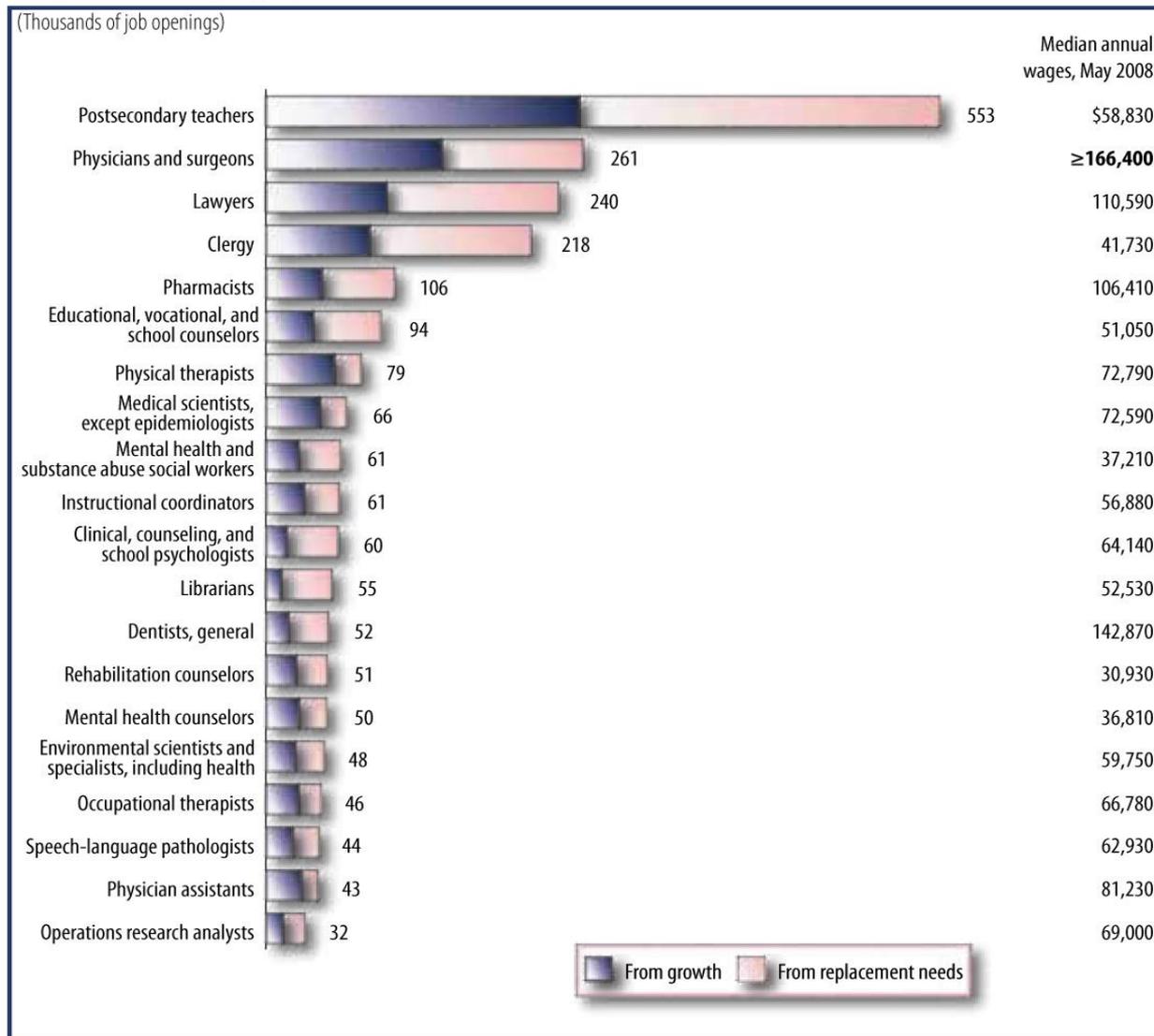


Completion of a master's degree usually requires 1 or 2 years of full-time academic study beyond a bachelor's degree. A doctoral degree (such as a Ph.D.) or a first professional degree (such as a medical or law degree) usually requires at least 3 years of full-time academic study beyond a bachelor's degree.

Most high-growth occupations in these educational categories are related to healthcare, education, and social services. The projected increase in the number of postsecondary teachers reflects expanding college enrollments. And the employment growth for physicians and surgeons and other medical occupations reflects an aging population's increased demand for medical services.

# Graduate degree

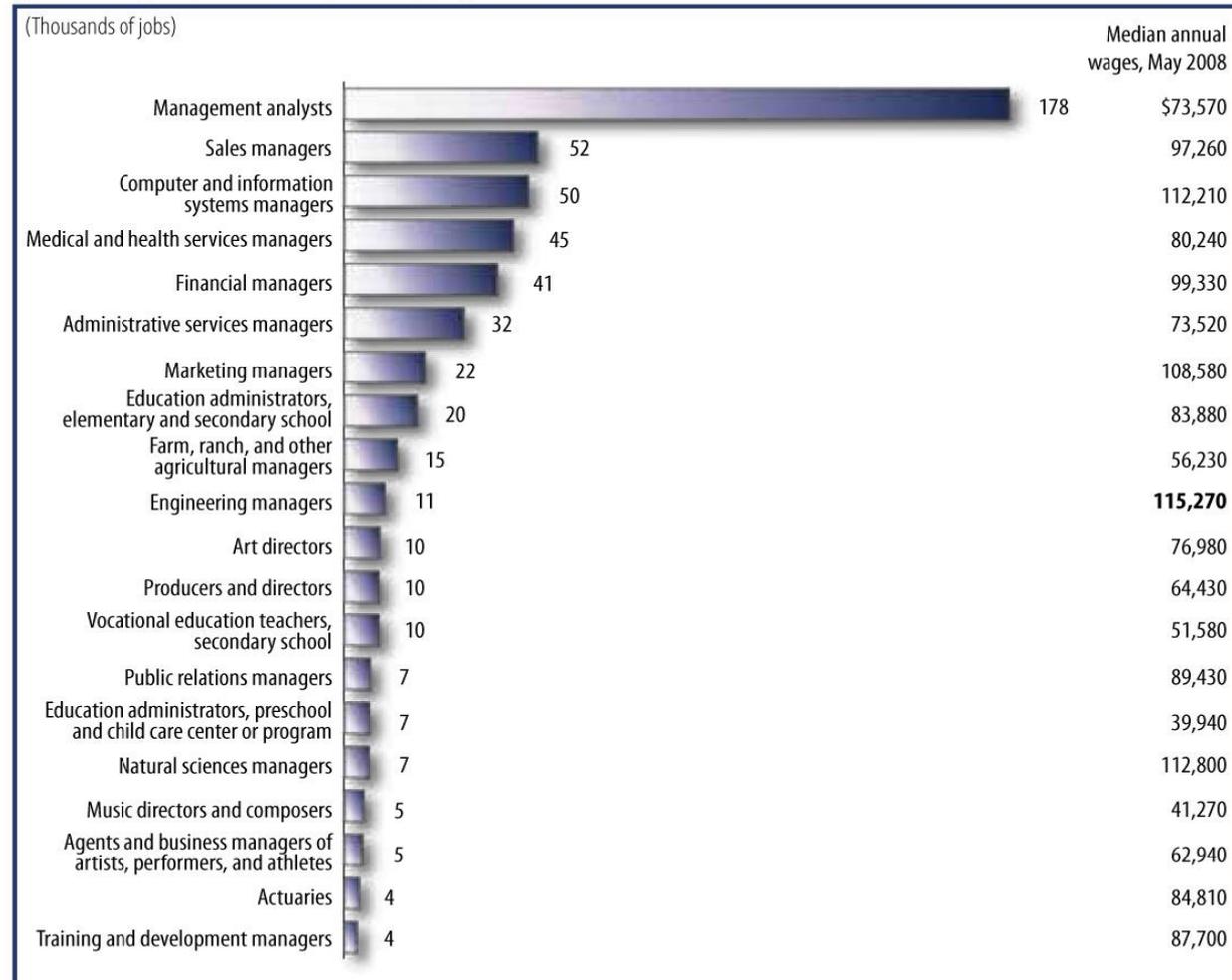
## Occupations that have the most job openings and that usually require a master's, doctoral, or first-professional degree, projected 2008–18



Between 2008 and 2018, nearly 300,000 job openings for postsecondary teachers are expected to arise from the need to replace existing teachers who retire or leave the occupation permanently for other reasons.

# Bachelor's or graduate degree plus work experience

Occupations that have the most growth and that usually require a bachelor's or graduate degree plus work experience, projected 2008–18

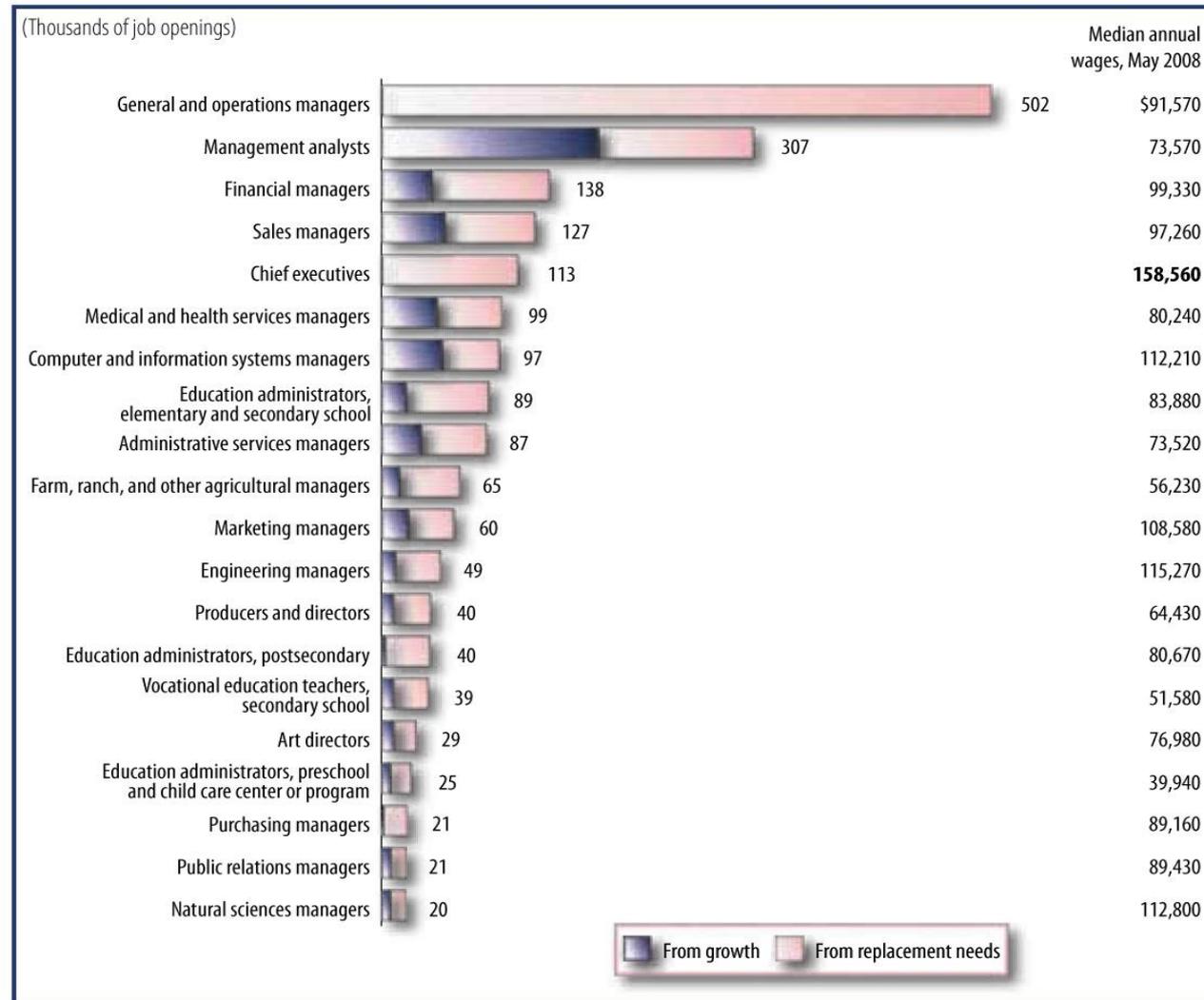


Occupations in this category often require a bachelor's or graduate degree and experience in a closely related occupation.

Nearly all of these occupations have managerial responsibilities, and jobs are usually filled by experienced staff who are promoted into managerial positions.

# Bachelor's or graduate degree plus work experience

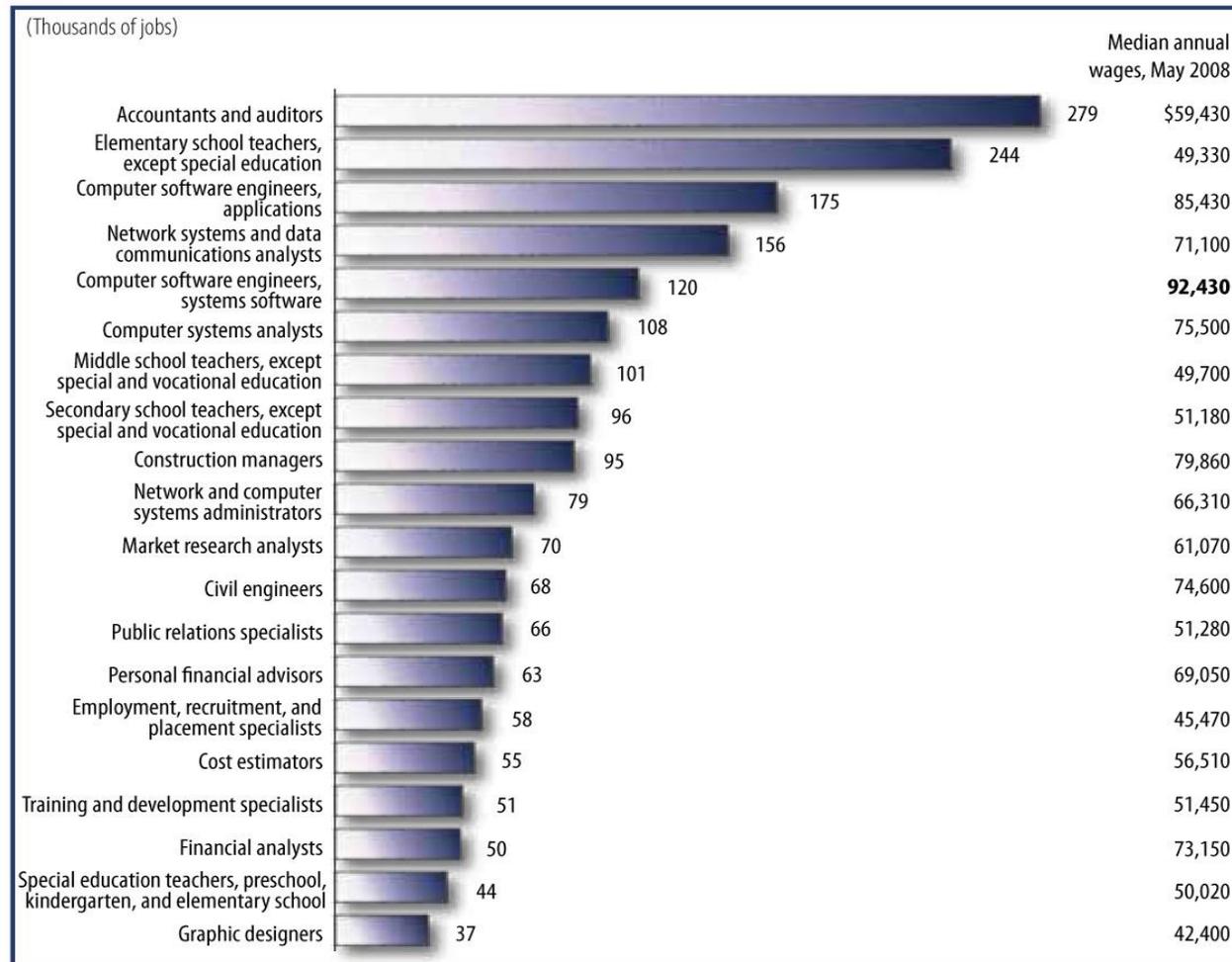
Occupations that have the most job openings and that usually require a bachelor's or graduate degree plus work experience, projected 2008–18



Within this category, general and operations managers are expected to have the most job openings over the 2008–18 decade. Because this occupation is large, many new workers will be needed to replace those who retire or leave permanently for other reasons.

# Bachelor's degree

## Occupations that have the most growth and that usually require a bachelor's degree, projected 2008–18

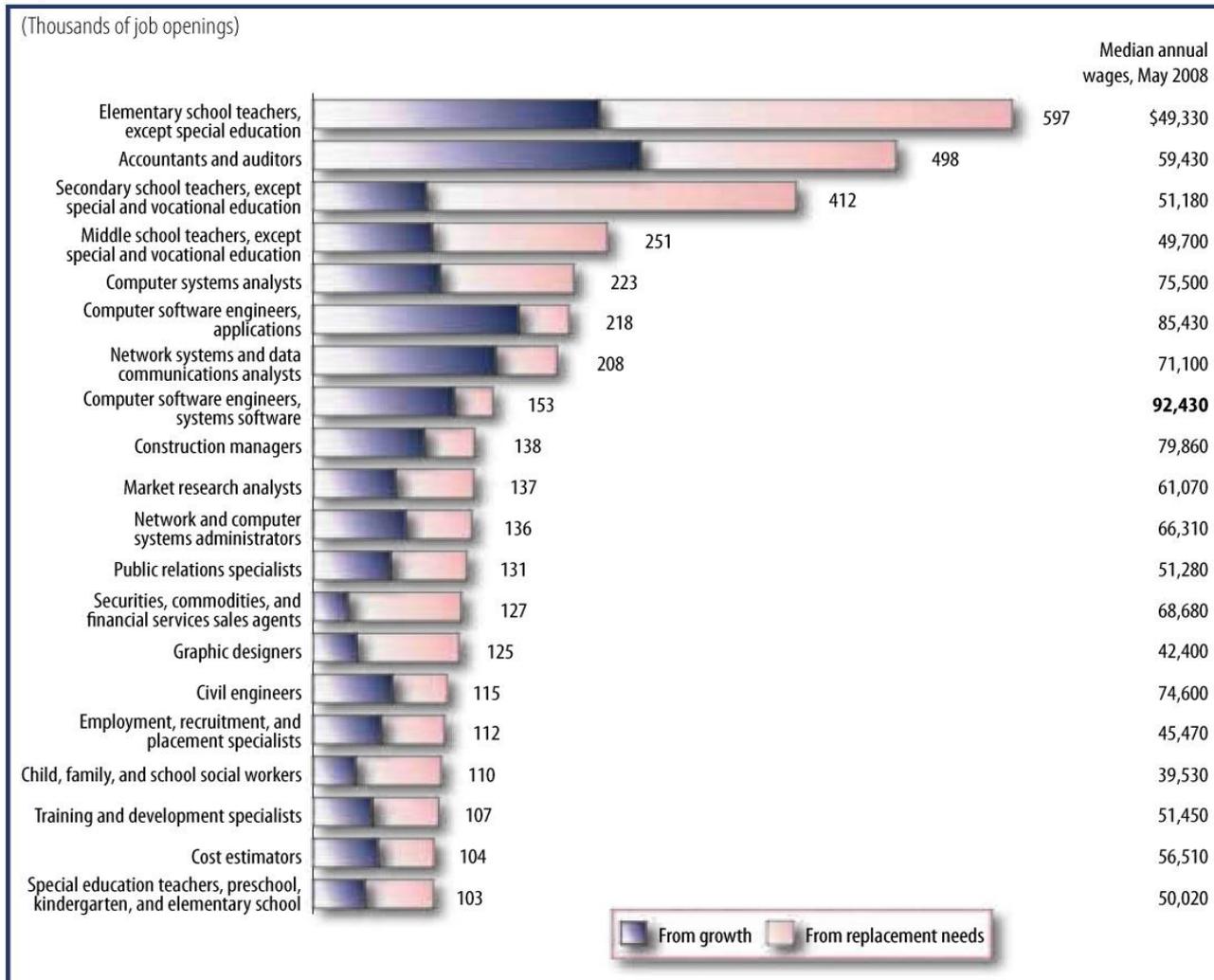


Completion of a bachelor's degree usually requires at least 4 years of full-time academic study beyond high school.

Most of these occupations relate to business, computers, or education. As businesses continue to invest in information technology, demand for workers in several computer-related occupations will grow. Several occupations involved in recruiting, training, and managing a qualified workforce are also expected to have significant job growth over the projections decade.

# Bachelor's degree

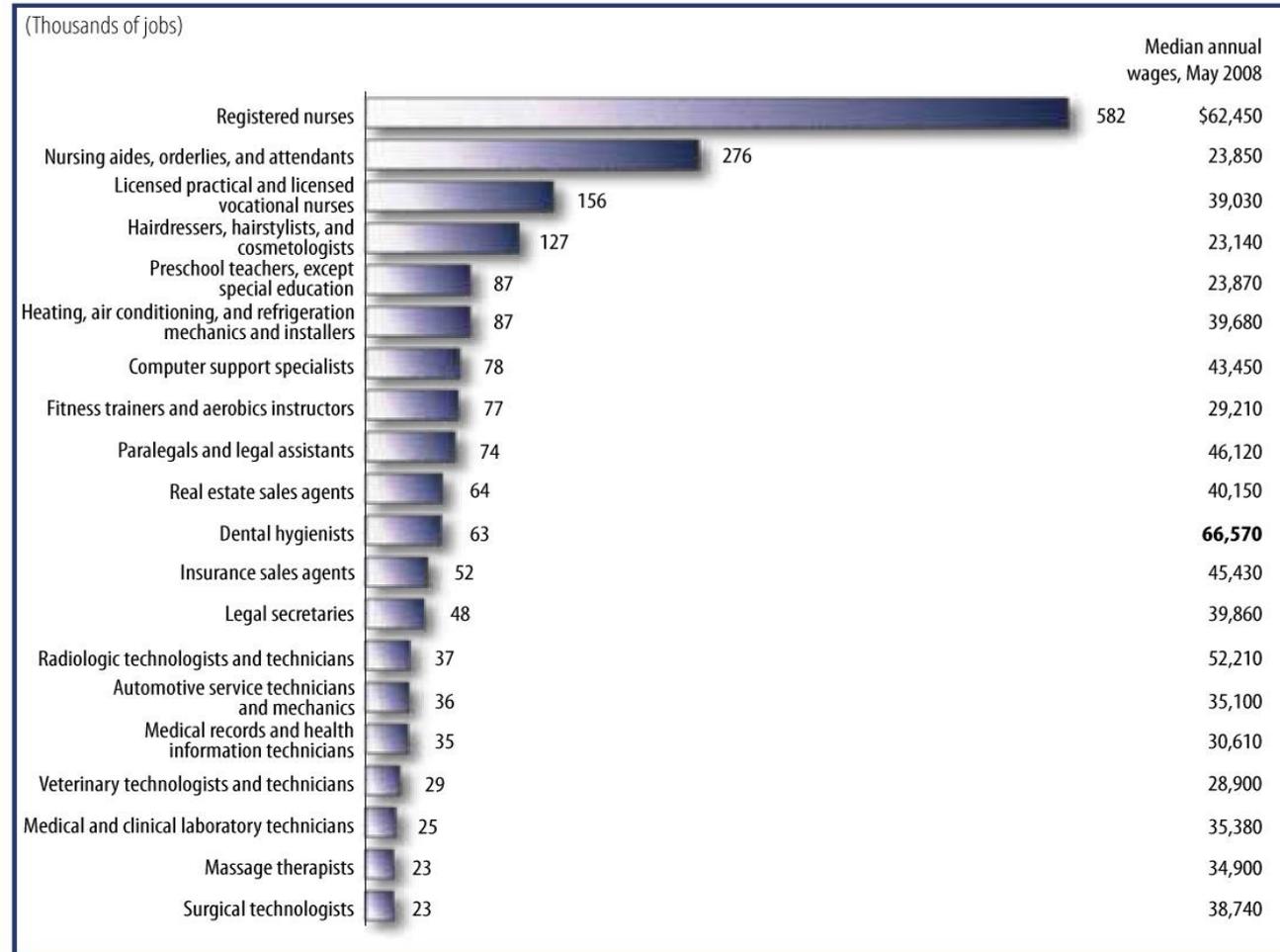
## Occupations that have the most job openings and that usually require a bachelor's degree, projected 2008–18



Thousands of openings for workers who have a bachelor's degree are expected in a variety of occupations. The large number of projected openings for teachers reflects the size of teaching occupations, the need to replace teachers who are expected to retire, and rising student enrollments.

# Associate degree or postsecondary vocational award

Occupations that have the most growth and that usually require an associate degree or postsecondary vocational award, projected 2008–18

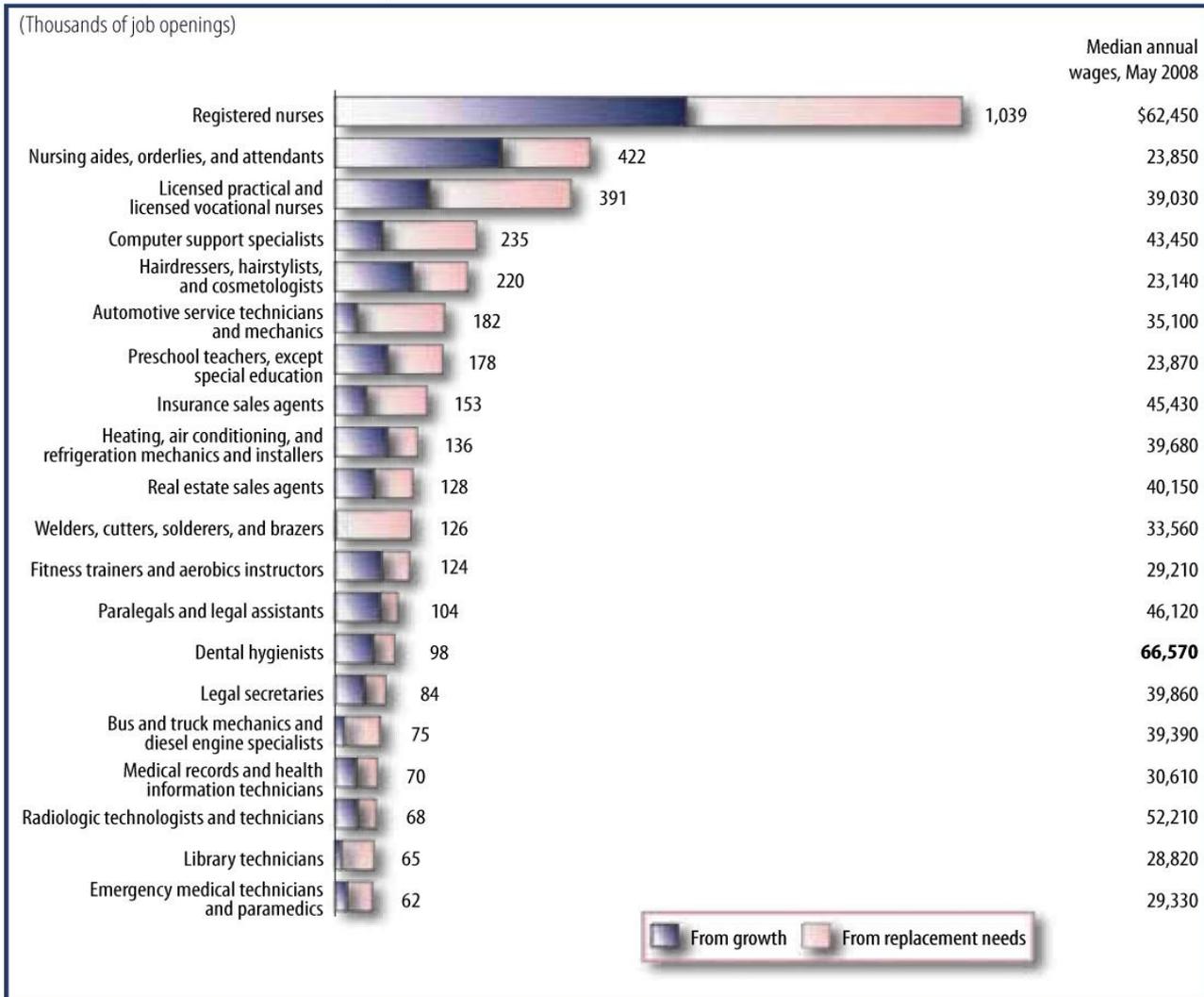


Completion of an associate degree usually requires 2 years of full-time academic study beyond high school. Postsecondary vocational programs vary in length and range from several weeks to 1 year or more. Completion of these programs often leads to a certificate or other award but not an academic degree.

At this level of training, occupations that are projected to gain the most jobs are largely related to healthcare, reflecting the growing medical needs of an aging population.

# Associate degree or postsecondary vocational award

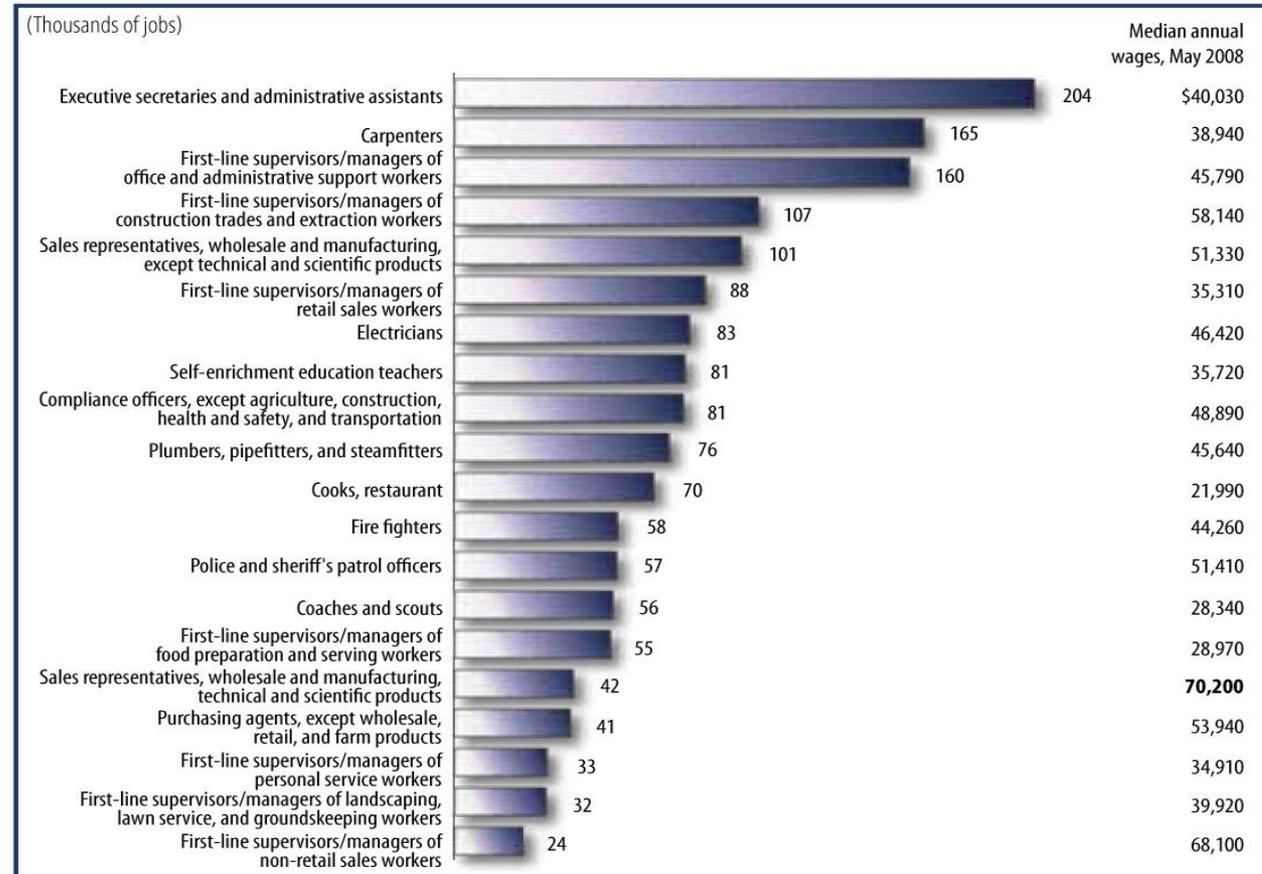
## Occupations that have the most job openings and that usually require an associate degree or postsecondary vocational award, projected 2008–18



Over the 2008–18 decade, more than 1 million job openings are expected for registered nurses seeking employment in the occupation for the first time.

# Work experience or long-term on-the-job training

## Occupations that have the most growth and that usually require work experience or long-term on-the-job training, projected 2008–18

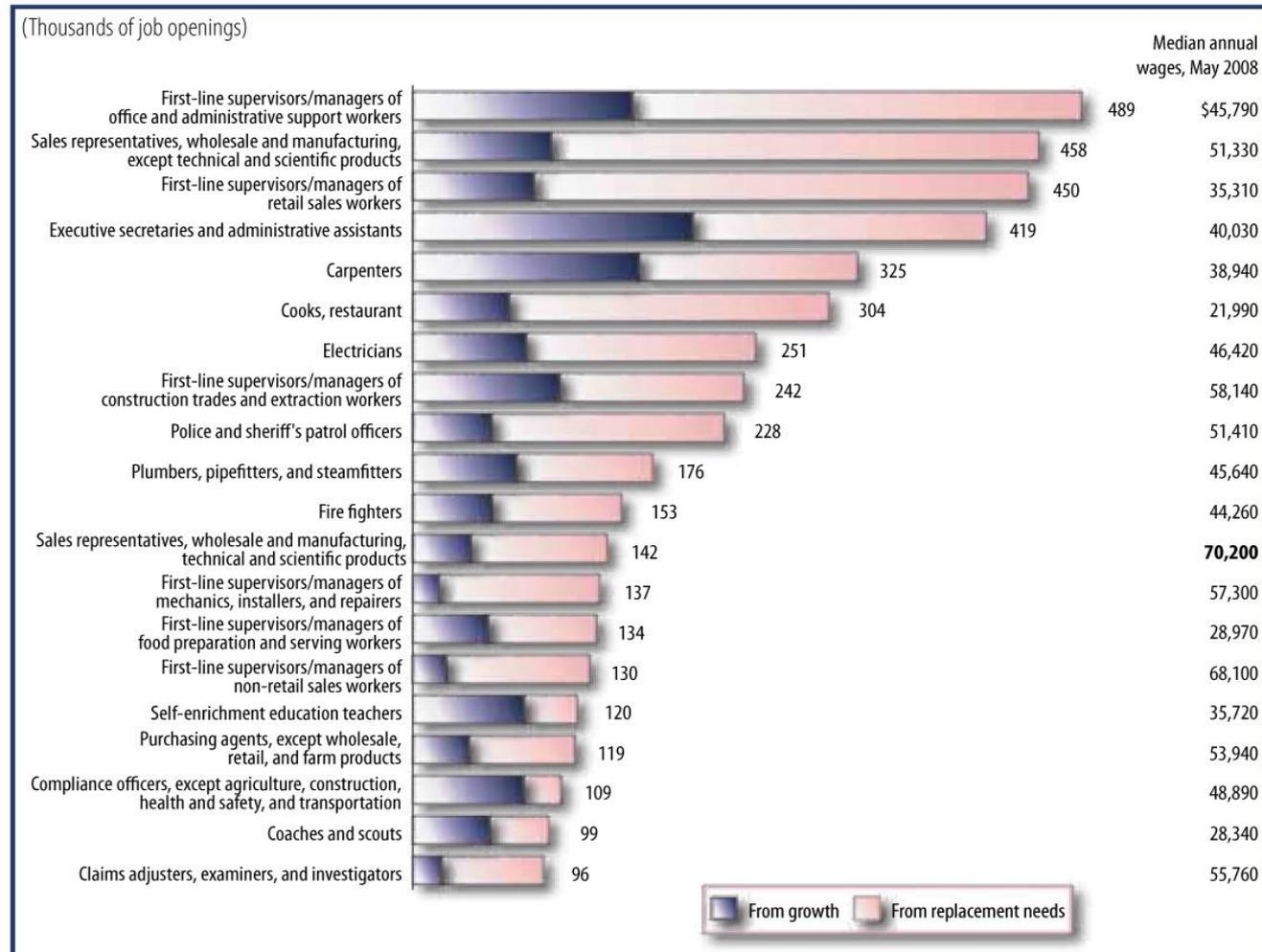


Occupations that require work experience are often supervisory, and workers' experience usually must be in the occupation being supervised. Occupations in the long-term on-the-job training category usually require workers to have 1 year or more of on-the-job training. Apprenticeships and long-term employer-sponsored training are classified here.

Employment of executive secretaries and administrative assistants is expected to increase in part because the duties in this occupation are less likely than many other office and administrative support occupations to be affected by technological advances. Increased activity in building and remodeling is expected to create growth in construction occupations. Supervisory occupations are also projected to gain many jobs over the 2008–18 decade.

# Work experience or long-term on-the-job training

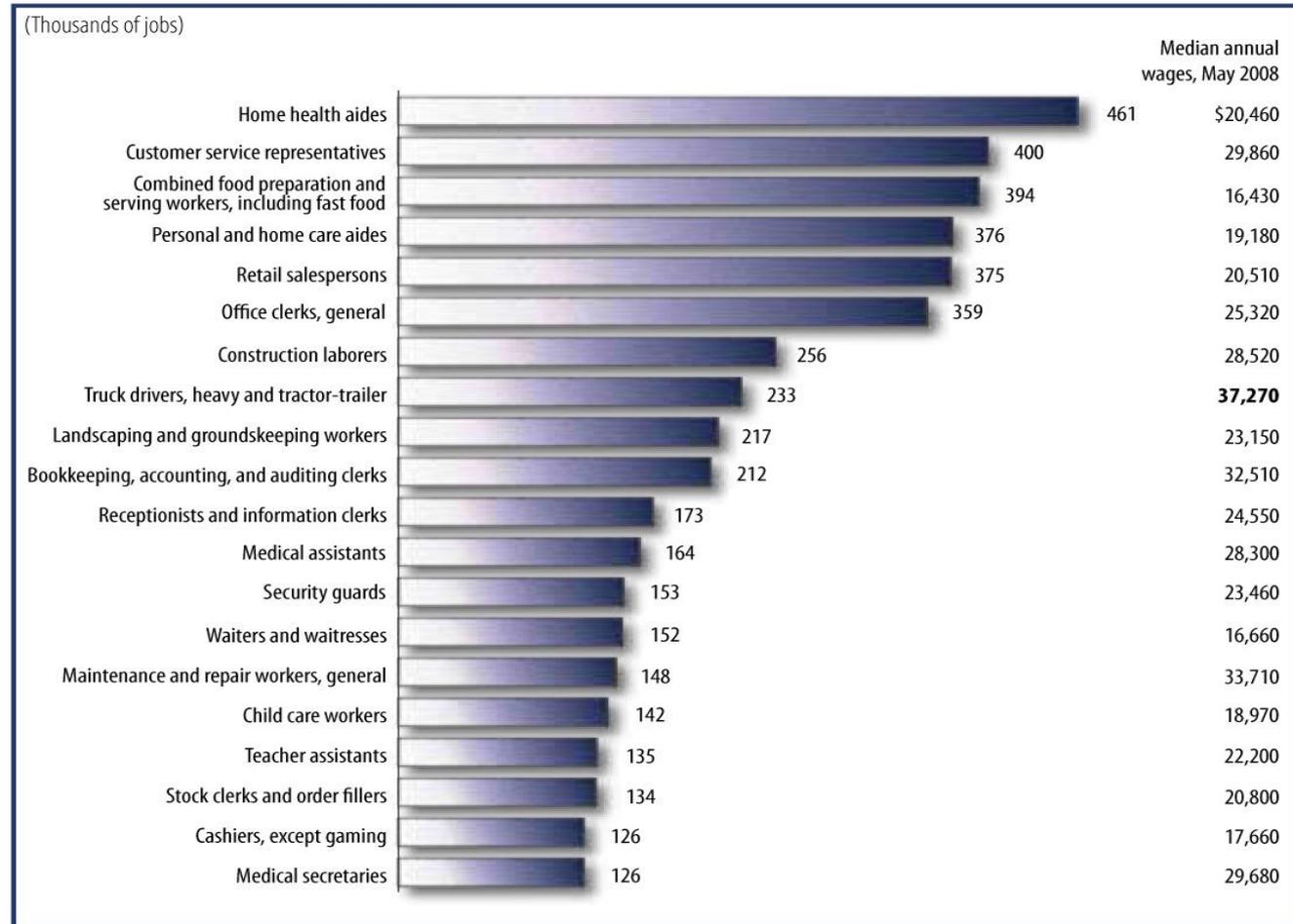
## Occupations that have the most job openings and that usually require work experience or long-term on-the-job training, projected 2008–18



Replacement needs are expected to account for most of the job openings in these occupations. Even occupations that are not expected to gain many new jobs—such as such as first-line supervisors of mechanics, installers, and repairers—will offer some job openings because of the need to replace existing workers who leave the occupation permanently.

## Short- or moderate-term on-the-job training

Occupations that have the most growth and that usually require short- or moderate-term on-the-job training, projected 2008–18



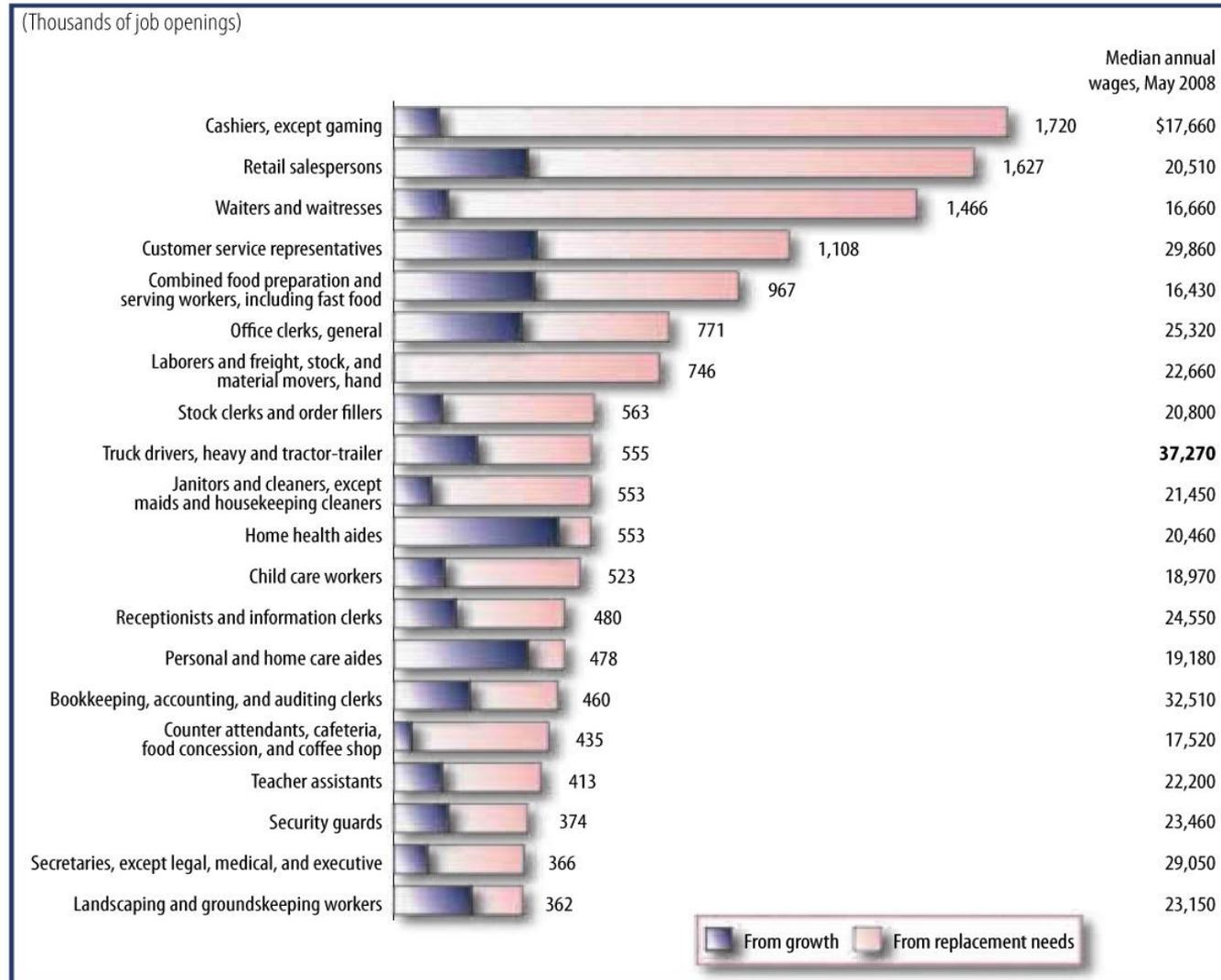
For occupations that require moderate-term on-the-job training, workers develop the skills that they need during 1 to 12 months of combined on-the-job experience and informal training.

For occupations in the short-term on-the-job training category, workers develop the skills that they need after a short demonstration of job duties or during 1 month or less of on-the-job experience or instruction.

Each of the occupations shown here is projected to gain more than 100,000 new jobs between 2008 and 2018.

# Short- or moderate-term on-the-job training

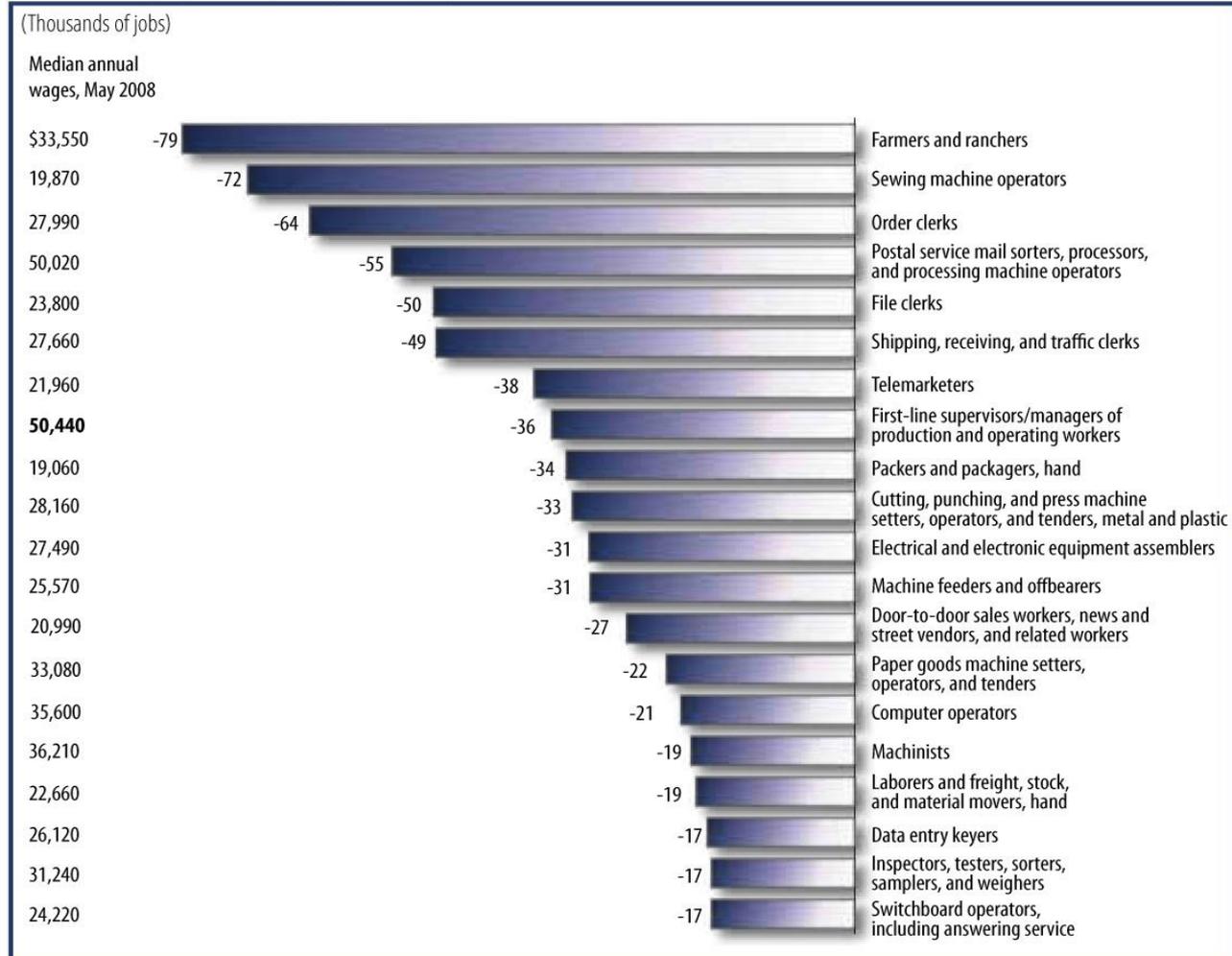
## Occupations that have the most job openings and that usually require short- or moderate-term on-the-job training, projected 2008–18



Among occupations that require relatively little training, the need to replace workers is expected to account for the bulk of job openings.

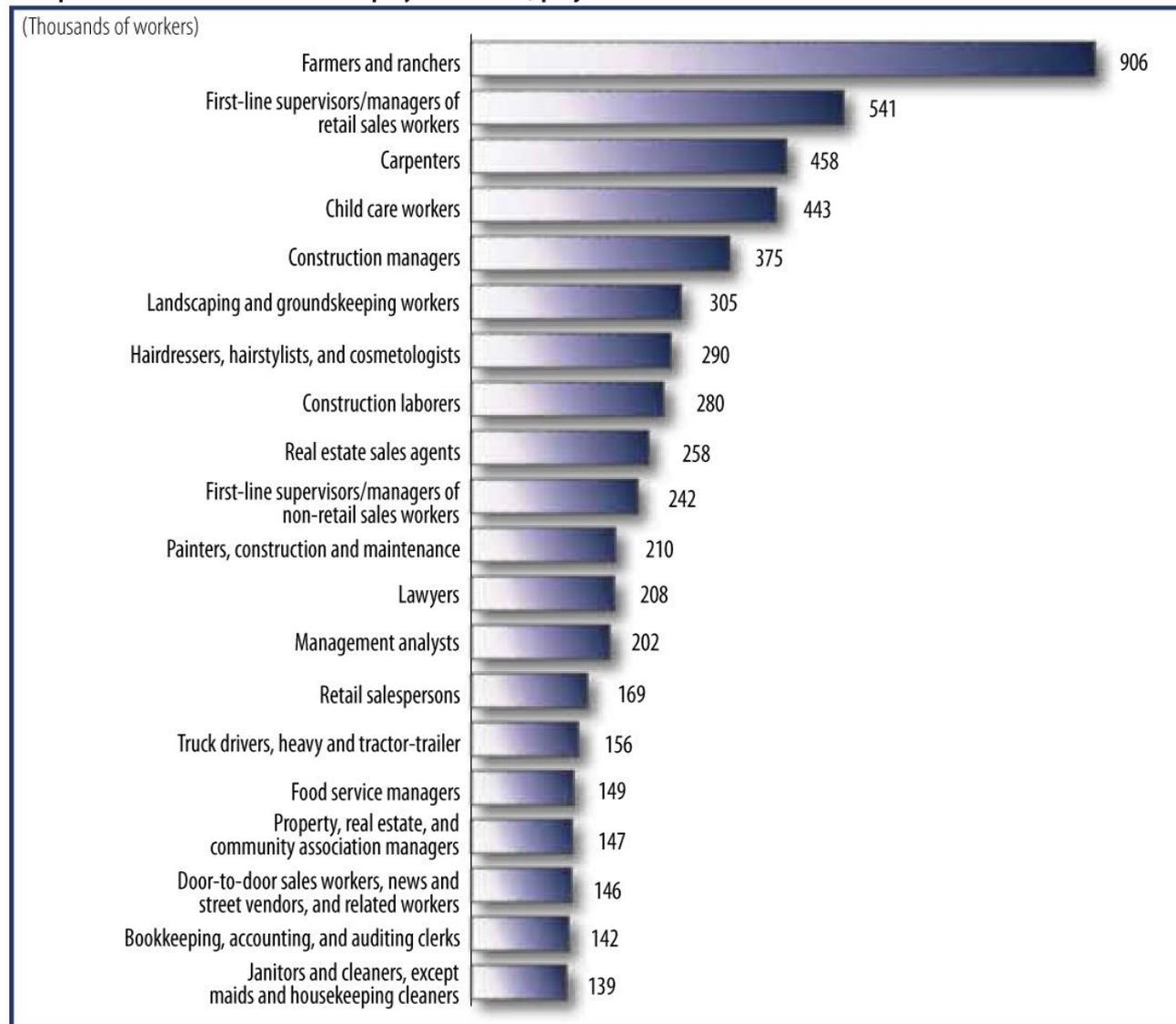
# Most job losses

## Decline in employment by occupation, projected 2008–18



The occupations that are expected to have the largest employment declines—in part because technology is increasing worker productivity—are primarily production occupations and office and administrative support occupations. Even in occupations that are not expected to gain new jobs, however, the need to replace existing workers who leave will create some opportunities.

## Occupations with the most self-employed workers, projected 2018



Most of the new jobs added to the economy are expected to be for wage and salary workers; employment of self-employed and unpaid family workers is projected to change little through 2018. Farmers and ranchers are projected to have the highest levels of self-employment in 2018. But self-employment is also expected to be common in business, construction, and personal service occupations.

# Lessons to Learn from Emerging Economic Patterns

**Look Forward** Promising strategies for economic improvement must reflect where the economy is going, not where it has been.

**Customize Strategies** Needs, opportunities and even attitudes vary widely from place to place in Montana. Goals and strategies for economic advancement must likewise vary.

**Cities Matter** Cities, even small ones, have become the “settings” if not the “engines” of economic growth, diversification, and advancement. In Montana, we need to assist cities, not deny that we have any.

**Urban-Rural Relations Matter** Pursuing economic development town-by-town or county-by-county is difficult. Influencing local economies sub-region by sub-region with healthy urban-rural partnerships has potential.

**Become “Learning Communities”** Successful businesses are adaptive businesses. Successful communities are adaptive communities. Adaptive communities must be “learning communities,” keeping abreast of change and understanding the story of local and regional change. Learning among key leadership is particularly important.

**Think about “Regional Positioning”** Local economies can’t be remade by local leaders. But local leaders can find ways of better positioning area businesses, schools, work forces, governments, families, etc. for future change. Anticipate future change and position yourself for it.

**Human-Resource Based Economy** The economy is more and more “human resource based” and “knowledge-based”. Well-designed, well-funded, adaptive systems for education and work force development are indispensable centerpieces for future economic prosperity.

**Environment as a “Key Economic Asset”** In the new economy, protecting and enhancing environmental qualities is not the enemy of economic development. It is essential for economic prosperity.

*- Larry Swanson, O’Connor Center for the Rocky Mountain West, U. of MT*

# Challenges for Workforce Development & Adult Education Programs

In an increasingly “human-resource based” economy, workforce development and education have become centerpieces of any strategy for community economic improvement. They are essential for economic prosperity.

**Regionally-based and Customized:** Workforce development programs must be grounded in the regions and communities served .. tailored to particular needs and opportunities of area employers.

**Inter-coordinated:** Workforce development and training and education more generally, must be inter-coordinated with business technical and financial assistance, marketing and promotion, infrastructure development, and other aspects of community economic development.

**Well-designed and Adaptive:** The economy is continually restructuring and changing. To be successful workforce development programming must reflect where the economy is going, not where it has been. Be “forward-looking” and “opportunistic”.

**Life-long:** The pace of economic change combined with the aging of the workforce require that workforce development itself be life-long. Develop programming for workers of all ages and for workers who are continually learning and upgrading their skills, incrementally and progressively.

**Workplace-oriented:** Workforce development is something workers need while they work. It is not simply something workers do between jobs or early in life. Make it easy and flexible. Place programming in or nearby the workplace. Employers must accommodate if not encourage this on-going training.

**Well-funded:** To be successful, workforce development programming must be well-funded. For an area to be competitive, such programming cannot be done “on the cheap.”

- Larry Swanson, O'Connor Center for the Rocky Mountain West, U. of MT