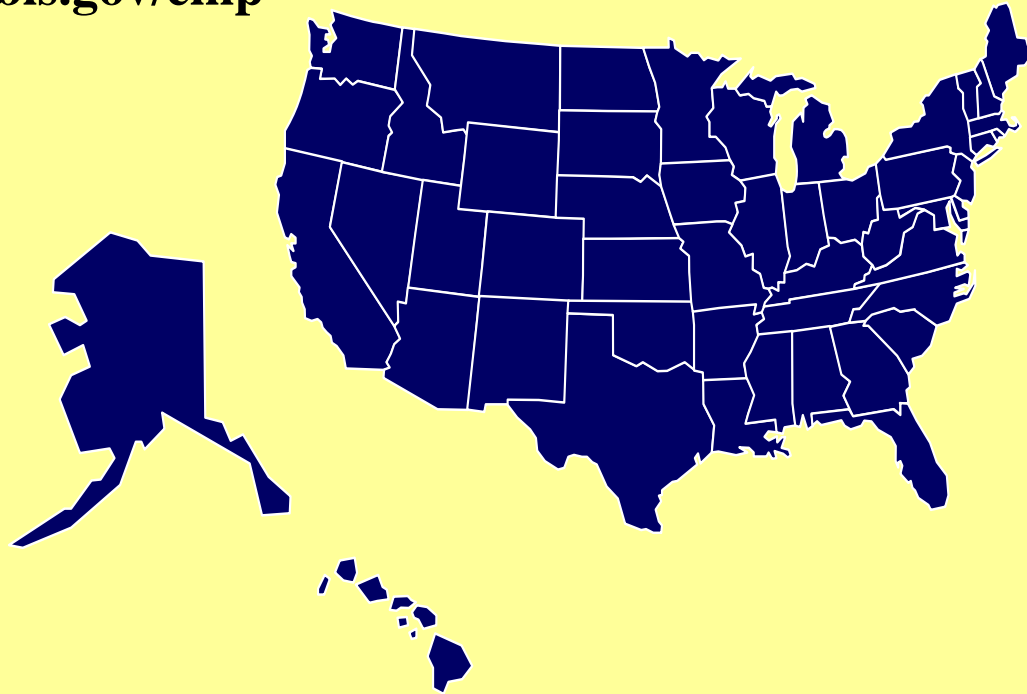


Employment Outlook: 2002-12

- ◆ **National employment projections**

<http://www.bls.gov/emp>



Dr. Michael Horrigan
Assistant Commissioner
Bureau of Labor Statistics

NASWA Winter Forum
March 18, 2004

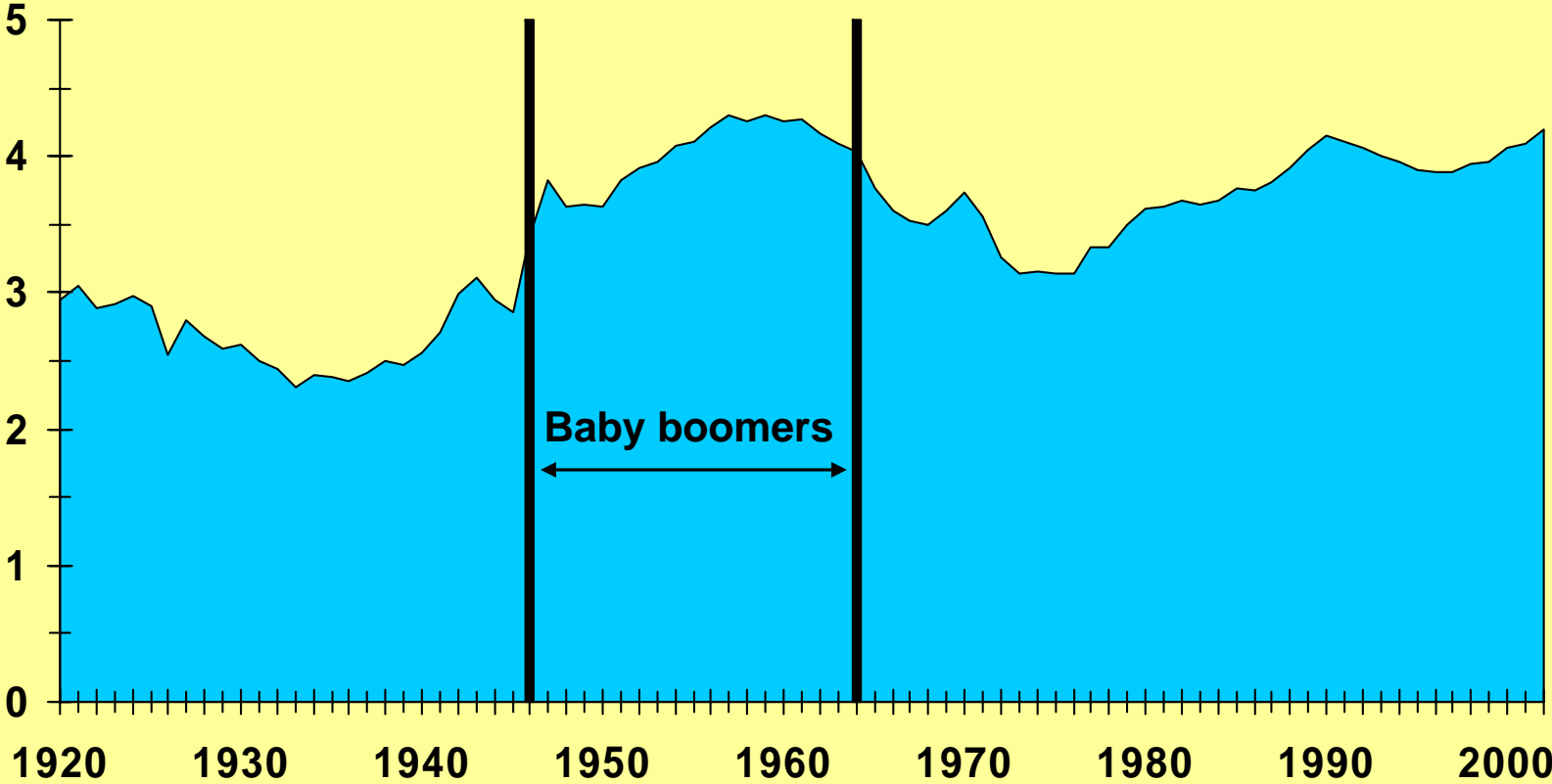
Employment Outlook: 2002-12

Projections Process

- Labor force
 - Economic growth
 - Industry employment
 - Occupational employment

Number of live births, 1920-2002

Millions



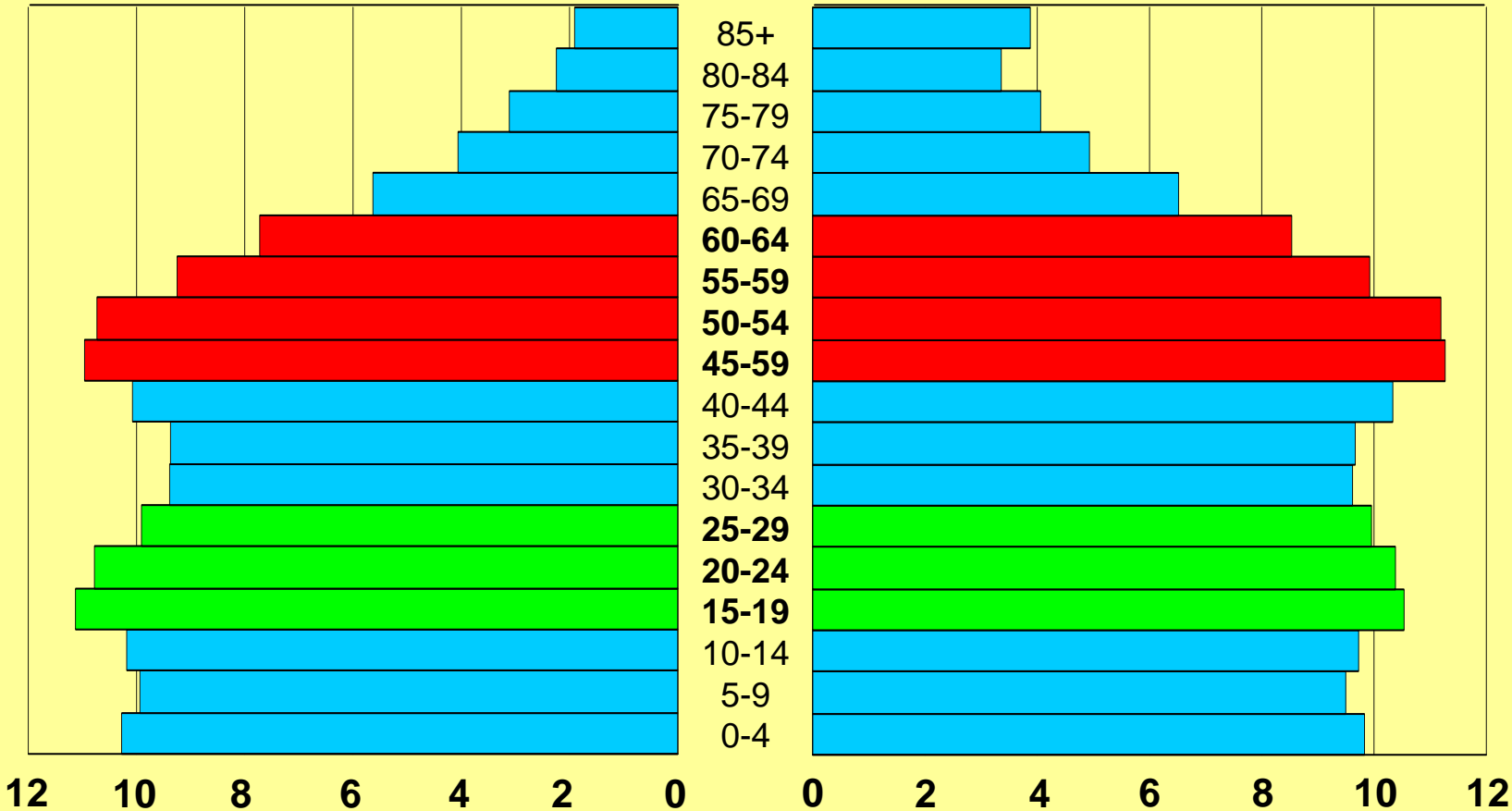
Population, projected 2010

Millions

Men

Age

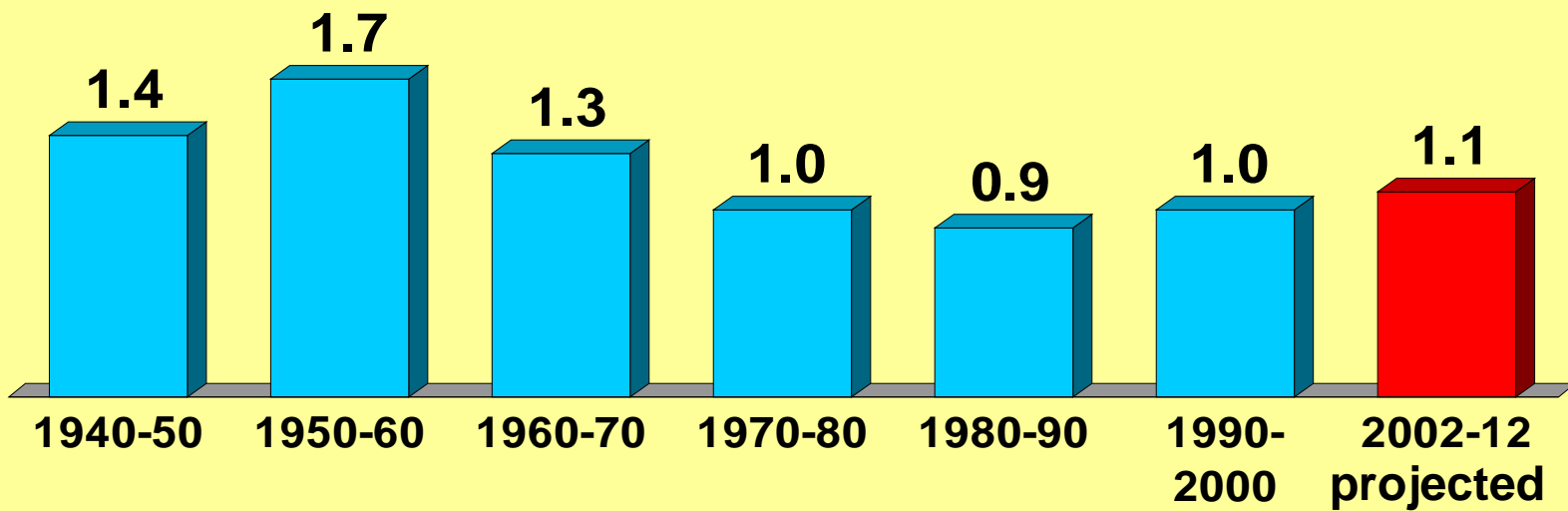
Women



Source: Bureau of the Census

Population growth rates

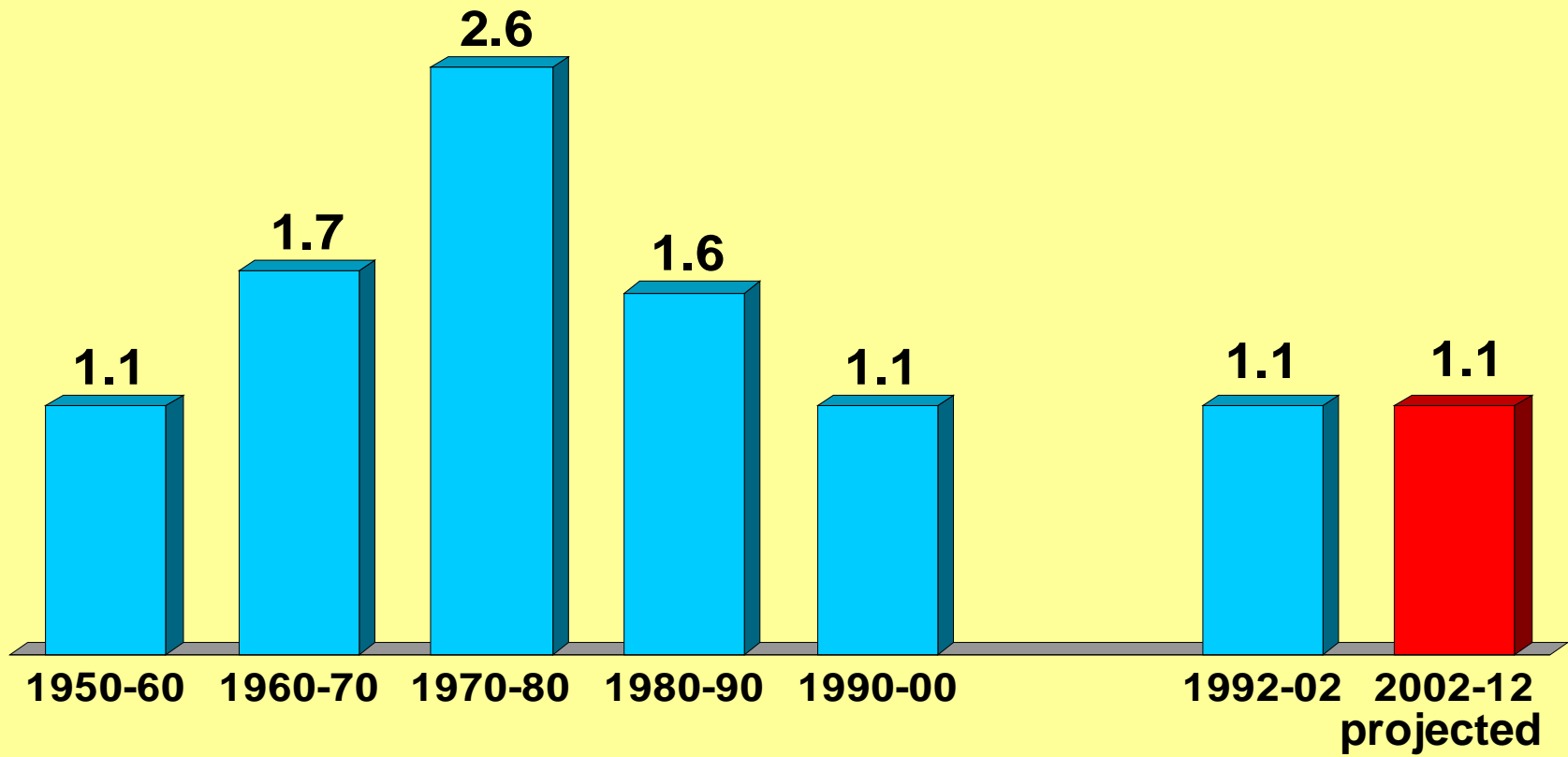
Annual rates of change



Source: Bureau of Labor Statistics

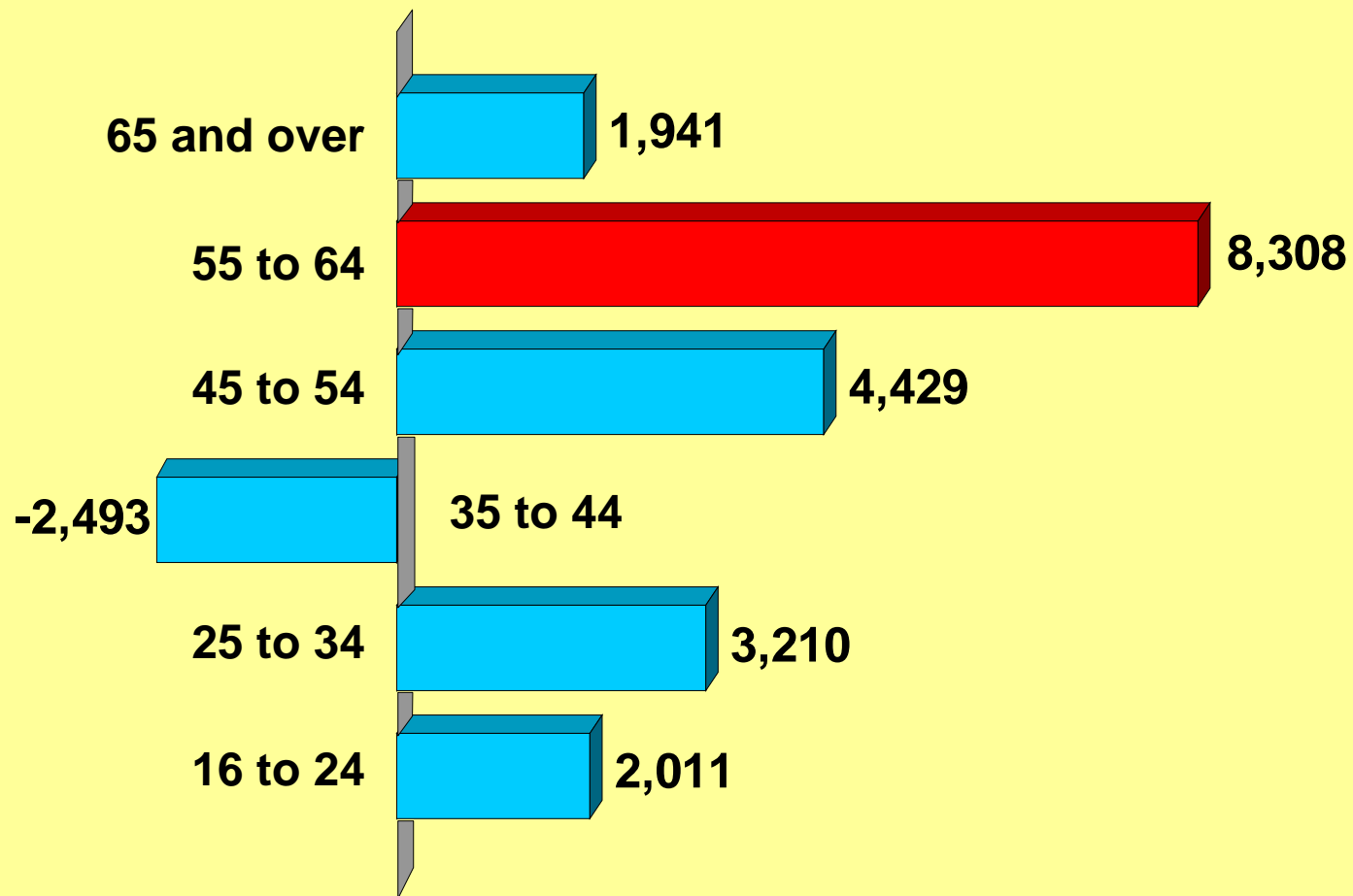
The civilian labor force, ages 16 and older, will grow by 1.1 percent annually between 2002 and 2012.

Annual rates of change



The size of the civilian labor force ages 55-64 will increase significantly

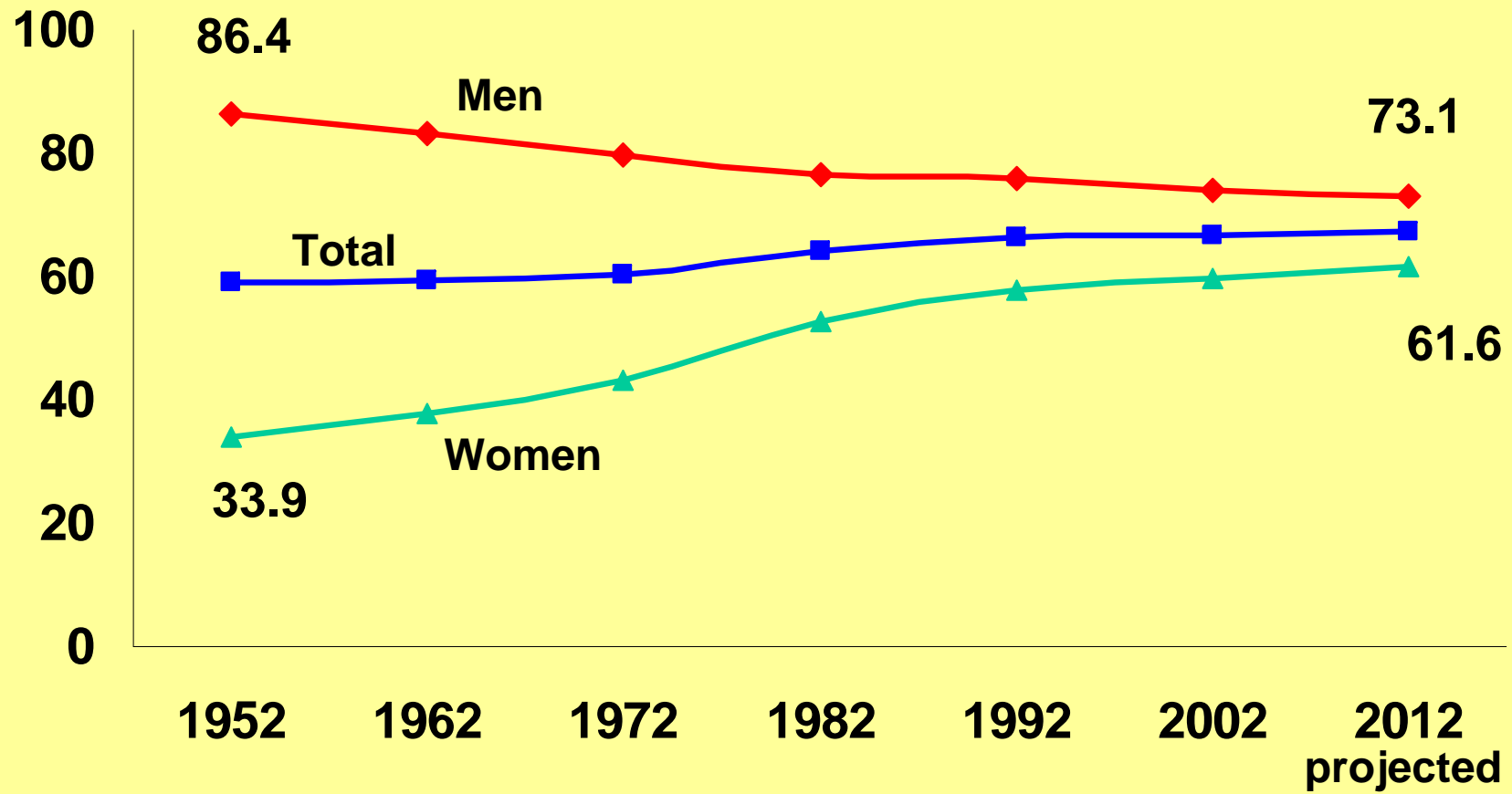
Projected **numerical** change, 2002-12



Source: Bureau of Labor Statistics

Labor force participation rate by sex

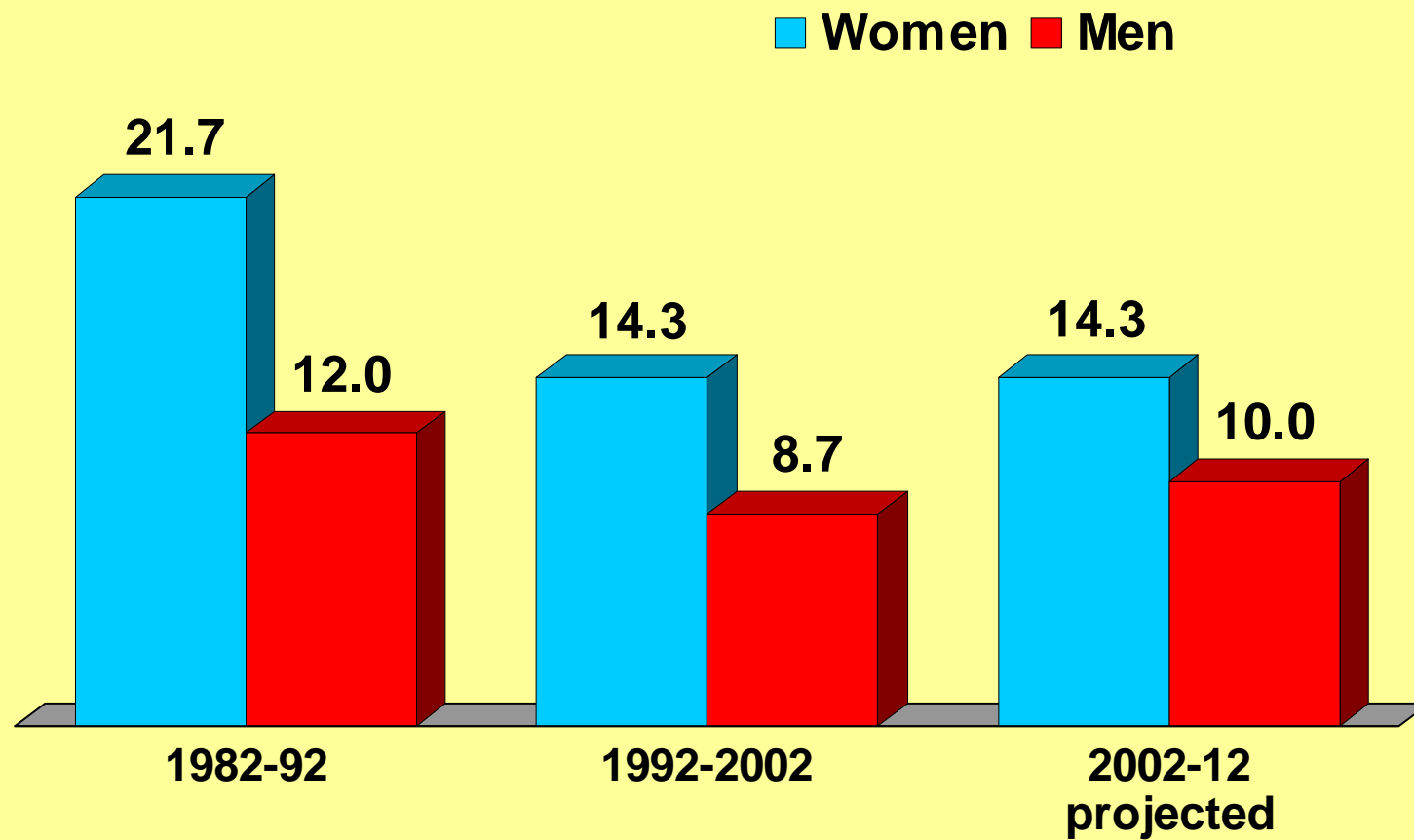
Percent, 1952-2002 and projected 2002-2012



Source: Bureau of Labor Statistics

Women's labor force growth outpaces men's

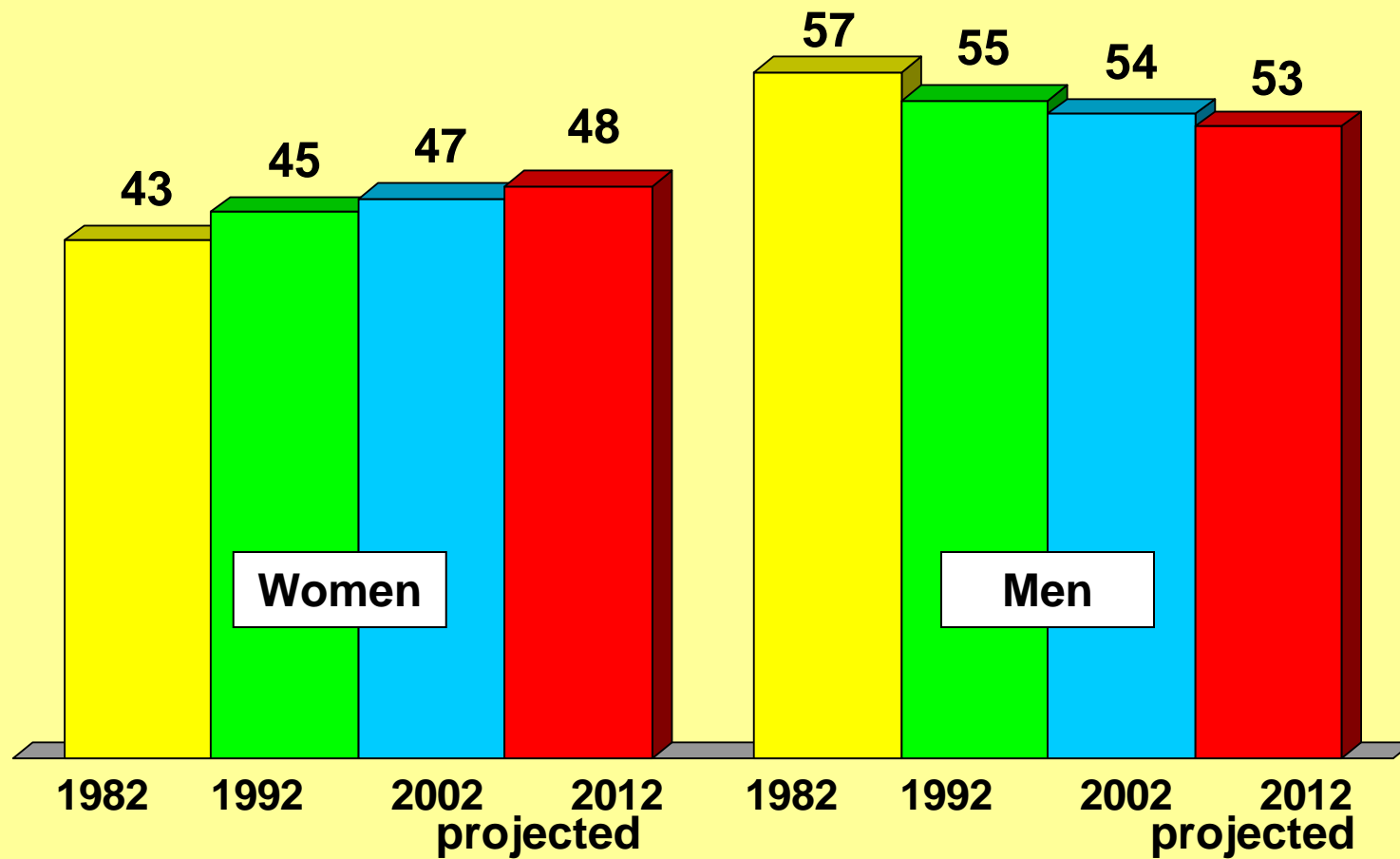
Percent change



Source: Bureau of Labor Statistics

Women's share of the labor force continues to edge up

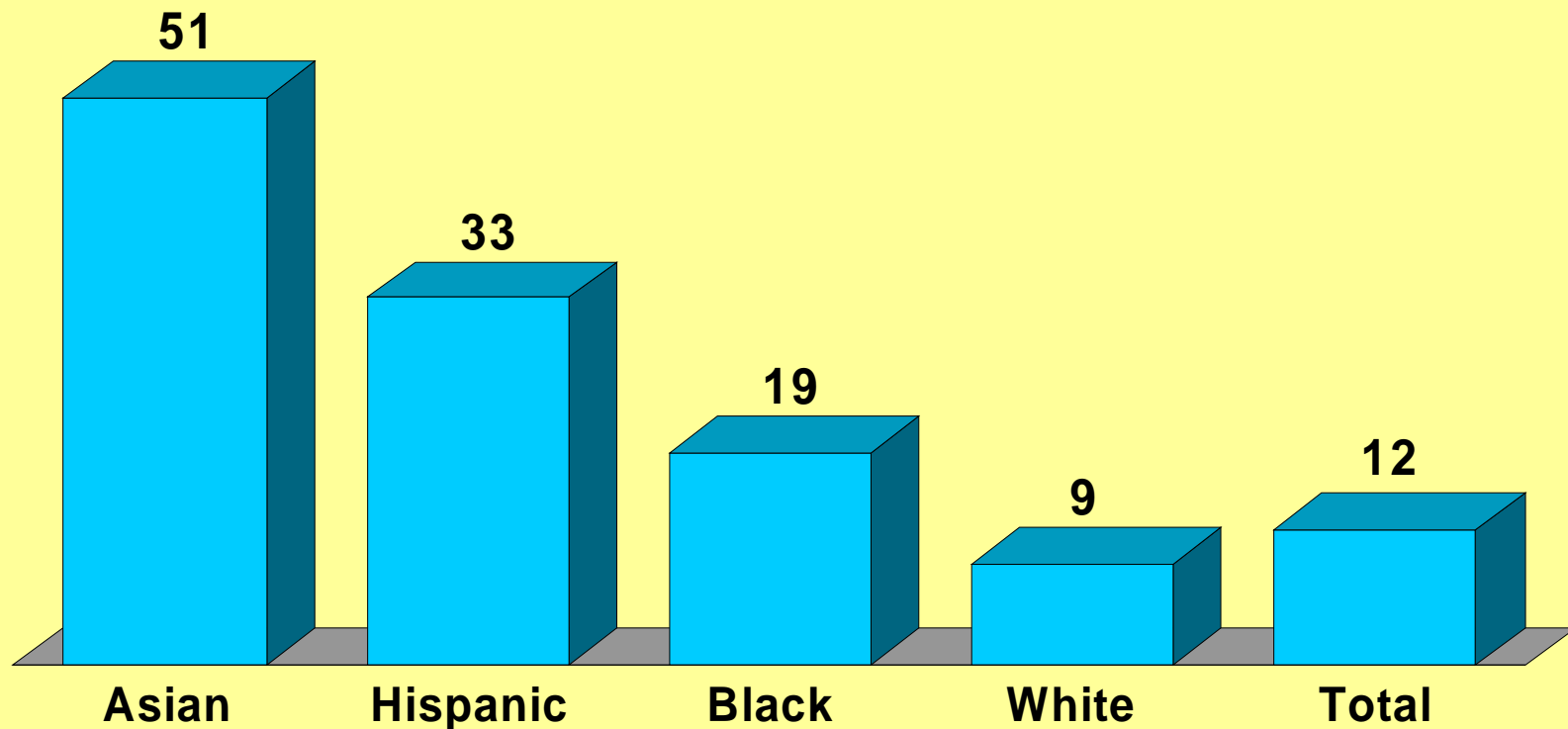
Percent of labor force



Source: Bureau of Labor Statistics

Labor force growth rates of minorities outpaces whites

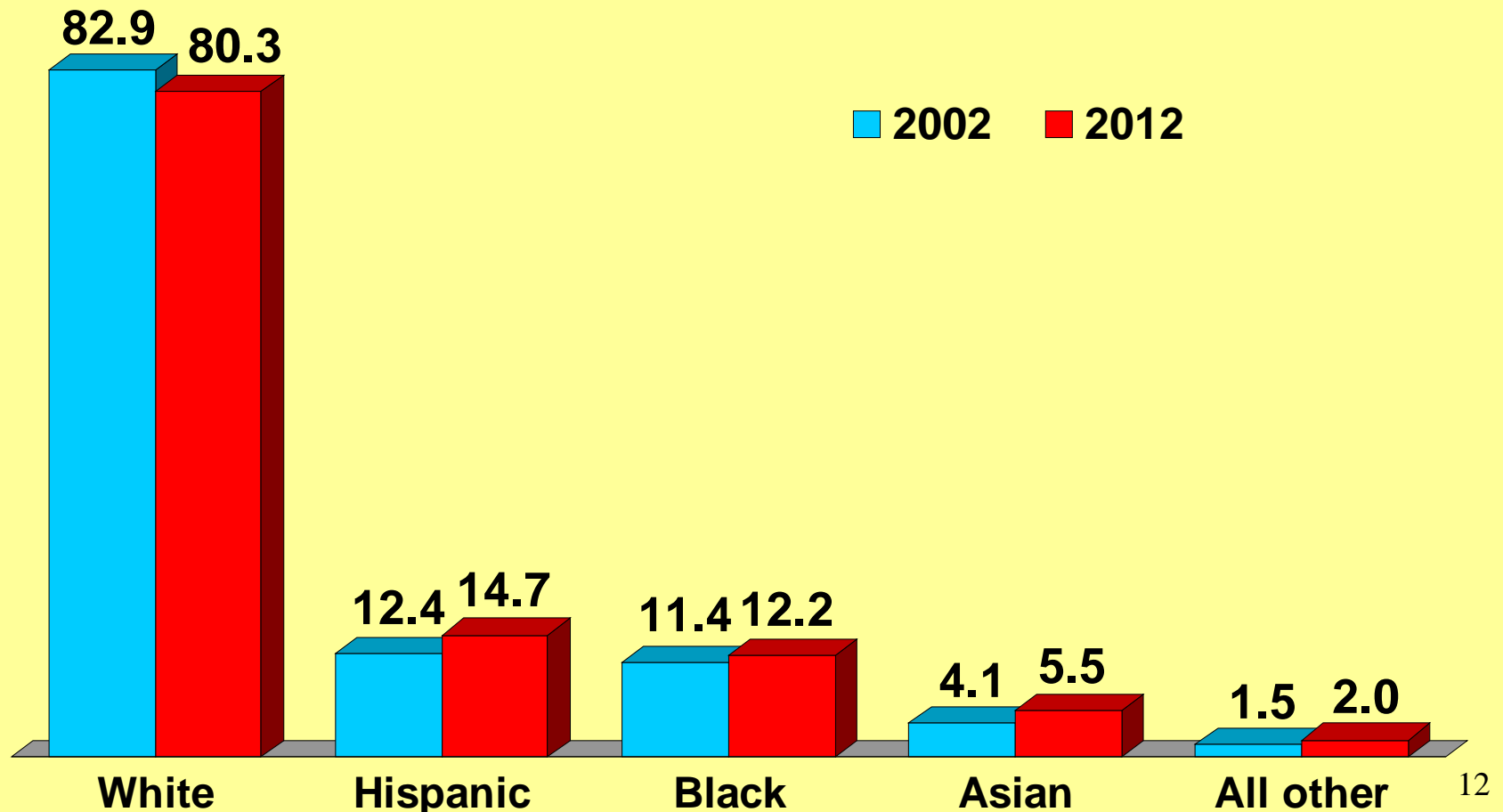
Percent change, 2002-12



Source: Bureau of Labor Statistics

Whites remain the largest group of workers

Percent of labor force



Source: Bureau of Labor Statistics

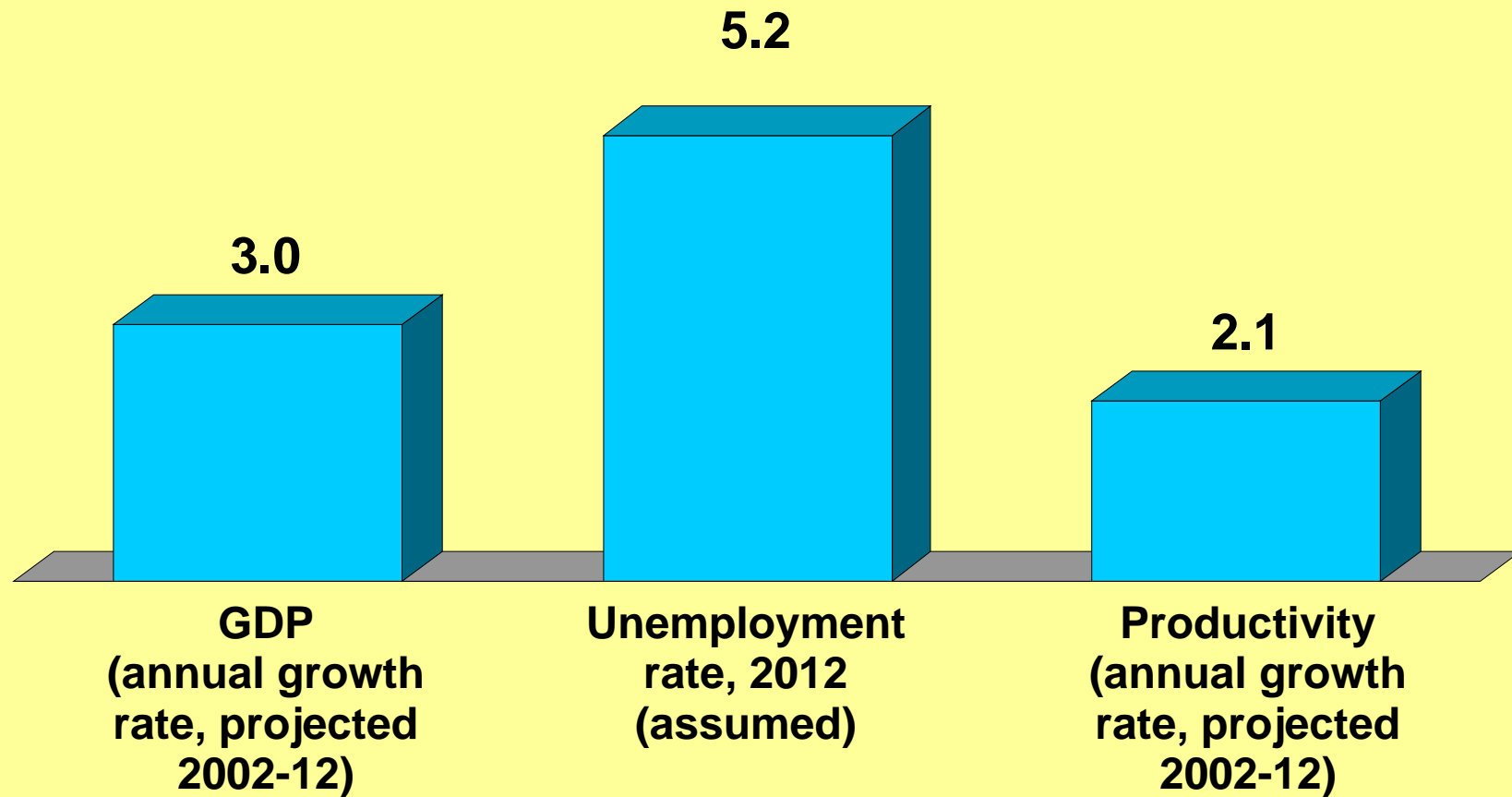
Employment Outlook: 2002-12

Projections Process

- ◆ Labor force
- Economic growth
- ◆ Industry employment
- ◆ Occupational employment

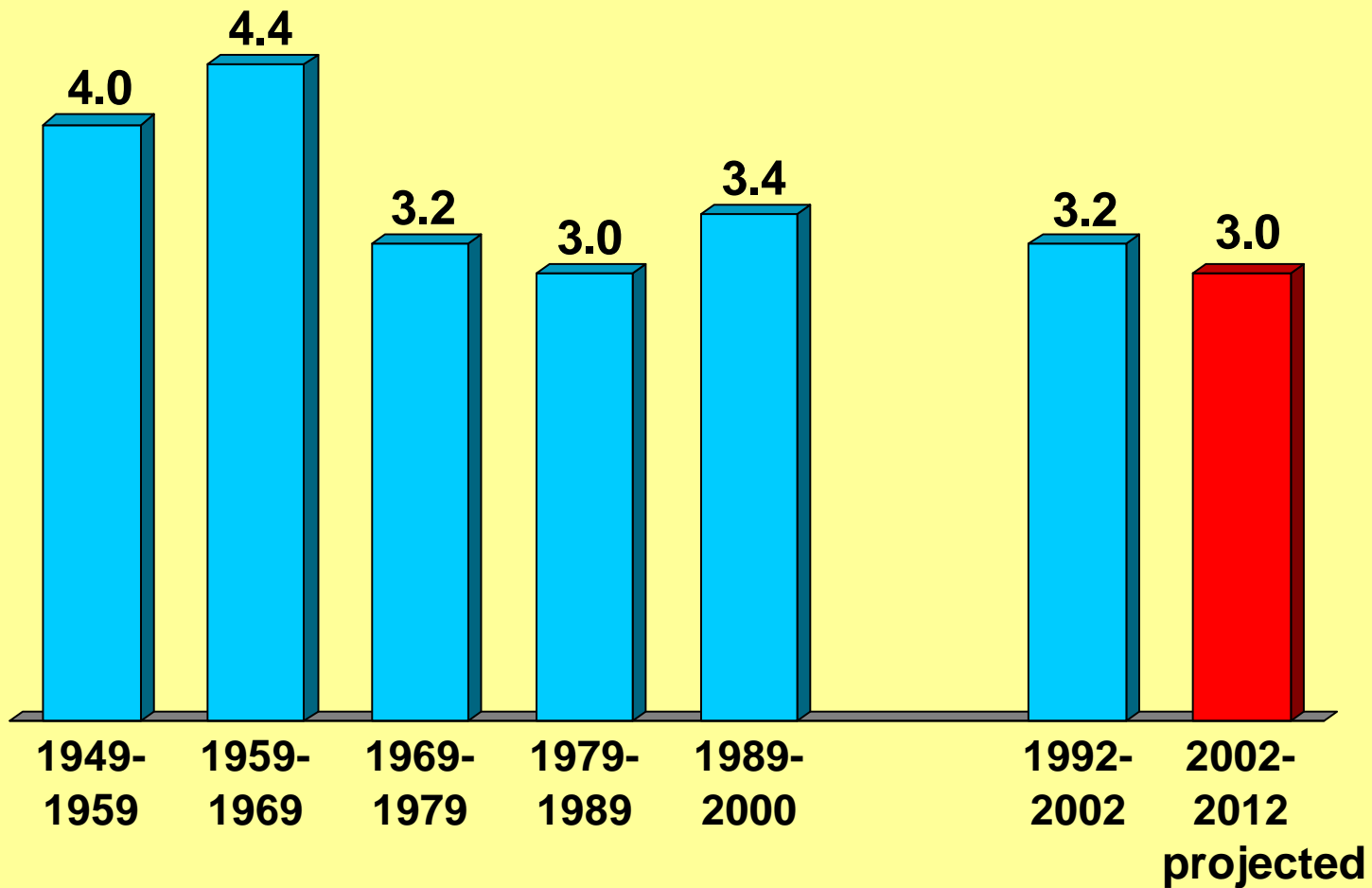
A healthy economy is projected through 2012

Selected economic variables



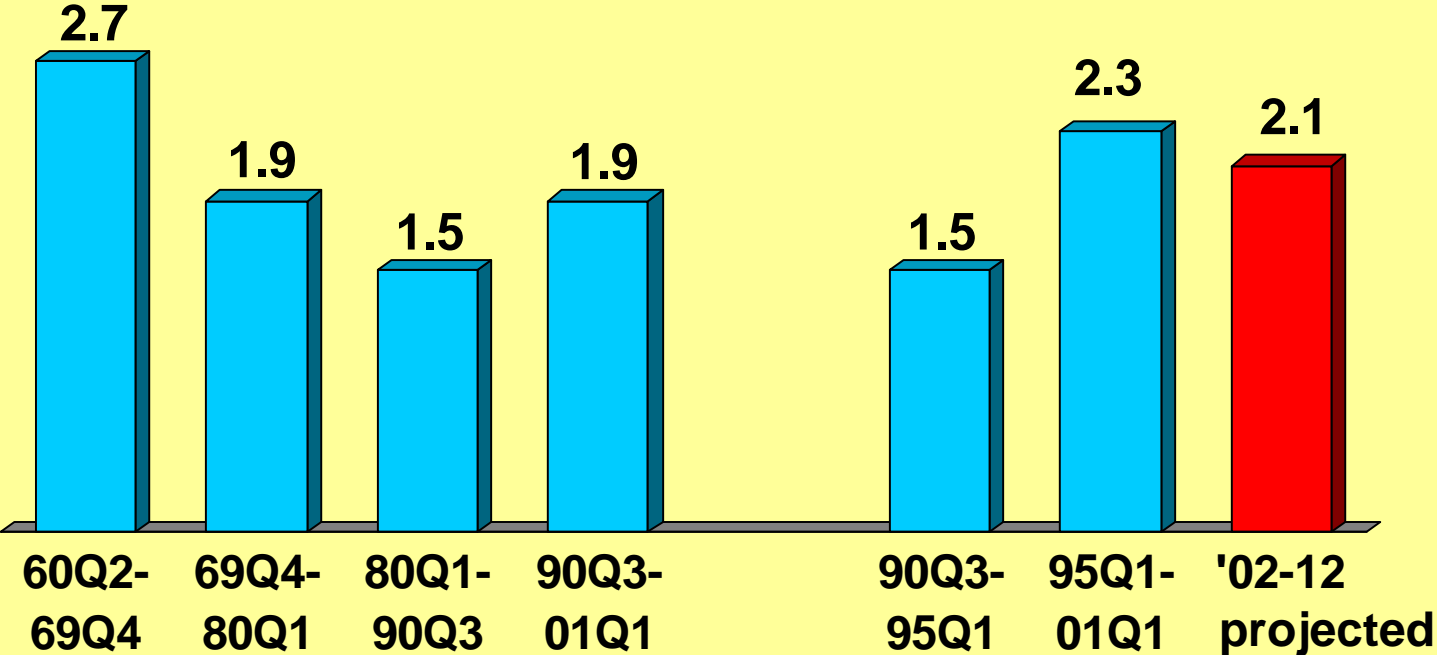
The 2002-12 projections assume a 3.0 percent real GDP growth rate

Average annual rate of change



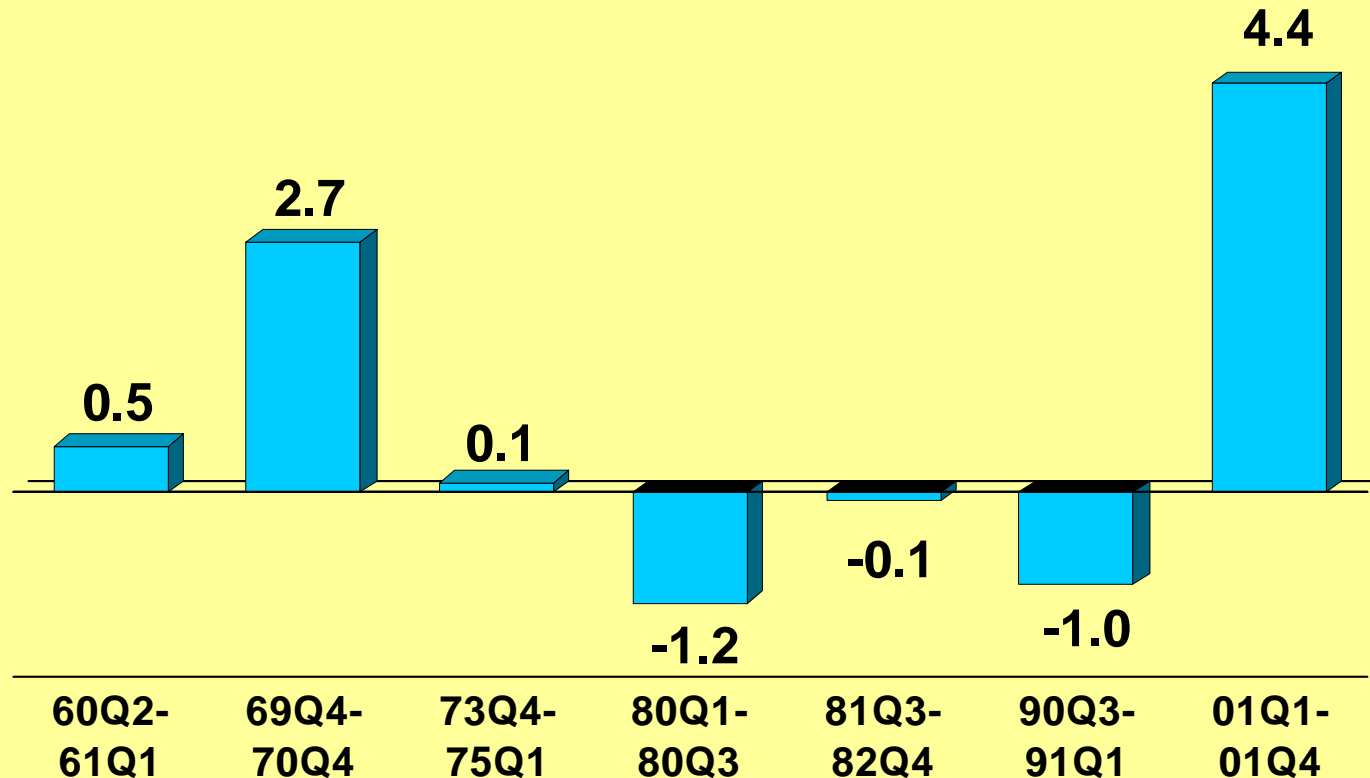
Annual rate of growth of output per hour, nonfarm business, comparison of selected business cycle expansionary periods

Average annual rate of change



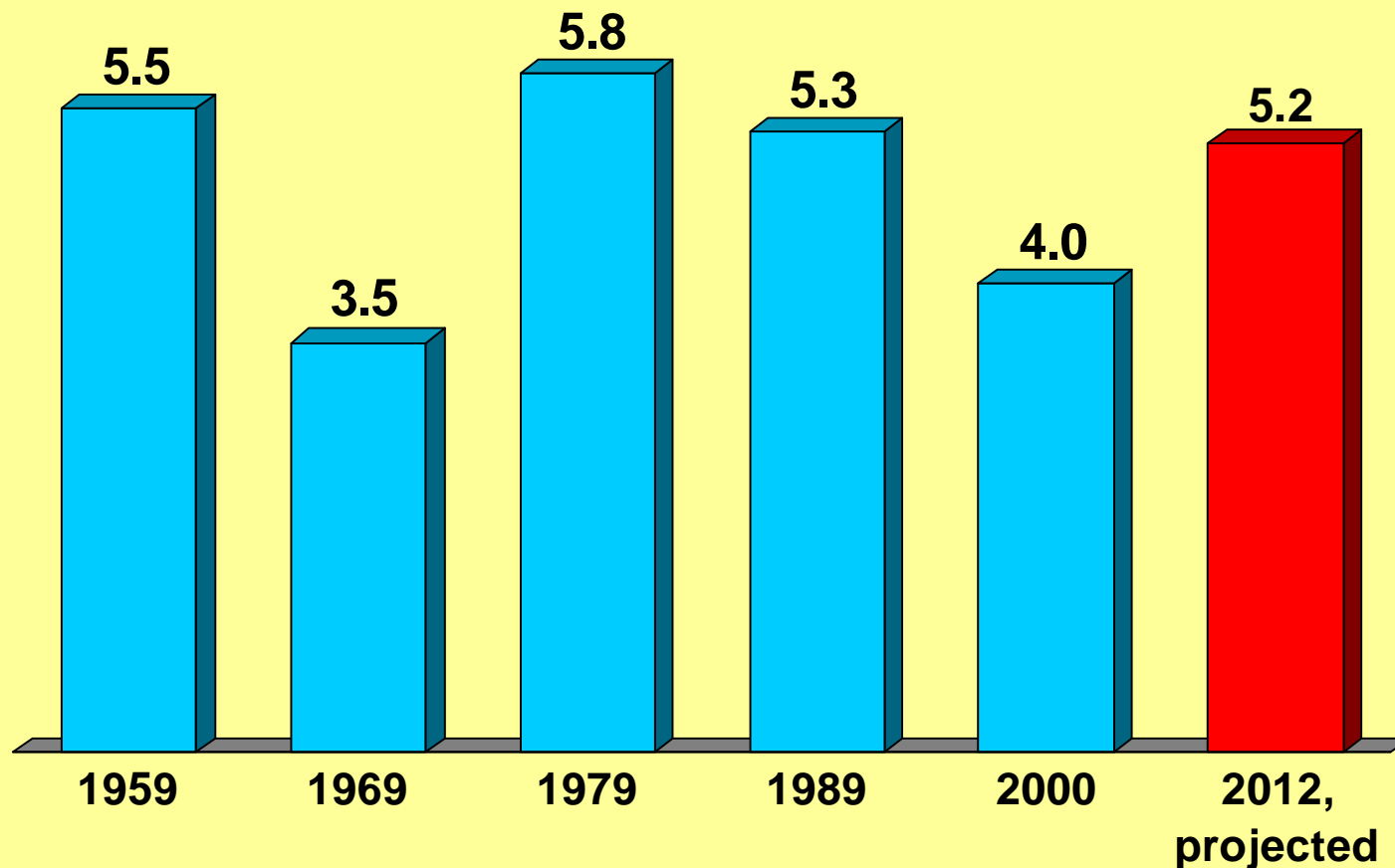
Annualized growth rates of labor productivity during recessions

Average annual rate of change



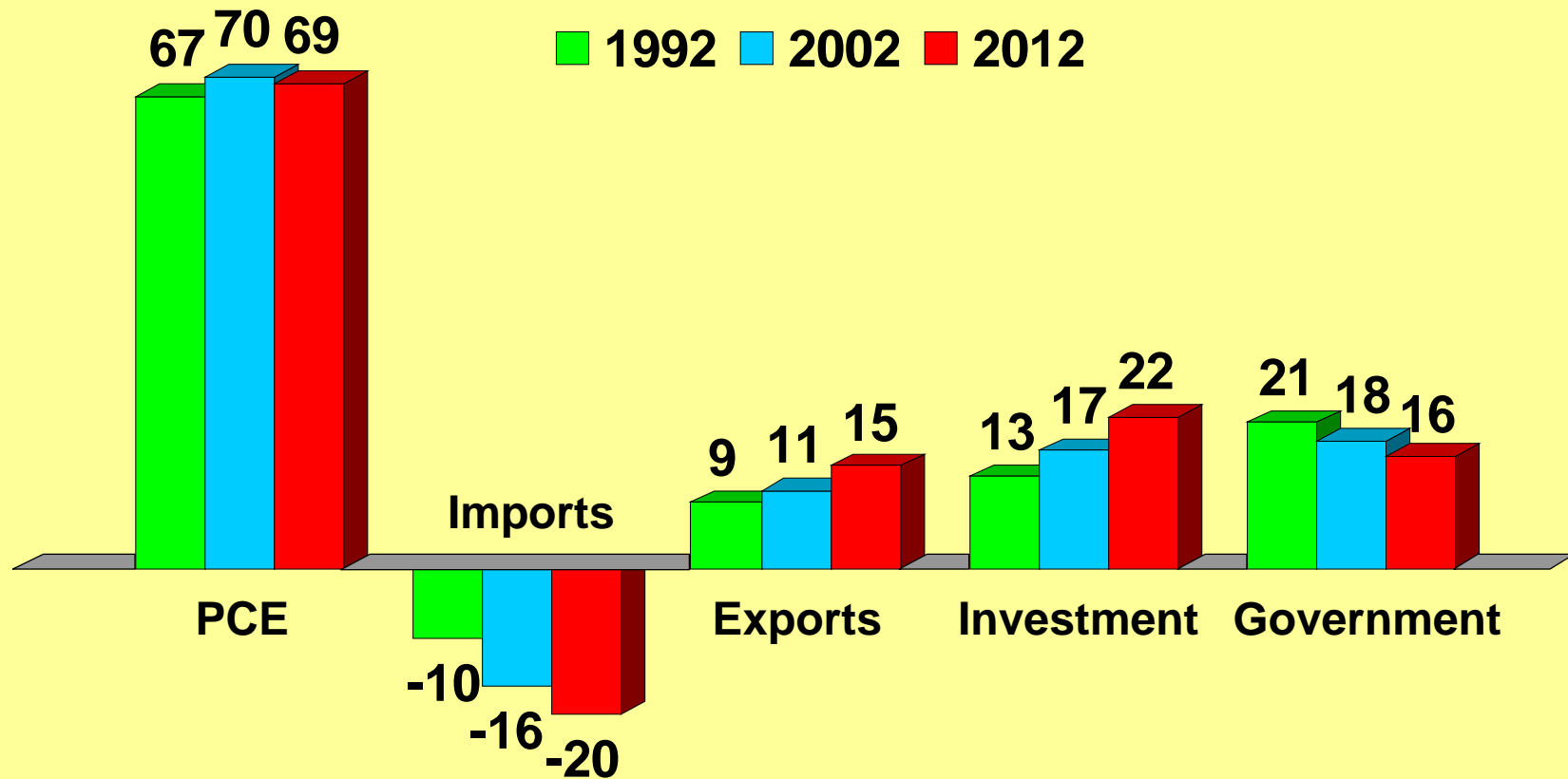
The 2002-12 projections assume a 5.2 percent unemployment rate

Percent



Investment expenditures have grown steadily as a share of GDP since 1992

Share of GDP



Source: Bureau of Labor Statistics

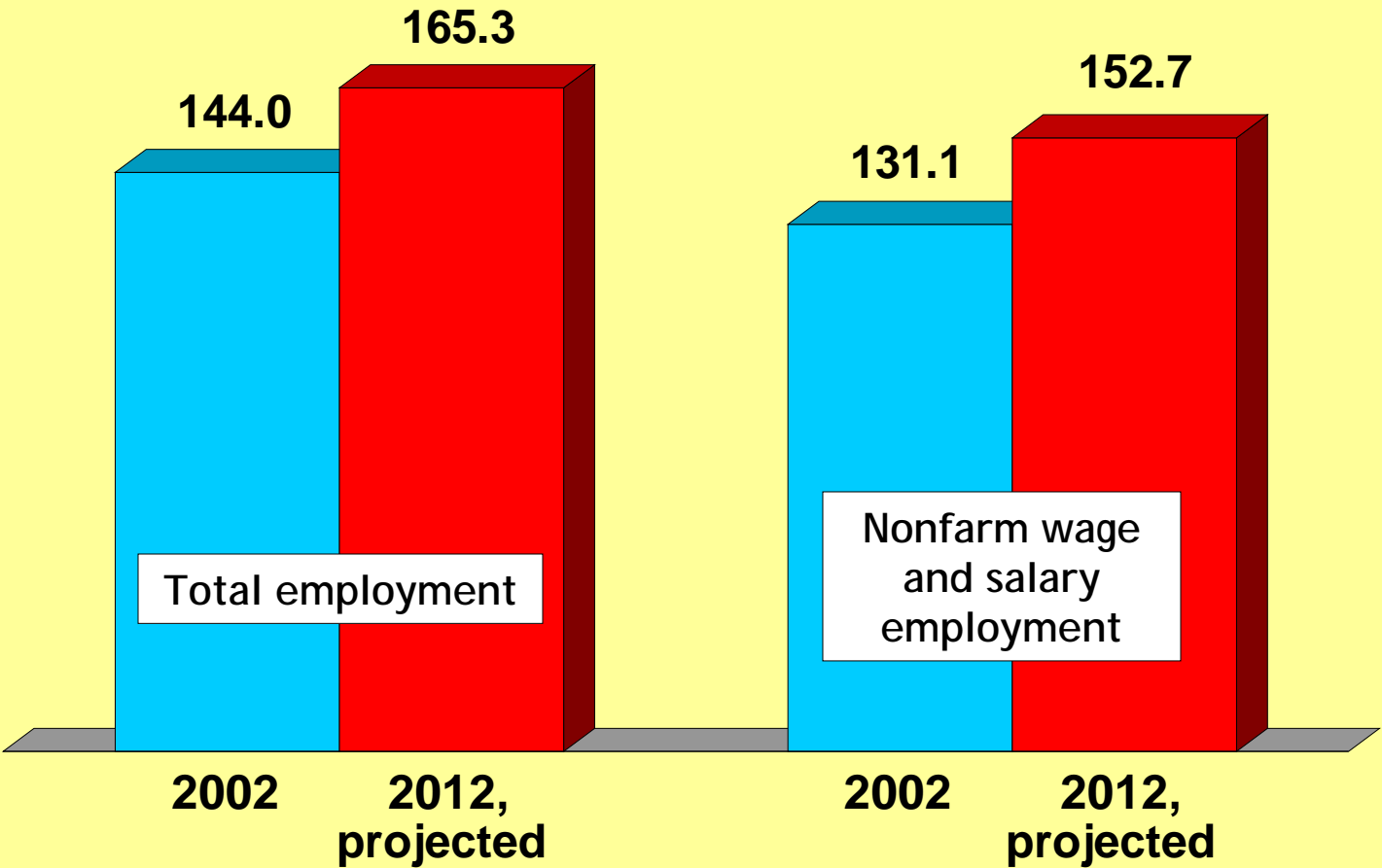
Employment Outlook: 2002-12

Projections Process

- Labor force
- Economic growth
- Industry output and employment
- Occupational employment

Total employment is projected to increase by 14.8 percent or 21.3 million. Nonfarm wage and salary employment is projected to increase by 21.6 million

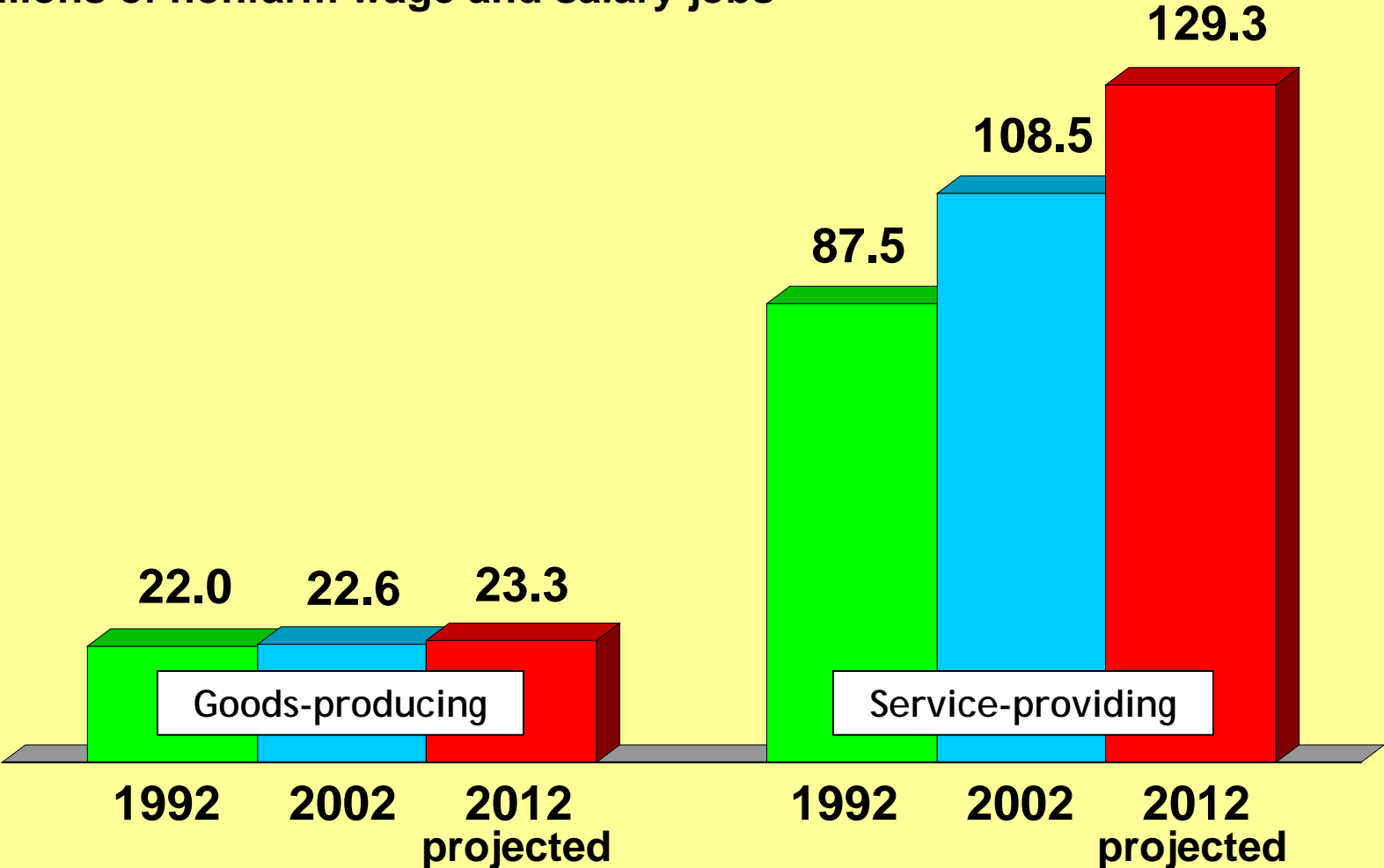
Millions of jobs



Source: Bureau of Labor Statistics

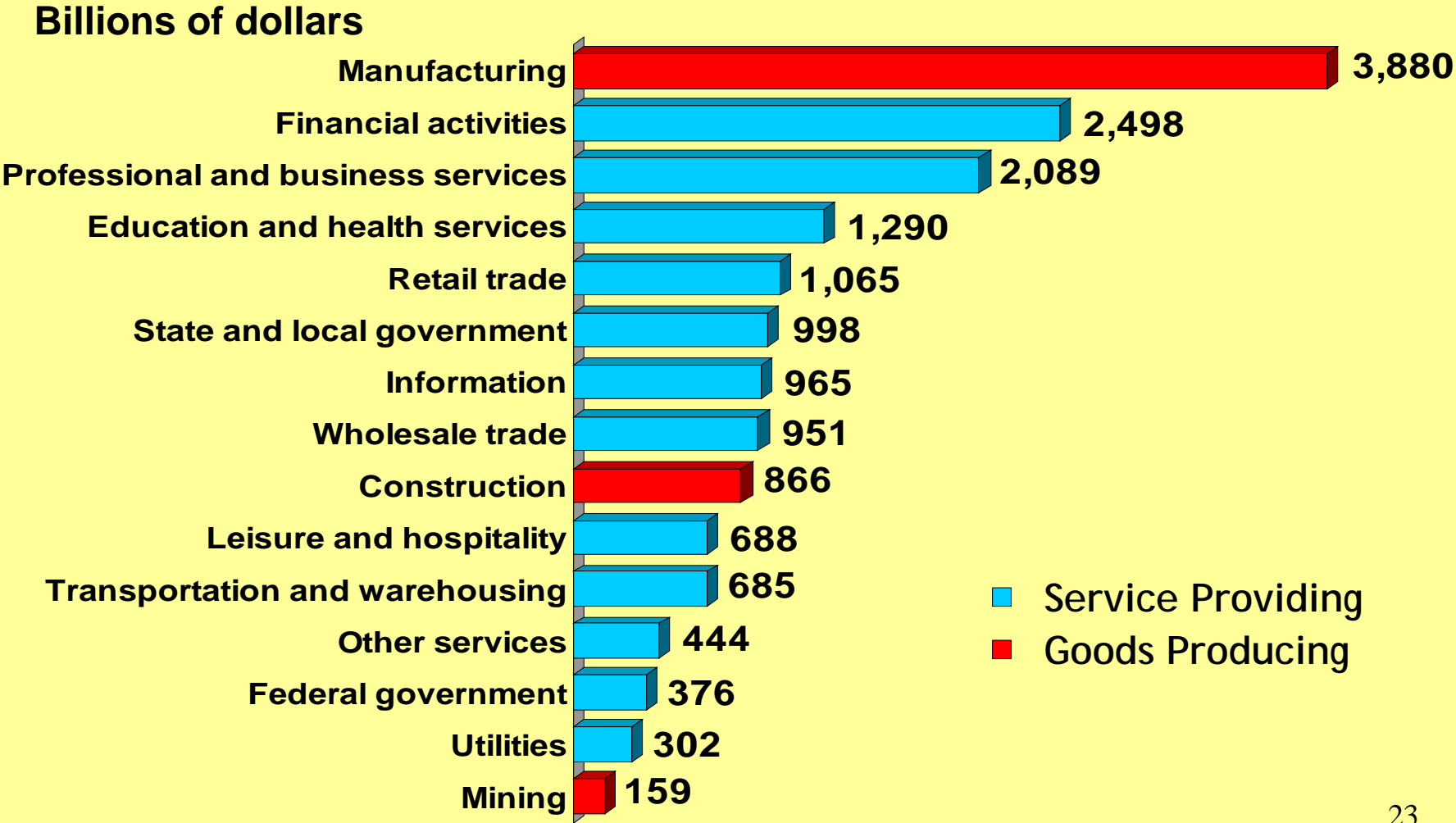
Service-providing industries continue to lead employment growth

Millions of nonfarm wage and salary jobs



Source: Bureau of Labor Statistics

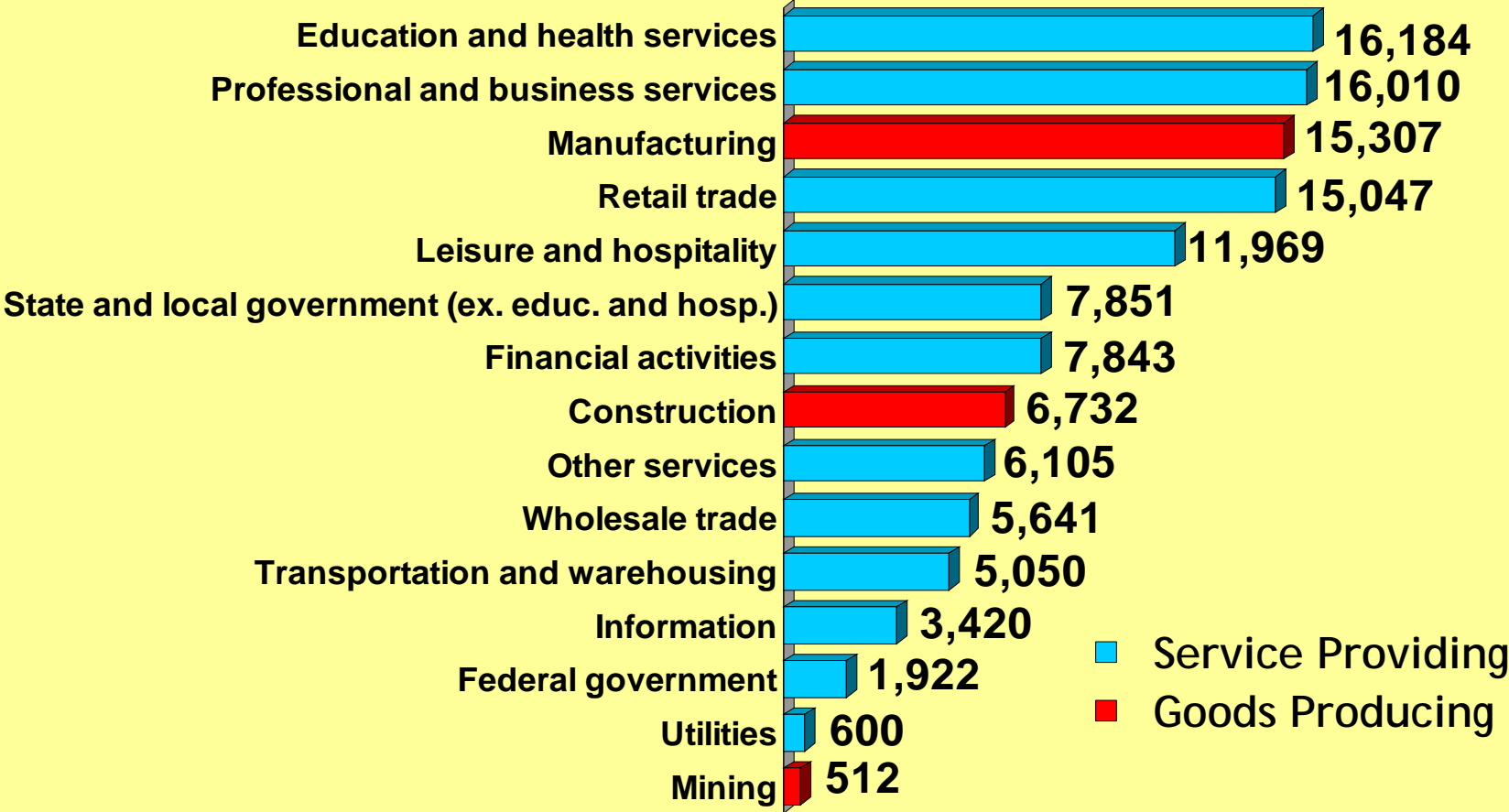
Manufacturing, financial activities and professional and business services accounted for nearly half of total output in 2002



Source: Bureau of Labor Statistics

Education and health services and professional and business services accounted for nearly 40 percent of employment in 2002

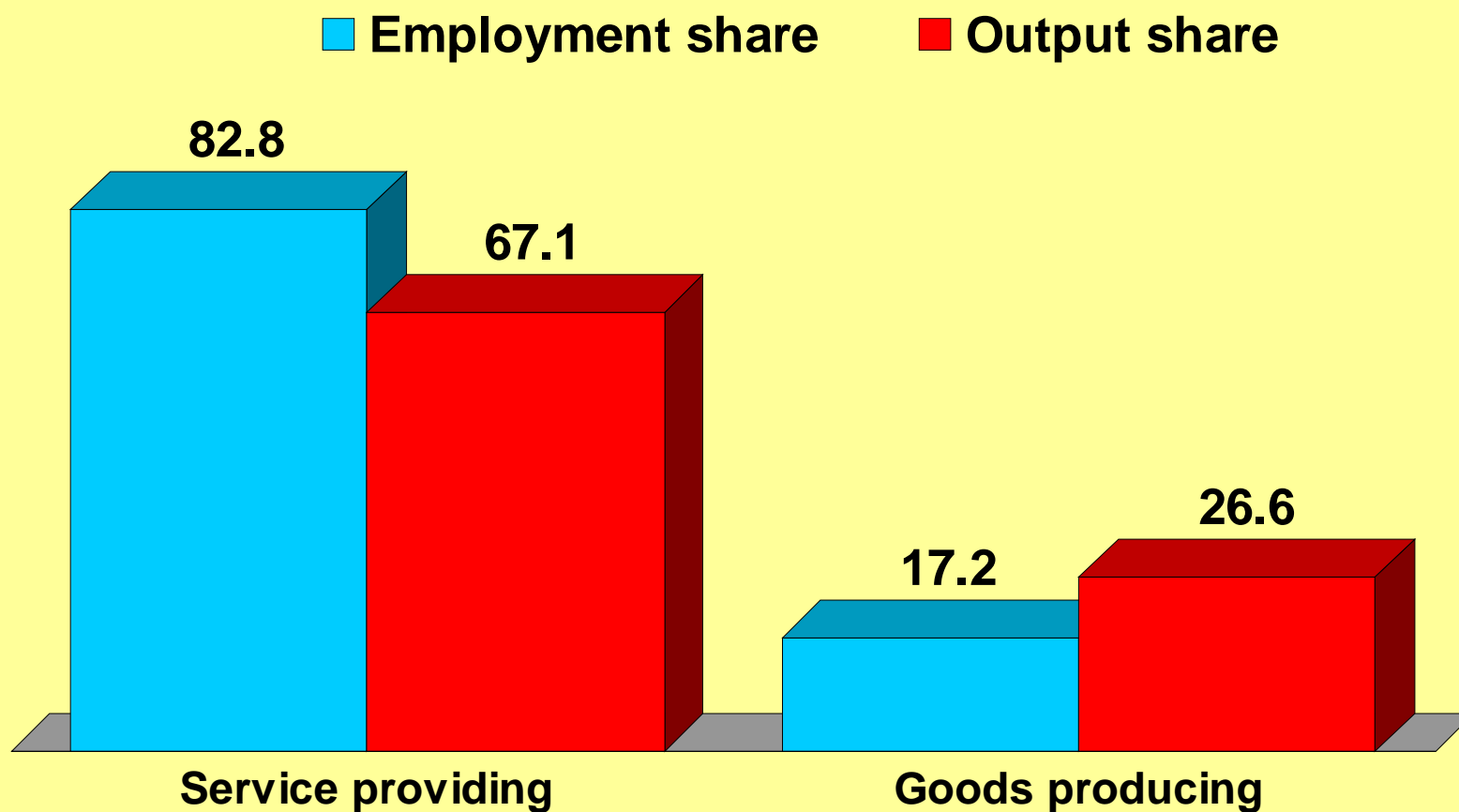
Thousands of nonfarm wage and salary jobs



Source: Bureau of Labor Statistics

Output and nonfarm wage and salary employment shares of goods-producing and service-providing industries, 2002

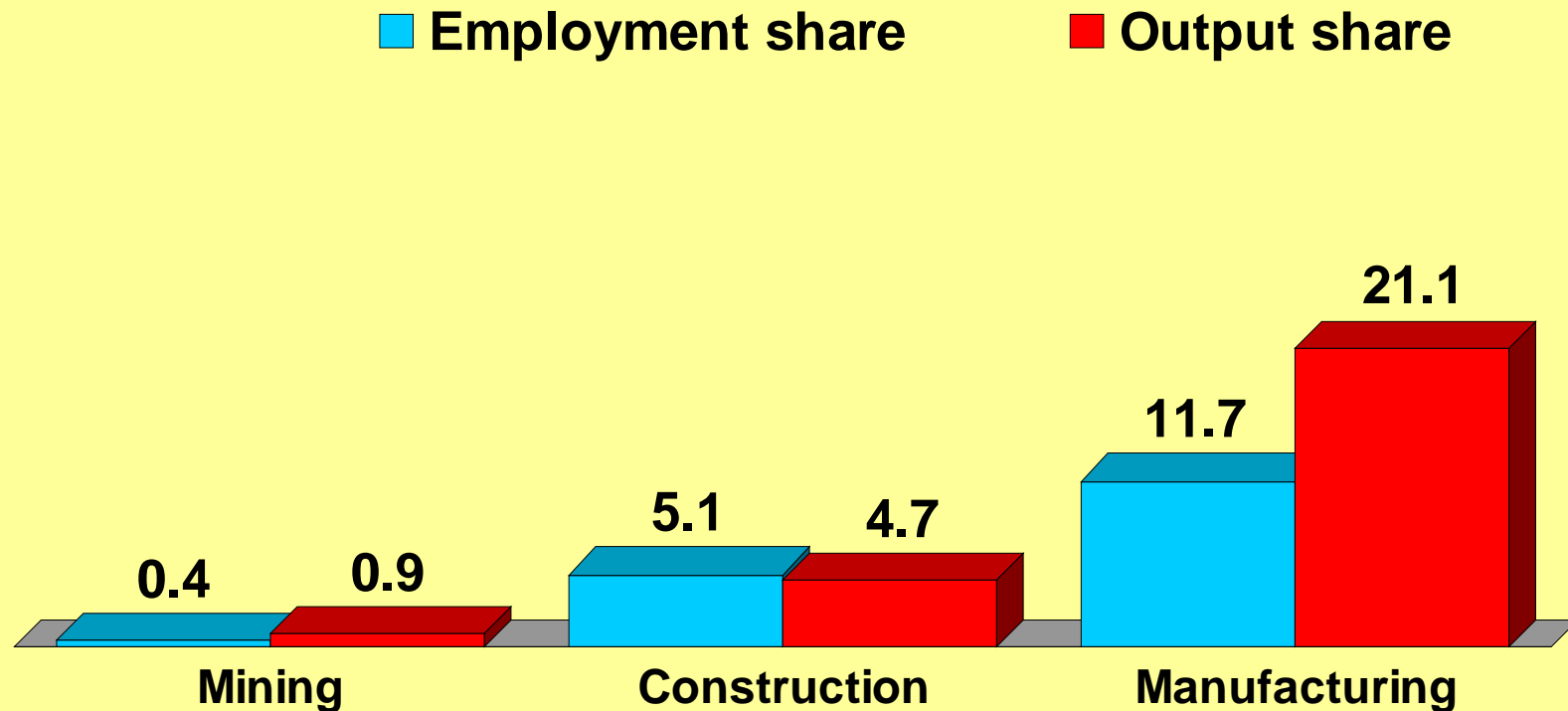
Percent



Source: Bureau of Labor Statistics

Output and nonfarm wage and salary employment shares of goods-producing industries, 2002

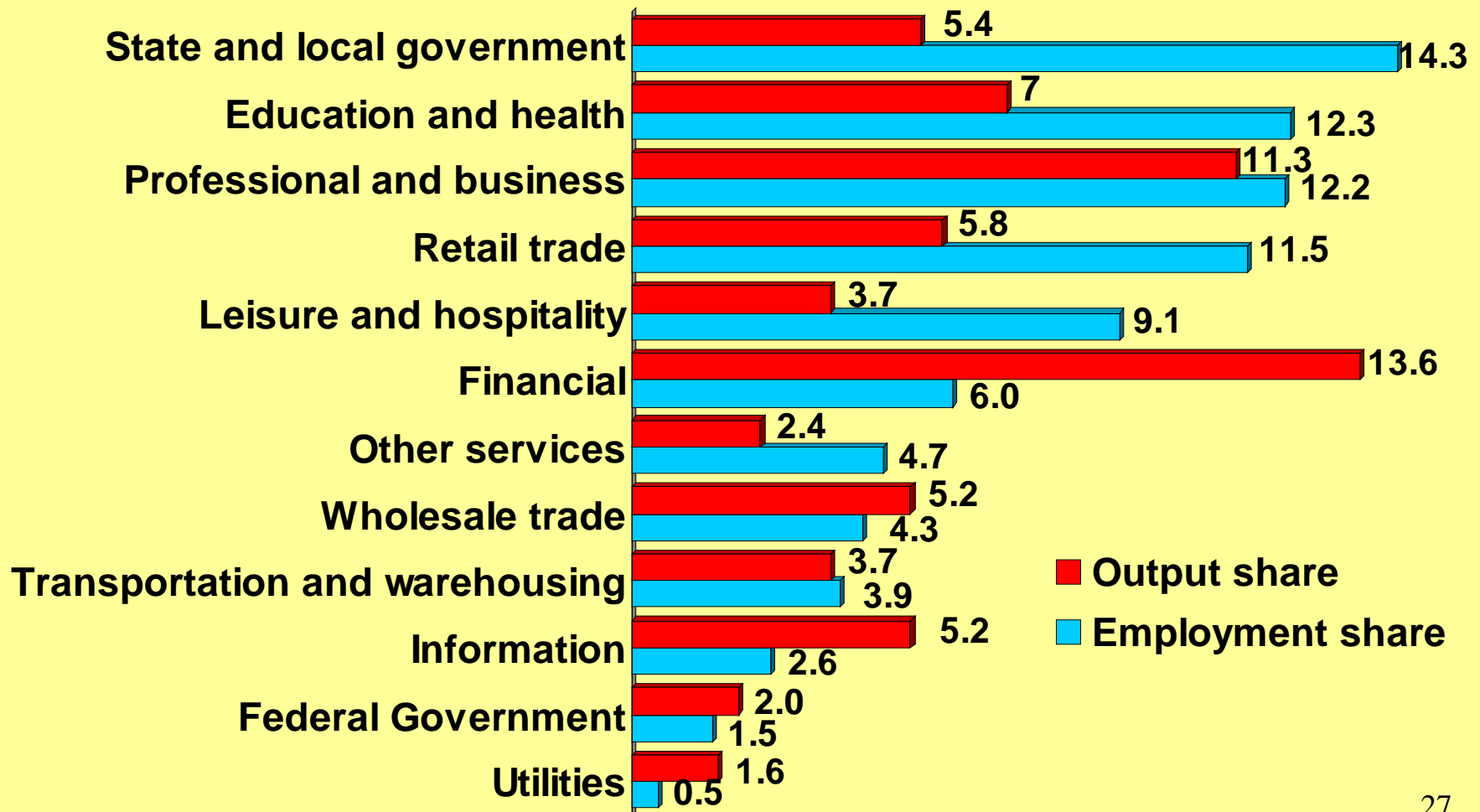
Percent



Source: Bureau of Labor Statistics

Output and nonfarm wage and salary employment shares of service-providing industries, 2002

Percent

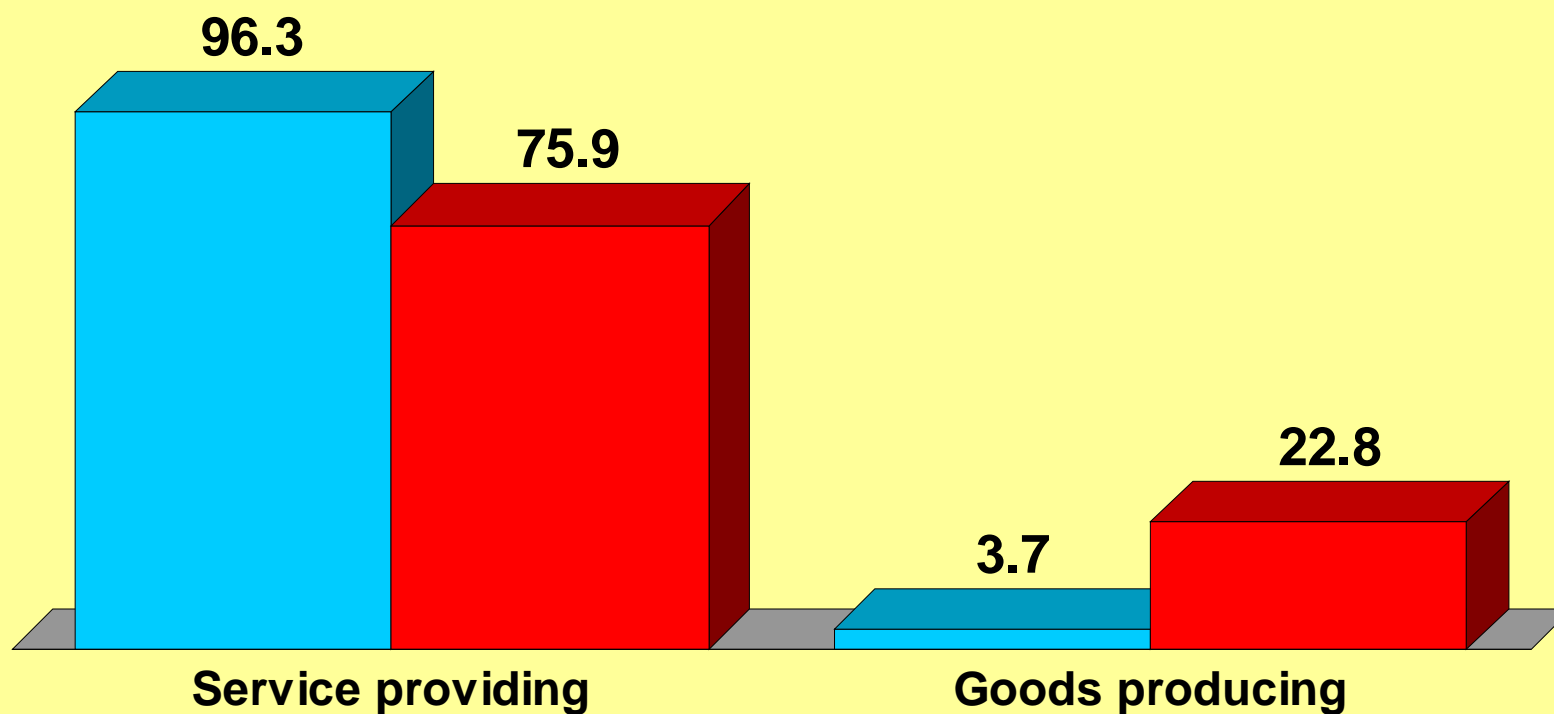


Source: Bureau of Labor Statistics

Shares of the projected growth in output and nonfarm wage and salary employment of goods-producing and service-providing industries, 2002-12

Percent

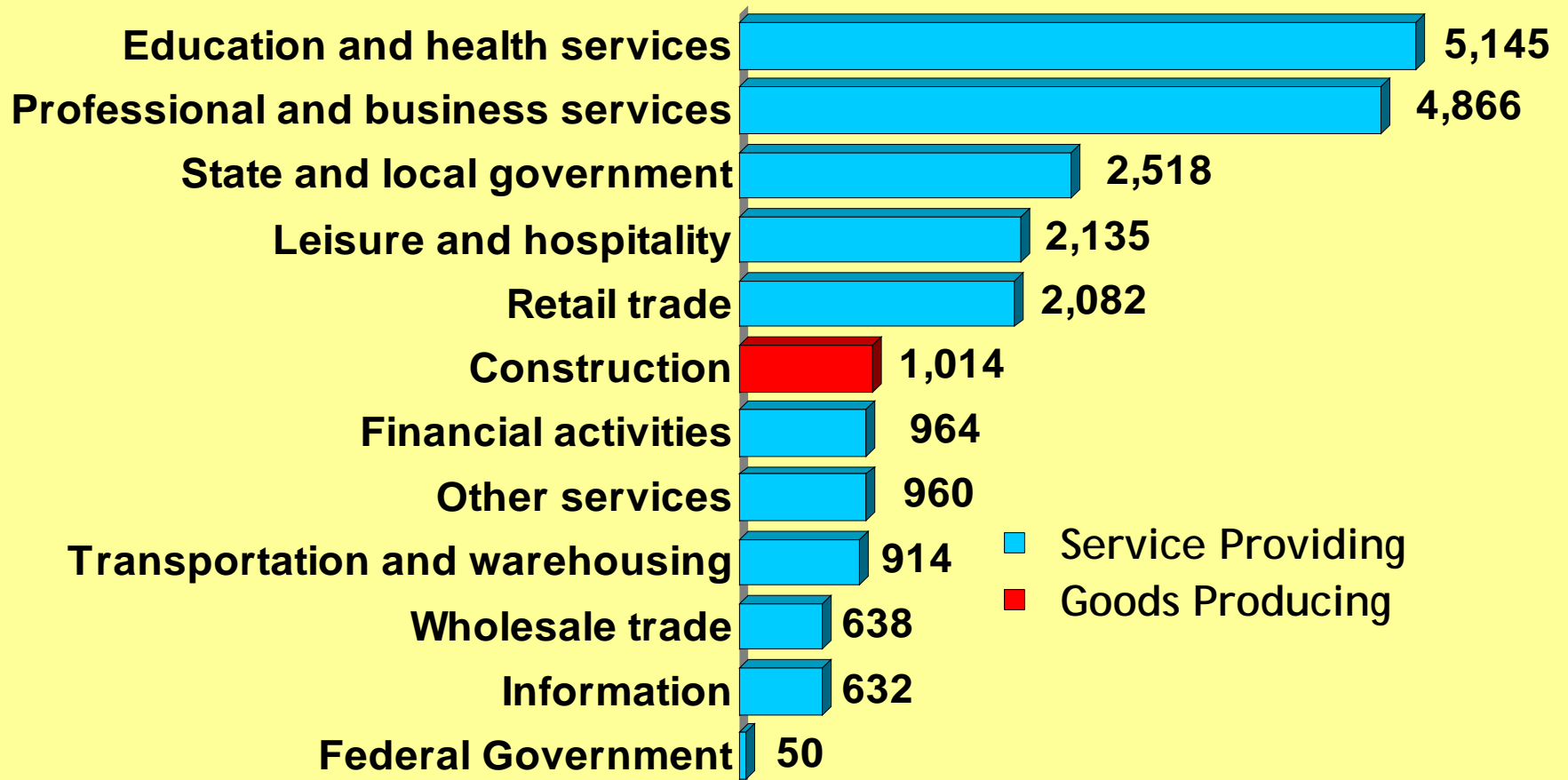
■ Employment share ■ Output share



Source: Bureau of Labor Statistics

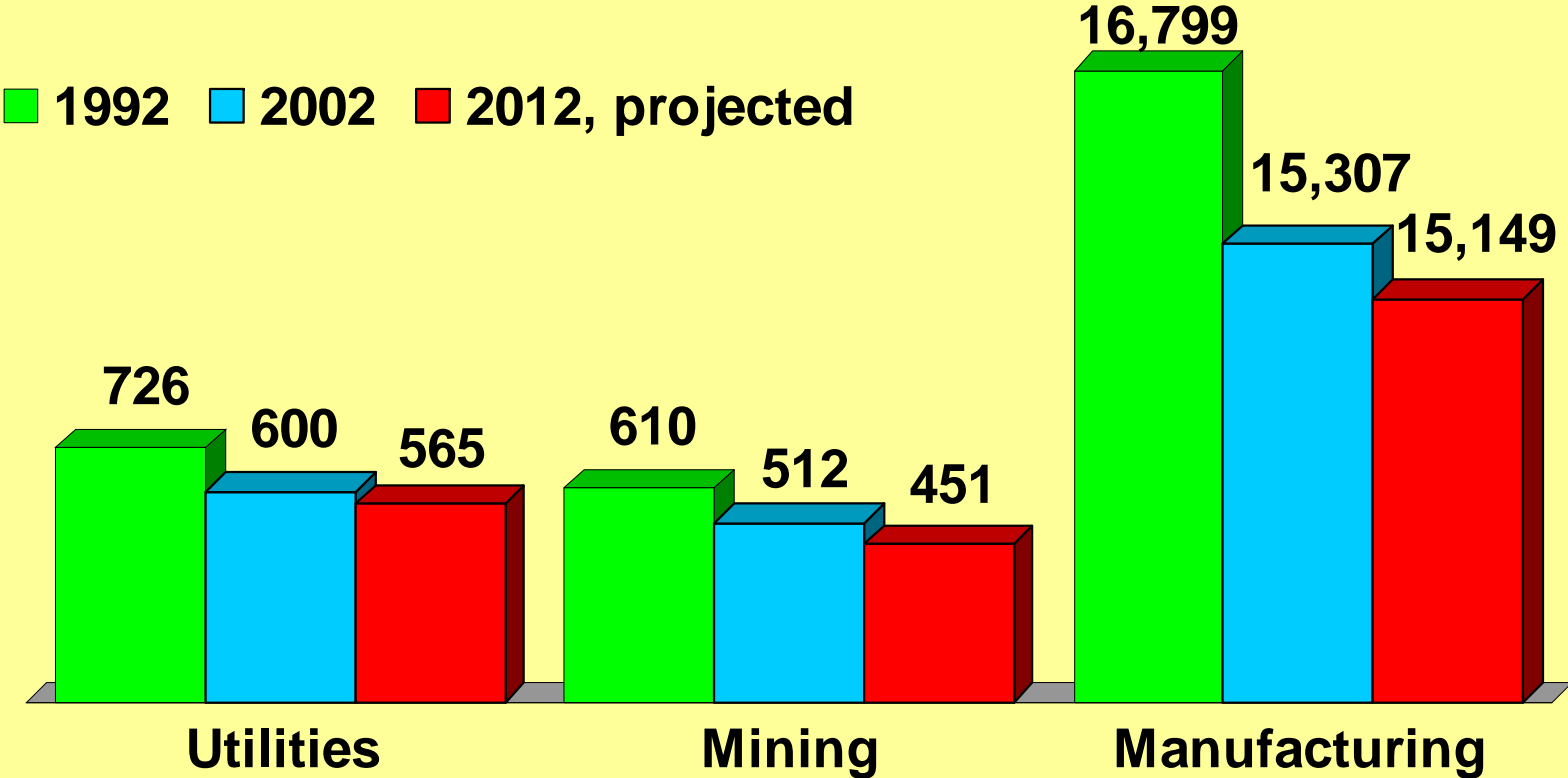
Education and health services and professional and business services account for nearly half of projected total employment growth

Thousands of nonfarm wage and salary jobs, 2002-12



Three industries are projected to have declines in employment

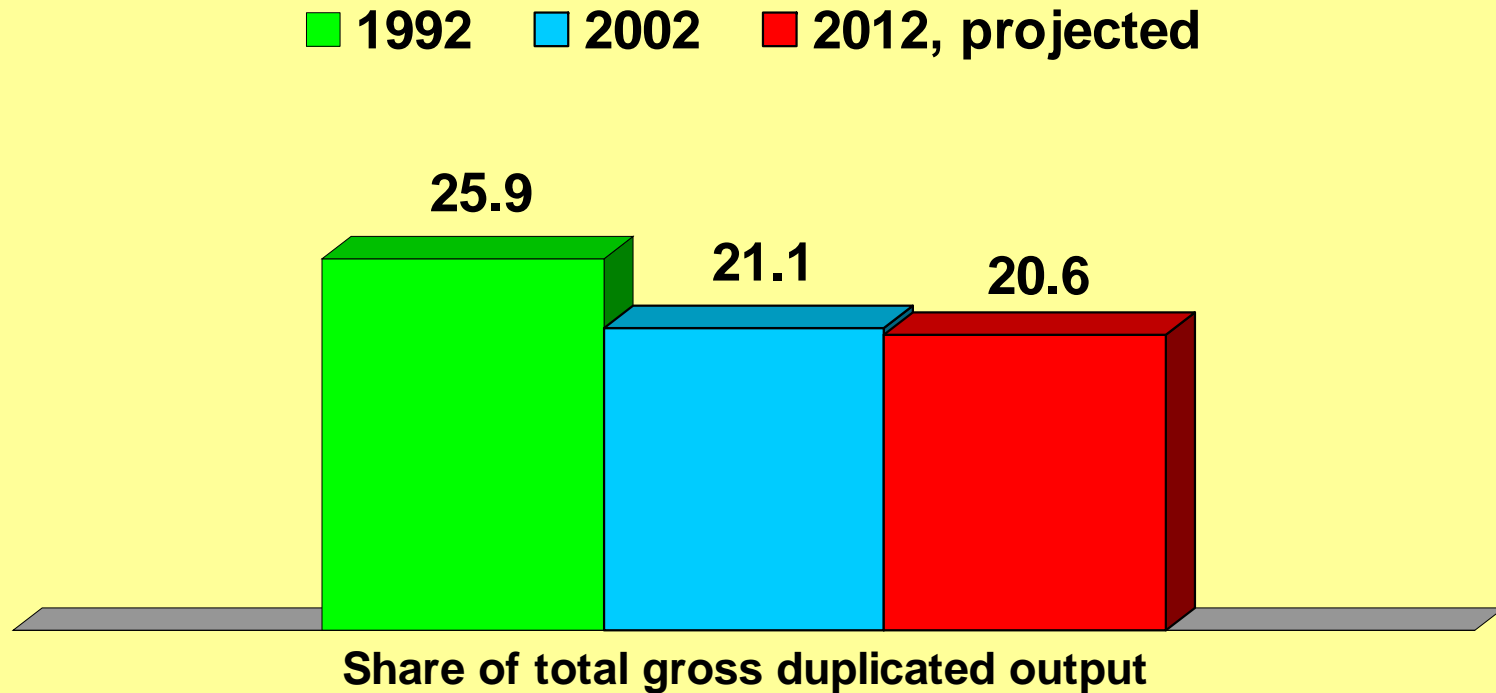
Thousands of nonfarm wage and salary jobs



Source: Bureau of Labor Statistics

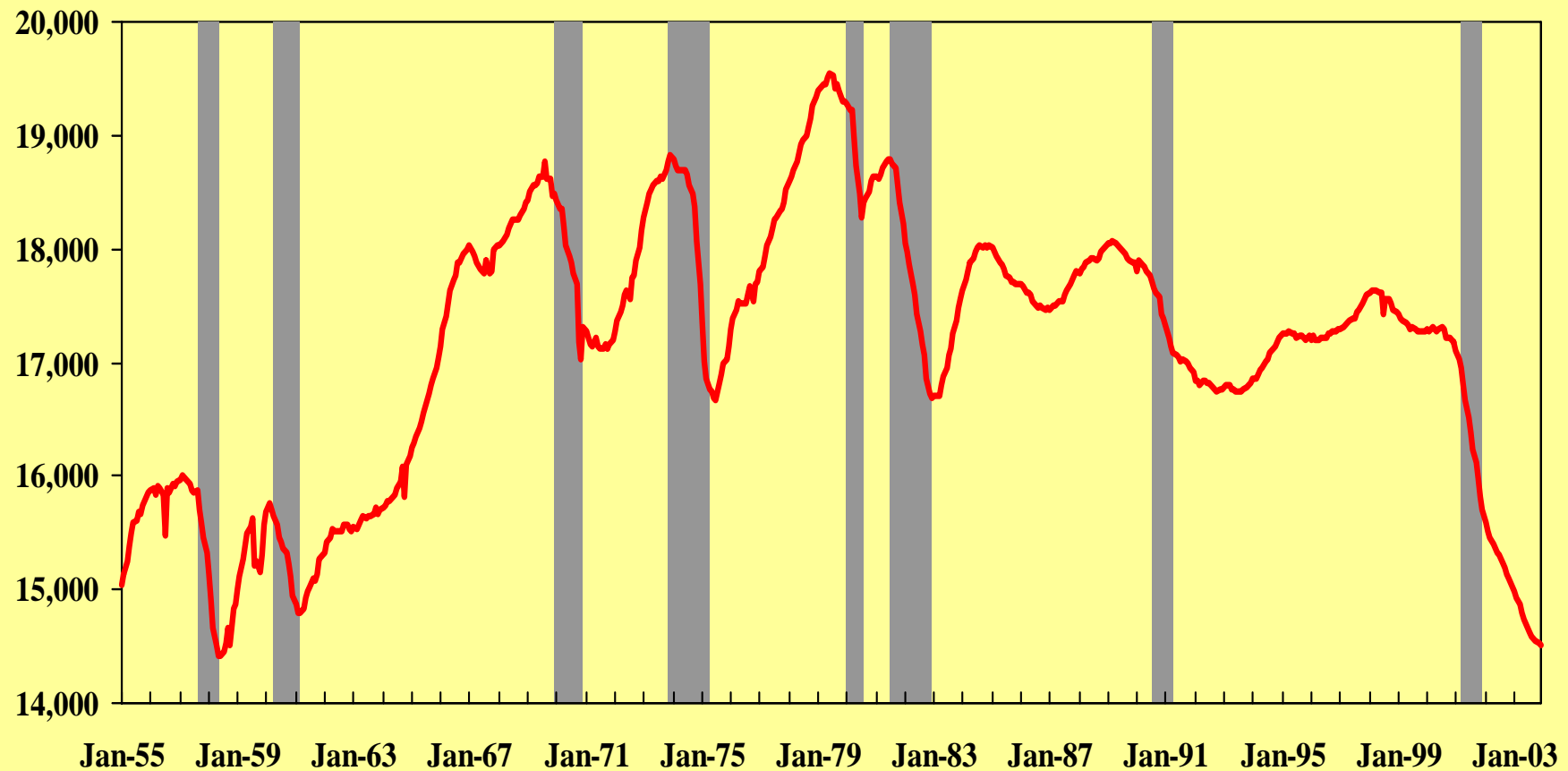
Manufacturing's share of total gross duplicated output

Percent



Employment in manufacturing 1955-2003

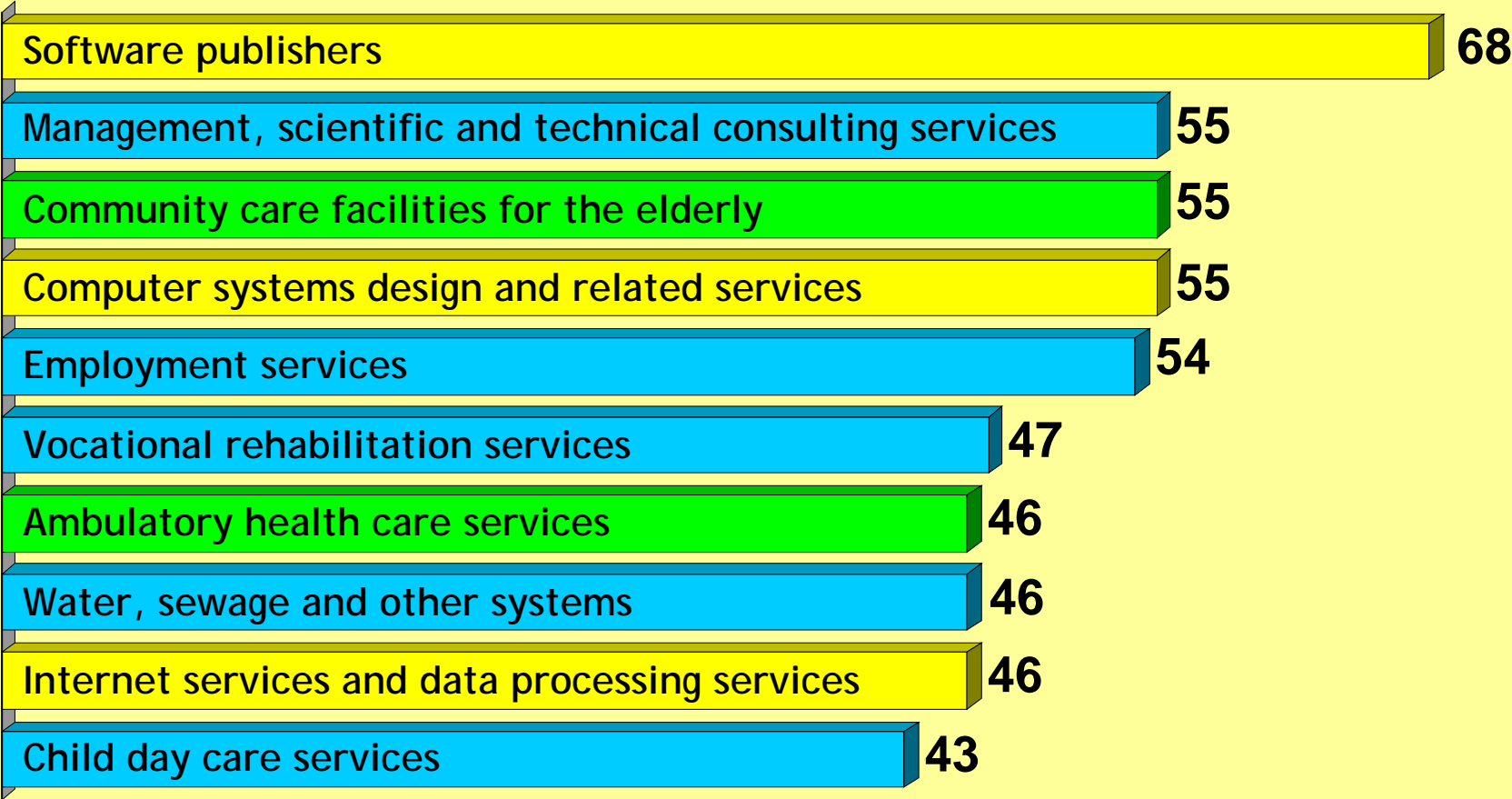
Seasonally adjusted, in thousands



SOURCE: Bureau of Labor Statistics, Current Employment Statistics Survey, January 9, 2004

Three of the 10 fastest-growing detailed industries over 2002-12 are computer related, two are health related.

Percent change



Source: Bureau of Labor Statistics

The 10 detailed industries with the most new jobs, projected 2002-12

Thousands of nonfarm wage and salary jobs



Source: Bureau of Labor Statistics

Detailed industries with faster than average employment and output growth

- ◆ **Detailed industries with:**
 - employment growth greater than 14.8%
 - and average annual output growth rates greater than the overall average of 3.3%.

- ◆ **These industries accounted for:**
 - 21.3% of employment in 2002
 - and are projected to account for 45% of employment growth from 2002-2012

Detailed industries with faster than average employment and output growth

- ◆ **If you include industries with:**
 - faster than average employment growth
 - and average annual output growth of at least 2% per year:
- ◆ **These industries accounted for:**
 - 38% of employment in 2002
 - and are projected to account for 65% of employment growth from 2002-2012

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Manufacturing

- Plastics product manufacturing (128,000)*
- Animal slaughtering and processing (80,000)
- Architectural and structural metals mfg (77,000)
- Pharmaceutical and medicine mfg (68,000)
- Other wood product mfg (67,000)
- Other general purpose machinery mfg (51,000)
- Cement and concrete product mfg (48,000)
- Metalworking machinery mfg (34,000)
- Veneer, plywood mfg (21,000)
- Forging and stamping (18,000)

* Numbers in parentheses are projected employment changes, 2002-12

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Utilities and waste management

- Water, sewage and other systems (23,000)*

◆ Transportation and warehousing

- Truck transportation, couriers and messengers (507,000)
- Scenic and sightseeing transportation (100,000)

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Information

- Internet services, data processing (244,000)*
- Software publishers (174,000)
- Motion picture and sound recording industries (116,000)

◆ Financial activities

- Nondepository credit intermediation (196,000)
- Consumer goods and general rental centers (131,000)
- Securities, commodity contracts (124,000)
- Commercial and industrial machinery rental (41,000)

* Numbers in parentheses are projected employment changes, 2002-12

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Professional and business services

- Employment services (1,764,000)*
- Computer systems design and related services (635,000)
- Business support and investigation and security services (489,000)
- Management, scientific, and technical consulting services (406,000)
- Services to buildings and dwellings (383,000)
- Scientific research and development (215,000)
- Accounting, tax prep, bookkeeping, and payroll services (215,000)
- Office and administrative support services (117,000)
- Advertising and related services (84,000)
- Specialized design services (38,000)

* Numbers in parentheses are projected employment changes, 2002-12

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Education and health services

- Offices of health practitioners (1,229,000)*
- Ambulatory health care services (670,000)
- Hospitals (632,000)
- Individual, family, community and voc rehab services (597,000)
- Nursing care and residential mental health facilities (559,000)
- Child day care services (382,000)

* Numbers in parentheses are projected employment changes, 2002-12

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Leisure and hospitality

- Food services and drinking places (1,337,000)*
- Amusement, gambling, and recreation industries (410,000)
- Traveler accomodation (293,000)
- Performing art companies, promoters, agents, managers, and independent artists (37,000)
- Museums, historical sites, and similar institutions (24,000)
- RV parks, recreational camps, and rooming and boarding houses (8,000)

Detailed industries with faster than average employment growth and output growth greater than 2% per year

◆ Other services

- Religious, grantmaking and giving services, and social advocacy organizations (428,000) *
- Automotive repair and maintenance (149,000)
- Personal care services (144,000)
- Other personal services (51,000)
- Commercial and industrial equipment (except automotive and electronic) repair and maintenance (29,000)

◆ State and local government

- State and local electric utilities (14,000)

* Numbers in parentheses are projected employment changes, 2002-12

Employment Outlook: 2002-12

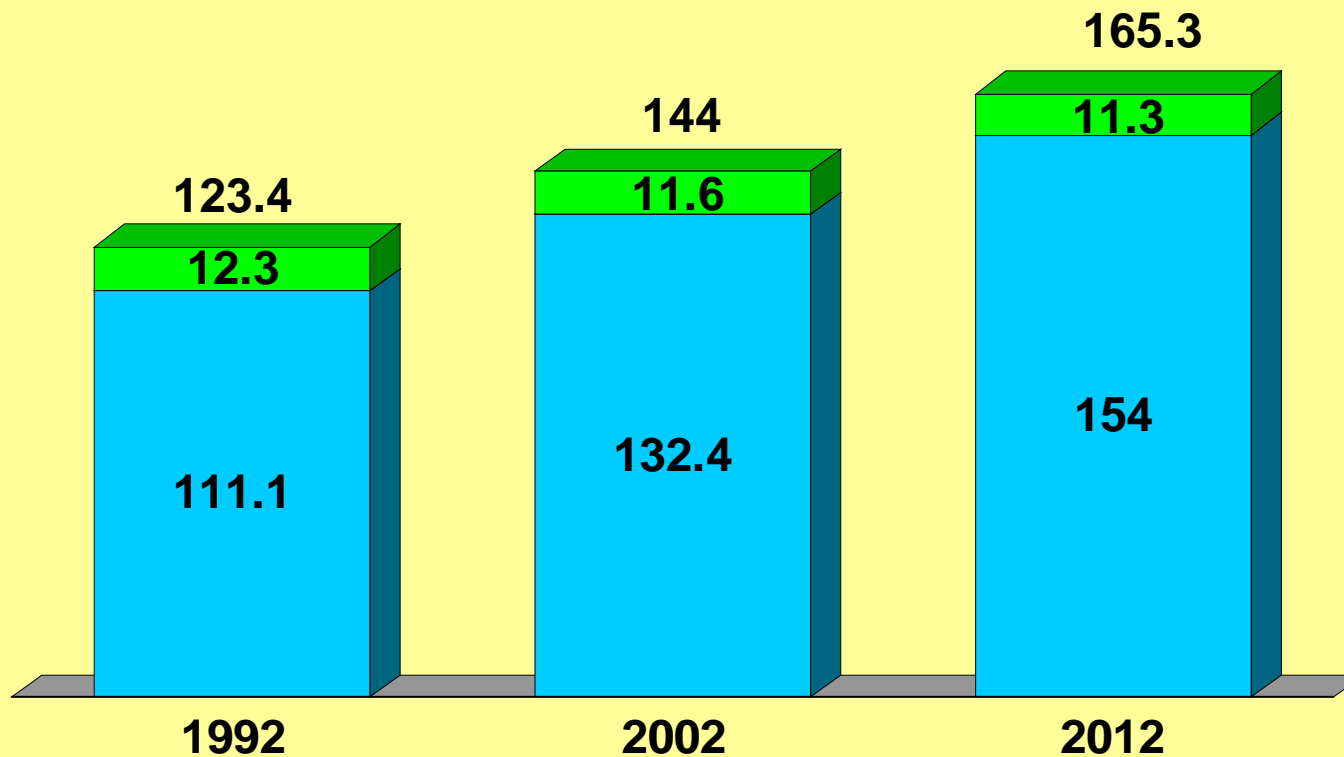
Projections Process

- Labor force
- Economic growth
- Industry employment
- Occupational employment

Wage and salary jobs will account for most of the employment growth

Employment, in millions

■ Wage and salary ■ Self-employed and unpaid family workers

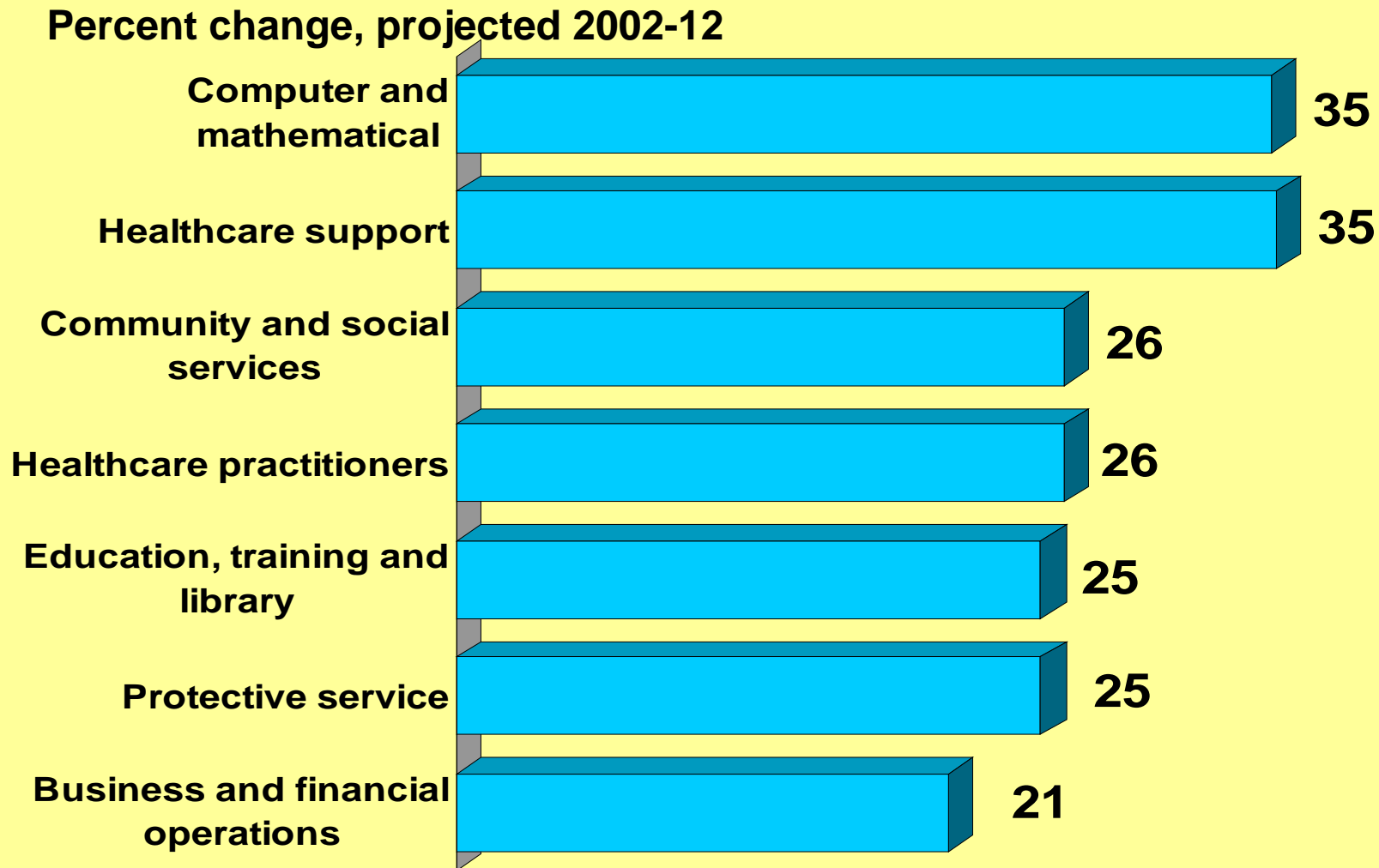


Source: Bureau of Labor Statistics

There are 22 major occupation groups

- ◆ Of these, 14 major occupations are projected to grow faster than average. Together, they:
 - Accounted for 45% of employment in 2002
 - And are projected to account for 65% of employment change 2002-12

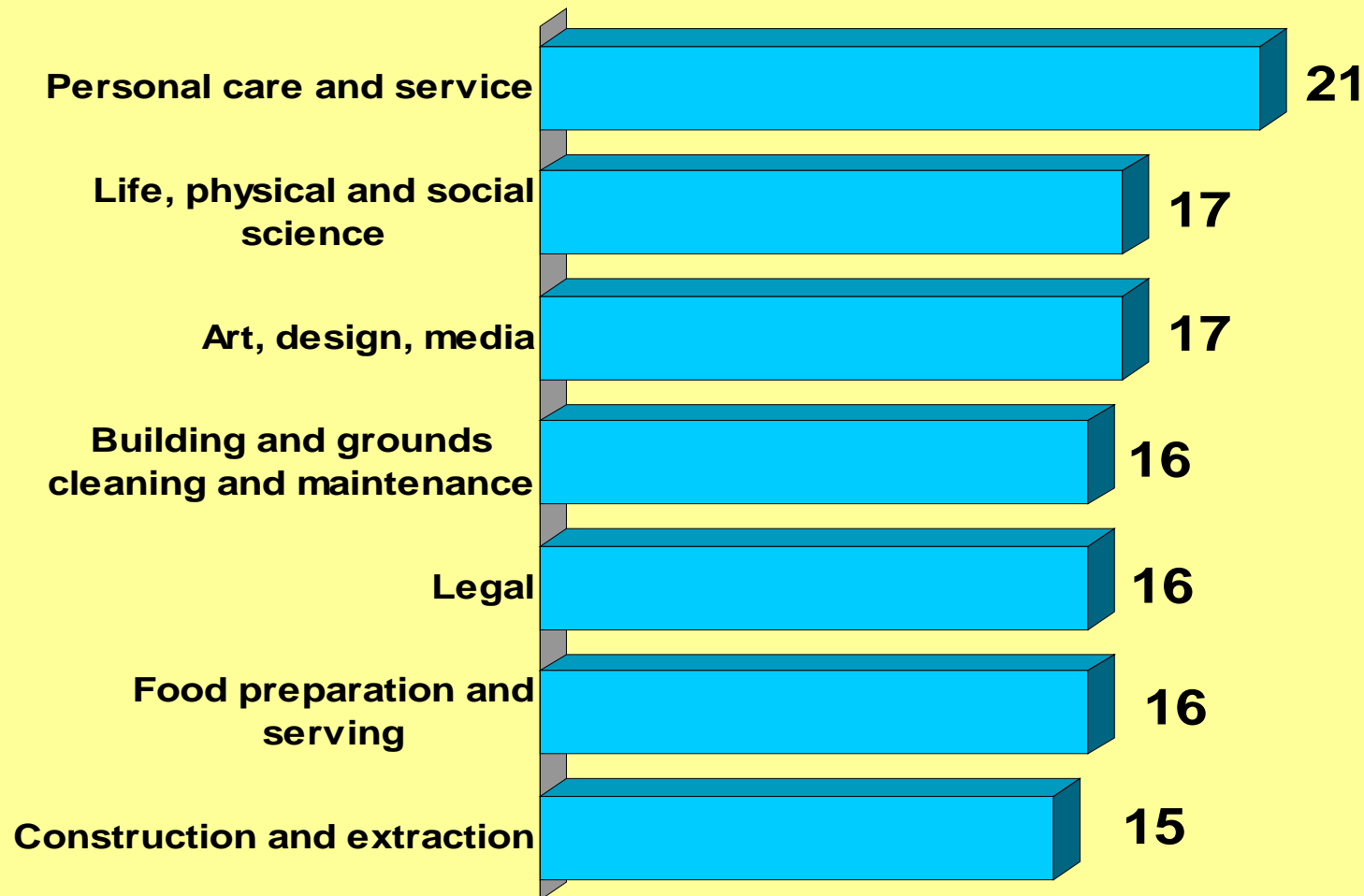
Major occupational groups projected to grow faster than average (14.8%)



Source: Bureau of Labor Statistics

Major occupational groups projected to grow faster than average (14.8%)

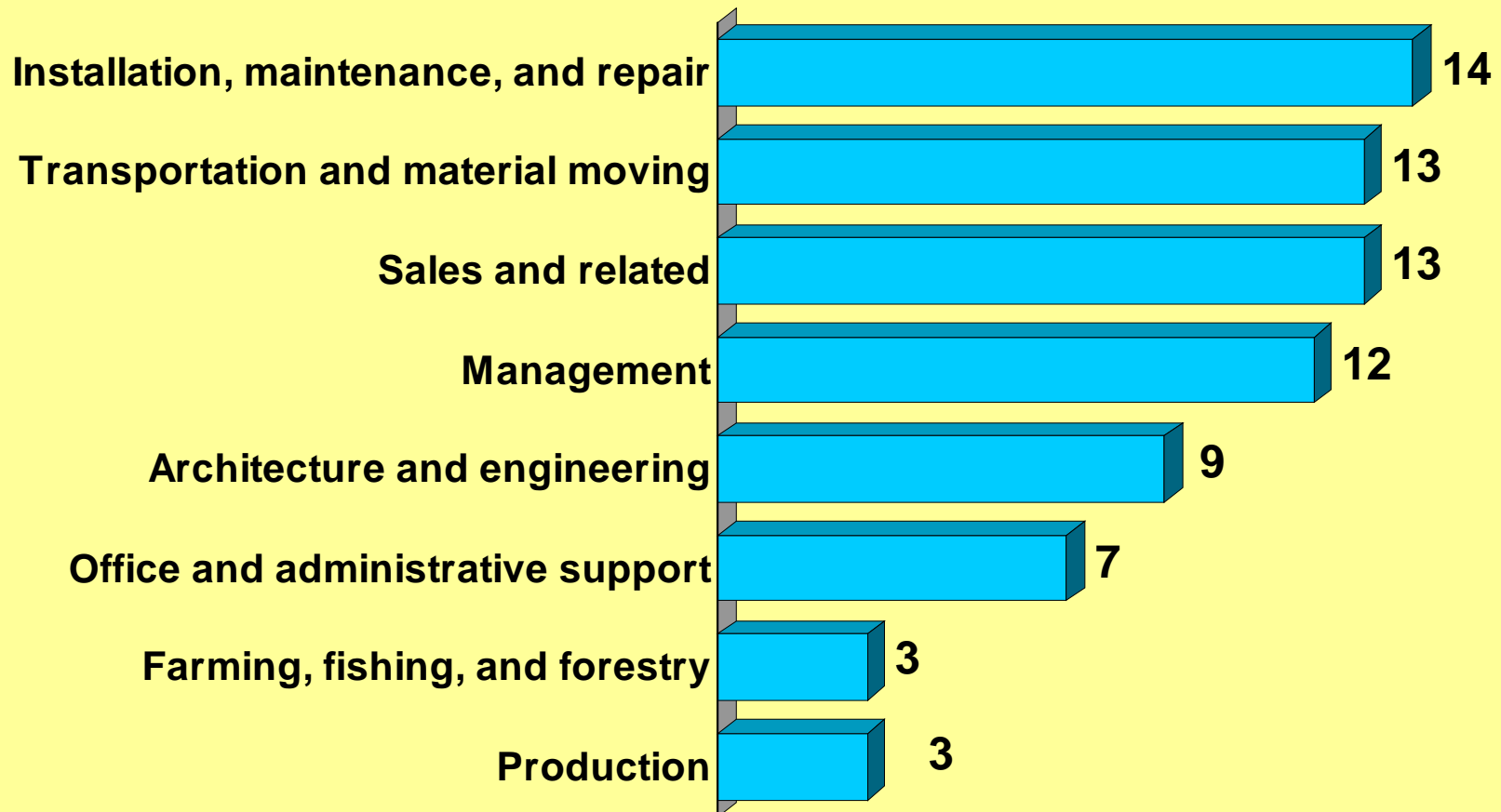
Percent change, projected 2002-12



Source: Bureau of Labor Statistics

Major occupational groups projected to grow slower than average (14.8%)

Percent change, projected 2002-12

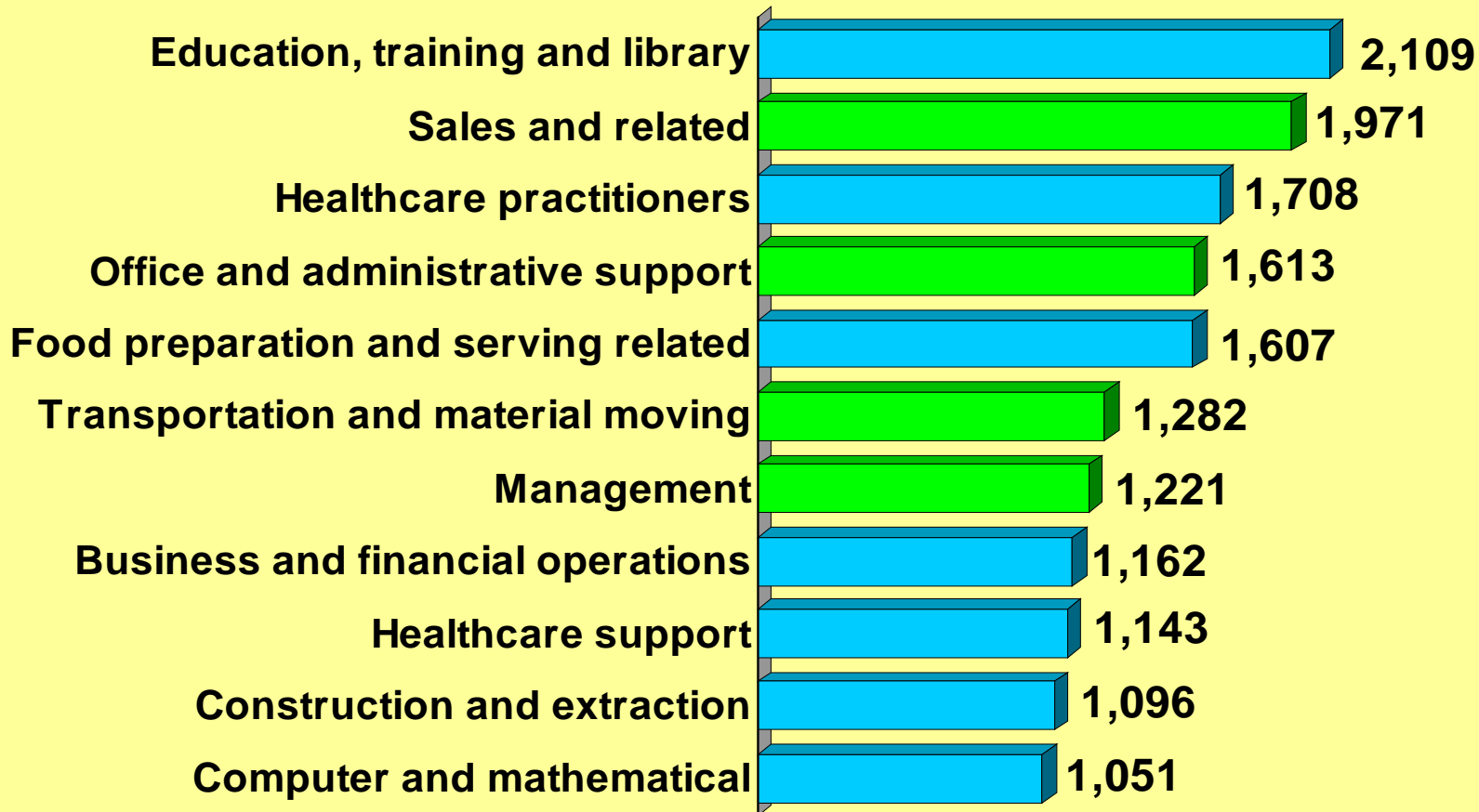



Source: Bureau of Labor Statistics


11 major occupations are projected to have a net employment increase of more than 1 million

Thousands of jobs, projected 2002-12

Source: Bureau of Labor Statistics



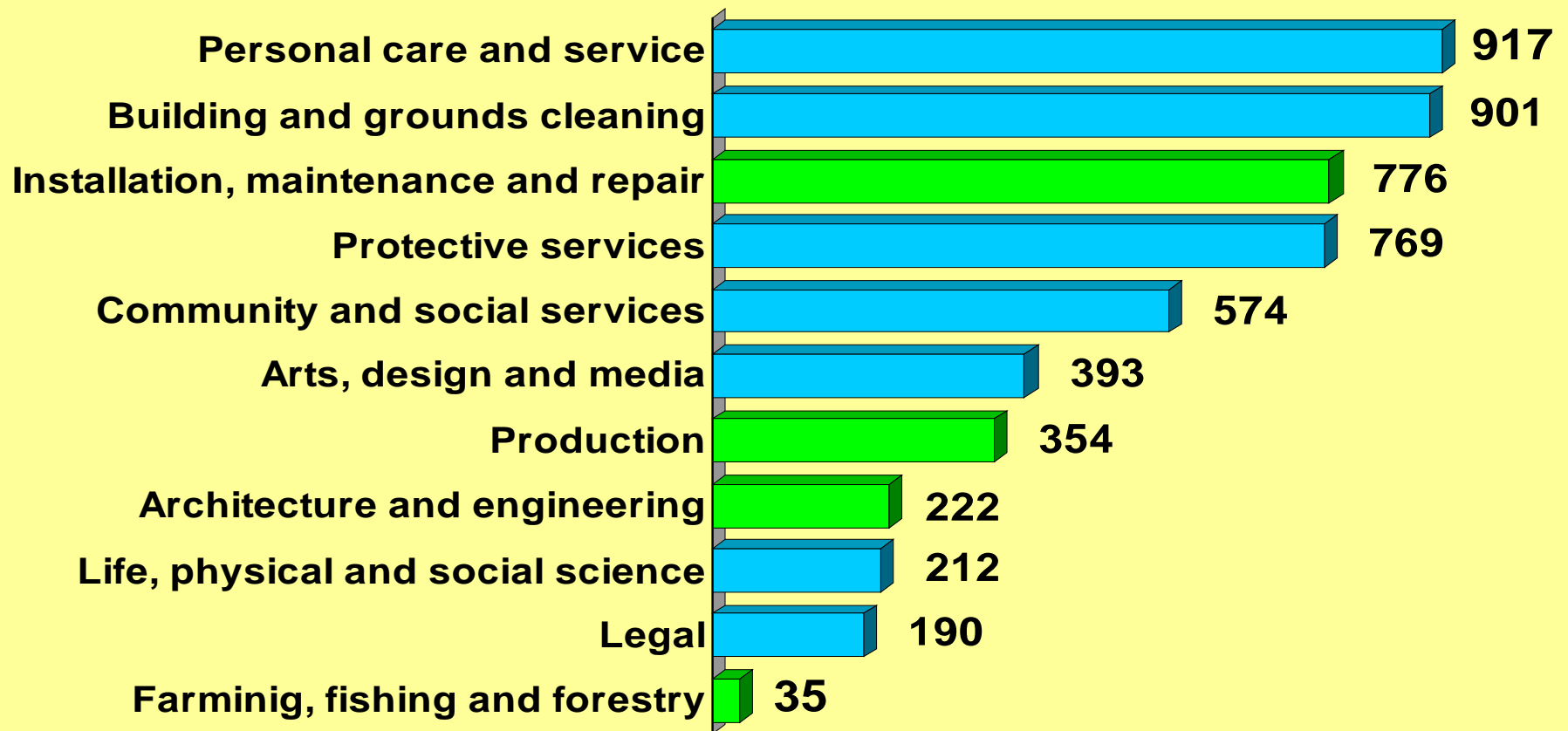
 Percent change projected to be greater than average (14.8%)


 Percent change projected to be less than average


11 major occupations are projected to have a net employment increase of less than 1 million

Thousands of jobs, projected 2002-12

Source: Bureau of Labor Statistics

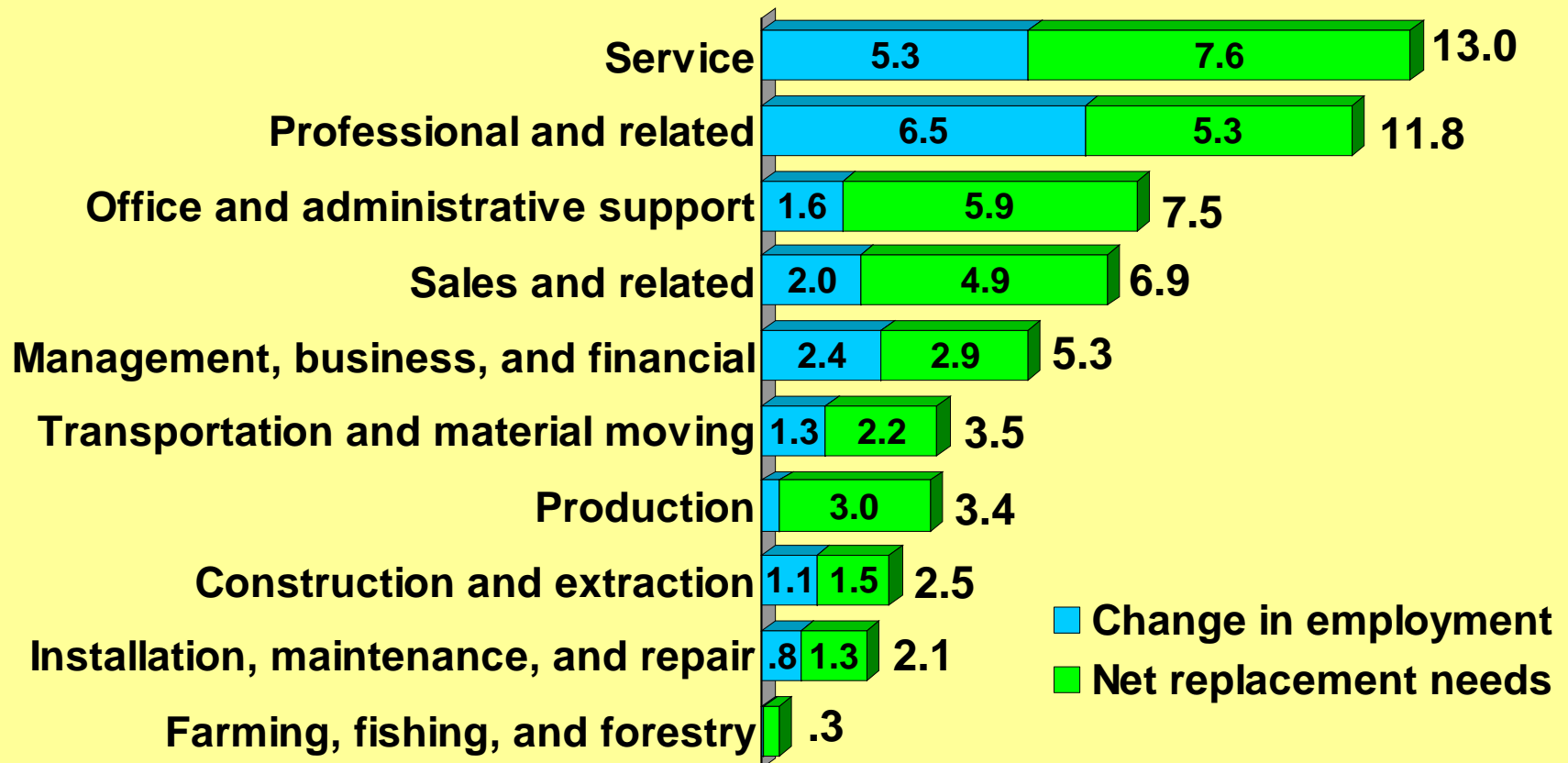


 Percent change projected to be greater than average (14.8%)

 Percent change projected to be less than average

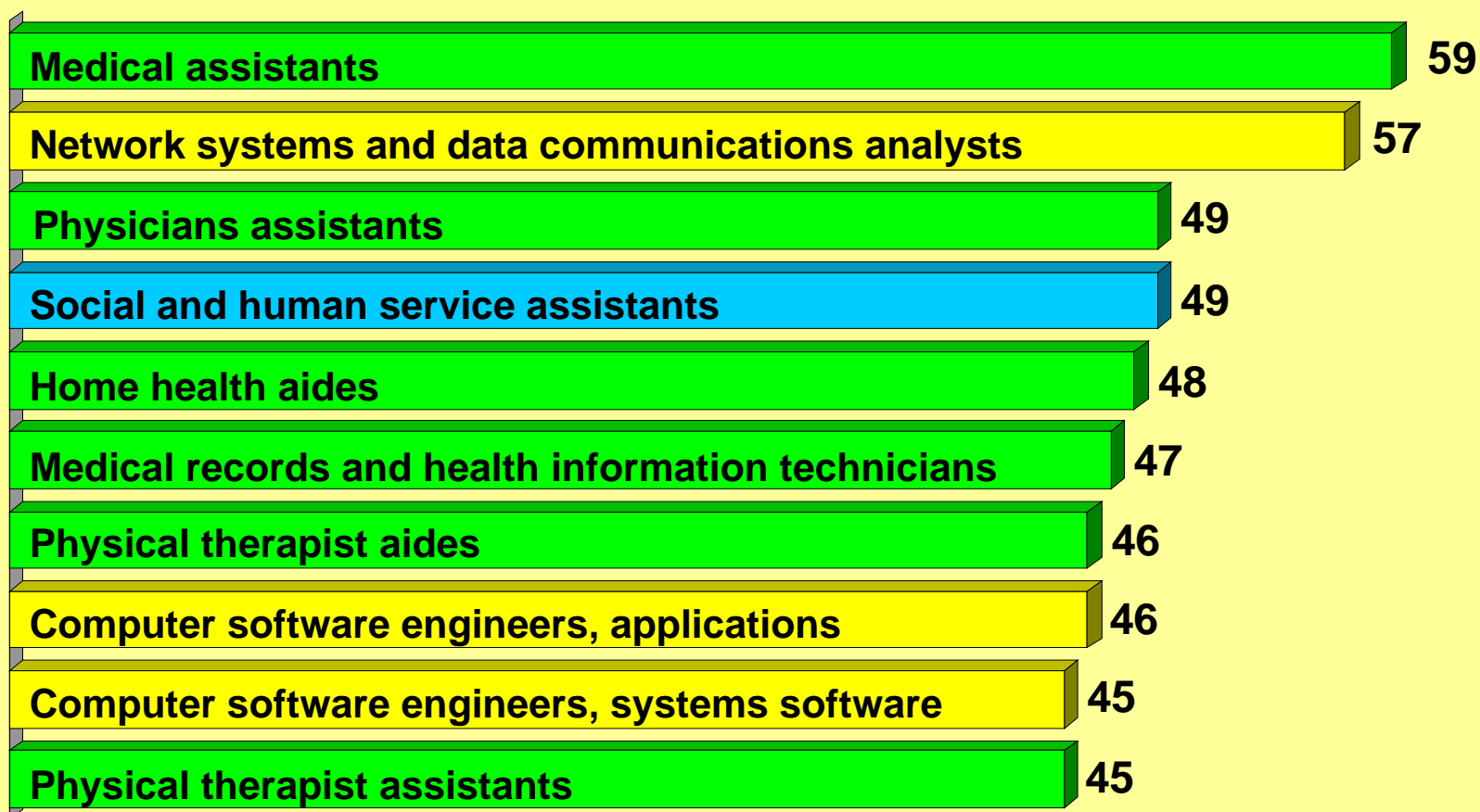
Job openings from replacement needs exceed those from employment growth

Millions of jobs, projected 2002-12



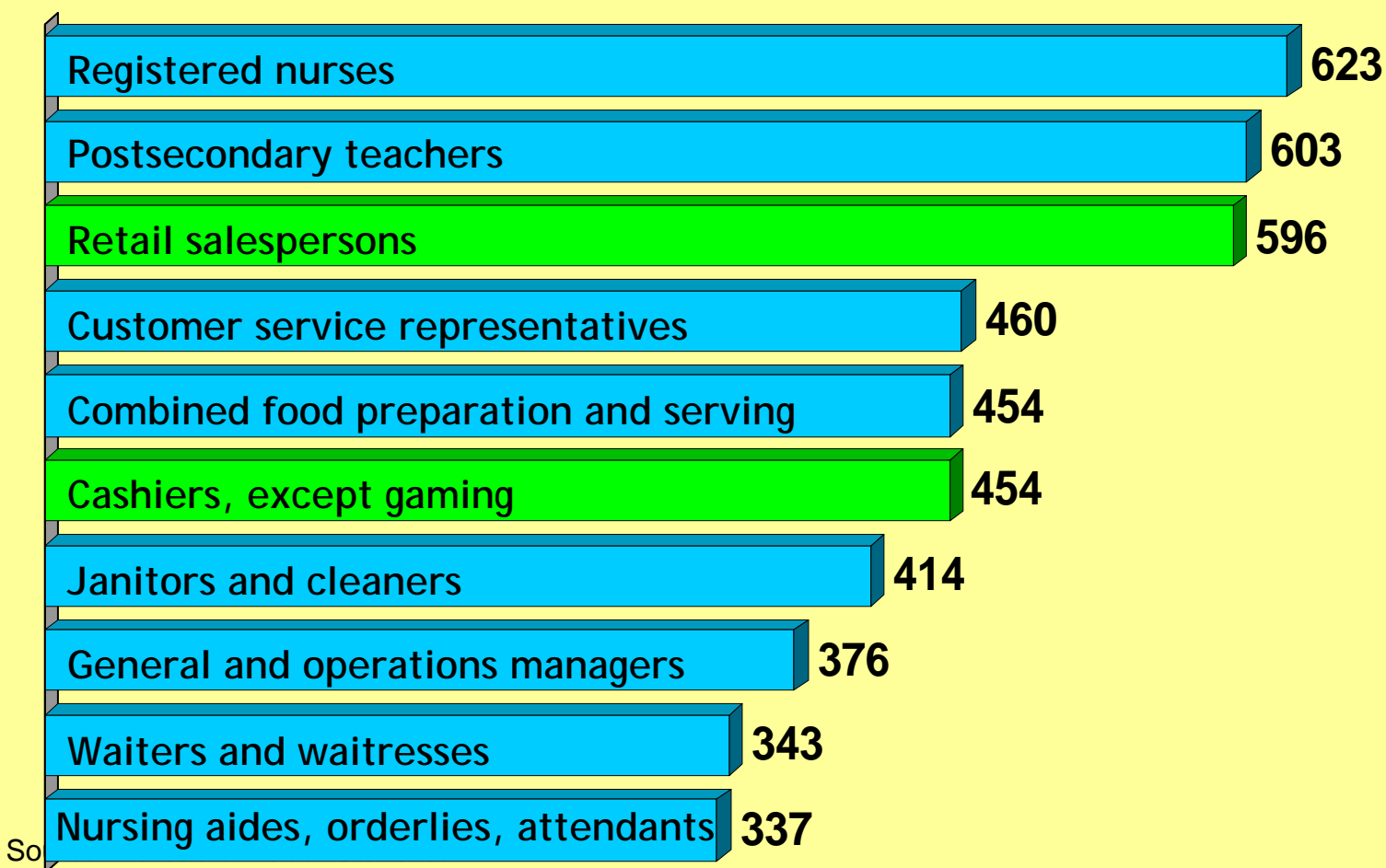
Six of the ten fastest growing detailed occupations are health related, three are computer related

Percent change, projected 2002-12



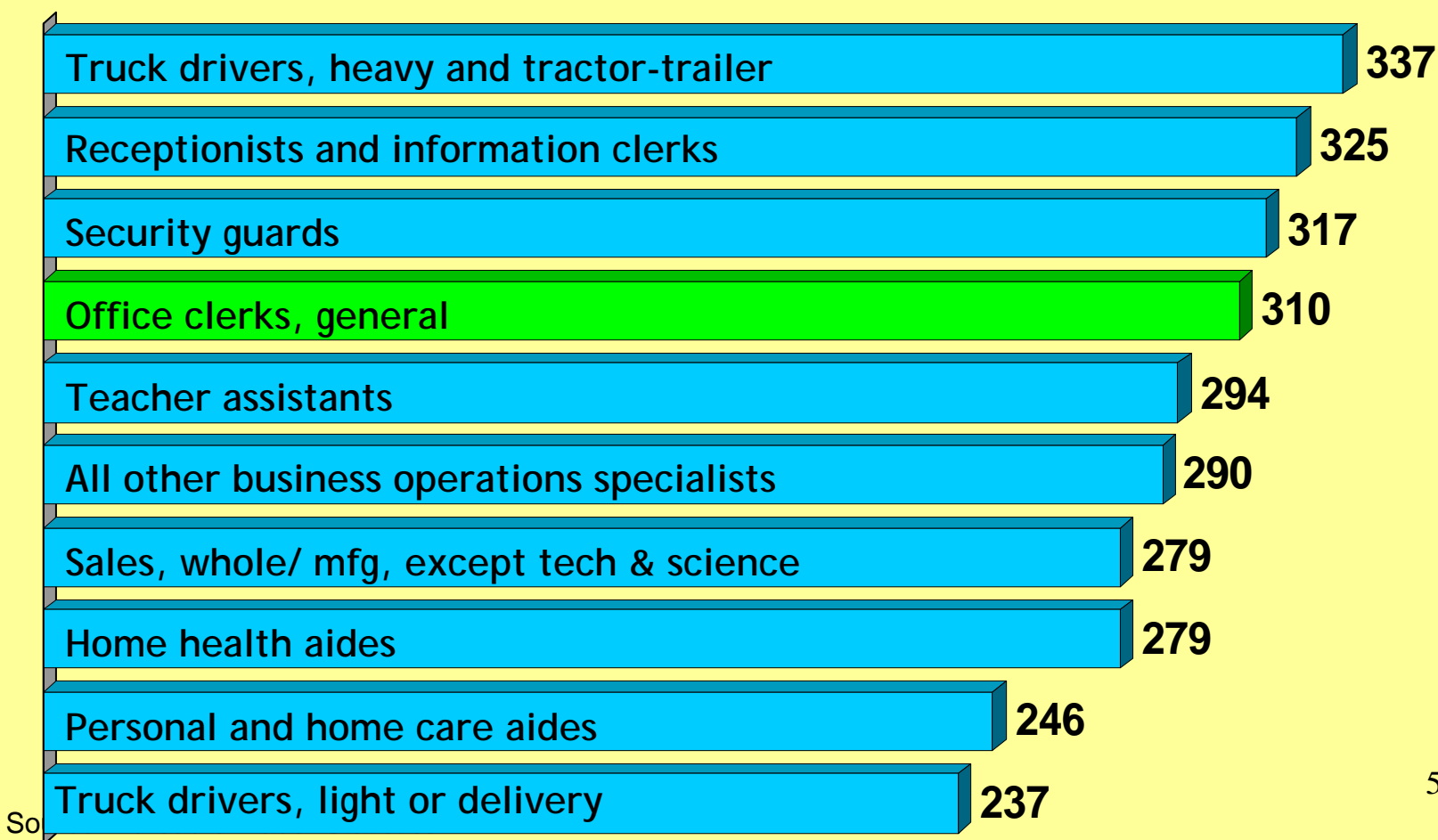
26 detailed occupations will each grow by more than 200,000 - and all but 3 will grow faster than average (14.8%)

Numerical change in thousands, projected 2002-12



26 detailed occupations will each grow by more than 200,000 - and all but 3 will grow faster than average (14.8%)

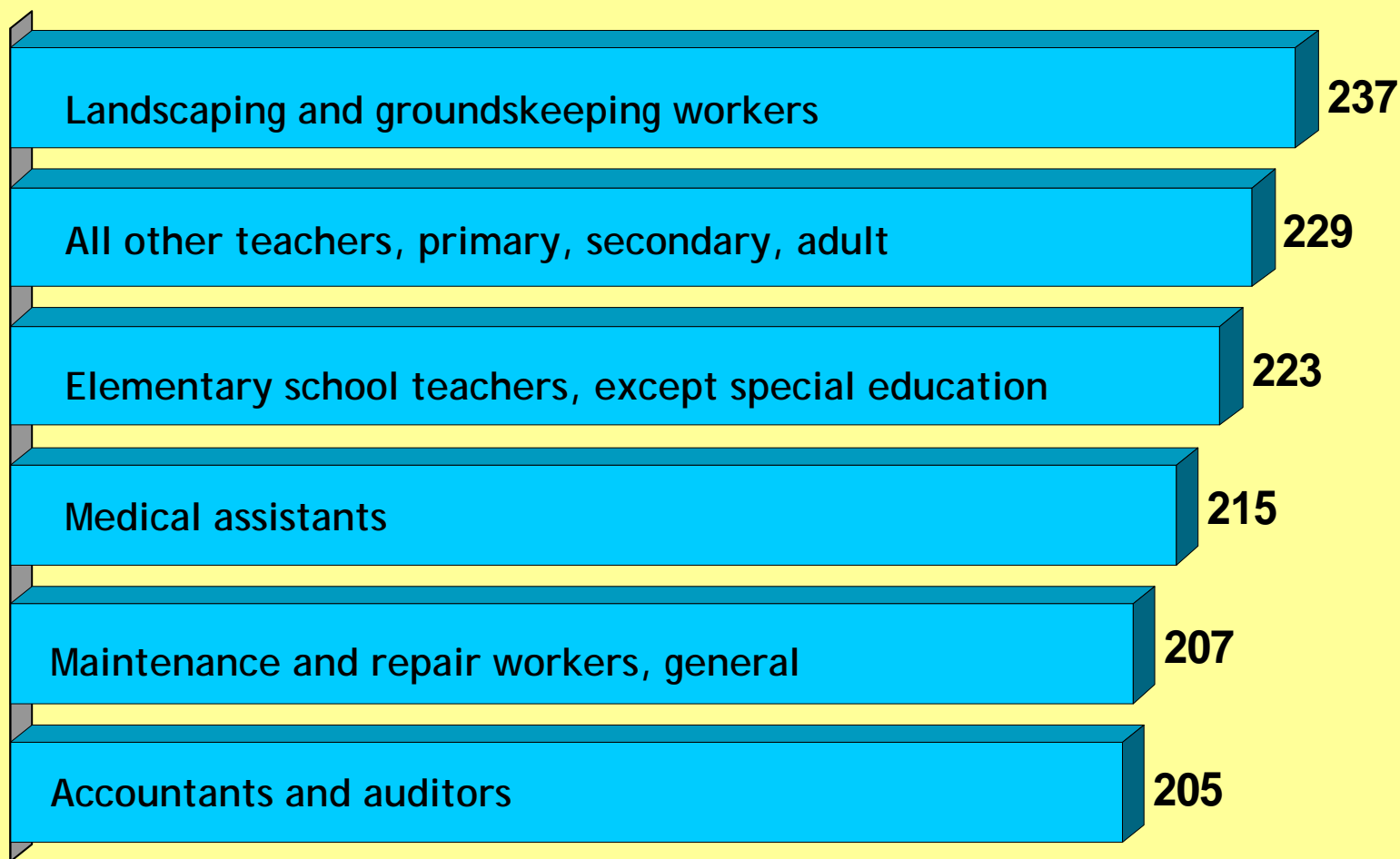
Numerical change in thousands, projected 2002-12



So

26 detailed occupations will each grow by more than 200,000 - and all but 3 will grow faster than average (14.8%)

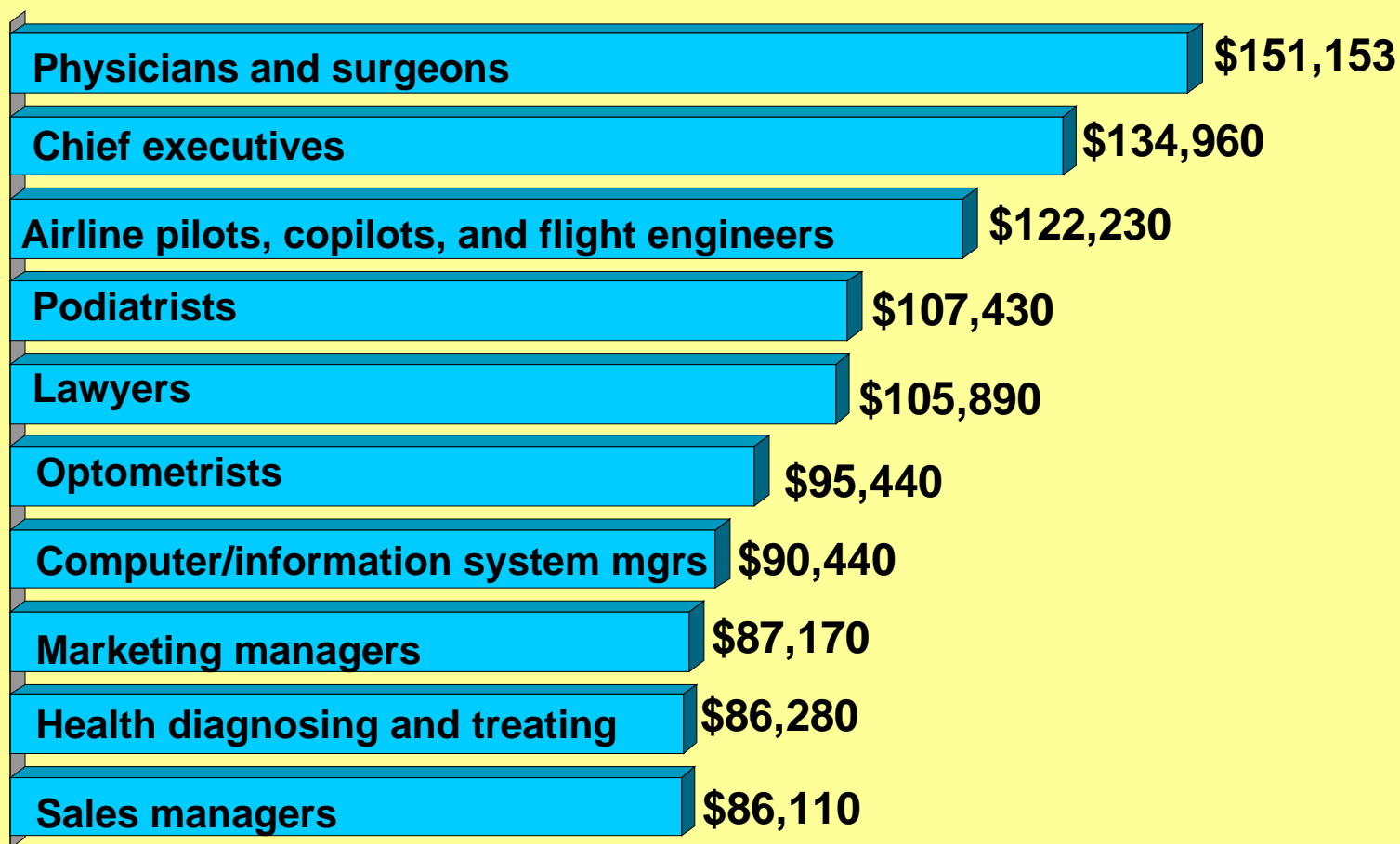
Numerical change in thousands, projected 2002-12



Source: Bureau of Labor Statistics

Top ten occupations generally requiring a bachelor's degree or higher that are projected to grow faster than average, by earnings

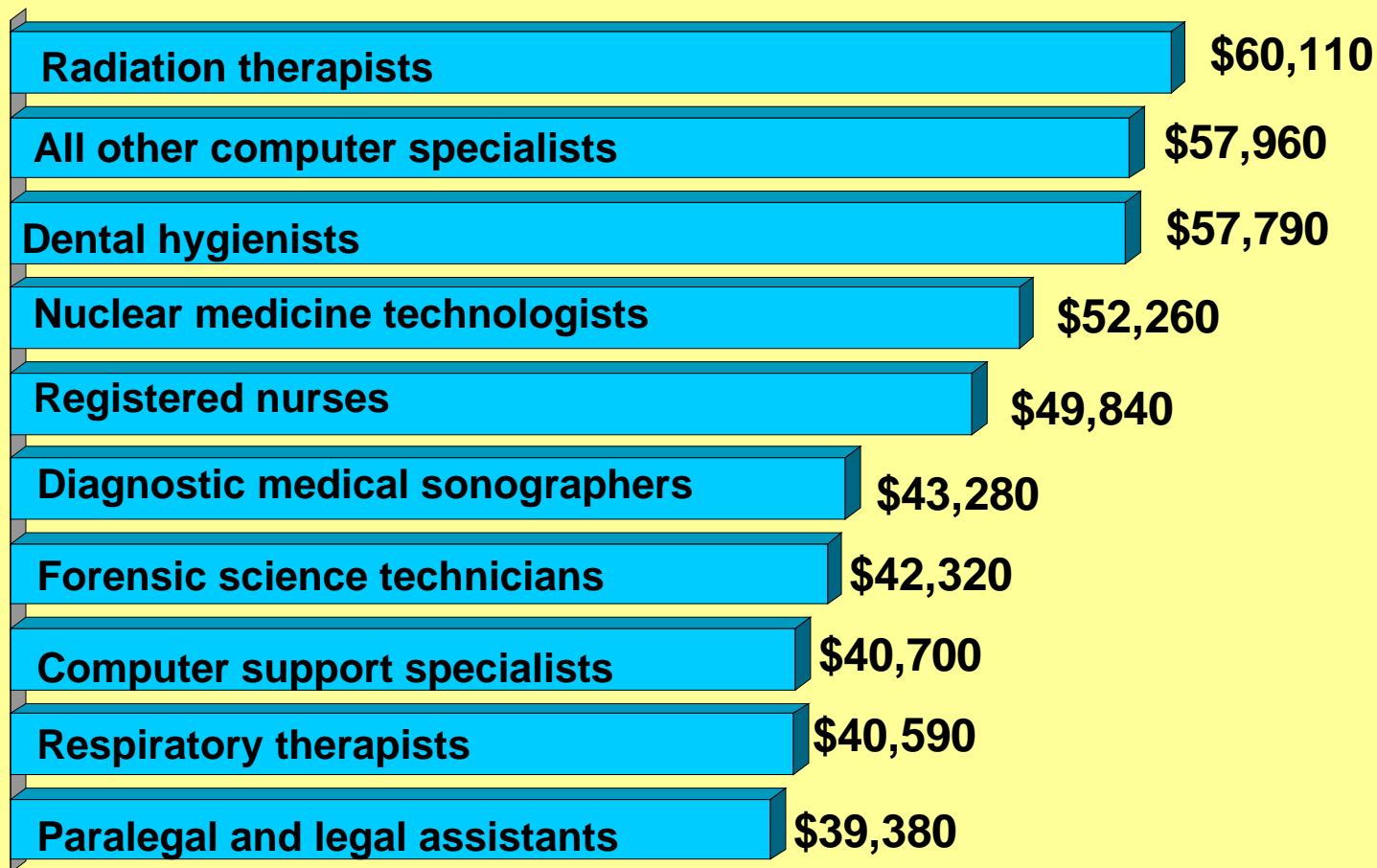
2002 average annual earnings



Source: Bureau of Labor Statistics

Top ten occupations generally requiring an associate degree that are projected to grow faster than average, by earnings

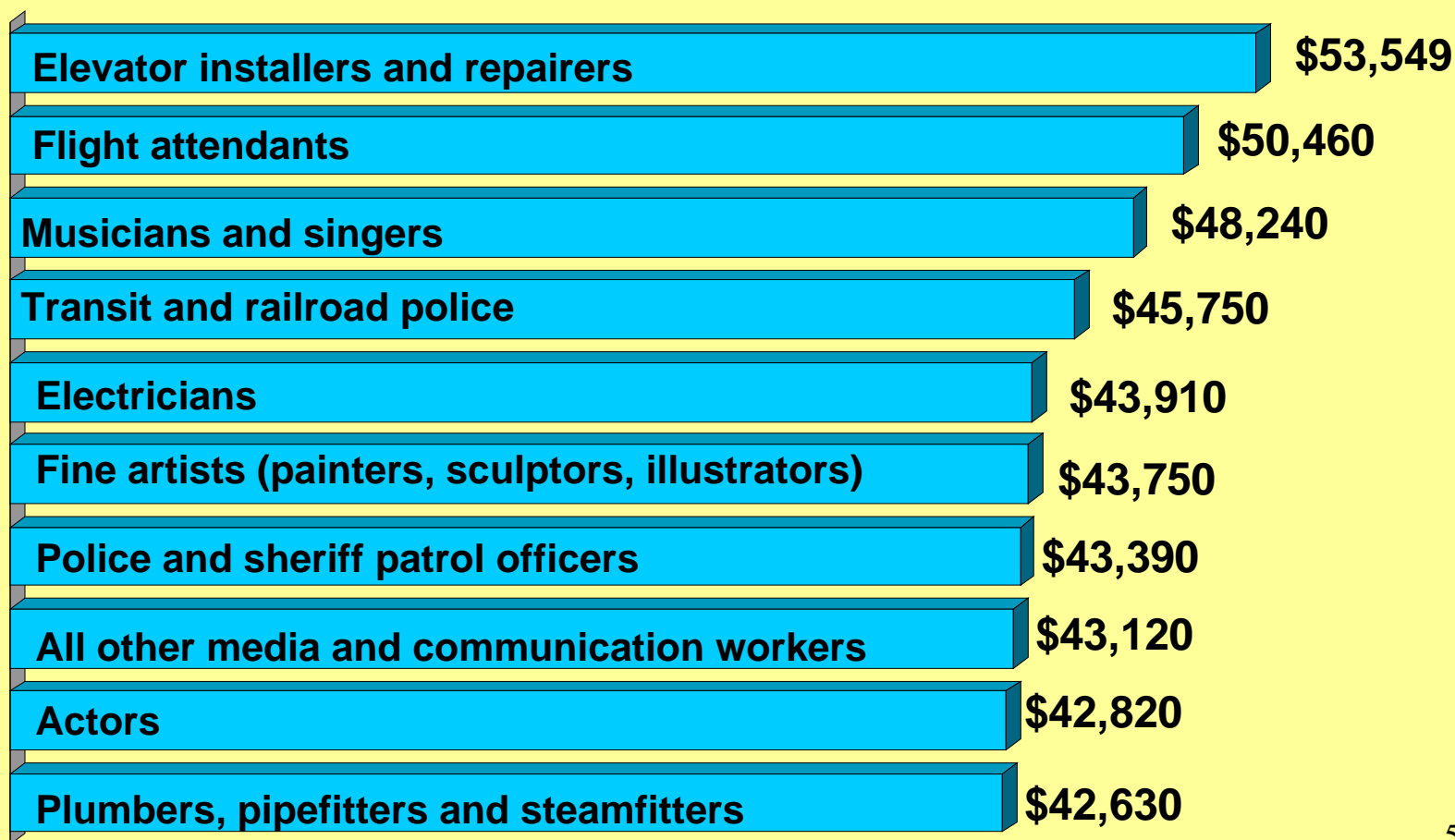
2002 average annual earnings



Source: Bureau of Labor Statistics

Top ten occupations generally requiring long-term on-the-job training that are projected to grow faster than average, by earnings

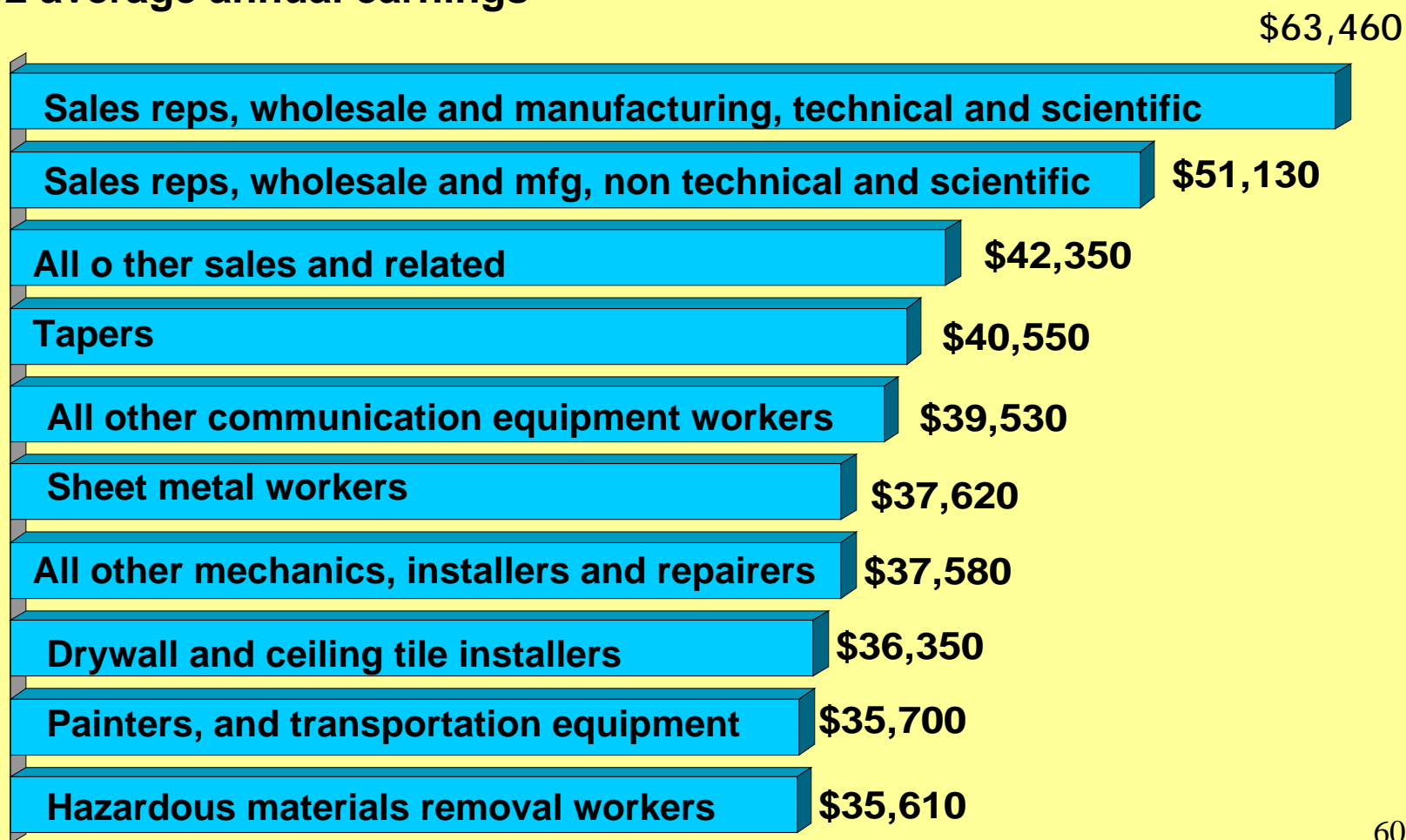
2002 average annual earnings



Source: Bureau of Labor Statistics

Top ten occupations generally requiring moderate-term on-the-job training that are projected to grow faster than average, by earnings

2002 average annual earnings



Source: Bureau of Labor Statistics