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BLS at 125: using historic principles to track the 21st-century economy

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BLS celebrates a birthday

The Bureau of Labor Statistics (BLS) is commemorating its 125th anniversary this month. Congress passed legislation establishing the Bureau in 1884, and President Chester A. Arthur signed the bill into law on June 27 of that year. Carroll D. Wright, the Bureau's first Commissioner, took office in January 1885. Keith Hall, the current Commissioner of Labor Statistics, is only the 13th since the agency's inception. BLS has been part of the U.S. Department of Labor since the Department was established in 1913. The Bureau today has approximately 2,400 employees in its National Office in Washington, D.C., its 6 Regional Offices, and in smaller offices around the country. It employs economists, statisticians, information technologists, and data collectors, among other occupations.

As *Monthly Labor Review* readers are aware, during its long tenure BLS has been a leader in pioneering, refining, and disseminating critical measures of consumer and producer prices, employment and unemployment, compensation and benefits, productivity, and workplace safety. BLS also has long been a leader in producing career guidance information and the occupational projections upon which it is based.

In the preparation of its data and analyses, BLS adheres to widely recognized principles of objectivity and impartiality, timeliness, relevance, and transparency. The lead article in this month's *Review*, by Associate Commissioner William J. Wiatrowski, uses those principles as a roadmap to examine significant events and changes to BLS programs and methods over the last quarter century, since our 100th anniversary in 1984. He notes that "Since its centennial, the BLS has witnessed rapid growth in technology, a movement towards instantaneous news, the advent of online pundits with quick access to data, and a constantly changing economy that can be difficult to measure. Much of what the Agency measured as standard work characteristics a quarter century ago is no longer standard, with such new phenomena as teleworking, medical savings accounts, employee leasing arrangements, green jobs, offshoring, and a host of others challenging the traditional means of measuring labor."

Change, in fact, has been a constant for the Bureau, as it has altered its programs and functions many times over the years to try and keep up with appropriately measuring a changing country and economy. In its early days, prior to the creation of many of the regulatory and mediation agencies we're familiar with today, BLS played a role sometimes far beyond measurement. Commissioners Wright and Charles P. Neill (appointed by President Theodore Roosevelt) were essential in mediating many labor disputes; in fact, Neill helped in settling around 60 railway controversies. Because this work absorbed such enormous amounts of time, Neill worked with Congress to set up the Board of Mediation and Conciliation, after which Commissioners of Labor Statistics were no longer required to mediate labor disputes. Between 1908 and 1916, BLS administered workmen's compensation for Federal employees. Commissioner Royal Meeker (appointed by President Woodrow Wilson) was instrumental in expanding the program to cover all Federal workers and occupational diseases. He later worked with Congress to establish a Board to relieve BLS of this duty.

But the heart of the Bureau's mission always has been the collection of data and the preparation of descriptive and analytical summaries of the findings. The employees of BLS have striven to provide the public and policymakers with the fullest possible understanding of labor markets contemporary to their time. Commissioner Ethelbert Stewart (also a Wilson appointee) said in 1918, "For 30 years, I have been struggling to put some flesh upon the bony skeleton of mere tabulation." The analytical and editorial staff at BLS, through the vehicle of *Monthly Labor Review* and other publications, continues to happily engage in that struggle.

In today's world of ever-heightening scrutiny over government data and policy, it may be useful to remember the words stated by Commissioner Wright when speaking of the Bureau near the end of his term (which concluded in January 1905): "It is only by the fearless publication of the facts, without regard to the influence those facts may have upon any party's position or any partisan's views, that it can justify its continued existence, and its future usefulness will depend upon the nonpartisan character of its personnel." Words for a statistical agency to live by, and ones the Bureau has tried to adhere to for 125 years. □

BLS at 125: using historic principles to track the 21st-century economy

Relying on its core principles of objectivity, confidentiality, relevance, accuracy, and transparency, as well as a core set of disciplines—economics, statistics, information technology, and behavioral science—the Bureau of Labor Statistics at 125 has incorporated new labor phenomena arising over the past quarter century into its repertoire of programs and services

William J. Wiatrowski

The U.S. Bureau of Labor Statistics (BLS) used its centennial in 1984 as "an opportunity to reflect on what we can learn from history and a time to think about emerging problems and their implications" for the future.[1] At that time, it would have been hard to imagine the growth and change in the economy over just a quarter century—and the growth and change at the BLS designed to keep up with the changing economy. Remarkably, some things that could not have been imagined in 1984 are now commonplace at the BLS: the use of the Internet for data collection and dissemination, computers on every employee's desk, staff telecommuting, distance training via video and computer, cognitive review to improve the clarity and accuracy of BLS questionnaires and publications, blogs and wikis, and more. But all of these changes are needed to track an economy that is increasingly global, lightning fast, and constantly being reinvented. Gone are the days when the BLS counted girdle manufacturers and stenographers. To keep up with the world of satellite communications and nanotechnology, the Agency had to reinvent itself.

The 100-year anniversary was marked with the publication of a volume that traced the growth of the BLS through the terms of 10 Commissioners.[2] Although each Commissioner left his or her own mark, all supported and expanded upon a core set of principles to guide the organization and its work. An additional quarter century may not deserve another historic volume; rather, this article is intended as an update of BLS activities over the past 25 years. And while Commissioners have come and gone, the guiding principles remain, having been tested and strengthened. This look back is organized not by time or by program, but by those principles, which are still relevant today. A brief introduction will provide some context on how these principles manifest themselves in today's BLS.

What is the BLS?

Those not familiar with the BLS are nonetheless often aware of some of the key measures and data that come from the Agency, including the monthly Consumer Price Index (CPI), the unemployment rate, and payroll employment figures. In fact, nearly every American is affected by some BLS data, most notably annual adjustments to Social Security payments and Federal income tax brackets, both of which result from changes in the CPI. The relative anonymity of the BLS is perhaps a byproduct of its commitment to objectivity:

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the statistics, not the agency that produces them, are the story. And although the measures just cited are among the most widely known, the BLS actually produces data from about two dozen programs covering such topics as employment, prices, spending, compensation, workplace safety and health, and productivity. These programs vary widely: some are large while others are small, and some offer broad overviews of the economy while others are rich in detail. Exhibit 1 provides a look at the current programs of the BLS.

The BLS is the principal factfinding agency for the Federal Government in the broad field of labor economics and statistics. As specified in its mission statement, the BLS "collects, processes, analyzes, and disseminates essential statistical data to the American public, the U.S. Congress, other Federal agencies, State and local governments, business, and labor." [3]

In the sections that follow, the principles that guide the work of the BLS have been grouped into five categories that describe the current focus of the Agency's activities. Of course, any such grouping is arbitrary, and other combinations might be as good or better at allowing readers to understand the tenets that go into producing high-quality labor statistics. Similarly, the examples that accompany each principle often speak to multiple principles. Nor are the examples exhaustive; other ones could easily have been substituted. The intent, however, transcends the particular examples chosen: to provide an illustration of the variety of challenges facing the BLS in the 21st century and of how a set of principles continues to guide the reactions to those challenges.

Objectivity, fairness, and impartiality

The BLS is an agency of the U.S. Department of Labor, but is also an "independent statistical agency," meaning that it is not involved in policy decisions. Although BLS data frequently are used by policymakers to formulate regulations, enact legislation, and illuminate the outcomes of new policies, the staff who produce these data have no role in developing or enforcing policy. Underscoring this independence, the BLS has but one political appointee: the Commissioner. Commissioners are nominated by the President, are confirmed by the Senate, and serve fixed 4-year terms. Their terms do not necessarily coincide with those of Presidents; for example, the current BLS Commissioner, Keith Hall, was appointed by President George W. Bush and continues to serve under President Barack H. Obama.

Despite this independence, many individuals and organizations try to draw the BLS into the policy arena. An example of this phenomenon occurred repeatedly during 2008, as the Agency reported on reductions in payroll employment. The BLS frequently was asked whether the declining employment figures meant that the U.S. economy was in a recession. In response, the BLS explained that such a declaration was not within its purview. The official declaration of a recession, as well as details of the specific timing of the business cycle, is made by the National Bureau of Economic Research (NBER), a nongovernmental independent research organization.[4] Data from the BLS can inform the issue, however; for example, the BLS can provide information from previous recessions on job losses and the amount of time that it took for employment to recover to its prerecession peak.

Attempts to draw the BLS into policy issues invariably come from external sources. For instance, Congress may include language in legislation that requires the BLS to conduct certain policy-related analysis, and other Federal Government Agencies may request that the BLS be involved in similar policy analysis. Such requests are turned down and in many cases are transferred to the relevant policy Agencies within the Department of Labor. (BLS statistical programs often have a parallel policy and enforcement agency, such as the Occupational Safety and Health Administration or the Wage and Hour Division of the Employment Standards Administration.) An example of the type of policy analysis that frequently is requested of the BLS is an analysis of the effect of increases in the minimum wage on employment. Although the BLS may provide information on the number of workers earning at or below the minimum wage and information on the characteristics of those workers, such as their demographics and educational attainment, the BLS does not predict the effect of changes to the minimum wage.

Beyond avoiding policy discussions, the BLS often includes caveats about its data to caution readers against drawing certain conclusions. For example, the following caution appears in the BLS news release of data comparing union and nonunion earnings:

> The difference [between union and nonunion earnings] reflects a variety of influences in addition to coverage by a collective bargaining agreement, including variations in the distributions of union members and nonunion employees by occupation, industry, firm size, or geographic region.[5]

A second example, from the annual *Highlights of Women's Earnings*, is about differences in earnings between men and women:

> In 2007, women who were full-time wage and salary workers had median weekly earnings of $614, or

Exhibit 1. Statistical programs of the Bureau of Labor Statistics, 2009

BLS statistical program	Major outputs	Origins	Significant events in past 25 years
American Time Use Survey (ATUS)	Annual and quarterly estimates of how, where, and with whom Americans aged 15 years and older spend their time	New program began in 2003; first federally funded continuous time-use survey in the United States.	Only Federal survey providing data on the full range of nonmarket activities, from childcare to volunteering; the U.S. Department of Agriculture sponsored secondary questions on eating and general health in 2006–08.
Business Employment Dynamics (BED)	Quarterly data series on gross job gain (openings and expansions) and gross job losses (closings and contractions)	Data for the BED are generated from the Quarterly Census of Employment and Wages (QCEW) program; national data were first published in 2003.	The following data series or expansions were added after 2003: industry detail in 2004, size class data in 2005, State data in 2007, size-of-change data in 2008.
Census of Fatal Occupational Injuries (CFOI)	Annual counts and rates of workplace fatalities	New program began in 1992; data previously captured as part of injury survey.	Began in 1992; provided special report on at-work fatalities as a result of the terrorist attacks of September 11, 2001; recently introduced rates based on hours worked.
Consumer Expenditure Survey (CE)	Information on the buying habits of American consumers, including average annual expenditures and details by expense category such as food, housing, health care, and entertainment	Conducted periodically since 1888. As the independent Diary and Interview surveys, continuously since 1980. To provide the basis for revising the weights and associated pricing samples for the CPI and to provide timely and detailed information on the spending patterns of consumers.	Numerous data collection improvements, including the major transition to computer-assisted interviewing in 2003–04. Variance data published starting in 2000. Imputation of missing income fields starting in 2004. Sample redesigns in 1986, 1996, and 2005.
Consumer Price Index (CPI)	Price indexes; selected average prices	Price indexes from 1913 forward	Introduced rental equivalence in 1983; introduced geometric mean formula in 1999; implemented biennial weight updates in 2002; added the Chained CPI-U in 2002.
Current Employment Statistics (CES)	Employment, hours, and earnings for the Nation, States, and metropolitan areas	The first monthly studies of employment and payrolls by BLS began in 1915 and covered four manufacturing industries. Several States were producing employment statistics prior to 1915.	In the early 1990s, the mail-based CES program began a transition to automated data collection methods. By 2006, nearly all collection was done by automated techniques. In June 2003, the BLS completed a comprehensive sample redesign. Prior to 2003, the survey utilized a quota sample whose inception in the 1940s predated the introduction of probability sampling as the internationally recognized standard for sample surveys. In 2006, BLS introduced hours and earnings series for all employees, to supplement the traditional production and nonsupervisory worker hours and earnings data.

Exhibit 1. Continued—Statistical programs of the Bureau of Labor Statistics, 2009

BLS statistical program	Major outputs	Origins	Significant events in past 25 years
Current Population Survey (CPS)	Unemployment rate and demographic characteristics of the labor force	Monthly collection of the CPS began in 1940 as a Work Projects Administration project. Responsibility for the planning, analysis, and publication of labor force statistics from the CPS was transferred to BLS in 1959.	Periodic supplemental surveys were developed on a variety of topics, including displaced workers (introduced in 1984), disabled veterans (1985), home-based work and flexitime (1985), contingent and alternative work arrangements (1995), and volunteering (2002). A significant redesign of the survey was introduced in 1994, including computerization of the instrument, changes to the questionnaire, and the availability of new data. Survey questions on nativity (1995) and new race/ethnicity categories (2003) were added. Special questions to identify Hurricane Katrina evacuees were added to the CPS from October 2005 to October 2006. Collection of monthly data on persons with disabilities began in 2008.
Employment Projections	Long-term industry and occupation employment projections; information for career planning and for planning education or training	First projections and career information published in 1949; prepared on a biennial basis since then.	Began publishing *Career Guide to Industries* in 1992. Incorporated offshoring analysis system into projections process starting with 2004–14 projections.
Import and Export Price Indexes	Prices indexes covering U.S. exports and imports of goods and selected services	First series started in 1971. Full coverage reached in 1983.	Shifted from quarterly to monthly basis in 1989; in 2004, began switching from a mail survey to collecting data via a Web-based application.
Industry Productivity and Costs	Annual measures of labor productivity and unit labor costs for detailed industries	Studies of output per hour in individual industries date back to the 1800s.	The number of industries covered by labor productivity measures has more than tripled over the last 25 years. Aggregation of detailed outputs was improved in 1995 by introducing value-weighted chained superlative indexes in place of unit labor requirements weights. Labor compensation and unit labor cost series were introduced in 1999. CPI research series were incorporated in 2001 for deflating some industry receipts. Improvements were made to hours estimates for nonproduction and supervisory workers.
International Labor Comparisons	Annual and monthly data comparing the United States with more than 30 countries on one or more of the following measures: employment counts and unemployment rates, productivity, hourly compensation costs, and Consumer Price Indexes	BLS has reported on foreign labor developments and statistics since its earliest days; a program to develop internationally comparable labor statistics began in the 1960s and was among the first of its kind.	Regular publication of data comparing compensation per hour for manufacturing workers began in the 1990s, and country coverage has been expanded significantly in the 2000s. A chartbook on the international labor situation was first published in 1995; annual publication of the chartbook began in 2006. Special studies have been completed on labor underutilization, the family and work, Mexico's labor market, and China's manufacturing employment and labor costs.

Exhibit 1. Continued—Statistical programs of the Bureau of Labor Statistics, 2009

BLS statistical program	Major outputs	Origins	Significant events in past 25 years
International Technical Cooperation	Provides technical assistance on labor statistics to economists, statisticians, and policymakers throughout the world. Coordinates BLS participation in international cooperative activities.	Carroll Wright, the first BLS Commissioner, strongly supported and encouraged international cooperation activities. BLS international technical assistance programs formally began as part of the Marshall Plan to rebuild Europe and Japan following World War II.	This program expanded during the early 1990s to assist statistical agencies in new democracies in eastern Europe. BLS activities included sponsoring an international conference on statistical needs of economies in transition. Since 2001, demand to conduct BLS technical assistance programs overseas has grown. Today, BLS staff conduct training programs and serve as consultants under the auspices of international organizations and direct foreign government sponsorship in countries throughout the world.
Job Openings and Labor Turnover Survey (JOLTS)	Monthly rates and levels of job openings; monthly and annual rates and levels of hires, quits, layoffs, discharges, and other separations	New program begun in 1999. Data series starts with December 2000.	Program began collecting data in 2000. Began releasing monthly data as a developmental series in July 2002. Became official BLS series in April 2004.
Local Area Unemployment Statistics (LAUS)	Monthly and annual average estimates of the labor force, unemployment, and the unemployment rate for nearly 7,300 areas that geographically exhaust the United States	Program was transferred to BLS from another DOL agency in 1972.	The first stand-alone PC-based estimating system was provided to States in 1983. Modeling of estimates for States was initiated in 1989, and two newer generations of models have been implemented since then. A major redesign of the program was completed in 2005.
Major Sector Productivity and Costs	Quarterly and annual measures of output per hour and unit labor costs for the nonfarm business sector and other sectors	Total private-sector labor productivity measures were first published in 1959; BLS switched to the "business sector" in 1976.	After extensive consultation with the Bureau of Economic Analysis (BEA), in 1996 BLS switched its business-sector output measures from the "income side" to the "product side" of the National Income and Product Accounts and also based these measures on BEA's new "chain-type annual indexes." These improvements have reduced the number of revisions to the series.
Mass Layoff Statistics (MLS)	Plant closings and mass layoffs involving at least 50 people who filed unemployment insurance claims against an employer over a 5–week period, for the Nation and States, by detailed industry; extended plant closings and layoffs lasting more than 30 days, by State and detailed characteristics of the layoff	Program began in 1984 at the direction of Congress. After the program was terminated in December 1992, Congress restored it in 1994.	Nationwide participation in the MLS program in 1994. A stand-alone PC-based operating system was provided to States in 1995. In 1996, the monthly news release on all layoffs, regardless of duration, was introduced. In 2000, a major program review involving BLS, the Employment and Training Adminstration (ETA), and the States was conducted. In 2004, the collection of data on job losses due to offshoring and outsourcing was initiated.

Exhibit 1. Continued—Statistical programs of the Bureau of Labor Statistics, 2009

BLS statistical program	Major outputs	Origins	Significant events in past 25 years
Multifactor Productivity (Industry and Major Sector)	Annual measures for the private business sector and selected industries. These measures expand the list of inputs with which output is compared.	Multifactor productivity (MFP) measures for private business were first issued in 1983. This report went a step beyond labor productivity analysis by accounting for capital inputs as well as labor.	The first set of manufacturing MFP measures comparing "sectoral output" (instead of real value added) with inputs of capital (C), labor, (L) energy (E), non-energy materials (M), and business services (all together KLEMS) was published in 1987. Estimates of the effects of the education and experience of the work force on private business productivity were issued in 1993. A set of KLEMS MFP measures for nonmanufacturing industries was prepared and used to critique the quality of available real output measures in 1999. A comprehensive set of MFP measures for detailed manufacturing industries was introduced in 2000.
National Compensation Survey (NCS), including the Employment Cost Index (ECI)	Quarterly rates of change in employer costs for wages and benefits; quarterly employer costs for wages and benefits; annual national, regional, and locality pay data by occupation; annual data on the incidence and characteristics of employee benefits	Studies of occupational wages in specific industries were among the earliest studies conducted by the BLS; ad hoc studies of employee benefits and workplace practices were also conducted periodically. After World War II, the need for occupational wage data by locality and industry was recognized; first sample of localities used to represent all metropolitan areas was introduced in 1960. Studies of wage and benefit costs date to the late 1950s; the current Employment Cost Index was introduced in 1976. The current benefits program began in 1979.	Separate Employment Cost Index (ECI), occupational wage, and employee benefit programs were combined in the mid-1990s to create the National Compensation Survey, which uses a single sample, collection process, and estimation methodology for all outputs. In 2009, the first locality ECI estimates were published for 14 large metropolitan areas. Annual wage and benefit cost levels were introduced in 1987; quarterly data were introduced in 2002. To meet the needs of the 1990 Federal Employees Pay Comparability Act, occupational wage data expanded from initial coverage for a fixed set of occupations to the current random selection from all occupations. Benefits data have expanded over time to the current coverage of all private industry and State and local governments.
National Longitudinal Survey (NLS)	Microdata from periodic interviews of a constant sample of people regarding working, education, and other life experiences Used by researchers in government and academia.	Began in the mid–1960s with four cohorts of individuals who were followed into the 2000s.	A new cohort of youths aged 12–16 years was started in 1997. More than 2,000 articles using NLS data have been written in scholarly journals in the last 25 years.

Exhibit 1. Continued—Statistical programs of the Bureau of Labor Statistics, 2009

BLS statistical program	Major outputs	Origins	Significant events in past 25 years
Occupational Employment Statistics (OES)	Annual occupational employment and wage data by geographical area or industry	Initial data collection efforts began in late 1960s and early 1970s; national industry-specific occupational employment estimates published since late 1980s; wage and geographical area data since late 1990s.	National industry-specific occupational employment estimates developed in late 1980s, with each industry available once every 3 years; in late 1990s, program expanded to include wage information, to cover all industries in each year, and to produce national, State, and local area cross-industry data.
Producer Price Index (PPI)	Family of indexes that measure average change over time in selling prices received by domestic producers of goods and services	Began in 1902 as Wholesale Price Index and is oldest continuous statistical series published by BLS. Comprehensive overhaul in 1978 resulted in restructured Producer Price Indexes.	Major expansion in coverage of services (from less than 1 percent of services GDP in 1985 to more than 77 percent now); added indexes for several types of nonresidential building construction in 2002–08; conversion to use of broadcast fax for mail surveys beginning in late 1990s.
Quarterly Census of Employment and Wages (QCEW)	Monthly employment and quarterly wages by detailed industry and geography down to the county level	Economic and statistical responsibility for the QCEW program (formerly known as ES–202) was transferred to BLS from the Employment and Training Administration (ETA) in 1972. Full funding and administrative responsibility were transferred to BLS in 1984.	Worksite- and establishment-level reporting was instituted in 1991–92. The program began to geocode data at the establishment level in 2003. The data review and publication process was accelerated by 3 weeks in 2005.
Survey of Occupational Injuries and Illnesses (SOII)	Annual counts and rates of workplace injuries and illnesses	Periodic data collection since 1910s; annual survey began in 1973.	Several external reviews in late 1980s; significant program revisions in early 1990s added demographics of injured workers and characteristics of incident; recent addition of rates by occupation and demographics.

> about 80 percent of the $766 median for their male counterparts. This ratio has grown since 1979…when women earned about 62 percent as much as men.… Readers should note that the comparisons of earnings in this report are on a broad level and do not control for many factors that can be significant in explaining earnings differences.[6]

Because the statements that the BLS makes about its data are limited to fact-based descriptions and analysis, journalists and commentators often go elsewhere to obtain policy and political reactions.

Protecting confidentiality; reducing burden

Carroll D. Wright, the first Commissioner of Labor Statistics, defined the principles that are followed by the BLS to this day. Among those principles were "firsthand data collection, voluntary reporting and confidentiality of returns." [7] Although the methods of data collection have changed dramatically, the principles of voluntary reporting and confidentiality continue to be the focus for all BLS data collection activities.[8]

The BLS and its regional offices, State agencies, and contractors collect a wide range of data from employ-

ers—data on employment, wages, compensation, prices, and workplace safety and health—for input into two dozen surveys and programs. In general, the BLS and its partners enjoy good relationships with employers and obtain data from a large proportion of those surveyed. Still, the relationship between the BLS and survey respondents has changed considerably over the past 25 years, and the Agency has had to take a number of steps to maintain and improve the way it interacts with employers.

One of the biggest changes has been an explosion of new technology, particularly in the area of communications. Today, data requested by the BLS often are available electronically, reducing the employer's burden of compiling data. Along with this expansion of electronic records, however, comes heightened concern about security. Although the BLS has always pledged that employers' data would remain confidential and would be used for statistical purposes and only in the aggregate, the threat of inadvertent disclosure of the data adds to the complexity of maintaining confidentiality.

A major milestone in the 125-year history of the BLS came in 2002 with the passage of the Confidential Information Protection and Statistical Efficiency Act (CIPSEA). This law provides statutory protection of data collected by a Federal Agency under a pledge of confidentiality for exclusively statistical purposes (a principle that is essential for gaining the cooperation of both employers and individuals). The law also allows the BLS, the Bureau of Economic Analysis, and the Census Bureau to enter into data-sharing agreements to promote statistical efficiency.[9]

In addition to exerting efforts to allay fears about data security and confidentiality, the BLS has undertaken many initiatives over the past quarter century to use technology and automation to make it easier for respondents to provide data. Often, the efforts focus on methods that work at the convenience of the employer. For example, rather than having to schedule a visit or call from a BLS representative at a particular time, employers frequently can provide information at their convenience. (See box, pages 11–12.)

The same individuals and organizations that provide data to BLS frequently are users of BLS data as well. To capitalize on these unique relationships, the BLS often uses a "corporate" strategy to coordinate the collection of data for multiple programs, thereby reducing the number of independent contacts with the employer. By understanding the full nature of the employer's data needs, the BLS can offer customized data products to meet those needs—these days frequently provided over the Internet.

Some BLS programs are administered in conjunction with the States. The relationship between BLS and the States has changed considerably over the past quarter century. Beginning in 1984, the BLS has been responsible for the administration of agreements with the States for both labor market information and safety and health statistics. The BLS has full responsibility for planning, managing, and funding all the Federal-State cooperative programs.

The Federal-State cooperative activities allow State governments to leverage their existing relationships with employers, which can assist in building cooperation. The BLS and State representatives also work together through the Workforce Information Council to improve State and local data.[10] Through these efforts and others, the availability of State and local labor market data has greatly expanded over the past quarter century. For example, in recent years the Current Employment Statistics (CES) program has expanded the amount of seasonally adjusted payroll employment data to the point that such data are now available for all States and nearly all metropolitan areas. In the same vein, the Local Area Unemployment Statistics (LAUS) program provides monthly estimates of employment and unemployment for 7,300 areas, including States, counties, and cities.

Employers responding to BLS data requests are remarkably generous with their time. This high degree of voluntary cooperation stems from two sources: (1) the high level of professionalism of the data collection staff and (2) the great care the BLS takes to protect the confidentiality of the information that respondents furnish. These partnerships with employers have been instrumental in maintaining consistently high response rates as well as high-quality data.[11] To maintain close relationships with employers and partners within State governments, the BLS realigned its regional offices in 1999. The streamlined regional structure (moving from eight to six regional offices) provided greater flexibility for the BLS to meet the needs of respondents and data users.

Relevance to economic and social conditions

The Act establishing the BLS (originally called the Bureau of Labor) within the Department of the Interior was signed by President Chester A. Arthur on June 27, 1884, and mandated that the Commissioner "shall collect information upon the subject of labor, its relation to capital, the hours of labor, and the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity."[12]

Since its inception, the BLS has focused many of its

studies on current economic and social conditions. Early studies "were broadly conceived and directed at social issues such as marriage and divorce, temperance, and laboring women and children, but, with periodic economic depressions and a growing industrial labor force, the Bureau was called upon increasingly to deal with more strictly economic issues such as wages, hours of work, prices, and the cost of living."[13] These core economic topics—wages, employment, hours of work, and prices—along with worker productivity and safety, continue to represent the fundamental statistics produced by the BLS. But changing economic and social conditions have led to an expansion in the topics covered, such as employer-provided childcare, the price of cellular phone service, and the identification of green jobs. Even in just a 25-year period, there are many examples of modifications in BLS programs and outputs made in recognition of a changing world.

Classification systems. One method of providing consistent data on a variety of topics is through the use of standard classification systems. To categorize data, the BLS utilizes several classification systems, some exclusively, others as a result of collaboration within the U.S. Government statistical community, and still others as a result of agreements with multiple countries.

Perhaps the most widely used of these systems among all BLS programs is the industry classification system, which has undergone radical changes over the past 25 years. Gone are separate categories for chewing-gum manufacturers (now part of nonchocolate confectionary manufacturing) and girdle manufacturers (now included among manufacturers of lingerie and nightwear); added are many new categories, often with a technological bent, such as satellite telecommunications. Standardization of industry classification in the United States began in the 1930s; early work soon became the Standard Industrial Classification (SIC) system. The SIC was updated sporadically over 60 years, before rapid changes in the types of

Interaction with data providers in an electronic age

New technology calls for the development, testing, and implementation of new methodologies. The explosion of the capabilities of microcomputers and other telecommunication features of the 1980s spawned experimentation and the large-scale implementation of new methods for collecting data for all BLS programs. The Current Employment Statistics (CES) program has been especially at the forefront of electronic collection efforts, driven in part by the rapid turnaround time needed between collection and publication of monthly payroll employment data. The CES program tested a number of alternative data capture methods, including touch-tone data entry and computer-assisted telephone interviewing. The first touch-tone data entry and voice recognition technologies were included in new methods that substantially increased response rates for CES data. An electronic data interchange collection center opened in Chicago in 1995 to handle electronic data submissions from large firms. Also, the CES program implemented the first Internet collection in an ongoing Federal survey in 1996. Indeed, what was once an all-mail collection is now practically all collected by a cost-effective array of telephone- and Internet-based methods. And this work continues to evolve with technology and the needs of respondents. The work has been copied, modified, and designed to meet the specific needs of many programs in the BLS and around the world.

The BLS Internet Data Collection Facility (IDCF) is a centralized resource currently available to all BLS programs for electronic data collection. The IDCF uses a standard interface and security protocol for users to enter the facility, so that respondents to multiple surveys will not need different logon IDs or passwords. Once in the system, respondents may see different collection methods or different entry screens, depending upon which survey they are completing; however, applications adhere to design standards that result in the same "look and feel."

The IDCF contains two approaches to Internet data collection: standard and "lite." Using the standard format, respondents may be able to see data from their establishment from a prior period and can then enter current-period data. Respondents can save incomplete information and return to complete their entry at a later date. Alternatively, the "lite" version, typically used for small amounts of data capture, has a simpler logon procedure and does not show previous-period data. Respondents must enter all of their data during one session, because data cannot be saved. The two versions were designed to meet different needs: greater security, availability of data from a previous period, and multiple logons for more complex requests (standard collection), compared with simple logon and entry for simpler requests ("lite" data collection). Both versions have been successful.

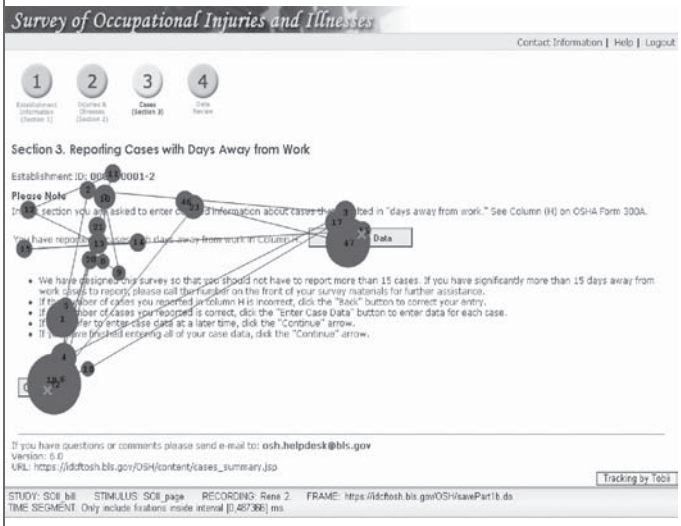
Like the CES program, the Survey of Occupational Inju-

Continued—Interaction with data providers in an electronic age

ries and Illnesses (SOII) has had considerable success in moving its sample of more than 200,000 establishments toward electronic collection. Depending upon an establishment's injury and illness experience, data entry can be quite extensive. In 2003, the survey began offering the Internet as an optional data collection mode; included with the lengthy paper survey form was a flyer describing how respondents could enter their data over the Internet. That year, about 10,000 establishments did so, and over the next 3 years Internet data collection grew, despite limited marketing, to 53,000 establishments in 2006. In an attempt to further encourage Internet collection, beginning in 2007 survey forms were eliminated from the mailing sent to some establishments. As a result, Internet collection ballooned: in 2008, almost 100,000 establishments used the Internet to enter data. Beginning in 2009, nearly all establishments receive a short mailing requesting that data be entered over the Internet.

One activity that has helped to test and improve the IDCF is the use of "eye-tracking" technology (see photo below) through the BLS cognitive laboratory. The technology can follow a subject's eyes as he or she looks at a computer screen and, in particular, at a Web site. Changes to data collection screens, especially as regards where and how instructions are presented, were made on the basis of the results of eye-tracking tests.

The BLS also has attempted to expand the information available to respondents, to make it clear how important their continued cooperation is to all BLS programs. Over the past few years, several BLS programs have added Internet pages targeted specifically at respondents. These pages typically provide questions and answers about the survey, including answers such as how establishments are selected and BLS procedures for maintaining the confidentiality of respondent data; definitions of, and concepts having to do with, the data being collected; and how respondents (and all employers) can use the results of data collection. The BLS expanded upon these pages in 2006, testing a new respondent page with detailed instructions for completing survey forms. Finally, as part of the 2008 Internet redesign, BLS introduced a set of pages with information targeted at selected audiences, including a "Survey Respondents" page that explains the importance of individual establishment responses and highlights the confidentiality precautions that the Agency takes. (See photo below.) The page has links to respondent information for many surveys, some of which have been updated to expand upon earlier test pages for respondents.



domestic industries and increased globalization led the United States, Mexico, and Canada to work together to develop a standard classification across the three countries in 1997: the North American Industry Classification System (NAICS).[14] Nearly every BLS program has some industry component, and all have converted to NAICS over the past decade. The box on page 13 provides a brief description of several classification systems: industries, occupations, geographic areas, characteristics of worker injuries and illnesses, and expenditures. Each system has been updated over the past 25 years to keep pace with the ever-changing economy.

BLS classification systems

Much of the data captured and published by the Bureau of Labor Statistics is categorized by a variety of classification systems. What follows is a brief description of some of the major classification systems used for BLS data.

Industry: NAICS

Developed under a production-oriented conceptual framework in cooperation with Canada and Mexico, the North American Industry Classification System (NAICS) represents one of the most profound changes for statistical programs focusing on emerging economic activities. NAICS groups establishments into industries on the basis of the activity in which the establishments are primarily engaged. Establishments using similar raw-material inputs, similar capital equipment, and similar labor are classified into the same industry. In other words, establishments that do similar things in similar ways are classified together. (For more information on NAICS, which was introduced in 1997, see "North American Industry Classification System (NAICS) at BLS" (Bureau of Labor Statistics, May 13, 2009), on the Internet at **www.bls.gov/bls/naics.htm**, visited June 17, 2009.)

Occupation: SOC

The 2000 Standard Occupational Classification (SOC) system was developed in response to a growing need for a universal occupational classification system. Such a system allows government agencies and private industry to produce comparable data. Users of occupational data include government program managers, industrial and labor relations practitioners, students considering career training, jobseekers, vocational training schools, and employers wishing to set salary scales or locate a new plant. Used by Federal agencies collecting occupational data, SOC provides a means of comparing occupational data across agencies. Reflecting the current occupational structure in the United States, the SOC system is designed to cover all occupations in which work is performed for pay or profit. The 2000 SOC is the result of a cooperative effort on the part of all Federal Agencies that use occupational classification systems to maximize the usefulness of occupational information collected by the Federal Government. The BLS plays a leading role in occupational classification by chairing the SOC Policy Committee, which is currently developing revisions to the system that are to be implemented in 2010. (For more information on SOC, see "Standard Occupational Classification" (Bureau of Labor Statistics, no date), on the Internet at **www.bls.gov/soc**, visited June 17, 2009.)

Geography: statistical areas

The BLS produces certain data series by State and by smaller geographic divisions, including metropolitan and micropolitan statistical areas. These areas are defined by the U.S. Office of Management and Budget and are revised following each decennial census. The general concept of a metropolitan or micropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core. Currently defined metropolitan and micropolitan statistical areas are based on the application of 2000 standards to 2000 decennial census data. (For more information on definitions of geographic areas, see "Metropolitan and Micropolitan Statistical Areas" (U.S. Census Bureau, no date), on the Internet at **www.census.gov/population/www/metroareas/aboutmetro.html**, visited June 17, 2009.)

Workplace injuries and illnesses: OIICS

The Occupational Injury and Illness Classification System (OIICS) is the classification system that is used to code the case characteristics of injuries, illnesses, and fatalities in the BLS Survey of Occupational Injuries and Illnesses (SOII) and Census of Fatal Occupational Injuries (CFOI). Worker injuries, illnesses, and fatalities are classified by the following characteristics: nature of injury or illness, part of body affected, source (primary or secondary) of injury or illness, and event or exposure. For example, a nurse sprains (nature) her back (part of body) from overexertion in lifting (event) a health care patient (source). The OIICS was originally developed by the BLS in 1992; other organizations have adopted this coding structure for their own use. The most recent update of the OIICS was in 2007. (For more information on the characteristics of workplace injuries and illnesses, see *Injuries, Illnesses, and Fatalities: Occupational Injury and Illness Classification Manual* (Bureau of Labor Statistics, July 11, 2008), on the Internet at **www.bls.gov/iif/oshoiics.htm**, visited June 17, 2009.)

Expenditures on goods and services

The BLS Consumer Price Index (CPI) and Consumer Expenditure Survey (CE) classify goods and services purchased for consumption into several hundred categories, which are then aggregated and published by major group, such as food, housing, apparel, transportation, health care, and recreation. While the major groups are kept consistent over time, the classifications are updated as new or changed goods and services are identified. (The CE information booklet *Consumer Expenditure Surveys: Quarterly Interview Survey* (Bureau of Labor Statistics, Apr. 1, 2009), on the Internet at **www.bls.gov/cex/current/i_infobook.pdf**, visited June 17, 2009, provides more detail on the groupings of expenditures. The current CPI structure is discussed in Appendix 3 of the December 1996 issue of the *Monthly Labor Review*.)

Employment data. Within the BLS employment programs, a major redesign of the Current Population Survey (CPS)—the source of national unemployment data—was implemented in 1994. The primary objective of the redesign was to improve the quality of the data derived from the survey; this was done by introducing a new questionnaire and modernized data collection methods.[15] The redesign had four main objectives:

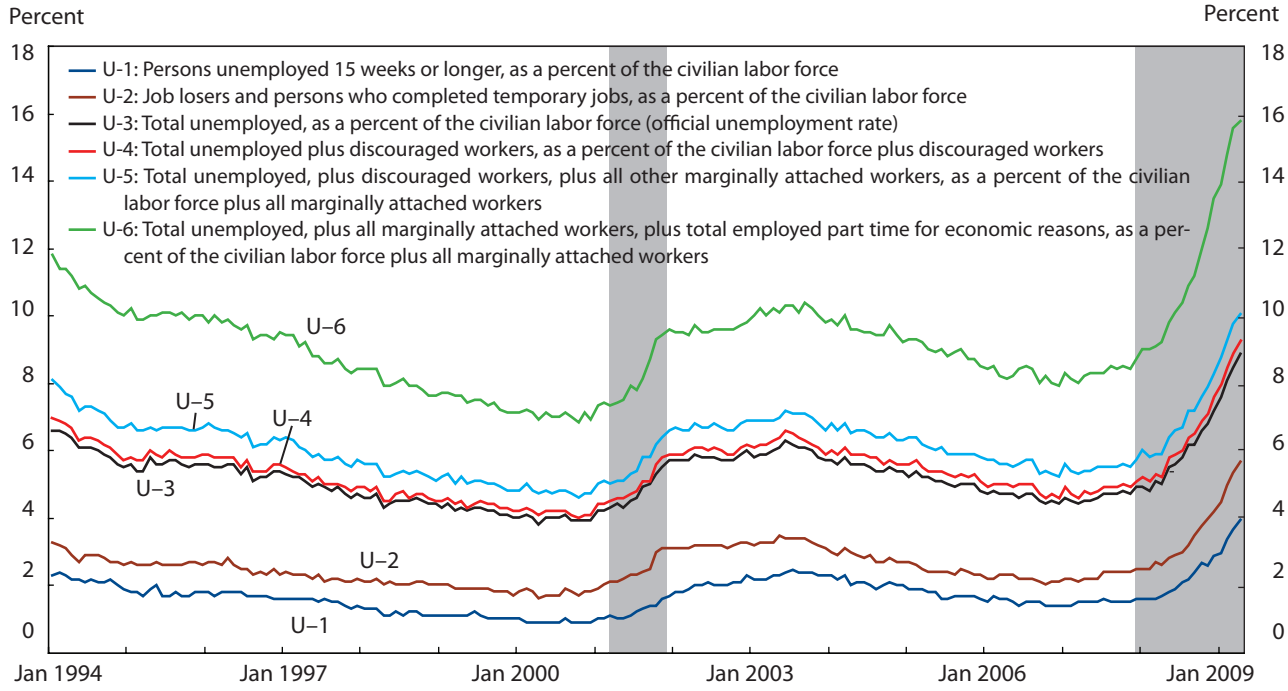
- to adopt a computer-assisted interviewing environment,
- to measure the official labor force concepts more precisely,
- to expand the amount of data available, and
- to implement several definitional changes.[16]

These changes led to the refinement of several alternative measures of unemployment that have been available for many years. Because of the redesign, the BLS now publishes six monthly measures of labor underutilization; these measures gain considerable attention especially during periods of rising unemployment.[17] One such measure identifies those individuals who presently are working part time although they would prefer to work full time. Chart 1 shows the trend in each of the different measures of unemployment over the past several years.

In addition to refining its statistics, the BLS has expanded its employment statistics programs considerably over the past 25 years. Among surveys of households, the American Time Use Survey released its first-ever estimates in 2004 and the National Longitudinal Survey introduced a new survey of youth in 1997. Together, these programs provide a valuable look into the worklife and related economic and social activities of Americans, offering insight into work-family issues, changes in training requirements for the labor force, and the expansion of technology at work and at home. More recently, new data from the CPS on the employment status of individuals with disabilities were introduced in 2009.

From surveys of employers, the BLS added the Job Openings and Labor Turnover Survey and began publishing Business Establishment Dynamics data from the Quarterly Census of Employment and Wages. These programs help data users understand the underlying ebbs and flows in the labor market that might otherwise be masked by broader measures of employment and unemployment.[18] In addition, the CES program was redesigned to improve statistical precision and broaden coverage to all workers, while the Occupational Employment Statistics program added to its publication of occupational staffing patterns

Chart 1. Alternative measures of labor underutilization, seasonally adjusted, 1994–2009



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER). NBER has not yet determined an endpoint for the recession that began in December 2007.
SOURCE: Bureau of Labor Statistics, Current Population Survey.

by including wages associated with those occupations. The Employment Projections program improved data on occupations and training requirements, while the Mass Layoff Statistics program added data on job losses associated with offshoring and outsourcing.

Compensation data. The past quarter century has yielded a considerable number of changes in the type (and magnitude) of worker compensation; the BLS has made every attempt to track those changes. Employer costs for benefits have more than doubled from $3.58 per hour worked in 1986 to $7.98 per hour worked in 2008. As a percentage of total employer compensation costs, however, benefits in private industry have been relatively stable: 27 percent of compensation costs in 1986 and 29 percent in 2008.[19] The benefits available have become more varied and more complex, and the responsibility for understanding and taking full advantage of benefit programs has shifted considerably from employers to employees. For example, in the early 1980s, traditional pension plans were quite prevalent; by 2008, such guaranteed plans had largely disappeared for private-sector workers. In their place are 401(k) and similar plans, often requiring workers to contribute in order to receive any contributions from their employer. The shift in retirement plans has had added complexities over the past 25 years, including the introduction of hybrid plans and employer activities that either canceled or froze existing plans. To provide data on each of these topics, the BLS has made numerous revisions to its benefits program in recent years.[20] Policymakers use BLS benefits data to determine the need for changes to social programs and tax structures, among other things.

Workplace health care benefits have changed as well. As the BLS celebrated its centennial in 1984, health insurance plans—often employer-paid "basic" benefits plus "major medical"—were just beginning to change. Health care inflation was high in the 1980s (see charts 2 and 3), one of several factors that may have led employers to begin a series of changes to the benefits they provide. Legislative changes also influenced what employers were offering.[21] First came health maintenance organizations, then preferred provider organizations, followed by point-of-service plans, and, finally, consumer-driven health care.[22] Employee premiums and employees' share of total premiums grew, as did out-of-pocket expenses such as deductibles and copayments. One overarching theme of these changes has been the introduction of more choice and more responsibility for employees. Both of these features are evident in new arrangements such as medical savings plans and health reimbursement accounts. Benefits data from the BLS National Compensation Survey have been expanded and redefined over time to keep up with these and other changes in employee benefits.

Beyond changes in retirement and health benefits, employees at the end of the first decade of the 2000s have access to such benefits as childcare assistance, parental leave, long-term care insurance, and financial counseling. Employers are establishing employee assistance and wellness programs to care for the well-being of their workforces. In addition, the traditional notion of the workday is no longer as rigid as it once was, with telework arrangements gaining considerable attention. The BLS reports on the percentage of workers who have these workplace options.

Price data. The BLS has produced data on prices and expenditures—consumer prices, producer prices, import and export prices, and consumer expenditures—for much of its history. Originally focused on the cost of living for U.S. workers, today's data expand upon that concept to provide broader measures of inflation, price levels, and expenditure patterns. The CPI is used to adjust billions of dollars in Federal payments and programs, including annual adjustments to Social Security benefits and income tax brackets. Consumer Expenditure Survey (CE) data are used to adjust the standard sales tax amounts that can be deducted from Federal income taxes. CPI and Producer Price Index (PPI) data also are used as escalators in wage and price contracts, and PPI data are used as well to deflate a variety of economic time series, such as measures of inventories and sales, that are input into gross domestic product (GDP) calculations.

The wide use of BLS price measures and the large sums of money that are dependent upon such measures demand that they be precise and up to date. Several enhancements have occurred over the past quarter century to improve the accuracy of these data and maintain their relevance. In the CPI, expenditure weights, which are derived from patterns captured in the CE, are now updated every 2 years, rather than the less frequent updates that occurred prior to 2002. By updating the CPI market basket of goods and services used to construct the index, as well as the weights associated with those goods and services, the CPI improves its measurement of price changes for current U.S. consumers. For example, computing services represented 0.2 percent of the CPI market basket of goods and services in 1984; a quarter century later, such services have increased to 0.9 percent of the market basket—a fourfold increase reflecting their increased prevalence in the lives of Americans. The PPI has made significant progress toward its goal of expanding coverage of the U.S. economy. In 1985, only 1

percent of services, as measured by the GDP, was covered by the PPI; currently, 77 percent of services are included in the PPI, reflecting the growth in service industries in the Nation's economy. The PPI has been recognized for the development of innovative measures in health care and nonresidential buildings and specialty trades.

Other BLS data. Over the last 25 years, the BLS has improved the relevance of its productivity measures for the domestic economy in a number of ways: by improving consistency with the GDP National Accounts at the major sector and subsector level, by conducting research into factors affecting productivity, by expanding coverage of industry productivity, and by incorporating broader measures of multifactor productivity for industries as well as major sectors. As a result of improvements to the BLS productivity series and expanded visibility of these data, several countries, including Canada, Australia, and the European Union, have started producing multifactor productivity measures in the past few years, adopting approaches first used by the BLS.[23]

The BLS international labor comparisons program began in the 1960s, with comparisons of unemployment and productivity for a few major industrial countries. In the past 25 years, the program has maintained its relevance by expanding coverage of both indicators and countries. The main indicator added was international comparisons of manufacturing compensation costs, an important measure of competitiveness in tandem with productivity. With globalization, the needs of policymakers for comparative data on developing countries increased. The BLS met those needs by instituting studies of Mexico, China, India, and other countries that are of growing importance in international trade. In particular, the work on Mexico has been useful to those analyzing the labor market impact of the North American Free Trade Agreement.[24] The work on China and India has focused on hourly compensation and employment in manufacturing.

For some statistical measures, maintaining relevance comes from added detail. In the case of data on worker safety and health, the BLS changed its focus in the early 1990s in order to capture both the demographics of workers who are injured, taken ill, or killed and the circumstances that affected the individual. Today, not only are the available statistics on worker safety and health detailed and extensive, but some items added over the past quarter century highlight a variety of current workplace safety concerns:

Chart 2. Employment Cost Index, 12-month change, private industry, cost of total benefits and cost of health benefits, 1982–2009

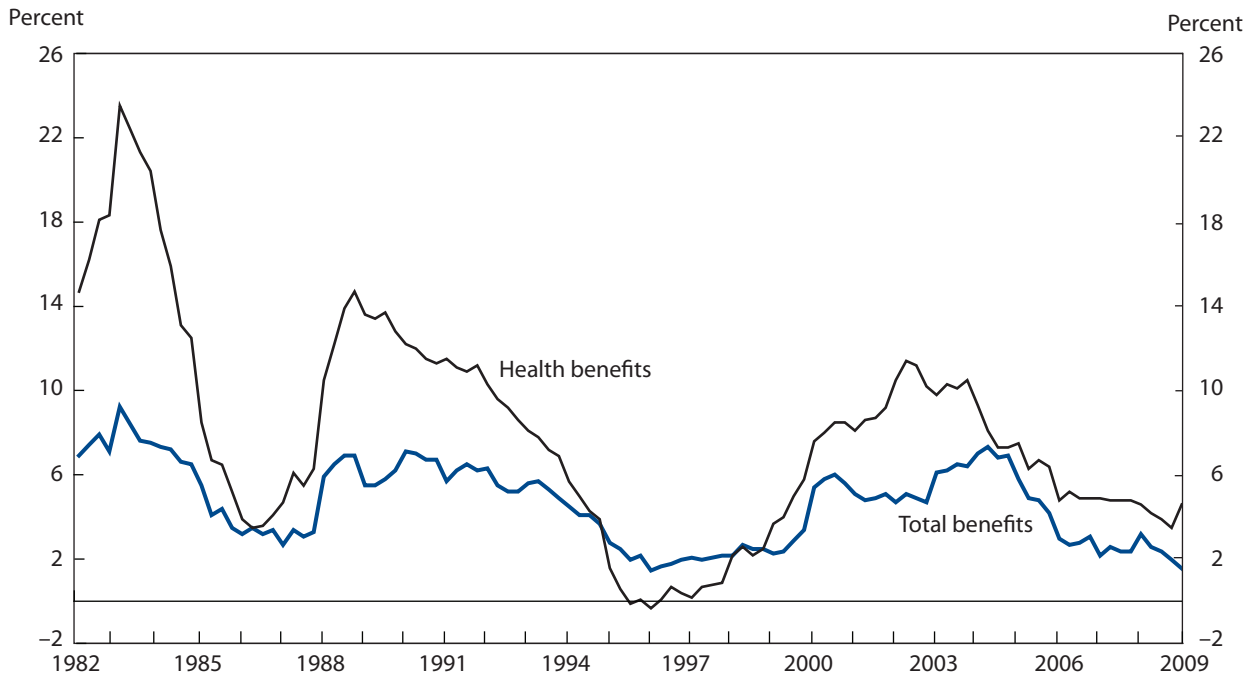
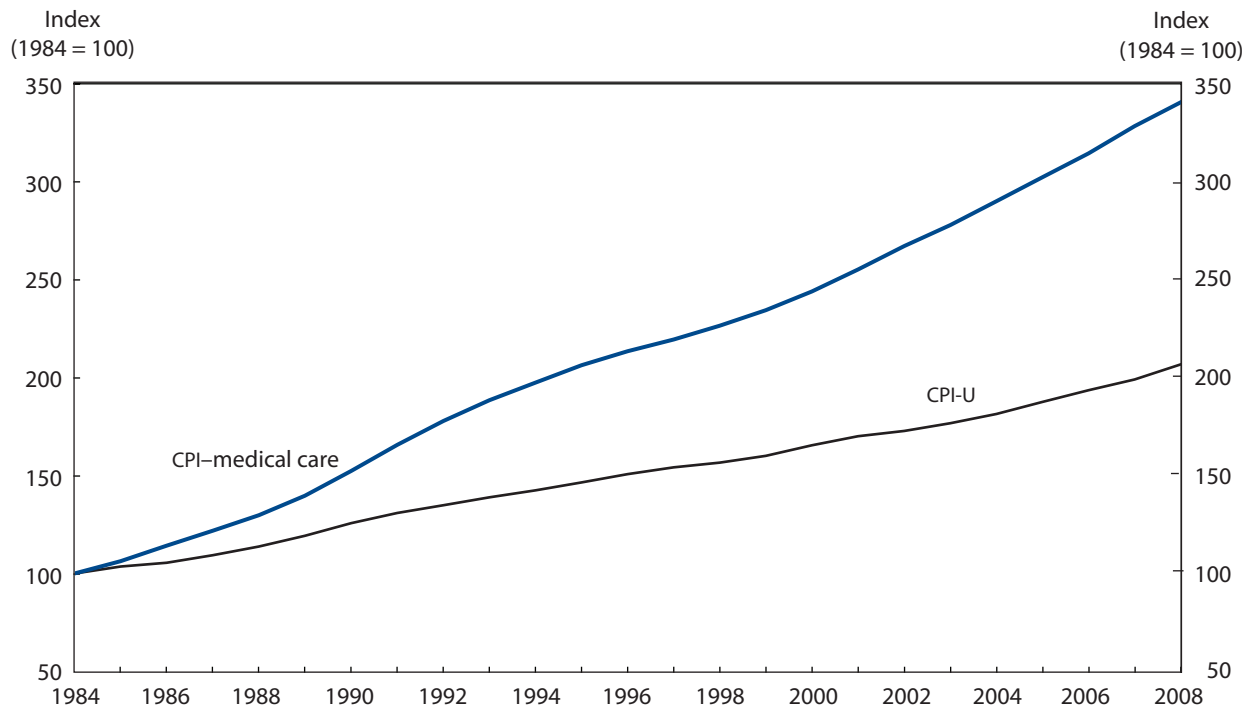


Chart 3. Growth in CPI-U and CPI-medical care, 1984–2008, not seasonally adjusted



- Identification of workers with musculoskeletal disorders;
- Identification of categories of perpetrators in workplace homicide cases, including family members, customers or clients, and robbers;
- Identification of the time of the incident and the length of time the employee had been at work when a workplace injury occurred;
- Identification of fatally injured Hispanic workers as either native or foreign born.

Reacting to unique circumstances. Although the BLS attempts to keep track of changes to the economy and seeks to anticipate the need to refine its programs, unforeseen circumstances can occur that require quick reaction. Two examples over the past quarter century are the terrorist attacks in September 2001 and Hurricane Katrina in August 2005. Both events stressed the BLS systems for capturing current and accurate data; both also resulted in the release of new or different outputs to reflect the specific economic condition. To ensure that statistics were reported accurately and completely, the BLS quickly introduced new procedures and collection methods for identifying the operational status of businesses while minimizing disruption to respondents.

The 2001 terrorist attacks led to the special publication of workplace fatality data on individuals who were in "work status" when they were killed in the attacks. Among those included were office workers at the World Trade Center and the Pentagon, business travelers on each of the airplanes that were hijacked, and rescue workers killed in their attempt to save victims. Of the workers who were fatally injured as a result of the terrorist attacks, 80 percent were working in an office building, 14 percent were involved in rescue efforts, and the remainder were airline passengers.[25]

Soon after Hurricane Katrina hit, the monthly CES program modified its procedures in recognition of the fact that many employers in heavily affected areas were likely to be temporarily or permanently out of business. Further, the BLS provided estimates of the effect of the hurricane on national payroll employment: the loss of 35,000 jobs in September 2005 was in stark contrast to the average monthly gain of 194,000 over the previous 12 months.[26] Finally, special questions were added to the CPS to identify individuals displaced by the hurricane.

The BLS released new Internet pages that showed the number of employees and business establishments in the counties that had been declared a disaster area following Hurricane Katrina. This feature of the Internet site was one of the first examples of "quick response" capabilities that the BLS has built; other examples have included special information on workplace fatalities related to mine cave-ins and crane collapses, employment effects of floods and hurricanes, and information on employment trends in finance, automotive, and other industries in the news.

Improved accuracy and timeliness

There are many examples of successful, ongoing efforts to improve the accuracy of BLS outputs. What these efforts frequently have in common is both the input of staff from many different disciplines to develop the best possible product and the advice of data users and other external experts. The BLS employs economists, statisticians, information technology specialists, behavioral scientists, program analysts, financial management specialists, and practitioners of many other disciplines; the Agency is organized by subject (employment, prices, compensation, and productivity), but also by areas of expertise (technology, data collection, publications, statistical methods, and administration). Professionals from each of these disciplines work together to build consensus around the best possible products.

High-quality methodology and research at the BLS flow from sustained and carefully focused long-term investments. An example of such an investment comes from 1988, when Commissioner Janet Norwood secured funding for laboratory-based research to improve survey measurement, leading to the integration of behavioral science theories and methods within the statistical sciences. Early work in the behavioral science research laboratory, also known as the cognitive laboratory, used the theories and methods of cognitive science to investigate accuracy, timeliness, and response burden by evaluating the effects of alternative wording and ordering of questions, variations in the design and structure of questionnaires, the mode of data collection on the quality of survey data, and the accuracy and timeliness of survey responses. BLS laboratory research has since expanded to all aspects of data collection, including interviewer training, computer-assisted interviewing technology, data processing, and areas outside of data collection, such as the dissemination of data and customer satisfaction. In another example, economic research units associated with each BLS program provide both expertise in program development and independent research.

One example in which the cognitive laboratory has had a valuable and ongoing impact on BLS operations is its review of the BLS Internet Data Collection Facility, which supports Web-based data collection for several BLS programs. Since its inception and throughout several iterations, the facility has gone through cognitive usability testing, designed to identify how respondents will react to data collection screens and how best to design those screens to get the desired data from respondents. Recent tests have included high-technology eye-tracking software that follows a user's eye as he or she reads an Internet screen and enters information. Such testing has optimized the user experience when reporting data and furthered the BLS mission of providing timely and accurate data.

In the area of statistical methods, the BLS also has invested in research activities designed to improve the accuracy and statistical soundness of various of its programs. Projects such as the conversion of the CES survey to a probability sample and improvements to seasonal adjustment techniques for many BLS programs come directly from this research. The Local Area Unemployment Statistics program, the first BLS program to use a model-based approach to estimation, incorporates regular updates to the modeling process.

Through both formal and informal means, the BLS reaches out beyond its borders to obtain input from many users. At present, the Agency has two formal advisory groups: the Federal Economic Statistics Advisory Committee (FESAC) and the Data Users Advisory Committee (DUAC). FESAC is a joint effort among the BLS, the Census Bureau, and the Bureau of Economic Analysis. FESAC members are generally from academic institutions and have backgrounds in economics, statistics, behavioral science, and related disciplines. The group meets with senior staff from the three statistical agencies; the agenda typically includes presentations on topics of interest across the agencies, such as inputs into the GDP accounts, statistical methods, and changes to industry or occupational classifications. The sessions include time for discussing ongoing research by the academicians, who often partner with Agency staff on projects of mutual interest. FESAC has been active since 1999, and the input of the various experts has led to improvements in the American Time Use Survey and in the PPI, among other BLS programs.

The DUAC is a recently formed advisory committee that replaces two longstanding committees: the Labor Research Advisory Committee (LRAC) and the Business Research Advisory Committee (BRAC). Both LRAC and

BRAC provided valuable input for nearly 60 years. The change in the advisory committee structure was designed to take the best aspects of those two groups and combine and expand participation to include a wide range of data users. DUAC's mission is as follows:

- To bring together data users from various sectors of the U.S. economy, including the labor, business, research, academic, and government communities;
- To engage in a dialogue on technical matters related to the collection, tabulation, and analysis of BLS statistics, on the Agency's published reports, on its data dissemination methods, and on the broader aspects of the overall BLS mission and function.

Other external inputs that help the BLS improve the accuracy of its statistics include formal and informal conversations with a wide variety of stakeholders. Many BLS programs that are administered in cooperation with the States have policy and advisory groups that provide a forum for State input into program operations and development. Field economists who collect data from employers often report on changes in economic conditions or new employer practices that might be ripe for future survey collection or tabulation. Individual programs participate in conferences and trade shows to encourage respondent participation in BLS surveys and to publicize BLS data. Through these interactions with stakeholders, the BLS gains valuable insight into the labor force and identifies potential improvements in survey programs.

Following delays in the implementation of a large-scale revision in the PPI, the BLS established several internal review processes. Programs identify "mission-critical projects" that are monitored more carefully by experts throughout the Agency. As a requirement of monitoring, large and highly visible projects must include detailed plans and written cross-organizational implementation strategies. These activities follow strict project management procedures to help ensure their success. In recent years, the BLS has developed several new measures under strict project management guidelines. Among these measures are employment cost indexes for 14 large metropolitan areas and rates of workplace injury and illness by occupation and demographic characteristics. The BLS continues to identify a half dozen or more mission-critical projects each year and has expanded its project management skills to help ensure the success of these projects.

More broadly, the BLS has implemented a rotating series of reviews of each of its statistical programs in order to provide multidisciplinary input to managers on program objectives and processes. These reviews focus on a number of aspects of a statistical program: what is being measured and what should be measured, proper planning, program operations, the use of information technology, program outputs and outreach efforts, and financial management. Although such reviews, which are being expanded to include input from external stakeholders, may not identify a large-scale problem that was unknown to program management, they have helped programs to develop long-run strategic plans that identify multiple improvements to be tackled over time. The inclusion of experts from various BLS programs and offices on the review teams helps to break down barriers and share best practices across the Agency.

Two aspects of the development of accurate estimates from statistical samples that are a constant challenge for the BLS (and, indeed, for any statistical organization) are variance and bias. *Variance* is a measure of the variability in estimates that can be attributed to random variability of the sampling and measurement process. Typically, the closer the sample size is to the size of the population, the lower is the variance. The BLS works to reduce variance by refining the sources of its samples, adjusting sampling sizes, and improving the allocation of the sample across certain variables, such as industry or geography. In recent years, these types of changes have resulted in lower variance estimates in a number of surveys.

Bias arises when the sample is not representative of the population being studied or when the data collection process results in systematic distortions. For example, if a large proportion of incomplete data in a particular survey came from one industry, the results of the survey might have a particular bias related to that industry. Similarly, if the misunderstanding of certain questions will lead to underreporting or overreporting of some expenditure, then the overall estimated mean expenditure may be biased. Improvements in sampling and estimation techniques, as well as in the data collection process, can help to reduce bias.

Over the past quarter century, BLS activities related to the measurement of variance and bias have included the following:

- Adding a measurement of statistical bias, as was done in the International Price Program;
- Increasing the quantity of published variance data, such as data on employee benefits;
- Conducting an analysis of nonresponse bias for the CES program;
- Implementing formal quality assurance processes, such as that for the Survey of Occupational Injuries

and Illnesses;

- Standardizing collection processes and procedures, as was done in the Mass Layoff Statistics and Occupational Employment Statistics programs;
- Improving nonresponse follow-up procedures, such as call scheduling in the American Time Use Survey;
- Improving the design and wording of forms, as was done for the CES; and
- Computerizing the survey collection instrument, as was done for the CPS.

The rapid pace of technology change has allowed the BLS to implement numerous improvements in survey collection, processing, and dissemination techniques, among other things, but technological improvements have had some negative effects as well. Twice in the late 1990s, the BLS released key economic data on its Internet site ahead of the designated release time. These errors led to the implementation of strict human and technological procedures to guard against early release, including processes that involve the use of the Navy's atomic clock to ensure accurate release times.

Improved collection and processing techniques (such as Internet collection and high-speed data processing) have resulted in more timely releases of data. In addition, the greatly expanded use of technology in data dissemination has helped transmit data to users more quickly. These improvements are most noticeable in the rapid adoption of the Internet for data dissemination. In January 1994, the BLS went live with an Internet presence—one of the first Federal Agencies to take advantage of this medium. Since that time, the Web has become the Agency's primary and most heavily used data dissemination mechanism. (See box, pages 21–22.)

The BLS gathers customer feedback on its Web products and uses that feedback to improve public access to data. Such feedback was key to major Web site redesigns that occurred in 2001 and again in 2008, including multiple iterations of empirical usability testing involving representative end users (researchers, journalists, librarians, students, economic analysts, and others). In the process, the BLS incorporated lessons learned from ongoing site operation. The Agency's current Web site highlights new content every business day and provides expanded search and query capabilities. Future plans include developing interactive graphics, including charts, maps, and other data visualizations, to make it easier to understand large data sets. Also under investigation are improved site and database search tools, more cross-program data compilations, expanded subscription capabilities, and improved educational materials.

Insistence on transparency and candor

A BLS tradition that dates to the first annual report of Commissioner Caroll Wright in March 1886 is the inclusion of information about the methods employed in the development, collection, and tabulation of data.[27] Today, information on definitions, methodology, and limitations of the data can be found in tables and charts, as well as in technical notes that accompany most releases of data. The reason for such transparency is to make readers aware of the known limitations of the data, to guide them in the appropriate use of the information, and to assure them that proper statistical standards and techniques have been used. A comprehensive compilation of this technical material is available in the *BLS Handbook of Methods*. The *Handbook*, with chapters on each of the BLS programs, was published as a bound volume up until the end of the last century; it is now available online. One advantage of developing an online version of the *Handbook* is to allow more frequent updating. At present, each chapter is updated whenever methodologies change.[28]

Among the types of information available to data users in the *Handbook* and elsewhere are response rates and variance estimates for survey data. Most BLS survey data are collected from employers, and most responses to requests for such data are voluntary. Although the response rate is often quite good, nonresponse can result in a decline in the quality of the data. The BLS publishes detailed statistics on response rates for its surveys. For example, the following tabulation indicates that the 2008 CPI included data from 84.5 percent of all items for which prices were sought, ranging from 53.6 percent of apparel prices to more than 91 percent of prices for food and beverages and for other goods and services:[29]

CPI component	*Response rate*
Total	84.5
Food and beverages	91.4
Housing	89.9
Apparel	53.6
Transportation	90.5
Medical care	75.9
Recreation	84.5
Education and communication	82.8
Other goods and services	91.7

Beyond the regular publication of information on methodology, BLS statistical programs are often the subject of external reviews, some initiated by the Agency it-

Development of the BLS Internet

The Internet has been the focus of much of the change that has occurred at the BLS in the last quarter century—and specifically, since the first BLS Internet site was launched in 1995. This initial foray onto the Web was inwardly focused, as pages were organized on the Internet in much the same way that BLS offices were organized. The first BLS Internet homepage was a grid of nine boxes (see photo below), and as users navigated beyond those boxes, they found the formal name of the Office that developed certain statistics. Users who were looking for data on workplace fatalities had to know that such data were produced in the Office of Compensation and Working Conditions. Select that box, and you might find the data you want; select another box, and you were lost.

As the data available on the BLS Web site accumulated, so did the Agency's interest in providing a better interface to help serve customers. That interface, which debuted in October 2001, attempted to organize data by topic, rather than by office. (See photo, next column.) As the Internet evolved, the new design presented some challenges for users. First, the theory behind the design was to provide users with a link from the homepage to anything they might want, so the page contained more than 100 links and could be overwhelming to the uninitiated. Second, the titles of the links often related to internal BLS program names or used other jargon, so getting where the user wanted to go still was nonintuitive.

But in some sense, problems with the interface no longer mattered, because users were not getting to BLS data by visiting **www.bls.gov.** Rather, the advent of the Internet search engine meant that users were searching for their topic of interest; with luck, the search results provided a link to the appropriate BLS Internet page. For example, if you were to enter "workplace fatality statistics" into Google, the BLS homepage would appear as the third choice, although the first two choices would take you to the same BLS statistics on the Occupational Safety and Health Administration Web site.

The BLS changed its Internet homepage again in 2008, this time reducing the number of links on the page, adding fresh content up front each business day, and identifying resources that users might need. (See photo, next page.) The goal of the homepage has changed from providing a link to everything available from the Agency to providing highlights of the latest data available. The goal of the new homepage is to get users accustomed to coming back to it again and again for BLS information, rather than coming upon such information through a search engine or from a secondary source.

As the BLS Internet site has evolved, Web activity has expanded greatly. In 1995, the first year of its operation, the BLS Web site averaged 70,000 hits per month; in June 2008, the figure was 30 million hits. The pattern of use varies throughout the year and has remained consistent for many years. The heaviest usage is generally in the fall and spring, corresponding with the academic year. Usage typically declines during the summer. In addition, spikes in usage often coincide with the release of new data, such as the release of employment projection data every other November.

Finally, the BLS has begun to add material on its Internet

1995

2001

Continued—Development of the BLS Internet

site that focuses on broad economic themes, moving away from the program focus that has dominated the site since its inception. The new Web site includes spotlights on timely topics, such as older workers and African-American History Month, with data from a number of BLS programs. Special pages also are available that demonstrate how the BLS can serve various constituents, such as jobseekers, investors, policymakers, journalists, and students. With fresh content now available on the homepage each business day, and with new features such as audio, video, so-called really simple syndication (RSS) Web feed format, and podcasts, more than ever do users have a single portal for labor statistics.

2008

self, others initiated externally. Over the past quarter century, standards for the operation of statistical surveys have evolved, and in 2006 the Federal Office of Management and Budget (OMB) updated and compiled those standards into a single volume.[30] Topics included in the standards are as follows:

- Development of concepts, methods, and design
- Collection of data
- Processing and editing of data
- Production of estimates and projections
- Data analysis
- Review procedures
- Dissemination of information products

Reviews of the survey process are a regular part of the business of producing government statistics. The OMB reviews all requests to collect statistical data; approval for such collection must be obtained periodically, at which time the OMB reviews each program for compliance with standards, as well as for relevance and potential duplication with other Federal data collection efforts. Certain major statistical programs receive an additional periodic review from the OMB to ensure sound statistical practices. Reviews also are performed from time to time by the Government Accountability Office and the Department of Labor's Office of Inspector General; not infrequently, these topic-based reviews result in recommendations to improve survey processes.

Although many reviews of BLS programs result in recommendations for improvement, some reviews conducted by the aforementioned organizations and others receive considerable public attention or recommend sweeping changes. A few examples from the past quarter century illustrate the breadth of these inquiries and the effect they can have on the data being produced.

In one example, as a result of the Occupational Safety and Health Act of 1970 the BLS developed an ongoing program to capture and report data on workplace injuries, illnesses, and fatalities. This data collection effort concentrated on broad estimates of the number and rate of workplace injuries, but included little detailed information (such as the occupation or demographics of injured workers or details of the injury). Further, a sample survey was used to capture information on workplace fatalities, an effort that proved inadequate for the collection of rare

events. Criticism of the BLS occupational safety and health statistics in the mid-1980s led the Agency to request the National Academy of Sciences to convene an expert panel to review data on workplace safety and health. The panel's exhaustive study resulted in recommendations for major changes to the program, including the collection of data on the characteristics of injured workers and on the circumstances surrounding their injuries, as well as the introduction of a census format to capture all fatal work injuries. The BLS implemented these changes in the early 1990s.[31]

In another, perhaps more well known example, the work of the U.S. Advisory Commission to Study the Consumer Price Index (known more commonly as the Boskin Commission), which took place in the mid-1990s, confirmed internal BLS research that had identified issues with the index that were thought to result in overestimates of price increases, which in turn led to increases in the cost of Social Security, among other things. The BLS responded to these issues not only by introducing a number of changes to the CPI over the last decade, but also by publishing a number of reports on progress toward the implementation and on the effect of the changes.[32]

Even without the impetus of outside reviews, the BLS strives to address questions and concerns about its statistics and implement changes where warranted. A few current examples demonstrate how the BLS has acknowledged criticisms of its data and provided clarification. In the area of employment statistics, data users have expressed concerns about differences between two surveys that provide similar information. The CES survey is a survey of employers that reports on the number of employees on the employers' payrolls each month. The CPS is a survey of households that reports on the number of individuals holding jobs, as well as the number and rate of unemployed persons. The employment levels reported by the CES and the CPS can differ, as can the direction and magnitude of the change in employment from month to month. The simple reason for such apparent discrepancies is that the surveys are measuring two different things: jobs and workers, respectively. Differences between the two kinds of estimate can result from individuals holding multiple jobs or from differences in the scope of the workers covered. The BLS provides considerable information to help data users understand this issue. For example, each monthly employment release includes a selection of frequently asked questions, the first of which relates to the different estimates provided by the two programs.[33]

In another example, with increased attention to the monthly payroll employment data from the CES program, the methodology used to account for newly formed businesses, known as the "birth-death model," has generated interest among data users. Again, the BLS has taken actions to help users understand the issue, providing considerable detail about the model on its Internet site and in publications.[34]

Finally, the BLS recently published two articles designed to assist data users in understanding controversies that had arisen concerning certain BLS statistics. Such proactive acknowledgement of external criticisms is not new, but in a world of fast-paced information, the BLS is still learning how to address criticisms in a timely manner. A *Monthly Labor Review* article designed to identify and dispel myths about the CPI includes the following passage:

> Within the past several years, commentary on the CPI...has not been concentrated in a single profession, academic discipline, or political group, but comes instead from an array of investment advisers, bloggers, magazine writers, and others in the popular press....This article is an attempt to correct some of the misunderstandings underlying those criticisms.[35]

In the same issue of the *Review*, an article addressing allegations that the BLS undercounts workplace injuries and illnesses includes the following rejoinder:

> The BLS Survey of Occupational Injuries and Illnesses (SOII or Survey) has come under criticism for undercounting the number of injury and illness incidents in the workplace....This article summarizes and critiques some of these studies and describes BLS efforts to better understand and address the undercount issue.
>
> The Bureau of Labor Statistics...has instituted a number of activities to understand and, where possible, address the issue. First, in 2007 BLS conducted a quality assurance survey....Second, BLS is extending the scope of SOII to include all public-sector workers....Third, BLS has instituted a program of research....Fourth, BLS is undertaking focused interviews of employers to learn about decisions made to report injuries and illnesses on OSHA logs and to other data systems. Finally, BLS is exploring partnerships with other organizations, including the National Institute for Occupational Safety and Health, to research the use of alternative data sources to complement the data available from SOII.[36]

The BLS is no stranger to controversy, and such criticisms are not unique to the last quarter century. Earlier controversies were similar in nature, expressing concerns about the accuracy of, and political influence on, statistics. What is different today is the rapid pace of news and the widespread nature of public commentary, often on the Internet. The BLS will continue to address these issues as they arise.

Looking forward

Since its centennial, the BLS has witnessed rapid growth in technology, a movement toward instantaneous news, the advent of online pundits with quick access to data, and a constantly changing economy that can be difficult to measure. Much of what the Agency measured as standard work characteristics a quarter century ago is no longer standard, with such new phenomena as teleworking, medical savings accounts, employee leasing arrangements, green jobs, offshoring, and a host of others challenging the traditional means of measuring labor. The BLS has moved at different speeds to incorporate these phenomena into its programs and continues to develop new means of keeping abreast of changes in the labor environment and adapting its programs to those changes. The continued focus on its core principles—objectivity, confidentiality, relevance, accuracy, and transparency—and on its commitment to developing a staff grounded in a core set of disciplines, namely, economics, statistics, information technology, and behavioral science, has allowed the BLS to fulfill its mission to date. This focus will serve the Agency well as the characteristics of work continue to evolve in the 21st century. □

NOTES

[1] Janet L. Norwood, "Centennial," *Monthly Labor Review*, January 1984, pp. 1–2.

[2] Joseph P. Goldberg and William T. Moye, *The First Hundred Years of the Bureau of Labor Statistics*, Bulletin 2235 (U.S. Department of Labor, September 1985).

[3] Quoted from the BLS Mission Statement, on the Internet at **www.bls.gov/bls/blsmissn.htm** (visited June 17, 2009).

[4] Founded in 1920, the NBER is a private, nonprofit, nonpartisan research organization dedicated to promoting a greater understanding of how the economy works. For more information, visit the NBER Internet site at **www.nber.org** (visited June 17, 2009).

[5] See "Union Membership in 2008," news release 09–0095 (Bureau of Labor Statistics, Jan. 28, 2009). For a further discussion of the problem of differentiating between the influence of unionization status and that of other worker characteristics on employee earnings, see Kay E. Anderson, Philip M. Doyle, and Albert E. Schwenk, "Measuring union-nonunion earnings differences," *Monthly Labor Review*, June 1990, pp. 26–38.

[6] See *Highlights of Women's Earnings in 2007*, Report 1008 (Bureau of Labor Statistics, October 2008), p. 1.

[7] Goldberg and Moye, *The First Hundred Years*, p. 12.

[8] The only BLS data that Federal law (the Occupational Safety and Health Act of 1970) requires employers to provide are occupational safety and health statistics. Certain States require employers to provide some other BLS data.

[9] For more information, see the Confidential Information Protection and Statistical Efficiency Act of 2002, Title V of Public Law 107–347.

[10] More information on Workforce Information Councils may be found on the Internet at **www.workforceinfocouncil.org** (visited June 17, 2009).

[11] Some material from this section is based on information found in the *BLS Handbook of Methods*, on the Internet at **www.bls.gov/opub/hom/home.htm** (visited June 17, 2009).

[12] Goldberg and Moye, *The First Hundred Years*, p. 4.

[13] *Ibid*., p. 21.

[14] NAICS has been updated twice since it was first released; the most recent version dates from 2007. For more information, see "North American Industry Classification System (NAICS) at BLS" (Bureau of Labor Statistics, May 13, 2009), on the Internet at **www.bls.gov/bls/naics.htm** (visited June 17, 2009).

[15] The CPS, a monthly survey of households conducted by the U.S. Census Bureau for the BLS, provides a comprehensive body of data on the labor force, employment, unemployment, and persons not in the labor force.

[16] *BLS Handbook of Methods*, chapter 1, on the Internet at **www.bls.gov/opub/hom/homch1_a.htm** (visited June 17, 2009).

[17] For more information on the variety of measures of unemployment, see John E. Bregger and Steven E. Haugen, "BLS introduces new range of alternative unemployment measures," *Monthly Labor Review*, October 1995, pp. 19–26.

[18] For more information on new measures of labor dynamics, see Zhi Boon, Charles M. Carson, R. Jason Faberman, and Randy E. Ilg, "Studying the labor market using BLS labor dynamics data," *Monthly Labor Review*, February 2008, pp. 3–16.

[19] Data are from the BLS Employer Costs for Employee Compensation series for private industry, March 1986 and December 2008. More information may be found on the Internet at **www.bls.gov/ncs/ect** (visited June 17, 2009).

[20] For more information on changes in retirement plans in recent years, see Stephanie L. Costo, "Trends in retirement plan coverage over the last decade," *Monthly Labor Review*, February 2006, pp. 58–64.

[21] Examples of Federal legislation related to employer health benefits include the Health Maintenance Organization Act of 1973 and the Mental Health Parity Act of 1996.

[22] Definitions of the various types of health insurance plans are found in *National Compensation Survey: Employee Benefits in Private Industry in the United States, 2005*, Bulletin 2589 (Bureau of Labor Statistics, May 2007).

[23] Further information on the recent history of the BLS Office of Productivity and Technology's productivity program appears in Edwin R. Dean and Michael J. Harper, "The BLS Productivity Measurement Program," in Charles R. Hulten, Edwin R. Dean, and Michael J. Harper, *New Developments in Productivity Analysis* (Chicago, University of Chicago Press, 2001), pp. 55–84.

[24] For a historical review of the international comparisons program, see Patricia Capdevielle and Mark K. Sherwood, "International comparisons: providing comparable international labor statistics," *Monthly Labor Review*, June 2002, pp. 3–14; for information on China, see Erin Lett and Judith Banister, "China's manufacturing employment and compensation costs," *Monthly Labor Review*, April 2009, pp. 30–38. An article on India is forthcoming in the *Review*.

[25] Complete data on work-related fatalities from the terrorist attacks are available in *Fatal Workplace Injuries in 2001: A Collection of Data and Analysis*, Report 970 (Bureau of Labor Statistics, September 2003).

[26] These statistics were released in the BLS Commissioner's statement that appeared concurrently with the October 2005 "Employment Situation" release. For more information on the effects of Hurricane Katrina on the Current Employment Statistics program, see "BLS Information: Effects of Hurricane Katrina on BLS Employment and Unemployment Data Collection and Estimation" (Bureau of Labor Statistics, May 2, 2006), on the Internet at **www.bls.gov/katrina/cpscesquestions.htm** (visited June 17, 2009). The Commissioner's statement appears on the Internet at **www.bls.gov/news.release/history/jec_10072005.txt** (visited June 17, 2009).

[27] Goldberg and Moye, *The First Hundred Years*.

[28] Some material from this section is based on information found in the *Handbook*; see note 11 for the Web address of the publication.

[29] Information on response to requests for data on the Consumer Price Index is available on the BLS Internet site at **www.bls.gov/cpi/cpirr2008.pdf** (visited June 17, 2009).

[30] For more information on standards and guidelines for statistical surveys, see "Statistical Programs and Standards" (Office of Management and Budget, various dates), on the Internet at **www.whitehouse.gov/omb/inforeg/statpolicy.html** (visited June 17, 2009).

[31] See Earl S. Pollack and Deborah Kellerman Keimig, *Counting Injuries and Illnesses in the Workplace: Proposals for a Better System* (Washington, DC, National Academy Press, 1987).

[32] For information on the Boskin report and follow-up activities from the BLS, see David S. Johnson, Stephen B. Reed, and Kenneth J. Stewart, "Price measurement in the United States: a decade after the Boskin Report," *Monthly Labor Review*, May 2006, pp. 10–19.

[33] See "Frequently Asked Questions about Employment and Unemployment Estimates" in the monthly *Employment Situation* news release, on the Internet at **www.bls.gov/news.release/empsit.toc.htm** (visited June 17, 2009).

[34] For more information on the CES birth-death model, see "Monthly Employment Situation Report: Quick Guide to Methods and Measurement Issues" (Bureau of Labor Statistics, Aug. 8, 2008), on the Internet at **www.bls.gov/bls/empsitquickguide.htm** (visited June 17, 2009).

[35] John S. Greenlees and Robert B. McClelland, "Addressing misconceptions about the Consumer Price Index," *Monthly Labor Review*, August 2008, pp. 3–19.

[36] John W. Ruser, "Examining evidence on whether BLS undercounts workplace injuries and illnesses," *Monthly Labor Review*, August 2008, pp. 20–32.

How shifting occupational composition has affected the real average wage

OES data from 2002–2007 reveal that an overall shift in employment towards occupations with lower mean wages hindered growth in the U.S. real average wage and that wage growth was concentrated in higher paying occupations; the data also show a shift in employment from the middle-paying occupations to the highest and lowest paying occupations

Rebecca Keller

Between November 2002 and May 2007, the cross-occupational average hourly wage in the United States increased by $2.46, from $17.10 to $19.56, or by about 14 percent, according to the Occupational Employment Statistics (OES) program. Adjusting the 2002 figure to May 2007 dollars[1] shows the real average hourly wage increased from $19.48 to $19.56, approximately a .41-percent increase.

There have been numerous studies and programs devoted to understanding this recent slow growth in the Real Average Wage (RAW). Many studies attribute slow wage growth to the increasing cost of employee benefits and health insurance—a phenomenon that results in employees' wages becoming a smaller part of their total compensation.[2] Other studies have analyzed how wage growth relates to income or wage inequality.[3] This article seeks to contribute towards an understanding of RAW growth by quantifying how changes in the occupational composition of U.S. employment have affected the average wage.

This article analyzes occupational wage and employment data from the OES program to understand how changes in occupations' wages and changes in occupations' levels of employment each have contributed to growth in the U.S. RAW. Overall wage growth could stem from increases in the mean wages of particular occupations, from a shift in employment towards occupations with higher wages, or from a combination of the two factors. This article's analysis of OES data from November 2002 to May 2007 finds that a shift in employment towards lower paying occupations hindered U.S. RAW growth, that increases in the real mean wages of individual occupations was the only factor that caused growth in the U.S. RAW, and that most of the average wage growth was due to increases in the wages of the highest paying occupations. This analysis also finds a shift in employment towards the highest paying and lowest paying occupations and away from middle-paying occupations. This article will show which occupations experienced growth and which experienced decline in real mean wages or in share of employment, and how these changes influenced the U.S. RAW. It will also reveal patterns of lower and higher paying occupations and of education and training categories, and give a brief analysis of changes in the average wages of U.S. States.

Methods

The OES program estimates national employment and wages by occupation and provides a

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data set for understanding changes in the average wage over the medium term. The OES program surveys 1.2 million business establishments, using 3 years of data collected in six semiannual panels to produce estimates for over 800 occupations.[4] Because of the survey methods employed, it can be difficult to use the data for time-series analysis, but this study mostly overcomes the issue because it compares wage and employment data 4½ years apart and analyzes cross-industry wage and employment estimates that have been retabulated on the basis of a common coding system.[5] However, between November 2002 and May 2007, OES implemented refinements in occupational coding procedures that have caused some management workers to be moved from one occupation to another. Therefore, some results of this analysis may have been affected by this worker classification change and must be interpreted cautiously.

Change in the U.S. average wage may be due to changes in the mean wages of individual occupations or to shifts in employment among higher and lower paying occupations. An occupation's share of national employment is the percent of total jobs in the Nation for which the occupation accounts. This article uses a "shift-share analysis" of OES data to quantify the effect of changes in mean wages and the effect of changes in employment share on the U.S. RAW from November 2002 to May 2007.[6] OES data previously have been employed to examine the role of occupational composition, or the assortment of shares of national employment held by occupations, in the average wage differentials of U.S. States for one point in time.[7] In this article, change in the U.S. RAW over time is analyzed in a similar fashion, by decomposing the components of the change.

To calculate the U.S. RAW, each occupation's mean wage is multiplied by its share of national employment and then the products are summed. Change in the U.S. RAW from time t to time t+1 is found by subtracting the U.S. RAW at time t from the U.S. RAW at time t+1. Just as the U.S. RAW is influenced by the two factors of occupational mean wages and occupational composition, change in the U.S. RAW is influenced by the two factors of changes in occupational real mean wages and change in occupational composition. The decomposition of U.S. RAW change into these two factors, expressed in words and in mathematical notation, is

Change in U.S. RAW = National Wage Component + National Employment Component + National Residual Component

$$\overline{w}_{t+1} - \overline{w}_t = \sum_{j=1}^{J}\left(\frac{N_j}{N}\right)_t \Delta\overline{w}_j + \sum_{j=1}^{J}\overline{w}_{jt}\Delta\left(\frac{N_j}{N}\right) + \sum_{j=1}^{J}\Delta\overline{w}_j\Delta\left(\frac{N_j}{N}\right)$$

where

$j = \{1, 2,..,J\}$ index occupations
Δ = Change from November 2002 to May 2007
$\overline{w}$ = U.S. real average wage (in May 2007 dollars)
$\overline{w}_j$ = Occupational real average wage (in May 2007 dollars)
N = National employment; N_j = Occupational employment
t = November 2002; t+1 = May 2007

Table 1 shows the results and constituents of this analysis for the sum of all occupations and for major occupational groups (obtained by summing the results of all occupations within each group), and includes mean wages (in May 2007 dollars) and national employment shares in November 2002 and May 2007. Table 2 shows the results and constituents of this analysis for selected occupations.

The contribution of changes in the mean wages of occupations to the change in the U.S. RAW, represented by the first term in the aforementioned equation, is called the "wage component." The wage component of an occupation is found by holding the occupation's share of national employment constant while considering only the change in the mean wage of the occupation. The wage component is measured by multiplying the change in mean wage from November 2002 (in May 2007 dollars) to May 2007 by the occupation's share of November 2002 national employment.

A positive wage component indicates that the mean wage of an occupation or group of occupations increased, while a negative result indicates that the mean wage decreased. For example, as seen in table 2, the occupation of accountants and auditors has a wage component of 1 cent, found by multiplying the occupation's real mean wage increase of $1.23 by its November 2002 employment share of .70 percent. The national wage component is found by summing all occupations' wage components. A positive national wage component indicates that occupational mean wages grew overall, whereas a negative result indicates mean wages declined overall.

The contribution of changes in occupational composition to the change in the U.S. RAW, represented by the second term in the above equation, is called the "employment component." The employment component of an occupation is found by multiplying the occupation's change in employment share by its November 2002 mean wage (in May 2007 dollars). In other words, an occupation's

Table 1. Mean hourly wage, employment share, and components of change in the U.S. real average wage, by occupational group, Nov. 2002–May 2007

Occupational group	2002 mean wage, in May 2007 dollars	2007 mean wage	Change in real mean wage[1]	2002 employment share	2007 employment share	Change in employment share[1]	Wage component	Employment component	Residual component	Total of three components[1]	Employment effect
Total, all occupations	$19.48	$19.56	$0.08	100.0	100.0	—	$0.22	$–0.11	$–0.03	$0.08	$–0.11
Management occupations[2]	43.19	46.27	3.08	5.56	4.47	–1.09	.20	–.49	–.04	–.33	–.28
Business and financial operations occupations	29.20	30.07	.87	3.74	4.48	.74	.02	.22	.00	.25	.08
Computer and mathematical science occupations	33.75	34.71	.96	2.17	2.38	.20	.01	.08	.00	.09	.04
Architecture and engineering occupations	31.77	33.11	1.34	1.89	1.85	–.04	.02	–.01	.00	.01	.00
Life, physical, and social science occupations	28.69	29.79	1.11	.85	.93	.09	.01	.03	.00	.04	.01
Community and social services occupations	18.96	19.49	.53	1.24	1.33	.10	.01	.02	.00	.03	.00
Legal occupations	42.35	42.53	.18	.73	.74	.01	.00	.01	.00	.01	.01
Education, training, and library occupations	22.01	22.41	.40	6.09	6.19	.10	.01	.03	.00	.05	.01
Arts, design, entertainment, sports, and media occupations	22.81	23.27	.46	1.18	1.31	.13	.00	.03	.00	.04	.01
Healthcare practitioner and technical occupations	29.75	31.28	1.53	4.87	5.12	.25	.06	.08	.01	.15	.03
Healthcare support occupations	12.27	12.31	.03	2.49	2.70	.21	.00	.02	.00	.03	–.02
Protective service occupations	18.25	18.84	.58	2.35	2.30	–.05	.02	– .01	.00	.00	.00
Food preparation and serving related occupations	9.40	9.34	–.06	7.89	8.39	.50	.00	.04	.00	.04	–.05
Building and grounds cleaning and maintenance occupations	11.44	11.33	–.11	3.34	3.28	–.06	.00	–.01	.00	–.01	.00
Personal care and service occupations	11.70	11.53	–.17	2.29	2.49	.20	.00	.02	.00	.02	–.02
Sales and related occupations	16.76	16.94	.18	10.46	10.67	.21	.02	.04	.00	.05	.00
Office and administrative support occupations	15.28	15.00	–.28	17.84	17.32	–.52	–.04	–.09	.00	–.13	.01
Farming, fishing, and forestry occupations	11.05	10.89	–.16	.35	.33	–.02	.00	.00	.00	.00	.00
Construction and extraction occupations	19.93	19.53	–.40	4.80	4.99	.19	–.02	.04	.00	.02	.00
Installation, maintenance, and repair occupations	19.59	19.20	–.39	4.09	4.01	–.08	–.02	–.02	.00	–.03	.00
Production occupations	15.43	15.05	–.38	8.41	7.55	–.86	–.03	–.13	.00	–.16	.04
Transportation and material moving occupations	14.93	14.75	–.18	7.37	7.17	–.20	–.02	–.02	.00	–.04	.02

[1] Numbers may not add precisely because of rounding.

[2] The results for management occupations should be interpreted with caution because they may be affected by refinements in occupational coding procedures.

mean wage is held constant and only the change in an occupation's employment share is taken into account. A positive employment component indicates that the employment share of an occupation or group of occupations increased, while a negative result indicates that its employment share declined. For example, as seen in table 1, the employment component of the production occupational group is –13 cents, found by multiplying the pro-

Table 2. Mean hourly wage, employment share, and components of change in the U.S. real average wage, for selected occupations, Nov. 2002–May 2007

Occupation title	2002 mean wage, in May 2007 dollars	2007 mean wage	Change in real mean wage[1]	2002 employment share	2007 employment share	Change in employment share[1]	Wage component	Employment component	Residual component	Total of components[1]	Employment effect
Total, all occupations	$19.48	$19.56	0.08	100.0	100.0	—	0.22	–0.11	$–0.03	$0.08	$–0.11
Selected occupations with large positive wage components (sorted by wage component)[2]											
Registered nurses	27.29	30.04	2.74	1.76	1.84	.08	.05	.02	.00	.07	.01
Pharmacists	41.15	47.58	6.43	.17	.19	.02	.01	.01	.00	.02	.00
Sales representatives, wholesale and manufacturing, except technical and scientific products	28.00	28.94	.94	1.08	1.12	.04	.01	.01	.00	.02	.00
Accountants and auditors	29.15	30.37	1.23	.70	.83	.13	.01	.04	.00	.05	.01
First-line supervisors/managers of non-retail sales workers	35.19	37.58	2.39	.26	.21	–.05	.01	–.02	.00	–.01	–.01
Sales representatives, wholesale and manufacturing, technical and scientific products	34.75	36.76	2.01	.29	.30	.01	.01	.00	.00	.01	.00
Licensed practical and licensed vocational nurses	17.69	18.72	1.03	.54	.54	–.01	.01	.00	.00	.00	.00
Waiters and waitresses	8.64	8.93	.29	1.64	1.75	.12	.00	.01	.00	.02	–.01
Computer software engineers, systems software	41.53	43.65	2.12	.20	.26	.06	.00	.02	.00	.03	.01
Executive secretaries and administrative assistants	19.19	19.57	.38	1.10	1.13	.03	.00	.00	.00	.01	.00
Selected occupations with large negative wage components (sorted by wage component)[2]											
Office clerks, general	12.89	12.48	–.41	2.24	2.22	–.02	–.01	.00	.00	–.01	.00
Truck drivers, heavy and tractor-trailer	18.81	18.06	–.76	1.19	1.26	.07	–.01	.01	.00	.00	.00
Stock clerks and order fillers	11.63	10.93	–.71	1.26	1.35	.09	–.01	.01	.00	.00	–.01
Cashiers	9.14	8.84	–.30	2.65	2.64	–.01	–.01	.00	.00	–.01	.00
Customer service representatives	15.46	14.93	–.54	1.45	1.63	.18	–.01	.03	.00	.02	–.01
Team assemblers	13.53	12.72	–.81	.89	.87	–.02	–.01	.00	.00	–.01	.00
Securities, commodities, and financial services sales agents	46.94	43.49	–3.44	.20	.20	.00	–.01	.00	.00	–.01	.00
Secretaries, except legal, medical, and executive	14.45	14.04	–.42	1.41	1.36	–.04	–.01	–.01	.00	–.01	.00
Computer support specialists	23.18	21.78	–1.40	.38	.39	.02	–.01	.00	.00	.00	.00
Construction laborers	15.64	14.88	–.76	.65	.78	.13	.00	.02	.00	.01	–.01

See footnotes at end of table.

Table 2. Continued—Mean hourly wage, employment share, and components of change in the U.S. real average wage, for selected occupations, Nov. 2002–May 2007

Occupation title	2002 mean wage, in May 2007 dollars	2007 mean wage	Change in real mean wage[1]	2002 employment share	2007 employment share	Change in employment share[1]	Wage component	Employment component	Residual component	Total of components[1]	Employment effect
Selected occupations with large positive employment effects (sorted by employment effect)[2]											
Computer software engineers, applications	40.41	41.18	0.77	0.28	0.37	0.09	0.00	0.04	0.00	0.04	0.02
Computer software engineers, systems software	41.53	43.65	2.12	.20	.26	.06	.00	.02	.00	.03	.01
Accountants and auditors	29.15	30.37	1.23	.70	.83	.13	.01	.04	.00	.05	.01
Packers and packagers, hand	9.94	9.77	–.17	.73	.59	–.13	.00	–.01	.00	–.01	.01
Management analysts	38.42	38.68	.26	.31	.37	.06	.00	.02	.00	.03	.01
Market research analysts	33.00	32.20	–.80	.10	.16	.07	.00	.02	.00	.02	.01
Personal financial advisors	42.96	42.89	–.07	.06	.10	.04	.00	.02	.00	.02	.01
Loan officers	28.56	30.10	1.54	.17	.27	.09	.00	.03	.00	.03	.01
Network systems and data communications analysts	33.62	34.02	.41	.10	.16	.06	.00	.02	.00	.02	.01
Financial analysts	36.79	39.28	2.50	.13	.17	.04	.00	.02	.00	.02	.01
Selected occupations with large negative employment effects (sorted by employment effect)[2]											
Combined food preparation and serving workers, including fast food	8.30	8.03	–.27	1.57	1.94	.37	.00	.03	.00	.03	–.04
Retail salespersons	11.91	11.79	–.12	3.05	3.30	.24	.00	.03	.00	.03	–.02
Home health aides	10.43	10.03	–.40	.45	.62	.17	.00	.02	.00	.02	–.02
Waiters and waitresses	8.64	8.93	.29	1.64	1.75	.12	.00	.01	.00	.02	–.01
Computer programmers	34.88	34.62	–.26	.36	.29	–.06	.00	–.02	.00	–.02	–.01
Personal and home care aides	9.20	9.11	–.09	.35	.44	.09	.00	.01	.00	.01	–.01
Cooks, restaurant	10.87	10.56	–.31	.56	.65	.09	.00	.01	.00	.01	–.01
First–line supervisors/ managers of non–retail sales workers	35.19	37.58	2.39	.26	.21	–.05	.01	–.02	.00	–.01	–.01
Stock clerks and order fillers	11.63	10.93	–.71	1.26	1.35	.09	–.01	.01	.00	.00	–.01
Customer service representatives	15.46	14.93	–.54	1.45	1.63	.18	–.01	.03	.00	.02	–.01

[1] Numbers may not add precisely because of rounding.

[2] Management occupations and residual occupations are not included.

duction group's November 2002 mean wage (in May 2007 dollars) of $15.43 by its employment share decline of .86 percentage point. A higher paying occupation will have an employment component of a greater degree than a lower paying occupation with the same change in employment share. The national employment component is found by summing all occupations' employment components. A positive national employment component indicates that higher paying occupations gained employment share relative to lower paying occupations, while a negative result indicates lower paying occupations gained employment share.

The final component of change in the U.S. RAW is the residual component, which captures the part of the

change in the RAW that is not attributable solely to either the employment component or the wage component. The residual component is less meaningful to this study than the wage and employment components, because it is small and does not represent either the change in occupational composition alone or the changes in occupations' wages alone.

The sums of the three components for each occupation or occupational group are the figures in the "total of components" column of tables 1 and 2. The sum of all three components of all occupations is equal to the change in the U.S. RAW. In addition to decomposing U.S. RAW change into its three components, this article also seeks to show how the change in each occupation's mean wage and the change in its employment share have affected the U.S. RAW. The effect of the change in an occupation's mean wage on the U.S. RAW is captured through its wage component. Occupations whose real mean wages have increased will have positive wage components and increase the U.S. RAW, while occupations whose real mean wages have declined will have negative wage components and decrease the U.S. RAW. For example, accountants and auditors' real mean wage increase of $1.23 would have increased the U.S. RAW by 1 cent were employment shares to have remained constant, as seen in table 2.

Whereas the wage component indicates the effect that the change in an occupation's mean wage has on the U.S. RAW, the employment component does not indicate the effect that the change in an occupation's employment share has on the U.S. RAW. For example, a below-average paying occupation with a decline in employment share will have a negative employment component, but this decline in employment share will actually increase the U.S. RAW. There is, however, a calculation that can determine the effect that the change in one occupation's employment share has on the U.S. RAW, and the result of this calculation is referred to as the "employment effect." The employment effect takes into account both the change in an occupation's share of employment and the difference between the occupation's mean wage and the national mean wage. The overall employment effect of a group or category of occupations is calculated by summing the employment effects of all the occupations within that group or category. The national employment effect—that is, the employment effect of all occupations taken together—is found by summing the employment effects of all occupations in the United States, and it is equal to the national employment component. The occupational employment effect is shown in tables 1 and 2, and its equation is

$$E_j = \Delta S_j * \left(\overline{w}_{jt} - \overline{w_t}\right)$$

where

j = {1, 2,...J} index occupations
$\underline{E}$ = Occupational employment effect
$\underline{w}$ = U.S. real average wage (in May 2007 dollars)
$\overline{w}_j$ = Occupational real average wage (in May 2007 dollars)
ΔS = Change in occupational employment share
t = November 2002

A positive employment effect indicates that the change in an occupation's employment share was a factor pushing the U.S. average wage upward. An occupation with a below-average mean wage and a decline in employment share will have a positive employment effect, as will an occupation with an above-average mean wage and an increase in employment share. Similarly, a negative employment effect indicates that the change in an occupation's employment share was a factor pushing the U.S. average wage downward. A negative employment effect is a result of either an occupation with a below-average mean wage gaining employment share or an occupation with an above-average mean wage losing employment share. For example, computer programmers' above-average November 2002 wage of $34.88 and their loss of .06 percentage point in employment share from November 2002 to May 2007 resulted in an employment effect of –1 cent on the U.S. RAW.

Results

The U.S real average wage increase of 8 cents was the combined result of a –11 cent employment component, indicating an employment shift toward lower paying jobs; a 22 cent wage component, indicating that the mean wages of occupations increased overall; and a –3 cent residual component.

The national wage component. The national wage component was 22 cents, indicating the U.S. RAW would have increased by 22 cents, or 1.1 percent, if the employment shares of occupations had remained constant. The national wage component more than offset the national employment component of –11 cents, and it alone propelled the U.S. RAW to positive growth. So, while the mean wages of occupations increased overall, growth in the U.S. RAW was hindered because lower paying occupations gained employment share relative to higher paying occupations.

The positive wage component indicates either that a majority of employment was in occupations with mean wage growth or that those occupations with mean wage growth had a greater degree of change in wage than did occupations whose mean wages declined. In fact, in November 2002 only about 41 percent of employment was in occupations whose mean wage was to grow through May 2007, and the remaining 59 percent was in occupations whose mean wage was to decrease or remain unchanged during the same period. Therefore, the positive wage component was driven by occupations with growth in the mean wage having a greater degree of change than occupations with a decline in the mean wage.

The influences of occupational wage components. Overall, about 51 percent of occupations, making up about 41 percent of employment, had positive wage components. The wage components of occupations depend on their employment shares in November 2002 and on the change in their mean wage from November 2002 to May 2007. An occupation with a higher employment share or greater growth in the mean wage will have a larger wage component. Conversely, an occupation with a lower employment share or lesser wage growth will have a smaller wage component. Those occupations with the largest wage components are generally higher paying and are mostly from the management, computer and mathematical science, healthcare practitioner and technical, and sales and related groups. As seen in table 2, registered nurses had one of the highest wage components, 5 cents, because the occupation had both strong real mean wage growth of $2.74 and a high November 2002 employment share of 1.76 percent. General office clerks, heavy and tractor-trailer truck drivers, and stock clerks and order fillers all had some of the most negative wage components, at –1 cent each, because of the occupations' high employment shares coupled with declines in their real mean wages. The management occupational group and the healthcare practitioner and technical occupational group had the largest wage components of all occupational groups, as shown in table 1. Production occupations and office and administrative support occupations had the most negative wage components.

The national employment component. The shifting occupational composition of the United States would have decreased the RAW by 11 cents, or .6 percent, had occupational mean wages remained constant. In other words, if the mean wages of all occupations had remained unchanged, changes in the distribution of employment among occupations would have decreased the U.S. RAW by 11 cents. This negative employment component indicates that lower paying occupations gained employment share relative to higher paying occupations. In other words, lower paying occupations had faster employment growth than higher paying occupations, accounting for a greater share of total employment in May 2007 than in November 2002. Because the national employment component aggregates the employment components of all occupations, it signifies a trend that takes all occupations into account and does not necessarily indicate that only the lowest paying occupations gained employment share or that only the highest paying occupations lost employment share. Occupations that gained and lost employment share will be further explored later in this article.

The influences of occupational employment effects. Whereas the national employment component has documented the shift in employment share from higher paying to lower paying occupations, the employment effect of an occupation shows precisely the degree and direction that the occupation's change in employment share has had on the U.S. RAW. Overall, 42 percent of occupations, making up 46 percent of employment, had a negative or zero employment effect on the U.S. RAW. For example, the occupation of combined food preparation and serving workers, including fast food, has one of the most negative employment effects, –4 cents, on the U.S. RAW because this below-average paying occupation increased in employment share from 1.57 percent to 1.94 percent. Major occupational groups that had negative employment effects on the U.S. RAW include the healthcare support, food preparation and serving related, and personal care and service occupational groups.

Still, most occupations had positive employment effects on the U.S. RAW. Many of those occupations with the greatest positive employment effects were from the business and financial operations group or computer and mathematical science group, as many of these above-average-paying occupations gained employment share. For example, the occupation of computer software engineers, applications had a positive employment effect of 2 cents on the U.S. RAW, as this high-paying occupation increased in employment share from .28 to .37 percent.

Grouping occupations by mean wage. Besides identifying how each occupation's mean wage and change in employment share affected the U.S. RAW, broader trends in the U.S. labor market can be understood through grouping occupations on the basis of mean wage. Doing so will illus-

Table 3. Employment shares and components of change in the U.S. real average wage, by pay category, Nov. 2002–May 2007

Category of occupations or percentage summary	Pay categories (organized by mean hourly wage)				All occupations
	Lowest paying	Lower paying	Average paying	Highest paying	
	Below $11.80	$11.80 to $15.67	$15.68 to $24.11	Above $24.11	
All occupations					
Employment share, Nov. '02, in percent	24.86	24.41	25.49	25.24	100.00
Employment share, May '07, in percent	25.46	23.67	25.29	25.57	100.00
Percentage point change in employment share, Nov. '02–May '07	.60	–.74	–.20	.33	.00
Total wage component	–.03	–.06	–.04	.35	.22
Total employment component	.05	–.10	–.03	–.03	–.11
Total residual component	.00	.00	.00	–.03	–.03
Total of three components	.02	–.16	–.08	.30	.08
Employment effect	–.06	.04	.01	–.09	–.11
Occupations whose mean wage increased Nov. '02–May '07					
Employment share, Nov. '02, in percent	6.73	5.10	9.66	19.55	41.03
Employment share, May '07, in percent	6.63	4.80	9.57	19.83	40.81
Percentage point change in employment share, Nov. '02–May '07	–.10	–.30	–.09	.28	–.22
Occupations whose mean wage declined or remained the same Nov. '02–May '07					
Employment share, Nov. '02, in percent	18.13	19.31	15.84	5.69	58.97
Employment share, May '07, in percent	18.83	18.88	15.73	5.75	59.18
Percentage point change in employment share, Nov. '02–May '07	.71	–.44	–.11	.06	.22
Percentage summaries					
Percent of pay category's Nov. '02 employment that was in occupations whose mean wage increased Nov. '02–May '07	27.08	20.88	37.88	77.45	
Percent of pay category's Nov. '02 employment that was in occupations whose mean wage declined or remained the same Nov. '02–May '07	72.92	79.12	62.12	22.55	
Percent of Nov. '02 employment in occupations whose mean wage increased that comes from this pay group	16.41	12.42	23.54	47.63	
Percent of Nov. '02 employment in occupations whose mean wage declined or remained the same that comes from this pay category	30.74	32.75	26.86	9.65	

trate how occupations with higher and lower mean wages experienced changes in mean wage and employment as a group, and how these changes influenced the U.S. RAW. Table 3 distributes occupations into four categories that had roughly equal shares of the Nation's employment in 2002. The categories vary by their 2002 mean wages, and they are labeled as follows: "highest paying" (mean wage over $24.11); "average paying" (mean wage of $15.68 to $24.11), a range within which the U.S. RAW of $19.48 falls; "lower paying" (mean wage of $11.80 to $15.67); and "lowest paying" (mean wage below $11.80). Table 3 also presents employment shares in November 2002 and May 2007, employment components, wage components, residual components, and employment effects for each of

Table 4. The number of occupations in the major occupational groups whose mean hourly wages are in each of 4 pay categories, Nov. 2002

Occupational group	Total	Mean wage below $11.80	Mean wage of $11.80 to $15.67	Mean wage of $15.68 to $24.11	Mean wage above $24.11
All occupations	762	76	150	285	251
Management occupations	30	0	0	4	26
Business and financial operations occupations	28	0	0	4	24
Computer and mathematical science occupations	16	0	0	2	14
Architecture and engineering occupations	34	0	0	9	25
Life, physical, and social science occupations	39	0	0	10	29
Community and social services occupations	14	0	2	11	1
Legal occupations	9	0	0	4	5
Education, training, and library occupations	58	1	3	9	45
Arts, design, entertainment, sports, and media occupations	37	1	3	20	13
Healthcare practitioner and technical occupations	46	0	7	12	27
Healthcare support occupations	15	4	8	3	0
Protective service occupations	20	2	3	9	6
Food preparation and serving related occupations	16	14	1	1	0
Building and grounds cleaning and maintenance occupations	9	3	4	2	0
Personal care and service occupations	33	17	9	6	1
Sales and related occupations	21	3	6	4	8
Office and administrative support occupations	55	6	21	28	0
Farming, fishing, and forestry occupations	13	4	4	5	0
Construction and extraction occupations	58	0	13	42	3
Installation, maintenance, and repair occupations	51	1	10	35	5
Production occupations	110	13	47	43	7
Transportation and material moving occupations	50	7	9	22	12

the four categories of pay.

Table 4 displays the occupational makeup of each pay category. The highest paying category consists mainly of management; business and financial operations; computer and mathematical science; life, physical, and social science; architecture and engineering; healthcare practitioner and technical; and education, training, and library occupations. However, some occupations from other groups also are included, such as power plant operators from the production group. The average-paying category consists of occupations from every occupational group. Still, accounting for most of this category of pay are occupations in the office and administrative support; arts, design, entertainment, sports, and media; construction and extraction; installation, maintenance, and repair; production; and transportation and material moving occupational groups. Most occupations within the lower paying category are in the office and administrative support; production; and construction and extraction occupational groups. The lowest paying category contains many occupations from the personal care and service; food preparation and serving related; and production occupational groups.

Wage components by pay category. Analyzing the wage components of each category of pay as a whole illustrates how mean wage growth varied by category. When the wage components of occupations within each category are summed, only the highest paying category has a positive wage component, while the three other pay categories have negative wage components. When occupations are analyzed in the context of these four categories, only the highest paying category would have increased the U.S. RAW—by 35 cents—from November 2002 to May 2007 had employment shares remained constant during that period. The lower paying category has the most negative wage component, –6 cents, while the lowest paying category has a wage component of –3 cents and the average-paying category has a wage component of –4 cents. Breaking out occupations into these pay categories shows that the category of highest paying occupations is the largest factor in creating a positive national positive wage component of 22 cents.

The highest paying category's wage component of 35 cents indicates either that occupations whose mean wage increased make up the majority of employment in this category or that those occupations whose mean wage grew had a greater degree of wage change than did those whose mean wage declined or remained unchanged. The analysis shows that in fact about 77 percent of November 2002 employment in this category was in occupations with growth in the mean wage.

For each of the other three pay categories, all of which have negative wage components, the majority of employment was in occupations with declines in the mean wage. About 62 percent of November 2002 employment within the average-paying category, 79 percent of employment from that time within the lower paying category, and 73 percent of employment from that time within the lowest paying category was in occupations with a decline in the mean wage or an unchanged mean wage from November 2002 to May 2007. Thus, most employment in the average-, lower, and lowest paying categories was in occupations with decline or no growth in mean wages, whereas the majority of employment in the highest paying category was in occupations whose mean wage increased.

Employment share by pay category. One can see from the negative national employment component that lower paying occupations gained employment share overall, but breaking out occupations into pay categories reveals that there also was an employment shift from the middle two pay categories to the lowest and highest paying categories. The lowest paying category had the largest increase in employment share, .60 percentage point, while the highest paying category increased employment share by about half that (.33 percentage point). The average-paying category lost .20 percentage point of its share of employment, and the lower paying category lost the greatest employment share, with a decrease of .74 percentage point. This same "polarization" of the U.S. labor market was studied by David H. Autor, Lawrence F. Katz, and Melissa S. Kearney in the 1990s; they found "employment polarizing into high-wage and low-wage jobs at the expense of traditional middle-skill jobs."[8]

Employment components and employment effects by pay category. Analyzing the overall employment effect of each category of pay reveals how shifts in employment share have influenced the U.S. RAW. The lowest paying category's gain of .60 percentage point in employment share resulted in an employment effect of –6 cents on the RAW. Still, the employment component of the category is positive, at 5 cents, showing that within the lowest paying category, occupations with higher mean wages gained employment share. Meanwhile, the lower paying category lost .74 percentage point of employment share, causing a positive employment effect of 4 cents on the U.S. RAW. Within the lower paying category, however, employment share shifted away from higher paying occupations, evidenced by the category's employment component of –10 cents. The average-paying category had an employment effect of about 1 cent on the U.S. RAW, although its employment component of –3 cents indicates that among the occupations within the category, employment share shifted slightly towards lower paying occupations. Because the highest paying category contains many management occupations, the results of this analysis for the highest paying category should be interpreted with caution.

Examination of employment trends within the four pay categories shows that the negative national employment component is explained by the trend of an overall shift in employment towards the lowest paying category. There was also a shift in employment towards occupations with lower mean wages within two or three of the pay categories.

Grouping occupations by change in mean wage. In addition to grouping occupations on the basis of their November 2002 mean wage, another way to allow hidden patterns to emerge is to separate occupations into those with growth in the mean wage and those with a decline in the mean wage or an unchanged mean wage. Table 3 displays employment components, wage components, and changes in employment share for occupations whose mean wage increased from November 2002 to May 2007 and for occupations whose mean wage decreased or remained unchanged during the same period. As described earlier, in November 2002 only about 41 percent of employment was in occupations whose mean wage increased during the 4½-year period, and the remaining 59 percent was in occupations whose mean wage declined or remain unchanged during that time. The highest paying category accounted for about 48 percent of the November 2002 employment of occupations whose mean wage was to grow through May 2007. So, not only was most employment in the highest paying category in occupations that experienced growth in the mean wage, as discussed earlier, but the highest paying category accounted for almost half of employment among occupations whose mean wage increased. The average-paying category made up about 24 percent of employment in occupations whose mean wage increased, and the remaining 29 percent came from the

lower paying and lowest paying categories.

Among occupations for which the mean wage declined or remained the same from November 2002 to May 2007, the lowest and lower paying categories made up 63 percent of November 2002 employment. The average-paying category made up 27 percent of employment among the same occupations, and the highest paying category accounted for the remaining 10 percent. This finding further explains the strong positive wage components of the highest paying category and the negative wage components of the three other categories.

A final underlying trend behind the .41-percent growth of the RAW was faster overall growth in employment among occupations whose mean wage declined or did not change, in comparison with occupations whose mean wage increased. Overall, those occupations whose mean wage decreased or remained the same gained .22 percentage point of employment share. Most of the loss in employment share from occupations with growth in the mean wage came from the average-paying, lower paying and the lowest paying categories, which lost a combined .49 percentage point of employment share. The highest paying occupations with mean wage growth gained .28 percentage point of employment share. In contrast, the lowest paying occupations whose mean wage decreased or remained the same gained .71 percentage point of employment share; the lower paying and average-paying categories whose mean wage declined or stayed the same lost employment share. As mentioned earlier in this article, the lowest paying and highest paying categories were the two pay categories that gained employment share. Categorizing occupations by change in mean wage reveals that for the lowest paying category, most of the occupations that gained employment share were occupations with a decline or no change in the mean wage, and that for the highest paying category, most of the occupations that gained employment share were occupations whose mean wage increased.

Additional applications

There are many potential additional applications for this

Table 5. Employment shares, wage components, and employment effects for categories of education and training, Nov. 2002–May 2007

Education or training category	Number of occupations	Employment share, November 2002	Change in employment share	Wage component	Employment effect	Number of occupations by pay category			
						Mean wage below $11.80	Mean wage of $11.80 to $15.67	Mean wage of $15.68 to $24.11	Mean wage above $24.11
All categories	759	100.00	—	0.22	–0.11	76	150	283	250
First professional degree	16	1.09	0.09	–.01	.04	0	0	0	16
Doctoral degree	45	1.09	.07	.02	.01	0	0	1	44
Master's degree	29	1.13	.09	.01	.01	0	1	6	22
Bachelor's or higher degree, plus work experience[1]	33	5.03	–.77	.17	–.22	0	0	4	29
Bachelor's degree	103	11.48	.95	.06	.10	0	1	28	74
Associate degree	39	4.07	.12	.06	.01	0	2	25	12
Postsecondary vocational award	48	5.00	–.07	.01	.00	3	12	27	6
Work experience in a related occupation	47	8.92	–.34	.06	–.05	1	2	22	22
Long-term on-the-job training	86	6.47	.18	–.01	.00	2	15	51	18
Moderate-term on-the-job training	180	19.63	–.34	–.07	.04	13	62	98	7
Short-term on-the-job training	133	35.83	.03	–.07	–.04	57	55	21	0
Not classified[2]	3	.27							

[1] The results of this category should be interpreted with caution because they may be affected by refinements in occupational coding procedures.

[2] The occupations represented in these data were assigned to more than one category of education or training.

article's analysis of the effects of changing employment shares and of changing occupational composition on change in the U.S. RAW. Two applications that will be briefly explored in this section are patterns among education and training categories and an analysis of the average wages of U.S. States.

Education and training categories. Just as this article groups occupations on the basis of their mean wage to demonstrate trends among lower and higher paying occupations, it also groups occupations into education and training categories to reveal trends among occupations associated with greater or lesser education and training. The BLS Employment Projections program assigns each occupation to 1 of 11 education and training categories, which range from "short-term on-the-job training" to "first professional degree." The most common source(s) and level of education for workers in a given occupation serves as the basis for placing the occupation in a particular category. Table 5 displays the employment shares, wage components, and employment effects of these categories of occupations.

The wage components of the three on-the-job training categories are negative, and the wage components of most of the eight other education and training categories are positive. The moderate-term on-the-job training and short-term on-the-job training categories both have the most negative wage components, –7 cents, and the long-term on-the-job training category has a wage component of –1 cent. Occupations in the category of bachelor's or higher degree, plus work experience had the greatest overall wage component, 17 cents, even though these occupations made up only 5 percent of employment in November 2002. This shows that this category had the greatest increase in real average wage of all the education and training categories. The categories of bachelor's degree, associate degree, and work experience in a related occupation each had relatively high wage components of about 6 cents.

Regarding shifts in employment share among the education and training categories, those occupations in the category of bachelor's degree gained the most employment share, .95 percentage point. Other education and training categories that made slight gains in employment share are long-term on-the-job training, short-term on-the-job training, associate degree, master's degree, doctoral degree, and first professional degree. The categories of work experience in a related occupation and moderate-term on-the-job training each lost about .34 percentage point of employment share, and the category of postsecondary vocational award decreased in employment share by .07 percentage point. Autor, Katz, and Kearney, observed "more rapid employment growth in the bottom end of the

Table 6. Components of change in the real average hourly wages of U.S. States, Nov. 2002–May 2007

State	Wage component	Employment component	Residual component	Total of three components[1]
Alabama	$0.05	$–0.13	$–0.02	$–0.10
Alaska	.11	–.03	–.13	–.04
Arizona	.19	–.18	–.12	–.11
Arkansas	.24	–.01	–.04	.19
California	.11	.32	–.05	.38
Colorado	.03	.03	.02	.08
Connecticut	–.31	.24	–.02	–.09
Delaware	1.00	–.29	–.28	.44
Florida	.60	–.21	–.16	.24
Georgia	–.32	.10	–.01	–.23
Hawaii	–.07	.21	–.03	.11
Idaho	–.01	.07	–.17	–.12
Illinois	1.24	–.31	–.16	.76
Indiana	–.12	–.25	–.02	–.38
Iowa	.30	–.17	–.12	.01
Kansas	–.17	–.09	–.02	–.28
Kentucky	–.19	.02	–.06	–.22
Louisiana	.18	–.24	–.05	–.12
Maine	.44	–.14	–.07	.24
Maryland	1.25	–.24	–.16	.85
Massachusetts	.78	.03	–.06	.75
Michigan	–.30	.04	.04	–.22
Minnesota	–.06	.24	–.02	.15
Mississippi	.49	–.04	–.06	.39
Missouri	.52	–.49	–.20	–.17
Montana	.42	–.29	–.10	.03
Nebraska	.37	–.36	–.13	–.12
Nevada	–.11	–.09	.05	–.15
New Hampshire	.55	.04	–.01	.58
New Jersey	.20	.29	–.05	.44
New Mexico	.73	–.51	.01	.23
New York	–.14	.34	.05	.25
North Carolina	.02	–.10	–.10	–.18
North Dakota	.81	–.09	–.18	.54
Ohio	.15	–.33	–.06	–.24
Oklahoma	–.25	.05	.02	–.18
Oregon	.00	.09	–.04	.05
Pennsylvania	.49	–.60	–.15	–.25
Rhode Island	.38	.26	–.09	.55
South Carolina	.12	–.20	–.11	–.18
South Dakota	.11	–.09	.00	.02
Tennessee	.00	–.13	–.02	–.15
Texas	.11	–.28	–.12	–.29
Utah	.16	–.02	.00	.14
Vermont	.18	.10	.05	.32
Virginia	1.18	–.19	–.04	.95
Washington	.32	–.04	.02	.30
Washington, DC	1.22	.29	.47	1.98
West Virginia	–.03	–.36	–.07	–.47
Wisconsin	.07	–.06	.02	.03
Wyoming	.33	.27	.00	.61

[1] Numbers may not add precisely because of rounding.

education distribution than in the middle" in the 1990s, but this article's findings from the 2000s indicate that the trend has changed.

Wage analysis by State. Just as OES data are used to analyze the U.S. RAW, they also can be used to analyze the components of changes in the average wages of U.S. States. The wage component, employment component, residual component, and total component for each State and the District of Columbia are shown in table 6. The patterns in employment and mean wages found at the national level also occur in most States. For example, the overall shift toward occupations with lower mean wages is found in 32 States. The States with the most negative employment components—that is, the most pronounced shift in employment toward occupations with lower mean wages—are Pennsylvania, New Mexico, Missouri, West Virginia, and Nebraska. The five places with the greatest positive employment components, or the most pronounced employment shift towards occupations with higher mean wages, are New York; California; New Jersey; Washington, DC; and Wyoming.

Most States have a positive wage component (35 States and the District of Columbia), but 15 States have negative occupational wage components, indicating that occupational mean wages declined overall in the State. The States with the most negative wage components are Georgia, with wage component of –32 cents; Connecticut, with wage component of –31 cents; and Michigan, with a wage component of –30 cents. The places with the greatest positive wage components are Maryland; Illinois; Washington, DC; and Virginia. Some States that have positive wage components still had a decline in the average wage—Pennsylvania being one example—because the negative employment component is greater in degree than the wage component. As seen in table 6, wage components and employment components differ greatly by State, with some States having an employment component and a wage component that are both negative, such as Kansas and Indiana, and some States having an employment component and wage component that are both positive, such as Vermont and California.

USING OES DATA TO UNDERSTAND COMPONENTS of U.S. real average wage growth from November 2002 to May 2007 reveals many trends in occupational mean wages and employment shares. The analysis revealed that the increase of 8 cents in the U.S. RAW could be decomposed into an employment component of –11 cents, a wage component of 22 cents, and a residual component of –3 cents. These components indicate that overall, the mean wages of individual occupations grew faster than is evident from the national average wage growth statistic because the national average wage was suppressed by occupations with lower mean wages gaining employment share. Another finding was that a majority of employment was in occupations that experienced a decline or no change in the mean wage, and the group of occupations whose mean wage decreased or remained the same made a slight gain in employment share; these two phenomena also hampered the growth of the U.S. RAW.

Grouping occupations by mean wage revealed that the lowest, lower, and average-paying categories of occupations each have overall negative wage components, indicating that taken together, occupations within each of these categories experienced a decline in their mean wage. An additional finding of this article was a shift in employment from the two middle-paying categories of occupations to the lowest and highest paying categories. The lowest paying category increased the most in employment share, .60 percentage point, and most of this gain was made by occupations whose mean wage decreased or did not change. The pay categories also revealed that the increase in the U.S. RAW is due mostly to growth in the mean wages of occupations in the highest paying category, which had a wage component of 35 cents and made up 48 percent of employment among occupations whose mean wage increased from November 2002 to May 2007. □

Notes

[1] The adjustment for inflation was made using the BLS Consumer Price Index for Urban Wage Earners and Clerical Workers.

[2] Katherine Baicker and Amitabh Chandra, "The Labor Market Effects Of Rising Health Insurance Premiums," *Journal of Labor Economics*, July 2006, pp. 609–34.

[3] John Jones, "What do OES data have to say about increasing wage inequality?" *Monthly Labor Review*, June 2009, pp. 39–49.

[4] OES statistics cover part-time and full-time wage and salary workers, and do not cover the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers.

[5] The common coding system is the 2002 OES occupational coding structure.

[6] Mean wages for November 2002 have been adjusted for inflation to May 2007 dollars. All wages are discussed in terms of May 2007 dollars.

[7] Patrick Kilcoyne, "The Role of Occupational Composition in State Wage Differentials," *Occupational Employment and Wages*, May 2005, Bulletin 2585 (Bureau of Labor Statistics, May 2007).

[8] David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, "The Polarization of the U.S. Labor Market," *American Economic Review,* May 2006, pp. 189–194.

What do OES data have to say about increasing wage inequality?

Wage distribution data from the Occupational Employment Statistics survey indicate that wages became more dispersed over the 2002–08 period; occupations paying higher wages tended to have workers with more education and higher level technical skills, while occupations paying lower wages tended to have workers with less education and lower skills

John I. Jones

Most economists concur that wage inequality has been increasing in the United States since the 1970s.[1] However, not all economists agree on the reasons behind this trend.[2] One of the more widely held positions hypothesizes that increasing wage dispersion has been driven by skill-biased technical change benefiting those who possess greater technical skills. Specifically, advancements in technology have boosted the productivity and wages of skilled labor relative to that of unskilled labor.[3] This article uses Occupational Employment Statistics (OES) survey data to explore wage inequality, measure changes in wage dispersion over time, and examine wage growth by occupational group, wage rate, skill level, and ties to technology.

The article first tests whether OES survey wage data support the notion that wage dispersion increased between 2002 and 2008. Then, occupational data are used to determine (1) whether wages for higher skilled occupations increased by more than wages for lower skilled occupations, (2) if so, which occupational groups were exceptions, and (3) whether occupations with the highest wage growth were most closely associated with technological innovation. Educational attainment data from the Current Population Survey are used as a proxy for determining which workers in an occupation are "more skilled" and which are "less skilled."[4]

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OES data; testing wage dispersion

The OES survey is a survey of 1.2 million business establishments conducted in six semiannual panels over a 3-year period. Respondents are asked to list the occupation and wage range for each of their employees. Data from the six most recent panels are used each year to provide wage and employment estimates for more than 800 occupations by area and industry. The OES methodology that allows such detailed area and industry estimates also makes it difficult to use OES data for comparisons across short periods. To minimize both the difficulty of comparison over short periods and the difficulties associated with changes in occupational or methodological definitions, two nonoverlapping data sets, from 2002 and 2008, were selected for the analysis. The virtue of using OES data for this type of analysis is that each period examined includes wage and detailed occupational data on more than 80 million workers.

One of the limitations of using OES data

to explore wage growth is the methodology of collecting data in wage ranges, especially for high-paying occupations. The OES program uses data from the National Compensation Survey to apply values to the wages within each of 12 wage ranges. Mean wage rates and wage growth for occupations with workers earning more than $145,600 per year may be underestimated because of the open-ended upper wage interval. Changes in percentile wage estimates should not be affected by changes in the upper interval as long as the percentile wages are below $145,600.

Results

If wage dispersion has increased over the study period, then the wage growth rate of higher wage earners will exceed that of lower wage earners. This hypothesis can be tested at the most aggregate levels by using the 10th, 25th, 50th (median), 75th, and 90th percentiles of the wage distribution for all occupations and industries from the OES survey. Table 1 shows the national annual wage in 2002 and 2008 for each percentile, along with the percent change. If there is no increase in wage dispersion between 2002 and 2008, then the wage growth would be equivalent across the percentile wages. However, that is not what is observed.

Wage growth by percentile

Nationally, the 10th percentile of the wage distribution increased 15.4 percent over the period examined, while the median wage increased 17.0 percent and the 90th percentile increased 21.8 percent. Inflation-adjusted figures are shown in the last column of table 1; the 90th-percentile workers are the only group to have experienced wage growth that exceeded inflation. As the wage percentiles increase, the growth in wages also increases: by 2008, wages for higher earners exceeded those for lower earners by a larger margin than in 2002. Another way to look at this phenomenon is that in 2002 a worker in the 90th percentile of the wage distribution earned 349 percent more than a worker in the 10th percentile, and by 2008 the worker in the 90th percentile earned 374 percent more than the worker in the 10th percentile.

This evidence of increasing wage dispersion does not necessarily show that individuals or groups of workers experienced the same wage growth as others in their percentile, because a shift may have occurred in the occupations that make up each group over time. Rather, the evidence simply points to a wider distribution of wages, the result of faster wage growth in high-paying occupations, uneven growth in employment between high-paying and low-paying occupations, or a combination of both factors. Faster wage growth may be due to structural changes in the economy that increase the demand for one group of workers relative to others, such as highly skilled workers, technologically oriented workers, or workers in the health care professions. The rest of this article focuses on the wage growth experience of both individual occupations and groups of occupations, and finds evidence that skill-biased technical changes in the occupational structure of the United States are benefiting certain groups more than others. Among those benefiting most are workers with higher levels of skills or education and workers whose jobs are technological in nature.

Wage growth by occupational group

Because national wage data showed evidence of increasing wage dispersion between 2002 and 2008, the data will be examined by occupational group in order to see whether increasing wage growth is found across high-wage or high-skill occupations or is concentrated in just a few occupations. Such an examination also will aid in determining whether increasing wage growth is more prevalent in occupations related to

Table 1. National percentile wage growth, 2002–08

Percentile wage	Year		Percent change in wage	Adjusted for inflation[1]
	2002	2008		
10th	$14,450	$16,680	15.4	–3.6
25th	18,580	21,590	16.2	–2.9
50th	27,690	32,390	17.0	–2.3
75th	43,340	51,540	18.9	–.7
90th	64,900	79,020	21.8	1.7

[1] The inflation rate over the 2002–08 period was 19.7 percent.

improved technology. The Standard Occupational Classification (SOC) system groups occupations by similar skills or work activities, so analysis of the OES data by SOC occupational group will serve as a starting point in looking for patterns in the occupational data.

Table 2 shows the mean annual wage for each occupational group in 2002 and 2008. Also listed is the wage difference for each group over the 2002–08 period and the percent change in the wage. To test the hypothesis that those occupational groups which had higher wages in 2002 had the greatest growth between 2002 and 2008, the data in the table are sorted by mean annual wage in 2002. If the highest percent wage growth corresponded perfectly to the highest annual mean wage, then the percent changes in the wage would appear in descending order. In general, as the 2002 wage for the occupational groups decreases, the percent change in the wage decreases with a correlation coefficient of 0.75—although there are notable exceptions.

In most cases, the occupational groups that earned above the mean wage of $35,560 in 2002 experienced wage growth greater than 18.9 percent and those which earned below the mean wage in 2002 experienced lower wage growth. However, there were exceptions. Each occupational group's 2002 wage and percent increase are plotted in chart 1. The upper right-hand quadrant of the chart shows occupations with above-average wages and above-average wage growth, the lower left-hand quadrant occupations with below-average wages and below-average growth. The other two quadrants show the occupational groups that fall outside the trend.

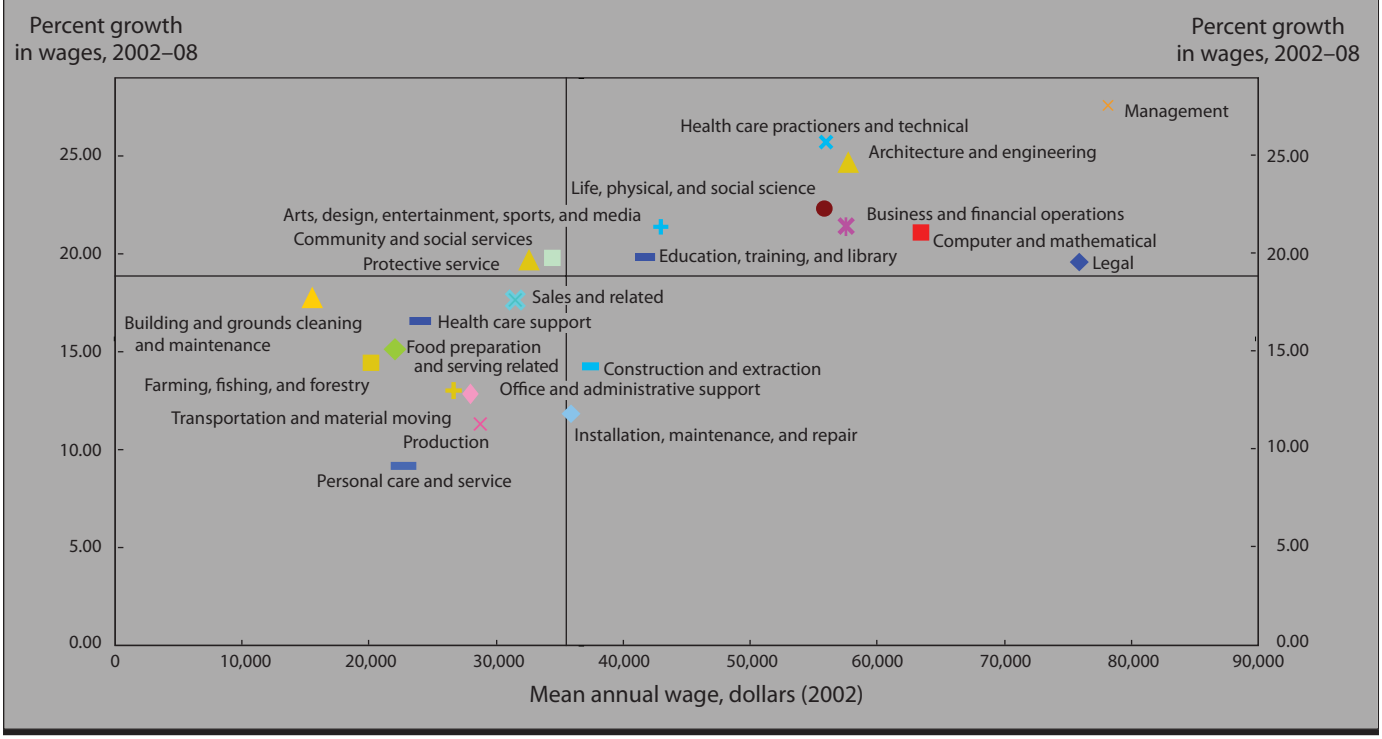
In general, the occupations listed toward the top of table 2 and shown in the upper right quadrant of chart 1 had both the highest wages and the highest wage growth. Among these occupations are architecture and engineering occupations and business and financial operations occupations. Those occupations with the lowest wages had the lowest wage growth and are shown in the lower left quadrant. Included in this group are food preparation and serving related occupations and building and grounds cleaning and maintenance occupations. Two occupations fell outside this trend, experiencing above-average wages and lower-than-average wage growth, and are shown in the lower right quadrant: construction and extraction occupations and installation, maintenance, and repair occupations. Finally, among those occupations with below-average wages were community and social services occupations and protective service occu-

Table 2. Wage growth of Standard Occupational Classification (SOC) major groups, 2002–08

SOC code	Occupational group	Mean annual wage, 2002	Mean annual wage, 2008	Difference (2008 wage minus 2002 wage)[1]	Percent change
11–0000	Management	$78,870	$100,310	$21,440	27.2
23–0000	Legal	77,330	92,270	14,940	19.3
15–0000	Computer and mathematical	61,630	74,500	12,870	20.9
17–0000	Architecture and engineering	58,020	71,430	13,410	23.1
29–0000	Health care practitioners and technical	53,990	67,890	13,900	25.7
13–0000	Business and financial operations	53,350	64,720	11,370	21.3
19–0000	Life, physical, and social science	52,380	64,280	11,900	22.7
27–0000	Arts, design, entertainment, sports, and media	41,660	50,670	9,010	21.6
25–0000	Education, training, and library	40,160	48,460	8,300	20.7
47–0000	Construction and extraction	36,340	42,350	6,010	16.5
49–0000	Installation, maintenance, and repair	35,780	41,230	5,450	15.2
00–0000	Mean wage for all occupations	35,560	42,270	6,710	18.9
21–0000	Community and social services	34,630	41,790	7,160	20.7
33–0000	Protective service	33,330	40,200	6,870	20.6
41–0000	Sales and related	30,610	36,080	5,470	17.9
51–0000	Production	28,190	32,320	4,130	14.7
43–0000	Office and administrative support	27,910	32,220	4,310	15.4
00–0000	Median wage for all occupations	27,690	32,390	4,700	17.0
53–0000	Transportation and material moving	27,220	31,450	4,230	15.5
31–0000	Health care support	22,410	26,340	3,930	17.5
39–0000	Personal care and service	21,370	24,120	2,750	12.9
37–0000	Building and grounds cleaning and maintenance	20,850	24,370	3,520	16.9
45–0000	Farming, fishing, and forestry	20,220	23,560	3,340	16.5
35–0000	Food preparation and serving related	17,180	20,220	3,040	17.7

[1] Statistically significant at the 90-percent confidence level.

Chart 1. Wages and percent growth in wages, by occupational group, 2002–08



pations, both of which experienced wage increases slightly higher than the average. These two occupations are shown in the upper left quadrant. Groups falling outside the trend are examined further.

Three occupational groups had lower wage growth than would be expected on the basis of their relatively high wage: legal occupations; installation, maintenance, and repair occupations; and construction and extraction occupations. The legal occupations group showed one of the biggest differences between its 2002 wage and its subsequent wage growth: with the 2nd-highest average annual wage in 2002, this group had only the 11th-highest wage growth and is furthest from the trend line in chart 1. Further study of the group reveals that the relatively low wage growth was influenced primarily by lawyers, the legal group's detailed occupation with the most employment, but a relatively low wage growth of 17.8 percent. This comparatively small wage growth may be a reflection of the limitation of the OES data and its methodology of collecting data in wage ranges. The top wage range in the OES survey is $145,600 or more per year, so the survey is less effective in measuring wages of the highest wage earners. Therefore, the wage growth figure for legal occupations may be underestimated. This explanation is supported by an examination of the wages of lawyers who are unaffected by the survey's top-coding methodology. Even the relatively lower paid lawyers showed higher-than-average wage growth: the 10th through 50th percentile of the wage distribution for lawyers showed increases of at least 22.4 percent.

The occupational group with the next-largest difference between its rank in wages in 2002 and its rank in percent change in wages is installation, maintenance, and repair. This group had the 11th-highest overall annual average wage in 2002, but the 20th-highest wage growth. Lower wage growth seems to be the norm for most, but not all, of the detailed occupations within the group, with 41 of the 51 detailed occupations having a percent change in wages that was below 18.9 percent for the period between 2002 and 2008. Some occupations in installation, maintenance, and repair that had large percent-change wage increases include watch repairers; manufactured building and home installers; and powerhouse, substation, and relay electrical and electronics repairers, all of which had wage increases of 21.0 percent or more.

The third group with wage growth that was lower than would be expected on the basis of its 2002 wages was construction and extraction occupations, which had the 10th-highest average wage in 2002, but only the 16th-highest wage growth. The slow growth in this group hides underlying trends for two subgroups: even slower growth

for construction-related occupations and faster-than-average wage growth for oil-and-gas-related occupations. Lower wage growth for occupations associated with residential and commercial construction may have been due to the slowdown in residential building after the housing bubble burst.[5] Occupations associated with the commodities of oil and gas, which, as an industry, had experienced its own bubble in 2007,[6] experienced much faster than average growth. For example, the wage percent change of 4 of the 5 occupations with the highest wage growth in the construction and extraction group, all linked to working with oil and gas, ranged from 31.3 percent to 49.7 percent. In contrast, carpet installers; paperhangers; floor sanders and finishers; carpenters; carpenters' helpers; plumbers', pipefitters', and steamfitters' helpers; construction and maintenance painters; plumbers, pipefitters, and steamfitters; electricians; construction laborers; and other related occupations all had wage percent changes below the average of 18.9 percent.

Like construction and extraction, production occupations had wage growth that was lower than expected. The group had the 15th-highest average wage in 2002, but the 21st-highest wage growth. Low growth was prevalent throughout the occupational group, with 91 of the 111 comparable occupations, representing 91 percent of the group's employment, having below-average wage growth.

Eleven occupation groups had higher wage growth than would be expected on the basis of their 2002 wage rank. The 5 groups with the greatest positive difference between their 2002 wage positions and wage growth positions were food preparation and serving; building and grounds cleaning and maintenance; farming, fishing, and forestry occupations; health care support occupations; and community and social services occupations. All 5 groups had below-average wages, and 4 of the 5 had below-average wage growth, resulting in wages in 2008 that were even further from the average than they were in 2002 and contributing to increased wage dispersion. These lower paying groups of occupations had smaller wage increases compared with the groups of occupations that grew less than their wage rank would indicate: the average annual wage increase of the 5 groups that went up in wage percent growth rank was $4,198, whereas the average annual wage increase of the 5 groups that went down in rank was $8,680, more than double.

Two of the occupational groups with higher growth than would be expected from their 2002 wages were food preparation and serving related occupations and building and grounds cleaning and maintenance occupations. Food preparation and serving related occupations had the lowest overall wage in 2002, but the 13th-highest wage increase. Relatively high wage growth was seen in only 5 of the 16 occupations in this group and was concentrated in just 1 occupation: waiters and waitresses, an occupation making up approximately 21 percent of total employment in the group and having a wage percent change of 24.2 percent. In contrast, combined food preparation and serving workers including fast-food workers, an occupation making up nearly 24 percent of total employment in the group, had a wage percent change of 14.9 percent.

Building and grounds cleaning and maintenance occupations also had a large difference between the group's annual average wage position in 2002, namely, 20th, and its wage growth position, 15th. The wage percent change was set predominantly by maids and housekeeping cleaners, an occupational component that accounted for approximately 49 percent of the group's total employment and had a wage percent change of 16.6 percent. Wage growth for the building and grounds cleaning and maintenance group was in a narrower range than that of most other groups, with a low of 15.7 percent and a high of 20.2 percent.

Skills, technology, and wage growth

To measure the impact of the demand for workers of different skill levels on wage growth (under the assumption that occupations in which wages have climbed the most are the most in demand), education data[7] from the CPS were linked to occupational data from the OES survey. The BLS Employment Projections program has identified the typical educational background of workers in each occupation: high school (HS); high school/some college (HS/SC); high school/some college/college (HS/SC/C); some college (SC); some college/college (SC/C); and college (C). (See note 4.) The 741 matching detailed occupations between 2002 and 2008 were sorted by percent change in wage, and the 50 occupations with the lowest and highest statistically significant percent changes in wages are shown in tables 3 and 4, respectively. Among occupations with the lowest growth, the ones that are most likely affected by the OES wage methodology, such as lawyers, were excluded from the table, because the top wage range might mask higher wage growth.[8]

Chart 2 shows the general relationship between educational clusters and wage growth over the 2002–08 period for all occupations in each educational cluster. In general, higher average wage growth is associated with increasing levels of education. An exception is the "some college" (SC) category, whose average wage growth was lower than that of the "high school/some college/college" (HS/SC/C) cat-

Table 3. Occupations with the lowest percent growth in wages, 2002–08

SOC code	Occupational title	Average annual wage, 2002	Average annual wage, 2008	CPS education level	Difference (2008 wage minus 2002 wage)	Percent change
53–4013	Rail yard engineers, dinkey operators, and hostlers	$40,600	$34,850	High school/ some college	–$5,750	–14.2
33–2022	Forest fire inspectors and prevention specialists	40,720	36,400	High school/ some college/ college	–4,320	–10.6
41–9091	Door-to-door salesworkers, news and street vendors, and related workers	30,120	27,600	High school/ some college/ college	–2,520	–8.4
47–4091	Segmental pavers	29,630	28,450	High school/ some college	–1,180	–4.0
29–1011	Chiropractors	83,440	81,340	College	–2,100	–2.5
49–9093	Fabric menders, except garment	28,580	27,920	High school/ some college	–660	–2.3
15–2091	Mathematical technicians	42,920	42,100	College	–820	–1.9
25–1043	Forestry and conservation science teachers, postsecondary	68,030	67,400	College	–630	–.9
39–6011	Baggage porters and bellhops	22,440	23,170	High school/ some college	730	3.3
53–7071	Gas compressor and gas pumping station operators	42,920	44,410	High school/ some college	1,490	3.5
51–9031	Cutters and trimmers, hand	24,630	25,540	High school	910	3.7
51–3093	Food cooking machine operators and tenders	23,160	24,110	High school/ some college	950	4.1
27–2022	Coaches and scouts	34,170	35,580	Some college/ college	1,410	4.1
53–2022	Airfield operations specialists	40,850	42,550	Some college/ college	1,700	4.2
53–4011	Locomotive engineers	51,280	53,470	High school/ some college	2,190	4.3
27–2023	Umpires, referees, and other sports officials	27,010	28,330	Some college/ college	1,320	4.9
53–4041	Subway and streetcar operators	46,810	49,330	High school/ some college	2,520	5.4
51–9192	Cleaning, washing, and metal pickling equipment operators and tenders	24,780	26,140	High school/ some college	1,360	5.5
51–4081	Multiple machine tool setters, operators, and tenders, metal and plastic	31,050	32,780	High school/ some college	1,730	5.6
51–9197	Tire builders	35,990	38,080	High school/ some college	2,090	5.8
33–3052	Transit and railroad police	45,750	48,540	Some college/ college	2,790	6.1
53–7072	Pump operators, except wellhead pumpers	38,640	41,020	High school/ some college	2,380	6.2
17–3021	Aerospace engineering and operations technicians	52,990	56,280	High school/ some college	3,290	6.2
45–4021	Fallers	32,090	34,180	High school	2,090	6.5
43–5111	Weighers, measurers, checkers, and samplers, recordkeeping	26,740	28,500	High school/ some college	1,760	6.6

Table 3. Continued—Occupations with the lowest percent growth in wages, 2002–08

SOC code	Occupational title	Average annual wage, 2002	Average annual wage, 2008	CPS education level	Difference (2008 wage minus 2002 wage)	Percent change
51–4122	Welding, soldering, and brazing machine setters, operators, and tenders	31,620	33,700	High school/ some college	2,080	6.6
25–9021	Farm and home management advisors	41,850	44,630	College	2,780	6.6
23–1022	Arbitrators, mediators, and conciliators	55,970	59,650	College	3,680	6.6
39–6032	Transportation attendants, except flight attendants and baggage porters	20,940	22,370	High school/ some college/ college	1,430	6.8
41–9011	Demonstrators and product promoters	25,360	27,150	High school/ some college/ college	1,790	7.1
47–5051	Rock splitters, quarry	28,070	30,160	High school/ some college	2,090	7.4
51–6064	Textile winding, twisting, and drawing-out machine setters, operators, and tenders	22,810	24,600	High school	1,790	7.8
51–9132	Photographic processing machine operators	21,080	22,740	High school/ some college	1,660	7.9
49–2096	Electronic equipment installers and repairers, motor vehicles	27,600	29,770	High school/ some college	2,170	7.9
19–4093	Forest and conservation technicians	32,700	35,320	Some college/ college	2,620	8.0
53–4021	Railroad brake, signal, and switch operators	45,750	49,400	High school/ some college	3,650	8.0
51–4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	31,450	34,070	High school/ some college	2,620	8.3
49–9063	Musical instrument repairers and tuners	33,210	35,950	High school/ some college	2,740	8.3
51–9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	28,070	30,430	High school/ some college	2,360	8.4
51–9022	Grinding and polishing workers, hand	24,940	27,100	High school/ some college	2,160	8.7
39–4011	Embalmers	36,160	39,320	High school/ some college/ college	3,160	8.7
43–5081	Stock clerks and order fillers	21,240	23,140	High school/ some college	1,900	8.9
49–9098	Helpers—installation, maintenance, and repair workers	23,560	25,670	High school	2,110	9.0
47–3011	Helpers—brickmasons, blockmasons, stonemasons, and tile and marble setters	27,170	29,610	High school	2,440	9.0
51–4194	Tool grinders, filers, and sharpeners	31,080	33,880	High school/ some college	2,800	9.0
31–9095	Pharmacy aides	19,700	21,500	High school/ some college	1,800	9.1
49–2092	Electric motor, power tool, and related repairers	34,030	37,110	High school/ some college	3,080	9.1
47–2171	Reinforcing iron and rebar workers	40,640	44,380	High school	3,740	9.2
47–3014	Helpers—painters, paperhangers, plasterers, and stucco masons	22,260	24,330	High school	2,070	9.3
19–4051	Nuclear technicians	61,220	66,910	Some college/ college	5,690	9.3

Table 4. Occupations with the highest percent growth in wages, 2002–08

SOC code	Occupational title	Average annual wage, 2002	Average annual wage, 2008	CPS education level	Difference (2008 wage minus 2002 wage)	Percent change
47–5012	Rotary drill operators, oil and gas	$36,320	$54,370	High school	$18,050	49.7
11–2031	Public relations managers	69,870	101,220	College	31,350	44.9
11–3061	Purchasing managers	66,250	94,300	Some college/ college	28,050	42.3
27–4032	Film and video editors	44,540	62,500	Some college/ college	17,960	40.3
25–1071	Health specialties teachers, postsecondary	72,820	102,000	College	29,180	40.1
45–1012	Farm labor contractors	26,220	36,640	High school/ some college	10,420	39.7
27–2041	Music directors and composers	39,270	54,840	Some college/ college	15,570	39.6
17–2171	Petroleum engineers	85,540	119,140	College	33,600	39.3
29–1051	Pharmacists	75,140	104,260	College	29,120	38.8
19–3022	Survey researchers	30,360	42,060	College	11,700	38.5
11–9081	Lodging managers	38,110	52,550	High school/ some college college	14,440	37.9
19–4041	Geological and petroleum technicians	41,470	57,080	High school/ some college college	15,610	37.6
11–2011	Advertising and promotions managers	69,200	94,720	College	25,520	36.9
53–7033	Loading machine operators, underground mining	32,480	44,230	High school	11,750	36.2
11–9121	Natural sciences managers	90,400	123,140	College	32,740	36.2
33–9021	Private detectives and investigators	34,250	46,480	Some college/ college	12,230	35.7
11–2021	Marketing managers	87,170	118,160	Some college/ college	30,990	35.6
47–5071	Roustabouts, oil and gas	24,160	32,660	High school	8,500	35.2
19–3091	Anthropologists and archeologists	42,380	57,300	College	14,920	35.2
27–2012	Producers and directors	61,500	83,030	College	21,530	35.0
19–1021	Biochemists and biophysicists	65,620	88,450	College	22,830	34.8
19–2021	Atmospheric and space scientists	61,000	82,080	College	21,080	34.6
11–3011	Administrative services managers	59,350	79,500	High school/ some college/ college	20,150	34.0
25–1021	Computer science teachers, postsecondary	55,330	74,050	College	18,720	33.8
19–3041	Sociologists	56,520	75,460	College	18,940	33.5
11–3031	Financial managers	83,080	110,640	Some college/ college	27,560	33.2
29–2034	Radiologic technologists and technicians	40,150	53,230	Some college/ college	13,080	32.6
35–1011	Chefs and head cooks	32,000	42,410	High school/ some college	10,410	32.5
51–6092	Fabric and apparel patternmakers	31,890	42,190	High school	10,300	32.3
47–5011	Derrick operators, oil and gas	31,780	41,980	High school	10,200	32.1
45–2011	Agricultural inspectors	31,380	41,330	High school/ some college college	9,950	31.7

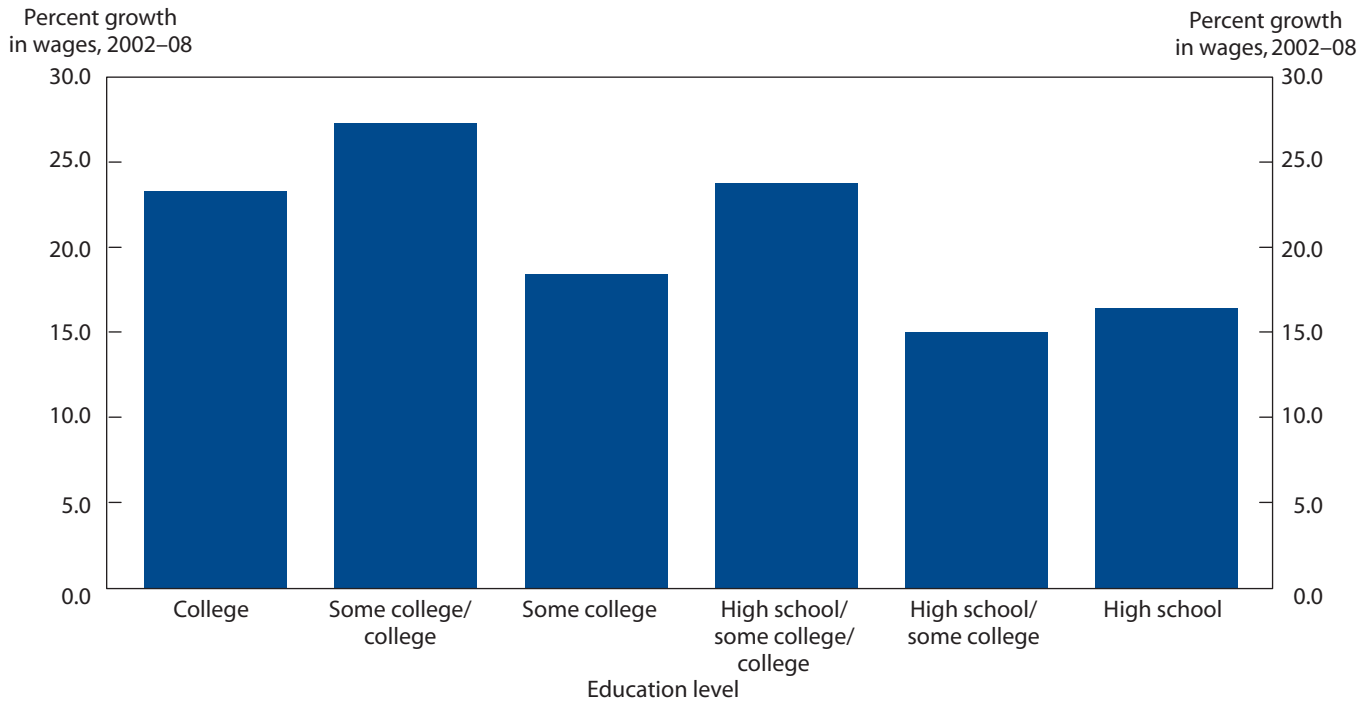
Table 4. Continued—Occupations with the highest percent growth in wages, 2002–08

SOC code	Occupational title	Average annual wage, 2002	Average annual wage, 2008	CPS education level	Difference (2008 wage minus 2002 wage)	Percent change
53–5021	Captains, mates, and pilots of water vessels	51,430	67,730	High school/ some college college	16,300	31.7
17–2061	Computer hardware engineers	76,150	100,180	Some college/ college	24,030	31.6
53–7031	Dredge operators	29,740	39,040	High school	9,300	31.3
47–5013	Service unit operators, oil, gas, and mining	31,480	41,320	High school	9,840	31.3
17–1022	Surveyors	42,630	55,980	College	13,350	31.3
25–1192	Home economics teachers, postsecondary	53,650	70,420	College	16,770	31.3
11–3021	Computer and information systems managers	90,440	118,710	Some college/ college	28,270	31.3
31–2011	Occupational therapist assistants	36,950	48,440	Some college	11,490	31.1
17–2131	Materials engineers	64,310	84,200	College	19,890	30.9
29–1111	Registered nurses	49,840	65,130	Some college/ college	15,290	30.7
17–2021	Agricultural engineers	55,730	72,850	College	17,120	30.7
27–1027	Set and exhibit designers	37,250	48,660	Some college/ college	11,410	30.6
29–1126	Respiratory therapists	40,700	53,150	Some college/ college	12,450	30.6
25–1193	Recreation and fitness studies teachers, postsecondary	46,480	60,700	College	14,220	30.6
13–2041	Credit analysts	49,530	64,580	Some college/ college	15,050	30.4
53–2012	Commercial pilots	58,000	75,500	Some college/ college	17,500	30.2
11–3071	Transportation, storage, and distribution managers	65,070	84,520	High school/ some college/ college	19,450	29.9
41–9031	Sales engineers	69,200	89,770	College	20,570	29.7
11–9033	Education administrators, postsecondary	71,630	92,920	College	21,290	29.7

egory. This relatively low growth was due to changes in the occupational employment composition of the group. The SC category has only four occupations in it, each of which grew between 20.4 percent and 31.1 percent; however, employment increases in the lowest paid occupation—emergency medical technicians and paramedics—lowered the wage growth for the group. Another exception is the "college" (C) category, whose average wage growth was lower than that of both the "high school/some college/college" (HS/SC/C) and "some college/college" (SC/C) categories. The college category is dominated by the employment of elementary, middle, and secondary school teachers, who make up nearly 25 percent of total employment in the category. Teachers had wage growth rates ranging from 18.2 percent to 19.2 percent. In addition, the wage percent change of the "some college/college" (SC/C) category was higher than that of the "college" (C) category, largely because of both registered nurses, who made up 14.1 percent of employment with a wage percent change of 30.7 percent, and business managers, accounting for approximately 20.8 percent of employment with wage percent changes from 21.8 percent to 33.2 percent.

Table 3, which lists the 50 occupations with the lowest wage growth during 2002–08, provides evidence of the link between skills or education and wage dispersion. Most of the occupations in this table require relatively

Chart 2. Wage growth, by education level, 2002–08



low levels of skill. Twelve of the 50 occupations listed are production occupations, 7 are from the transportation and material-moving group, and there are 5 occupations each from the construction and extraction group and the installation, maintenance, and repair group. Thirty-nine of the occupations with the lowest wage growth have educational levels ranging from high school through high school/some college/college. Only 11 of the occupations have high educational levels of some college or college.

Table 4 offers further evidence of the connection between skills or education and wage dispersion. The table lists the 50 occupations with the highest wage growth from 2002 to 2008, most of which require relatively high levels of skill. Eleven of the occupations are from the management group; 6 are in the life, physical, and social science group; and 5 are in the architecture and engineering group. In contrast to the occupations listed in table 3, only 15 occupations in table 4 have educational levels ranging from high school through high school/some college/college. Thirty-five of the 50 occupations have an educational level of either some college or college.

In comparing Tables 3 and 4, a few generalizations may be made in support of the skill- or education-biased wage-change hypothesis. According to this hypothesis, occupations that work with computers and new technology should have the highest wage growth and college-educated workers are in the best position to take advantage of such productivity-increasing technology. In fact, table 4 does have a preponderance of college-educated occupations, compared with table 3.

Although the broad group of computer and mathematical science occupations, which are the most directly related to many types of technology, did not show the highest wage growth, there is support for the hypothesis within the occupational group. In this regard, the detailed occupation consisting of computer and information research scientists had the highest percent change in wages in the group. This is an occupation that requires high levels of education or talent to invent or design solutions to problems in the field of computer hardware and software. In comparison, the occupation consisting of computer support specialists had the lowest percent change in wages of all detailed occupations in the group and may indeed be suffering stagnating wages because technology has allowed workers in the occupation to be replaced by automated assistants, online help, and technical support workers located overseas. This is the downside of advancing technology: workers are finding that their skills are being replaced by that very technology, in one way or another. Simply put, one of the occupations in the computer and mathematical science occupational

group is taking advantage of higher education while the other is losing ground because of automation.

Technology may enhance the productivity of workers in fields other than computer science. For example, the collection, processing, and analysis of medical information is more efficient with advanced technology, allowing medical workers to serve more individuals. Also, pharmacists filling prescriptions for new drugs use technology to help screen customers for adverse drug interactions. In another application of technology, nurses may enter notes concerning a patient's progress on a wireless portable memory device that instantly becomes available to the doctor. Finally, the nuclear medical technologist using a new magnetic resonance imaging (MRI) device to scan a patient for disease can improve productivity by having the results of the scan uploaded almost instantaneously to the patient's electronic file for diagnosis. Again, workers with high levels of education and skill are in the best position to take advantage of productivity-increasing technology.

More support for this hypothesis is found in table 3, which lists lesser skilled occupations that are more likely to suffer from the other side of the increased use of technology: labor replacement. For instance, workers in manufacturing occupations may be replaced by robots or computerized manufacturing. Similarly, demonstrators and product promoters may be replaced with virtual online demonstrators and product promoters. Finally, door-to-door salesworkers, news and street vendors, and related workers may suffer from the availability of Internet news and targeted e-mail and phone advertising.

OES DATA SUPPORT THE HYPOTHESIS that wage dispersion continued from 2002 to 2008. National wage distribution data show a clear positive correlation between percentile levels and wage increases: the higher the percentile, the higher is the percent change in wages. In addition, occupational groups with higher average wages in 2002 tended to have the highest subsequent wage growth.

Examining wage growth by occupational group provides insight into the types of jobs that have experienced the largest wage increases. The five occupational groups with the highest wage growth are management occupations; health care practitioners and technical occupations; architecture and engineering occupations; life, physical, and social science occupations; and education, training, and library occupations. In contrast, the occupational groups with the lowest wage growth were personal care and service occupations; food preparation and serving related occupations; farming, fishing, and forestry occupations; construction and extraction occupations; and production occupations. In sum, occupations usually associated with higher education and higher technical skills have had higher wage growth than occupations with lower education and skill requirements. □

Notes

[1] Aaron Steelman and John A. Weinberg, "What's Driving Wage Inequality?" *Economic Quarterly* (Federal Reserve Bank of Richmond), summer 2005, pp. 1–17, cite this general consensus among economists.

[2] David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, "The Polarization of the U.S. Labor Market," NBER Working Paper No. 11986 (National Bureau of Economic Research, January 2006), pp. 1–19ff.

[3] Steelman and Weinberg, "What's Driving Wage Inequality?"

[4] See "Occupational Projections and Training Data" (Bureau of Labor Statistics, no date), on the Internet at **www.bls.gov/emp/optd** (visited June 17, 2009). Data on educational attainment by occupation come from the Current Population Survey and are given in *Occupational Projections and Training Data*, Bulletin 2602 (Bureau of Labor Statistics, December 2007). Chapter 1, "Education and Training Classification Systems," says,

> The educational attainment cluster system sorts occupations according to the highest level of educational attainment of current workers....
>
> If an education level represents the highest educational attainment of at least 20 percent of workers in an occupation, that education level is included in the education category of the occupation. For example, if more than 60 percent of workers have a high school diploma or less, less than 20 percent have some college or an associate degree, and less than 20 percent have a bachelor's or higher degree, that occupation is considered a high school (HS) occupation. However, if more than 20 percent have a high school degree or less, more than 20 percent have attended some college or held an associate degree, and less than 20 percent have a bachelor's or higher degree, the occupation is considered to be a high school/some college (HS/SC) occupation.

[5] For a discussion of job losses in residential construction, see the BLS news release "The Employment Situation: May 2008" (Bureau of Labor Statistics, June 6, 2008), on the Internet at **www.bls.gov/news.release/archives/empsit_06062008.pdf** (visited June 17, 2009). For a look at when the housing bubble burst, see "Nationally, Home Prices Began 2009 with Record Declines According to the S&P/Case-Shiller Home Price Indices," *Standard & Poor's Press Release*, May 26, 2009, on the Internet at **www2.standardandpoors.com/spf/pdf/index/CSHomePrice_Release_052619.pdf** (visited June 17, 2009); see especially chart, p. 1.

[6] For an examination of the oil and gas industry, see "Oil Price History and Analysis," on the Internet at **www.wtrg.com/prices.htm** (visited June 17, 2009).

[7] Education is often linked with skill. Other influences on skill include experience, training, and individuals' abilities—for instance, creativity.

[8] The OES top wage range was $145,600 or more for panels prior to November 2005. Currently, the top wage range is $166,400 or more. In either case, because respondents cannot report their actual top wage, the top wage range may mask wage growth for the highest wage earners over time.

Productivity trends in business cycles: a visual essay

Michael Chernousov, Susan E. Fleck, and John Glaser

Productivity measures are used to assess the state of the economy. The series of charts in this visual essay provides an overview of labor productivity and related measures in the U.S. nonfarm business and manufacturing sectors. The nonfarm business sector accounts for three-fourths of output and employment in the total economy; manufacturing—a subsector of nonfarm businesses—produces about a quarter of U.S. output and accounts for just under 10 percent of its employment.

Capital-intensive investment, improvements in technology, and better skilled workers, among other factors, translate into labor productivity growth in the long term. More than 60 years of data—spanning 11 cycles of recessions and expansions—highlight long-term trends in productivity, output, and hours worked. Productivity data are cyclical. In a recession, output and hours worked decline, although usually not in tandem. Thus, productivity, which is the measure of output per hour worked, provides a window through which to analyze business cycles.

The National Bureau of Economic Research (NBER) is responsible for identifying the month in which changes in economic activity signal the end of a business-cycle expansion, as well as the month in which the ensuing recession ends. The last month of expansion is called the peak; the last month of a business-cycle contraction, or recession, is called the trough. Recessions are measured by the time between the peak and the trough, and expansions are measured by the time between the trough and the peak.

The productivity measures in this visual essay are quarterly data. In order to represent quarterly data in the context of business cycles that NBER defines using months, the quarter that contains the month designated by NBER as the peak or trough of economic activity is identified in this visual essay as the peak quarter or trough quarter. For example, the peak marking the onset of the present recession is considered for the purpose of this essay to be the fourth quarter of 2007, because NBER designated December 2007 as the most recent peak month of the business cycle.

Since 1947, the first year for which nonfarm productivity data are available, there have been 11 recessions, including the one beginning in December 2007. The dates below are the years and quarters that mark these recessions and expansions; no trough has been designated for the present recession.

Year/quarter of the peak	*Year/quarter of the trough*
1948:4	1949:4
1953:2	1954:2
1957:3	1958:2
1960:2	1961:1
1969:4	1970:4
1973:4	1975:1
1980:1	1980:3
1981:3	1982:4
1990:3	1991:1
2001:1	2001:4
2007:4	Not yet designated

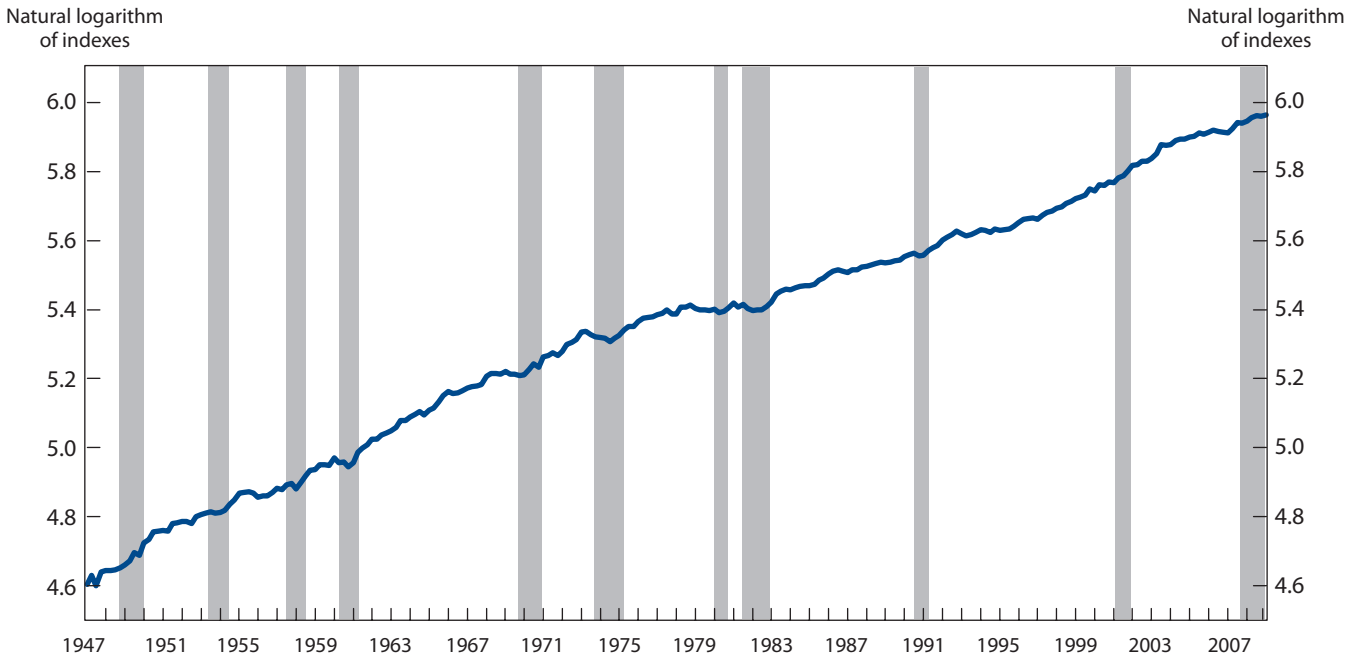
The current recession continues to show declining output and hours worked through the first quarter

of 2009. Two other post-WWII recessions, from the fourth quarter of 1973 to the first quarter of 1975 and from the third quarter of 1981 to the fourth quarter of 1982, also lasted through five quarters; the rest were shorter. Manufacturing data are available from 1949 onward.

The charts in this visual essay highlight output and hours worked as well as output per hour worked, or labor productivity; data on labor costs are also included. Data are presented as indexes and growth rates. Index measures are derived from data on output, hours worked, and compensation. Comparing data based on different units and levels—such as billions of dollars or thousands of hours—can skew the analysis. To improve comparative analysis, the long-term trends are based on the natural logarithm of the index measures. The natural logarithm creates a straighter line of data when comparing different data series based on widely different levels over long periods of time. Growth rates are based on percent changes in indexes and are compounded to create annual rates. Averages of productivity measures across recessions and expansions are weighted averages of compound annual rates, in which the weights are based on the number of quarters that compose the various time periods, excluding the current recession. All data are seasonally adjusted.

The data in these charts are updated eight times a year in the Productivity and Costs news release prepared by BLS. The charts prepared for this visual essay are based on the June 4, 2009, Productivity and Costs news release. All data are quarterly, unless otherwise noted. Data are available at the BLS website, **www.bls.gov/data/home.htm**, or by contacting the BLS Division of Major Sector Productivity by telephone at (202) 691–5606 or by email at DPRWEB@bls.gov. This essay was prepared by Michael Chernousov, economist; Susan E. Fleck, division chief; and John Glaser, supervisory economist; in the Division of Major Sector Productivity in the Office of Productivity and Technology, Bureau of Labor Statistics.

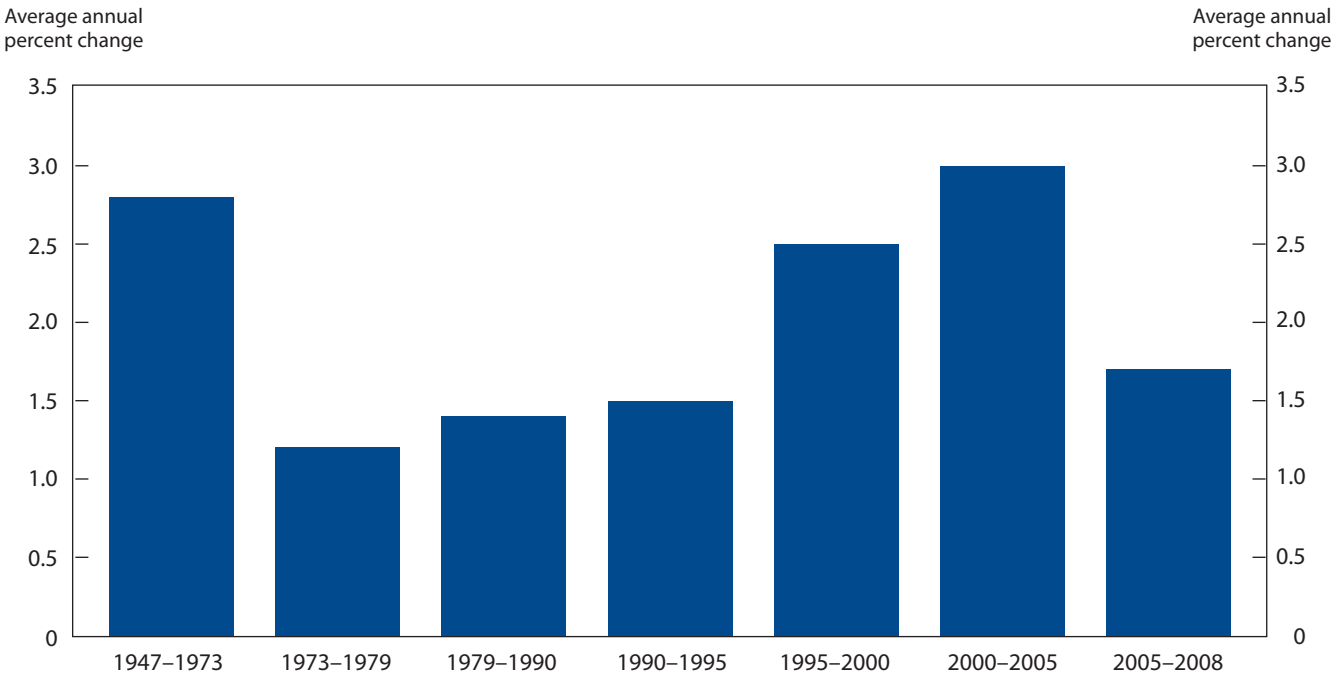
1. Productivity in the nonfarm business sector, 1947–2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

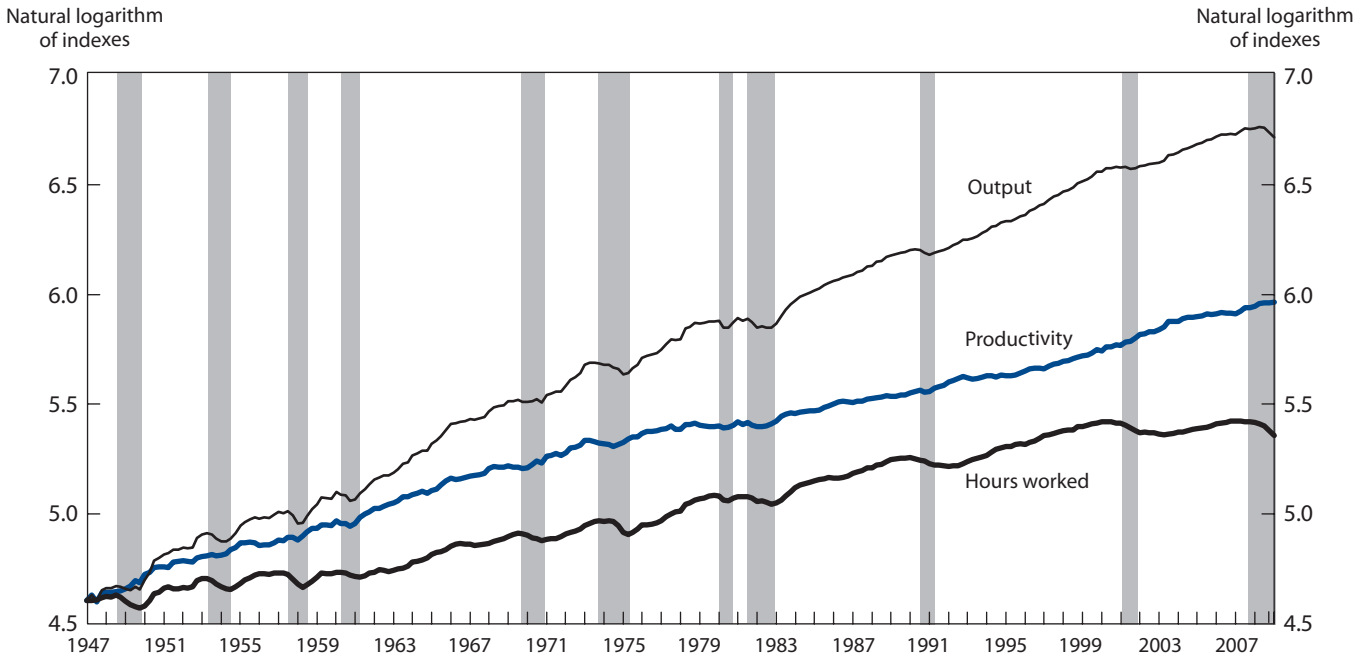
- Labor productivity is defined as total output divided by total hours worked by all people: employees, the self-employed, and unpaid family workers. Productivity in the nonfarm business sector often dips during recessions.
- Overall, productivity growth has been positive since the series began in 1947.

2. Productivity growth in the nonfarm business sector, 1947–2008



- Though productivity growth has trended upwards over the last 60 years, a slowdown in productivity growth in nonfarm businesses took place from the early 1970s through 1995.
- After 1995 productivity growth shifted upwards, until recently. This productivity boost is often attributed to capital-intensive investments and improvements in technology.

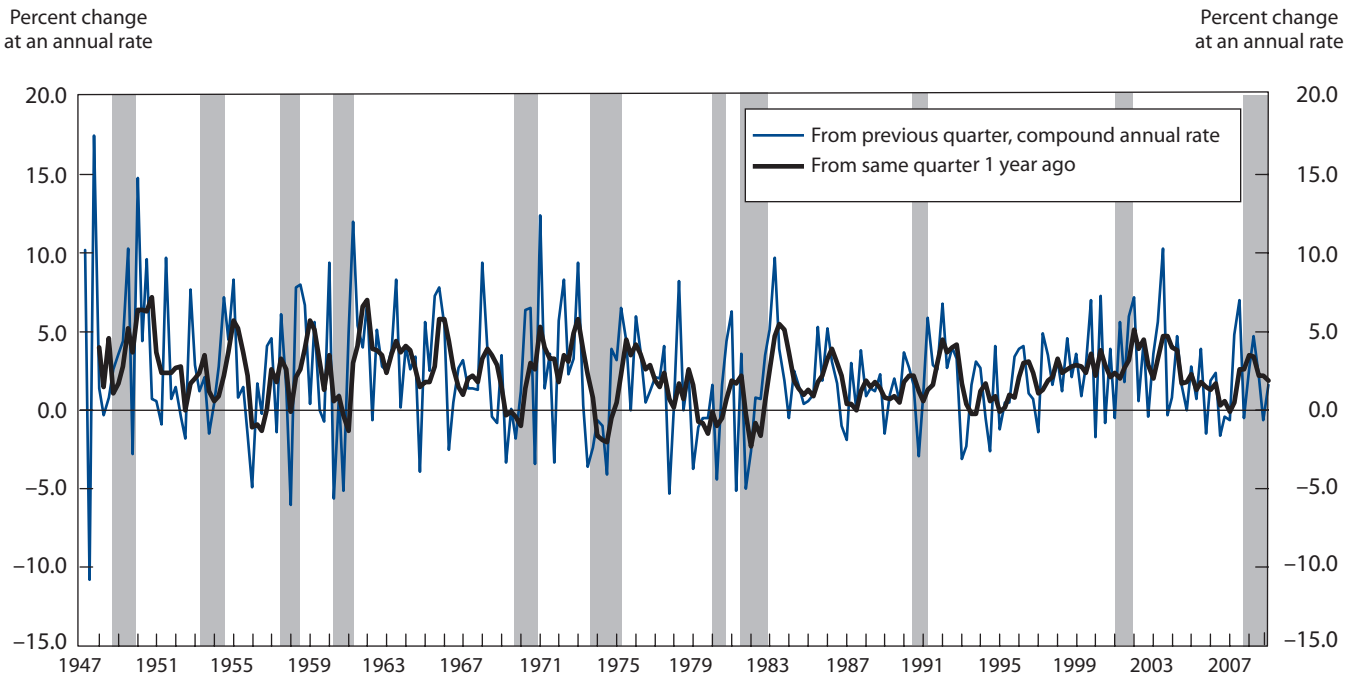
3. Productivity, output, and hours worked, nonfarm business sector, 1947–2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

- In recessions both output and hours worked contract. Output usually slows earlier than hours worked in a recession and recovers sooner during an expansion.
- Over the long term, output has outpaced hours worked. Hours worked have taken longer to return to prerecession levels, especially in the most recent recessions.

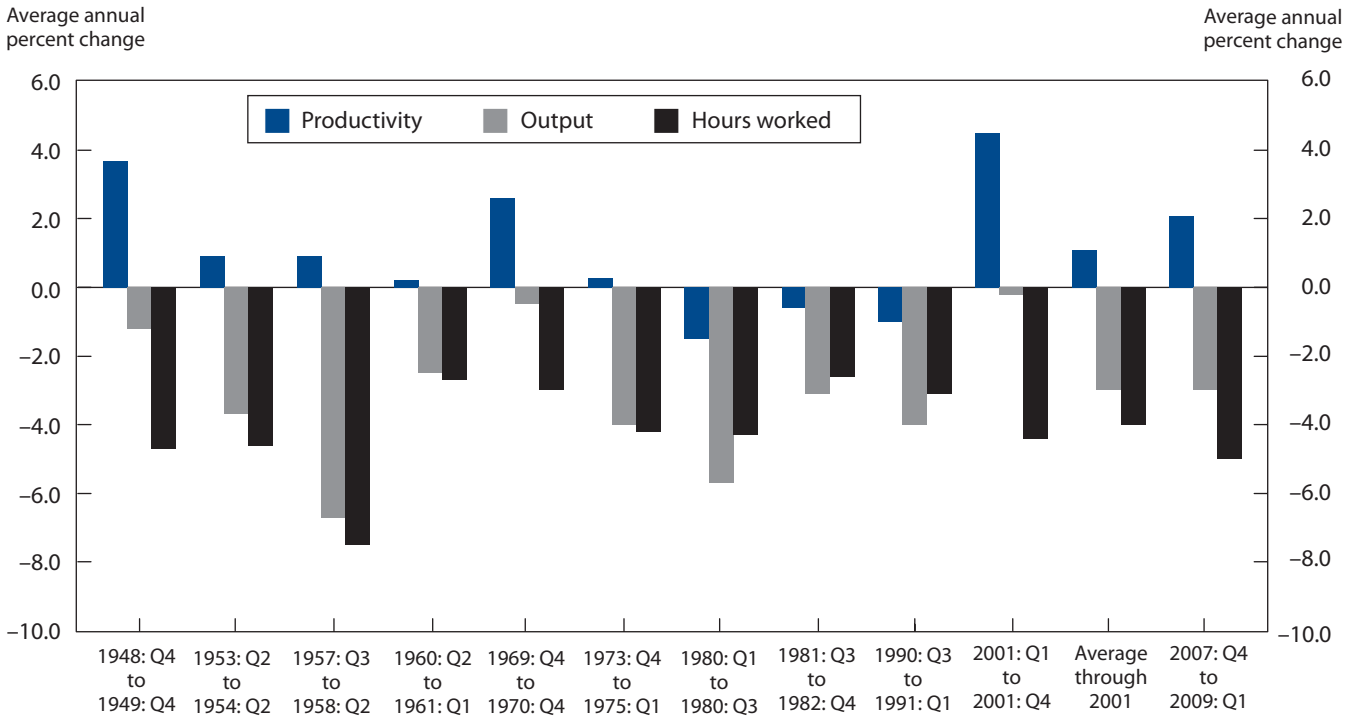
4. Productivity growth, nonfarm business sector, first quarter 1947–first quarter 2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

- Quarterly movement in the growth of nonfarm business output per hour is highly volatile. The percent change from a given quarter of one year to the same quarter of the following year provides a longer term perspective.
- Recessions generally end with high productivity growth that carries on into the initial few quarters of the recovery, illustrated by spikes in the blue line just beyond the shaded areas.

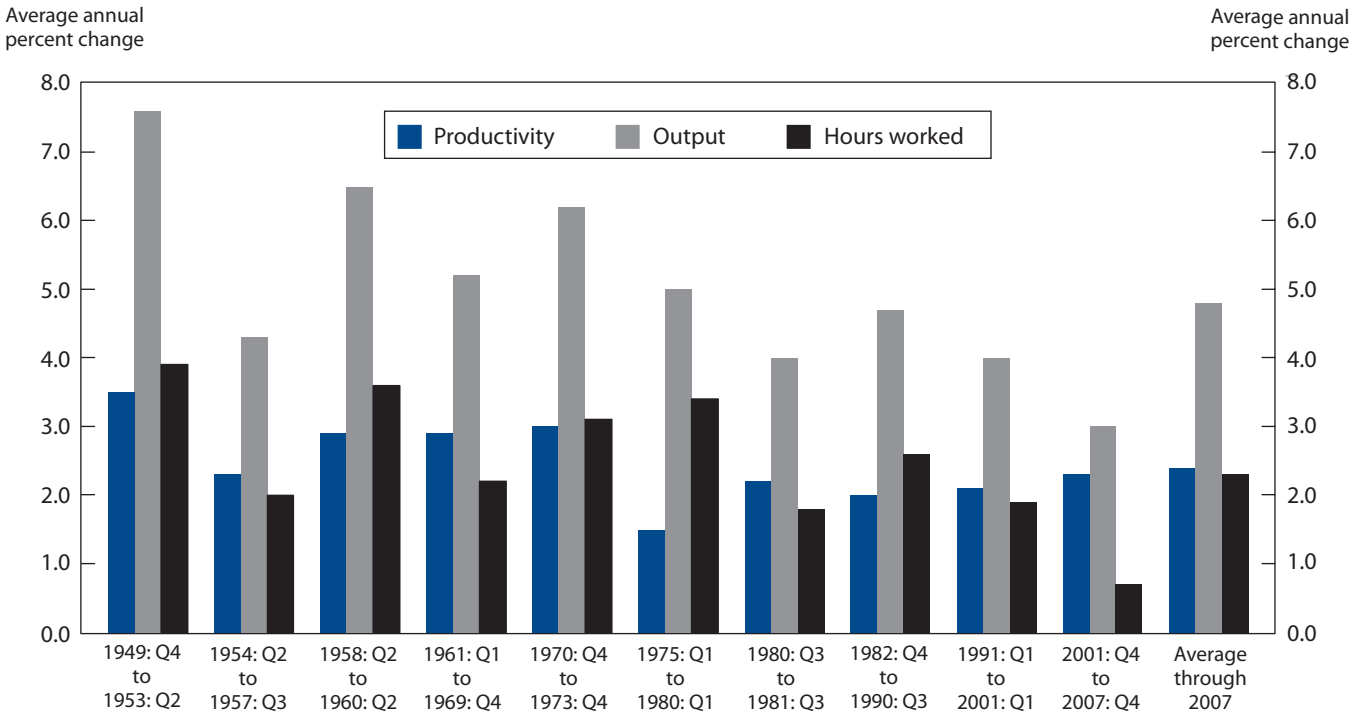
5. Growth in productivity, output, and hours worked during recessions, nonfarm business sector, fourth quarter 1948–first quarter 2009



- Negative productivity growth is more likely during recessions than expansions. Three of the 10 recessions prior to the current one involved a contraction in output that surpassed the decline in hours in the nonfarm business sector.

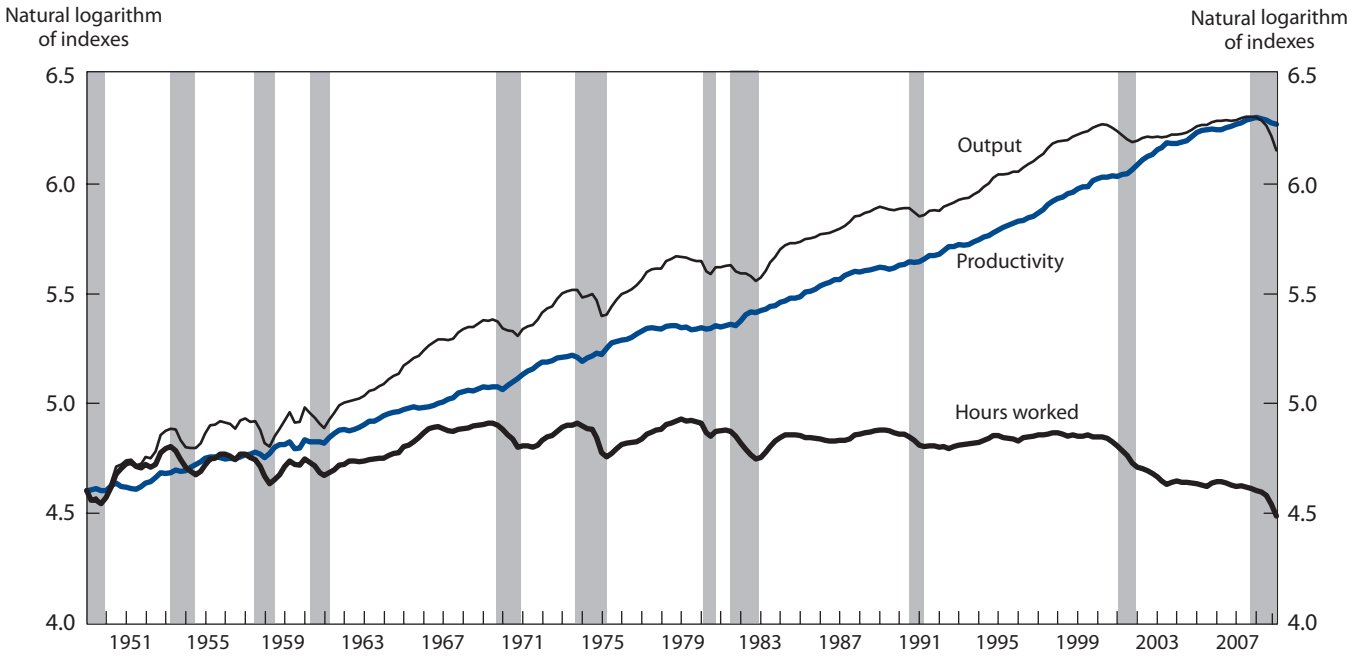
- Productivity growth in recessions may also be positive, albeit weak, when the change in hours worked is less positive or more negative than the change in output. In 4 of the last 10 recessions before the current one, nonfarm business productivity experienced more than 1.0 percent growth. For the 10 recessions combined, productivity growth averaged 1.1 percent.

6. Growth in productivity, output, and hours worked during expansions, nonfarm business sector, fourth quarter 1949–fourth quarter 2007



- Expansions are marked by growth in total hours worked and even higher growth in output. This combination results in higher productivity growth during the upturn in the business cycle.
- Expansions typically last much longer than recessionary periods and exhibit greater productivity growth, which has averaged 2.4 percent.

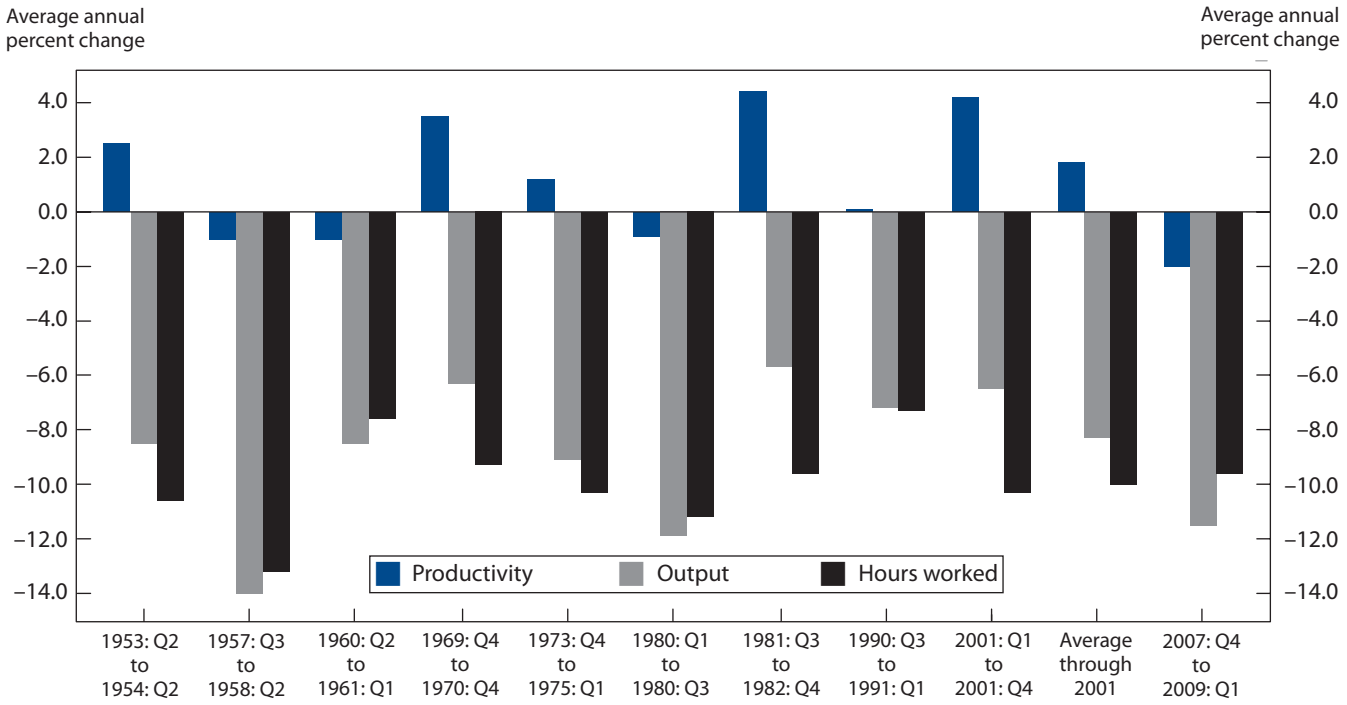
7. Productivity, output, and hours worked, manufacturing sector, first quarter 1949–first quarter 2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

- Manufacturing-sector data from 1949 onward highlight how labor productivity has improved steadily over the last six decades. Over the last three decades, this is due partly to a fall-off in hours worked.
- Recessions are clearly marked in historical manufacturing-sector data by downward shifts in output and hours worked.
- The 2001 recession saw a large dip in manufacturing output, as well as a decline in hours worked that continued throughout the subsequent expansion.

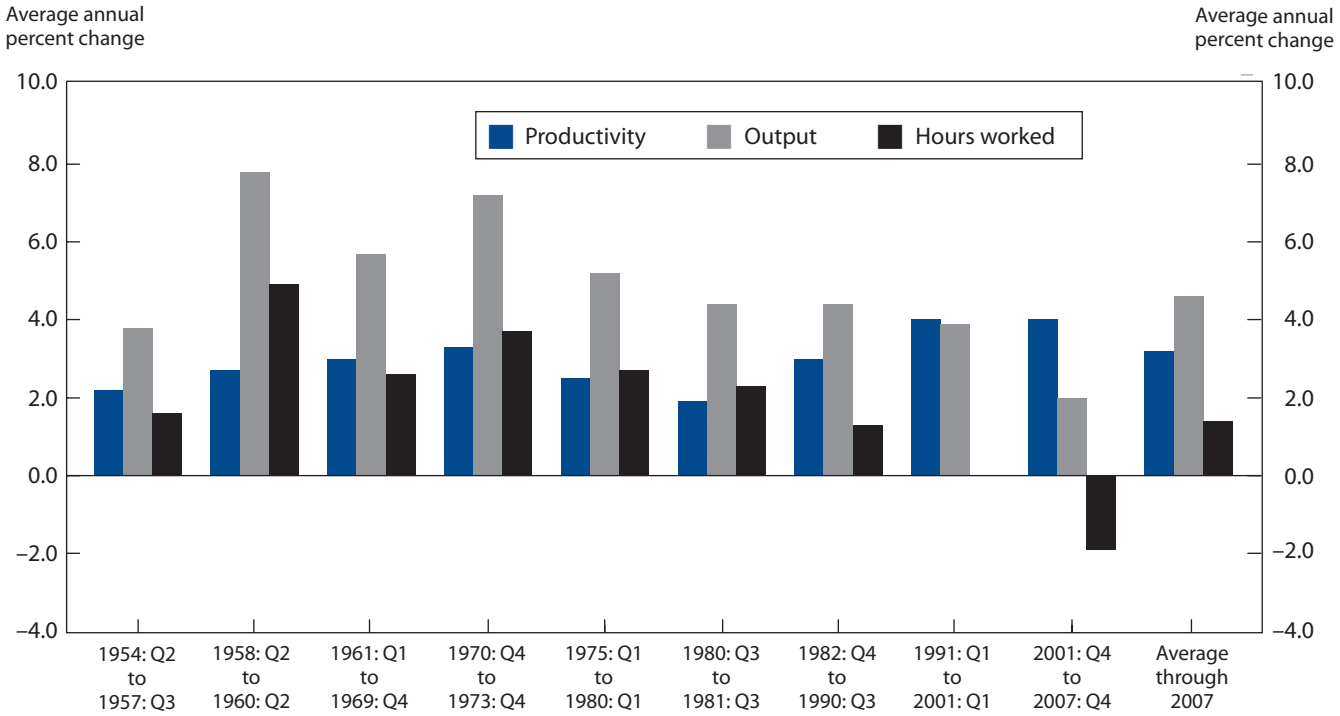
8. Growth in productivity, output, and hours worked during recessions, manufacturing sector, second quarter 1953–first quarter 2009



- In the manufacturing sector, recessions are consistently characterized by reductions in output and hours worked that are deeper than in the nonfarm business sector as a whole. (See chart 5.)

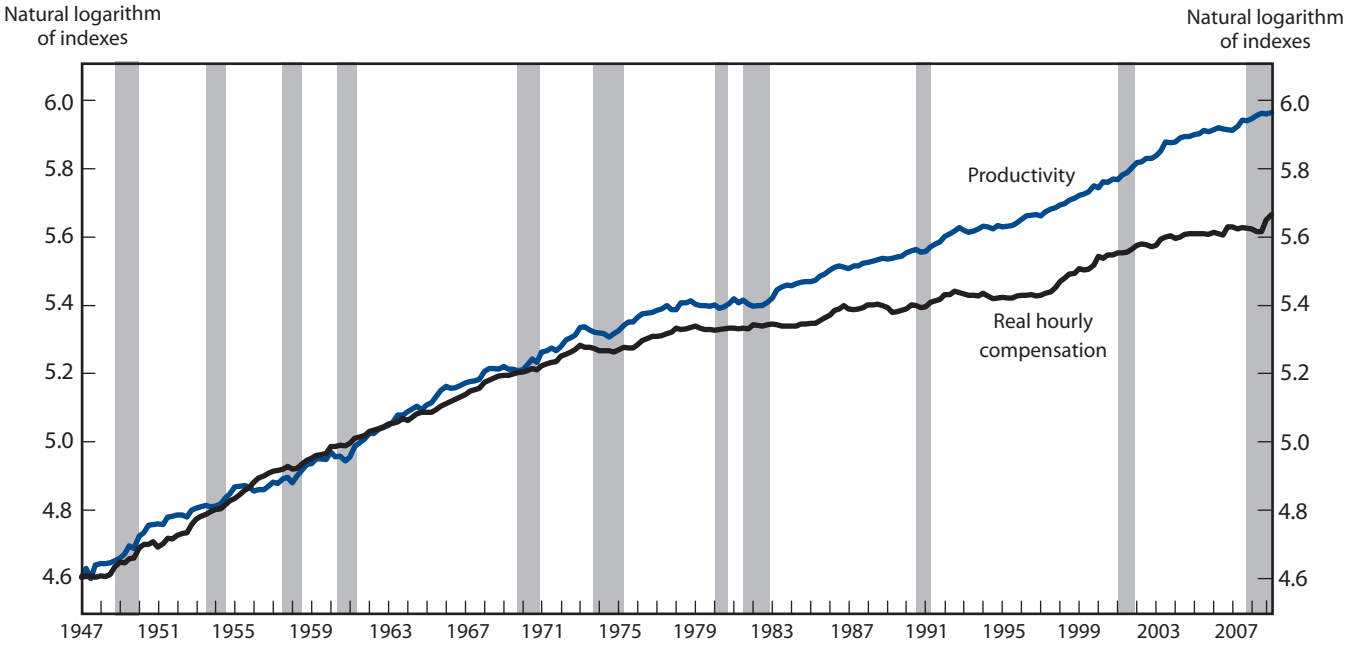
- Half of the recessions showed positive productivity growth because the decline in hours worked outpaced the contraction of output. On average, productivity has grown 1.8 percent in the manufacturing sector in the nine recessionary periods beginning with the recession that started in 1953.

9. Growth in productivity, output, and hours worked during expansions, manufacturing sector, second quarter 1954–fourth quarter 2007



- In the manufacturing sector, expansions—in contrast to recessions—consistently show positive productivity growth because output advances faster than hours worked. The average rate of manufacturing-sector productivity growth during recoveries since 1949 is 3.2 percent.
- Beginning with the economic recovery in 1970, hours worked in manufacturing grew more slowly with each successive expansion and fell outright from 2001 to 2007.

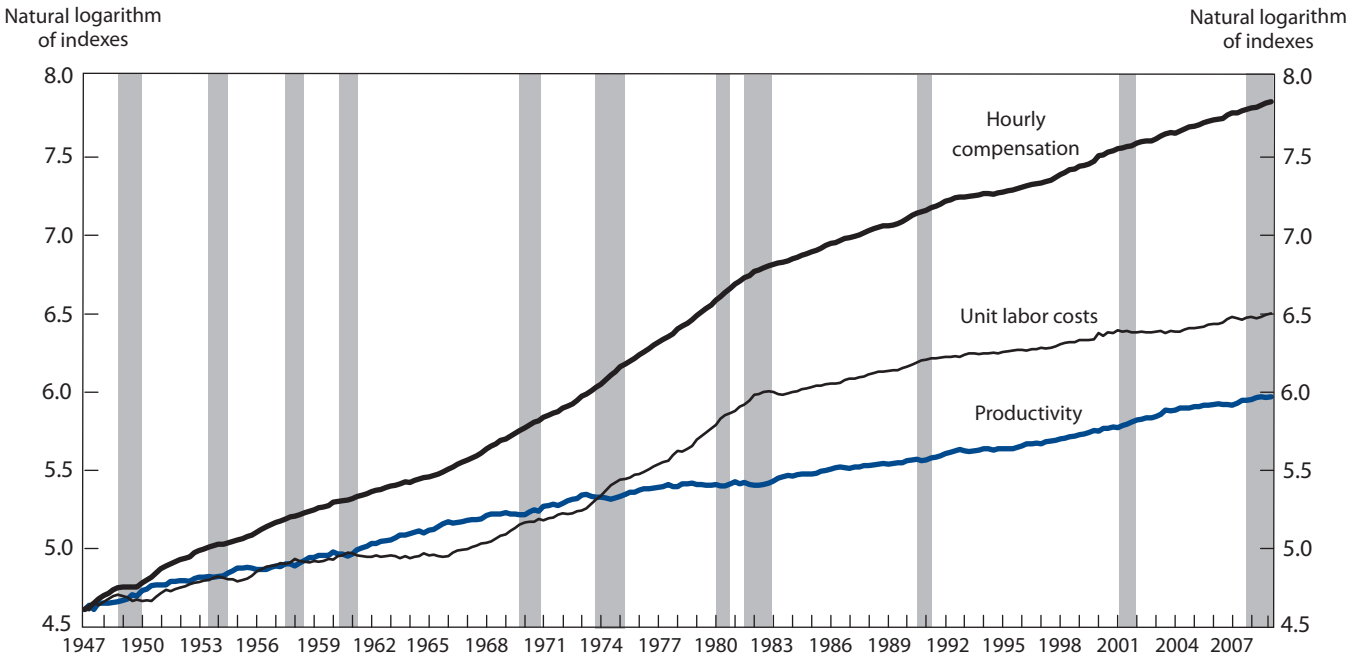
10. Productivity and real hourly compensation, nonfarm business sector, 1947–2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

- Real hourly compensation, which measures wages plus benefits adjusted for consumer prices, does not typically experience dips during recessions. This trend implies that workers who maintain jobs during a recession do not see a loss in their purchasing power.
- Output per hour closely tracked real hourly compensation through the 1970s. After 1982 productivity began growing faster than real hourly compensation.

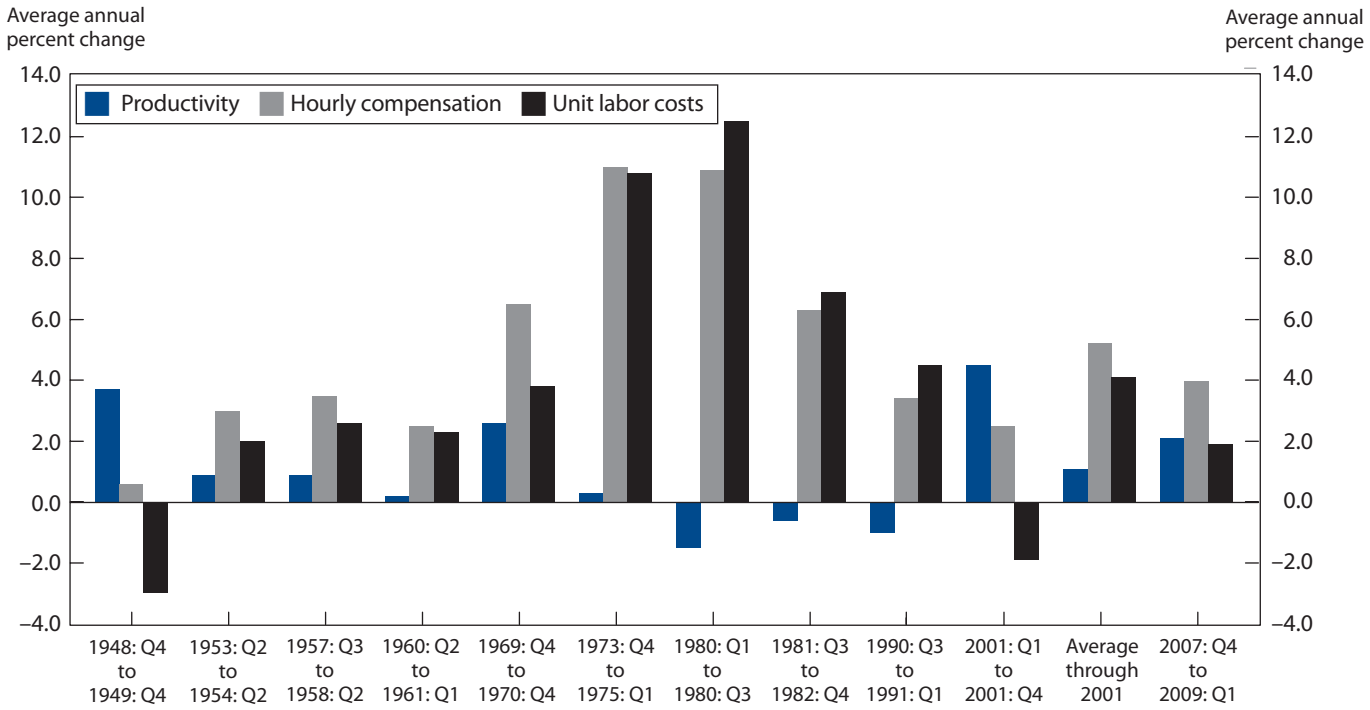
11. Productivity, hourly compensation, and unit labor costs, nonfarm business sector, 1947–2009



NOTE: The shaded bars denote recessions. Because the data in the chart are quarterly, peaks and troughs of economic activity are assigned to quarters instead of months. An endpoint for the most recent recession has yet to be designated.

- Unit labor costs are the ratio of hourly compensation to productivity. Because productivity has steadily improved, unit labor costs have not increased as fast as hourly compensation.
- Unit labor costs tend to rise in the beginning of recessions, as output falls faster than hours worked and productivity stagnates.

12. Growth in productivity, hourly compensation, and unit labor costs during recessions, nonfarm business sector, fourth quarter 1948–first quarter 2009



- During the recessions of the 1970s and early 1980s, unit labor costs soared as productivity gains failed to keep up with hourly compensation increases. High inflation was characteristic of the 1970s and early 1980s.

The prominence of Boston area colleges and universities

Denis M. McSweeney
and
Walter J. Marshall

The Boston metropolitan area[1] is recognized by many for its concentration of prestigious private colleges and universities. The metropolitan area is home to 85 private colleges and universities employing 70,000 people and attracting more than 360,000 students from all over the world. This report uses employment and wage data from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) program for the years 1990 and 2007[2] to analyze the labor market impact and contribution of these institutions of higher education to the Boston area economy.

The analysis indicates a strong and steady growth in both wages and employment, with job creation in colleges and universities almost double the rate for total private employment. Wage gains also were higher for those working in colleges and universities than for those in overall private industry. The continuing growth of colleges and universities enhances the quality of the labor force and fuels knowledge-based industries, which are attracted by that quality.

Higher education employment

In 1990, there were almost 2,000 private colleges and universities in the United States, employing a total of almost 725,000 workers. (See table 1.) Massachusetts had 82 private colleges and universities, employing more than 69,000. Fifty-eight of those institutions (70.7 percent) were located in the Boston area, employing almost 58,000 workers.

By 2007, there were dramatic increases in the number of colleges and universities, as well as in their employment. In the United States, there were almost 4,400 private colleges and universities, employing an estimated 1,060,000 workers. Massachusetts colleges and universities had grown to 124, employing almost 85,000. Eighty-five (68.5 percent) of those institutions were in the Boston area, employing more than 70,000 workers.

Higher education job growth

In the Nation over the 17-year period from 1990 to 2007, overall job growth increased by 25.5 percent while the growth in college and university employment was 46.7 percent. Massachusetts employment gains in colleges and universities were almost double the overall percentage of growth in the private sector (22.2 percent, compared with 11.3 percent). While the Massachusetts economy added 288,000 jobs over the period, 5.4 percent of the total growth, or 15,400 jobs, were attributable to gains in higher education employment. The Boston area accounted for approximately 80 percent of the overall job gains in colleges and universities, with 12,000 jobs added over the 17-year period, for a growth rate of 20.9 percent, well above the overall increase of 12.9 percent for the metropolitan area.

Metropolitan area comparisons

Using a location quotient[3] comparison among the largest metropolitan areas in the Nation confirms the dominance and importance that higher education employment had in the Boston area over the 17-year period. In 1990, Boston ranked first among major metropolitan areas, with a location quotient of 3.92. Seventeen years later, the Boston area still ranked first, with a location quotient of 3.59. (See chart 1.) The Boston area location quotient indicates that college and university employment was approximately three-and-a-half times more concentrated, compared with the U.S. average, and shows that none of the other major metropolitan areas came close to matching the Boston area's concentration of employment in higher education.

Job generators

The concentration of colleges and universities in both Massachusetts and the Boston metropolitan area has a positive impact on the quality of the labor force. The highly educated workforce attracts knowledge-based industries such as professional and business services, financial activities, and navigational, measuring, electromedical, and control instruments manufacturing.

Colleges and universities themselves are a knowledge-based industry that requires a highly skilled labor force to educate students, and the results benefit the Boston area by increasing the percentage of the workforce with college degrees. Nationally in 2007, 27.5 percent of adults 25 years and older had bachelor's degrees and 10.1 percent had more advanced degrees. Among the 50 States, Massachu-

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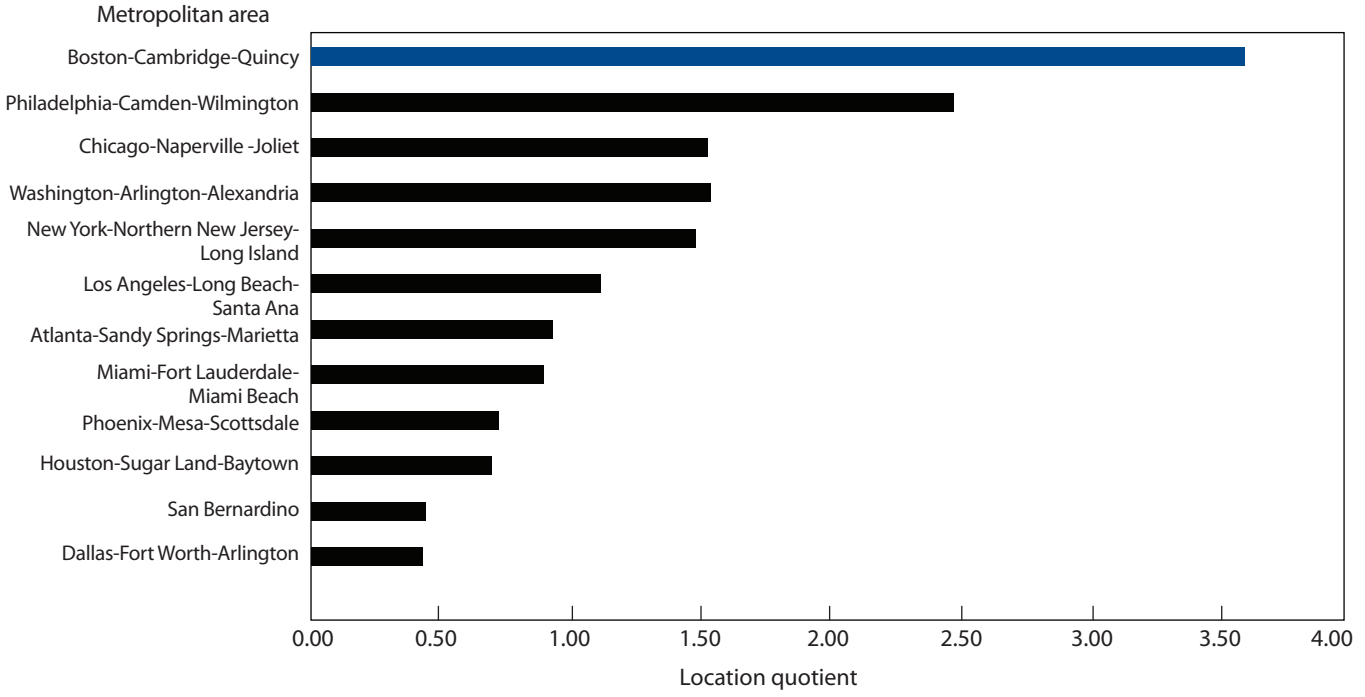
Table 1. Total private employment and employment in colleges and universities, United States, Massachusetts, and Boston metropolitan area, 1990 and 2007 annual averages

Employment and wages	Number		Change, 1990–2007	
	1990	2007	Number	Percent
United States				
Employment:				
Total private establishments	5,860,445	8,681,001	2,820,556	48.1
Total private employment	90,855,141	114,012,221	23,157,080	25.5
Colleges and universities' establishments	1,985	4,389	2,404	121.1
Colleges and universities' employment	723,107	1,060,666	337,559	46.7
Colleges and universities' share of total private employment	.80	.93	–	–
Location quotient	1.00	1.00	–	–
Wages:				
Total private average weekly wage	$447	$853	$406	90.8
Total private average annual wage	23,262	44,362	21,100	90.7
Colleges and universities' average weekly wage	458	925	467	102.0
Colleges and universities' average annual wage	23,835	48,098	24,263	101.8
Massachusetts				
Employment:				
Total private establishments	164,346	204,301	39,955	24.3
Total private employment	2,537,238	2,824,834	287,596	11.3
Colleges and universities' establishments	82	124	42	51.2
Colleges and universities' employment	69,423	84,847	15,424	22.2
Colleges and universities' share of total private employment	2.74	3.00	–	–
Location quotient	3.44	3.23	–	–
Employment:				
Total private average weekly wage	$510	$1,073	$563	110.4
Total private average annual wage	26,497	55,798	29,301	110.6
Colleges and universities' average weekly wage	521	1,095	574	110.2
Colleges and universities' average annual wage	27,080	56,927	29,847	110.2
Boston metropolitan area				
Employment:				
Total private establishments	113,165	135,840	22,675	20.0
Total private employment	1,859,951	2,099,976	240,025	12.9
Colleges and universities' establishments	58	85	27	46.6
Colleges and universities' employment	57,960	70,089	12,129	20.9
Colleges and universities' share of total private employment	3.12	3.34	–	–
Location quotient	3.92	3.59	–	–
Wages:				
Total private average weekly wage	$538	$1,168	$630	117.1
Total private average annual wage	27,988	60,725	32,737	117.0
Colleges and universities' average weekly wage	527	1,136	609	115.6
Colleges and universities' average annual wage	27,387	59,058	31,671	115.6

NOTE: Dash indicates not applicable.

SOURCE: BLS Quarterly Census of Employment and Wages (QCEW) program.

Chart 1. Location quotients for colleges and universities in 12 of the largest metropolitan areas, 2007 annual averages



setts ranked first in the percentage of adults with both bachelor's degrees and advanced degrees. In 2007, 37.9 percent of Massachusetts adults had completed a bachelor's degree and 16 percent had completed an advanced degree. In the Boston area, an even greater percentage of the population—more than 40 percent—had bachelor's degrees.[4]

Massachusetts has consistently attracted venture capital funds for biotechnology-related investments. In 2007, Massachusetts attracted almost $1.5 billion in investment funds for biotechnology firms, up from $1.3 billion in 2006.[5] To further highlight local prominence in knowledge-based industries, despite being ranked 13th in population, Massachusetts had the fifth-highest number of patents granted in 2007.[6] Boston's reputation and prominence have been strengthened by the fact that 56 Nobel laureates have taught and do research in the area's colleges and universities.

Industry concentration

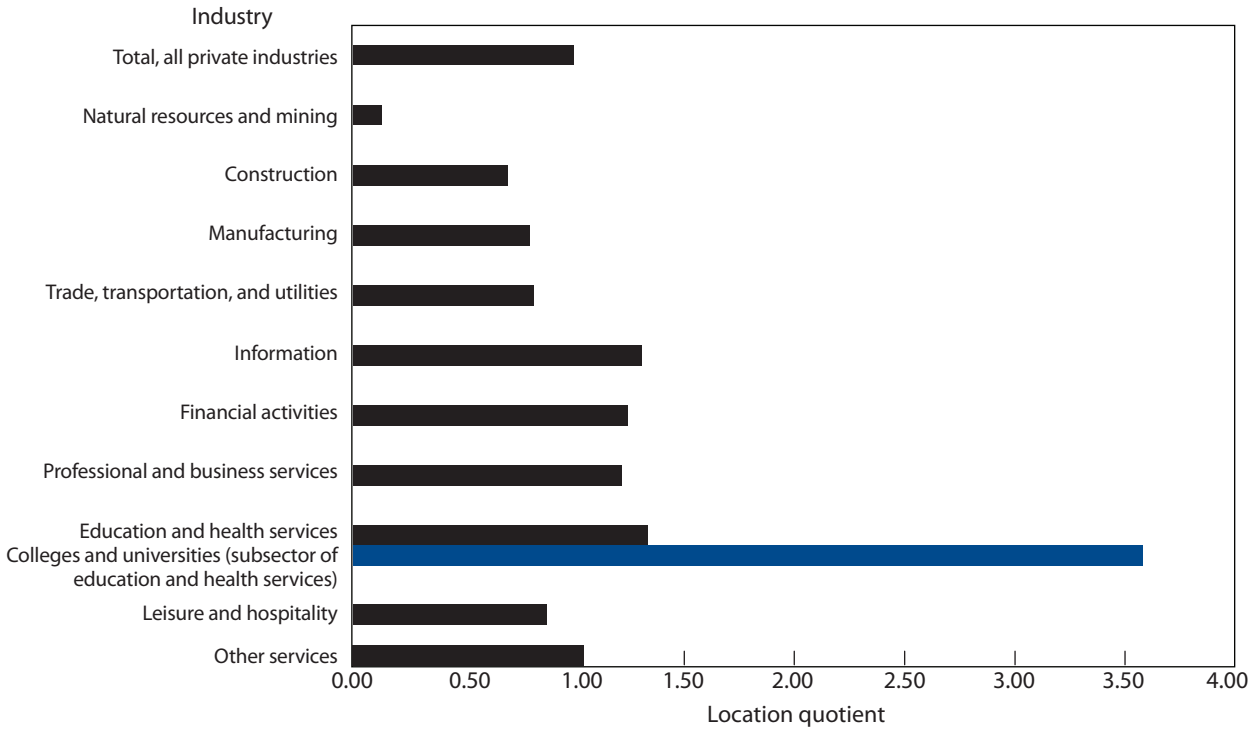
Using location quotient analysis at the supersector[7] industry level highlights those industries which are prominently concentrated in the Boston area. An examination of the 10 supersector industries in 2007 indicates that the highest concentrated industry in Boston was education and health services (location quotient = 1.34), an industry that includes not only colleges and universities, but nursing homes, hospitals, and elementary and secondary schools. (See chart 2.) In Boston, employment in this supersector was 34 percent higher than the national average.

The Boston area also had a high concentration of other knowledge-based industries, including information (location quotient = 1.31); financial activities (1.25); and professional and business services (1.22). These industries are generally regarded as knowledge-based industries with high wages. In contrast, Boston had lower-than-average concentrations in such industries as manufacturing, construction, and natural resources and mining.

Higher education wages

In 1990, total U.S. private average weekly wages were $447. (See table 1.) Massachusetts and Boston, with average weekly wages of $510 and $538, respectively, were 14 percent and 20 percent above the national average weekly wage. Massachusetts ranked fifth highest in average weekly wages among the 50 States in 1990. The average weekly wage in colleges and universities in 1990 was $458 nationally, $521 in Massachusetts, and $527 in the Boston area.

Chart 2. Location quotients in the Boston metropolitan area, by industry supersector, 2007 annual averages



Seventeen years later, in 2007, Massachusetts ranked third highest among the 50 States in the average weekly wage for private-industry workers, at $1,073. Wages for colleges and universities in Massachusetts were $1,095, slightly above the average for all private industry.

In the Boston area, where high-paying industries such as high technology, finance, and biotechnology are more concentrated, college and university wages were $1,136, slightly lower than the $1,168 average for private industry. From 1990 to 2007, private-industry wage gains were 91 percent nationally, but 110 percent in Massachusetts and 117 percent in Boston. Those working in colleges and universities saw a national average weekly pay increase of 102 percent, a gain of 110 percent in Massachusetts, and an increase of 116 percent in Boston.

In 2007, total private wages in the United States were $5.0 trillion, of which $51 billion was generated by colleges and universities. Thus, roughly 1.0 percent of all national wages was earned in colleges and universities. In contrast, total private wages in Boston were $127.5 billion, of which $4.1 billion, or 3.2 percent, were earned in higher education.

Summary

In Massachusetts and, more specifically, the Boston metropolitan area, colleges and universities have exerted an important positive influence on the local and regional labor market economies. Compared with the Nation and the largest metropolitan areas in the country, Boston has the highest industry concentration, or location quotient, for colleges and universities, both in 2007 and historically back to 1990.

Colleges and universities have a measurable economic impact in Boston. Over the 17-year period examined, they acted as a powerful job generator, with job growth roughly twice the rate for total private industry. Boston area colleges and universities' total wages as a proportion of total private wages were 3.2 percent, compared with 1.0 percent nationally. In addition, colleges and universities have a powerful economic impact by improving the quality of the labor force. As a result, the Boston area's highly educated labor force continues to attract knowledge-based industries such as high technology, biotechnology, and financial services. These industries have high wages, generate jobs faster than overall job growth does, and attract much-needed venture capital funds required to sustain the area's prominence as a center for higher education and research. □

Notes

[1] According to the BLS Quarterly Census of Employment and Wages (QCEW), the Boston metropolitan area is defined as all cities and towns in the Boston-Cambridge-Quincy, MA-NH, Metropolitan Statistical Area, which includes the Boston-Quincy, MA, Metropolitan Division—Norfolk, Plymouth, and Suffolk Counties; Cambridge-Newton-Framingham, MA, Metropolitan Division—Middlesex County; Essex County, MA, Metropolitan Division—Essex County; and Rockingham County-Strafford County, NH, Metropolitan Division—Rockingham and Strafford Counties.

[2] 1990 was chosen because it was the earliest year that the QCEW used the North American Industry Classification System (NAICS) code 611310, which includes all private 4-year colleges, universities, and professional schools (for example, business administration, dental, law, and medical schools), as well as theological seminaries, that grant baccalaureate or graduate degrees.

[3] A location quotient is the ratio of the concentration of a resource or activity, such as employment, in a defined area, such as a State, to the concentration of the same resource or activity in a larger area, such as the Nation. The national location quotient for each industry is always 1.0. (For more on location quotients, see "Quarterly Census of Employment and Wages: Location Quotient Calculator," on the Interntet at **www.bls.gov/cew/cewlq.htm**, visited June 19, 2009.)

[4] Educational attainment data are from the U.S. Census Bureau's American Community Survey, 2007.

[5] According to Dow Jones VentureSource.

[6] According to the U.S. Patent Trademark Office.

[7] Under NAICS, the industrial composition and organization of industries are defined by the type of activity or sector they are engaged in. The analysis presented in this report uses the BLS standard for sector aggregation at the two-digit level, of which there are 11 "supersectors": natural resources and mining; construction; manufacturing; trade, transportation, and utilities; information; financial activities; professional and business services; educational and health services; leisure and hospitality; other services; and government. This report excludes the government supersector.

The life of Frances Perkins

The Woman Behind the New Deal: The Life of Frances Perkins, FDR's Secretary of Labor and His Moral Conscience. By Kirstin Downey, New York, NY, Doubleday, 2009, 458 pp., $35.00/ hardback.

In a captivating style Kirstin Downey has told a tale of moral complexity that transcends fictional drama. A real life experience, it is not limited by the author's imagination. The author chronicles one of the historic struggles that shaped our nation as she demonstrates what these changes owe the individuals who brought them about.

In the first six chapters of the book Downey describes Frances Perkins' struggles in life as an independent woman. The formative years of Perkins' young adult life seemed almost destined to result in her achievements as a cabinet official during the transforming era of the Great Depression. Reminiscent of the John Adams described in James Grant's biography, it is in the interplay between her values and her life experiences that were forged the idealism that led to Perkins' confrontation with inadequate governmental institutions.

After graduating from Mount Holyoke, Perkins had been unable to find work until she received an offer to teach at a woman's college in Lake Forest, Illinois. It provided her an opportunity to leave behind the socially conventional milieu of a merchant's daughter in Worcester, Massachusetts; she reinvented herself by changing her first name (to Frances) and her faith (to Episcopalian). Whatever worldly advantage this move to a new faith gave her, for she was also a bit of a social climber who did what it took to advance her agenda, she remained committed to the Episcopalian church until the end of her days. Meanwhile, Perkins escaped the finishing school atmosphere of the school by absorbing nearby Chicago in its notorious turn of the century heyday. She learned from the radical feminist Florence Kelley, who remained her mentor, and Jane Addams, founder of Hull House, a leading "settlement house" which had the implementation of social reform as its goal.

Perkins was ever mindful that she was a direct descendant of Revolutionary War patriot James Otis, who had railed against taxation without representation. The event which transformed her from social reformer to social activist was when she witnessed the Triangle Shirtwaist fire. Her leadership role in investigating its cause led to an appointment as Director of the Committee on Safety that established fire regulations, particularly as they concerned worker safety. A woman of abounding energy, Perkins was fearless in the face of intellectual and physical challenges. She entered into the world of political reality by recognizing in notorious Tammany Hall the ability to make things happen on behalf of its constituency. Consequently, she marched into the cigar chomping all male den of its headquarters and demanded to see the man in charge. She came armed with facts and figures. In addition to her work on fire laws, she championed a fifty-four hour work week for women factory workers. The legislation passed at her instigation by allowing a compromise on an exemption for cannery workers. Her perfectionist social worker colleagues were angry, but she had learned to compromise to get things done and the following year was rewarded by seeing the cannery workers included as well.

Frances Perkins earned her appointment as the first female cabinet member in U.S. history and FDR's only Labor Secretary as a result of these successes. Perkins became the impetus while FDR understood the need, and together they had the political skill to propose and shepherd legislation to successful outcomes. Their close collaboration was instrumental in the passage of landmark Social Security, Fair Labor Standards, and other safety net legislation. FDR had first learned of her extraordinary competence when she served him as Industrial Commissioner of New York State. Her brilliance as a government official centered on her unusual effectiveness in persuading others of the merits of her well conceived and rehearsed agenda. This quality was one Perkins also sought in her appointments, notably that of Isador Lubin (whom she named Commissioner of Labor Statistics in 1933 shortly after she became Labor Secretary).

Family considerations were another important factor that shaped Frances Perkins' life. At age thirty three she married a socially prominent, urbane man four years her senior. Chapters seven through nine in the book detail the heartbreaks that followed this seemingly 'good match.' Her husband ran through his fortune by increasingly bizarre behavior that was clinically diagnosed as manic depression. Their daughter was later to suffer the same illness. Isolated emotionally from family ties, Perkins was forced by necessity to become decision maker and breadwinner for her husband and daughter.

Mary Rumsey and Frances Perkins shared a home in Washington D.C. when Mary became a widow and Frances' husband needed hospital care.

They entertained extensively, a life style that suited the Franklin Delano Roosevelt administration. A good deal of legislative business was handled in these entertainments. Downey cites an instance in which a Supreme Court justice guest tipped off Perkins that the taxing power of the Federal Government could be used to ensure that State unemployment compensation met national standards. In a 5–4 decision the court upheld the constitutionality of this provision of the Social Security Act.

In her closing chapters Downey recounts Perkins' work on the U.S. Civil Service Commission from 1946 to 1952 and the offer Perkins accepted to join Cornell University's fledgling Industrial and Labor Relations School. While the Cornell position appeared to be to her liking, the Civil Service Commission job was not commensurate with her experience as Labor Secretary; Perkins had hoped to be appointed head of the Social Security Administration. She was clearly disheartened by both the lack of recognition and by being told that the other cabinet members did not wish to work with her because she was a woman… that her mere presence made them uncomfortable.

Kirstin Downey has written an excellent book about a page turning political history which needs to be read. Frances Perkins was a pioneer in shaping the world we know. Her personal life was full of sorrow. Her professional life was a constant struggle whose triumphs were often rewarded with hostility. Downey shows us what it costs to be the catalyst that recasts societal values in a resistant world.

—Solidelle Wasser
New York Region
Bureau of Labor Statistics

Wanted: Book Reviewers

Interested in reviewing a book for the *Monthly Labor Review*? We have a number of books by distinguished authors on economics, industrial relations, other social sciences, and related issues waiting to be reviewed. If you have good writing skills and/or experience, then please contact us via E-mail at mlr@bls.gov

Immigrants' occupations and earnings

Numerous studies have analyzed the effects that education and work experience have on the earnings of immigrants in the United States. However, most of these studies do not include variables for occupations in their equations. The article "Earnings and Occupational Attainment among Immigrants" (Industrial Relations, July 2009), by Barry R. Chiswick and Paul W. Miller, in contrast, is one that views earnings and occupation as two imperfect measures of labor-market outcome. The authors believe that education has not only a direct effect on earnings, but also an indirect effect that operates through the occupation in which a given immigrant works. Their article uses data from the 2000 U.S. Census on foreign-born males aged 25–64. The data include information on 23 major occupational groups and 509 occupations.

Controlling for major occupational group, Chiswick and Miller find that about 40 percent of the rise in earnings associated with additional schooling stems from entrance into a better paying major occupational group; the rest stems from attaining higher earnings within the group. Controlling separately for both major occupational group and for occupation, the authors also discover that a larger amount of work experience prior to immigration is associated with immigrants working in lower paying jobs in the United States. This appears to result from the difficulty in transferring job skills from one country to another. This explanation is consistent with the fact that the negative effect of experience in a foreign labor market is relatively stronger among higher paying occupations. Most growth in earnings achieved by immigrants comes from increases in earnings within an occupation.

A greater number of years spent in the United States is associated with higher earnings, but only when not controlling for English-language ability—a finding which highlights the importance of English skills in obtaining a job that pays well. In fact, the association between better English skills and greater pay is found to be highly statistically significant. It also appears that access to higher paying occupations is based primarily on educational attainment as opposed to work experience. On the whole, an immigrant appears to be most likely to obtain a high salary in a more lucrative occupation if he is highly educated, immigrates as early as possible, and becomes proficient in English as quickly as possible. □

We are interested in your feedback on this column. Please let us know what you have found most interesting and what essential reading we may have missed. Write to: Executive Editor, Monthly Labor Review, Bureau of Labor Statistics, Washington, DC. 20212, or e-mail MLR@bls.gov

Current Labor Statistics
Monthly Labor Review
June 2009

NOTE: Many of the statistics in the following pages were subsequently revised. These pages have not been updated to reflect the revisions.

To obtain BLS data that reflect all revisions, see http://www.bls.gov/data/home.htm

For the latest set of "Current Labor Statistics," see http://www.bls.gov/opub/mlr/curlabst.htm

Notes on Current Labor Statistics

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of current and past experiences. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 and seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 are revised in the March 2007 *Review.* A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 54 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings.* Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

www.bls.gov/cps/

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

www.bls.gov/ces/

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment.*

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95,* BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments;* and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

www.bls.gov/lpc/

For additional information on international comparisons data, see *International Comparisons of Unemployment,* Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry,* a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2. Measures of rates of change of compensation and wages from the Employment Cost Index

program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–29)

Household survey data

Description of the series

Employment data in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 60,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*. For a discussion of changes introduced in January 2003, see "Revisions to the Current Population Survey Effective in January 2003" in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at **www.bls.gov/cps/rvcps03.pdf**).

Effective in January 2003, BLS began using the X-12 ARIMA seasonal adjustment program to seasonally adjust national labor force data. This program replaced the X-11 ARIMA program which had been used since January 1980. See "Revision of Seasonally Adjusted Labor Force Series in 2003," in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at **www.bls.gov/cps/cpsrs.pdf**) for a discussion of the introduction of the use of X-12 ARIMA for seasonal adjustment of the labor force data and the effects that it had on the data.

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

Employment, hours, and earnings data in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 160,000 businesses and government agencies, which represent approximately 400,000 individual worksites and represent all industries except agriculture. The active CES sample covers approximately one-third of all nonfarm payroll workers. Industries are classified in accordance with the 2002 North American Industry Classification System. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in the goods-producing industries cover employees, up through the level of working supervisors, who engage directly in the manufacture or construction of the establishment's product. In private service-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those

workers mentioned in tables 11–16 include production workers in manufacturing and natural resources and mining; construction workers in construction; and nonsupervisory workers in all private service-providing industries. Production and nonsupervisory workers account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Table 17 provides an index on private nonfarm employment based on 278 industries, and a manufacturing index based on 84 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The March 2003 benchmark was introduced in February 2004 with the release of data for January 2004, published in the March 2004 issue of the *Review.* With the release in June 2003, CES completed a conversion from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) and completed the transition from its original quota sample design to a probability-based sample design. The industry-coding update included reconstruction of historical estimates in order to preserve time series for data users. Normally 5 years of seasonally adjusted data are revised with each benchmark revision. However, with this release, the entire new time series history for all CES data series were re-seasonally adjusted due to the NAICS conversion, which resulted in the revision of all CES time series.

Also in June 2003, the CES program introduced concurrent seasonal adjustment for the national establishment data. Under this methodology, the first preliminary estimates for the current reference month and the revised estimates for the 2 prior months will be updated with concurrent factors with each new release of data. Concurrent seasonal adjustment incorporates all available data, including first preliminary estimates for the most current month, in the adjustment process. For additional information on all of the changes introduced in June 2003, see the June 2003 issue of *Employment and Earnings* and "Recent changes in the national Current Employment Statistics survey," *Monthly Labor Review,* June 2003, pp. 3–13.

Revisions in State data (table 11) occurred with the publication of January 2003 data. For information on the revisions for the State data, see the March and May 2003 issues of *Employment and Earnings*, and "Recent changes in the State and Metropolitan Area CES survey," *Monthly Labor Review*, June 2003, pp. 14–19.

Beginning in June 1996, the BLS uses the X-12-ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review).* When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are published as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Current Employment Statistics: (202) 691–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Quarterly Census of Employment and Wages

Description of the series

Employment, wage, and establishment data in this section are derived from the quarterly tax reports submitted to State employment security agencies by private and State and local government employers subject to State unemployment insurance (UI) laws and from Federal, agencies subject to the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, State agencies edit and process the data and send the information to the Bureau of Labor Statistics.

The Quarterly Census of Employment and Wages (QCEW) data, also referred as ES-202 data, are the most complete enumeration of employment and wage information by industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor

market trends and major industry developments.

Definitions

In general, the Quarterly Census of Employment and Wages monthly employment data represent the number of **covered workers** who worked during, or received pay for, the pay period that included the 12th day of the month. **Covered private industry employment** includes most corporate officials, executives, supervisory personnel, professionals, clerical workers, wage earners, piece workers, and part-time workers. It excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm and domestic workers. Certain types of nonprofit employers, such as religious organizations, are given a choice of coverage or exclusion in a number of States. Workers in these organizations are, therefore, reported to a limited degree.

Persons on paid sick leave, paid holiday, paid vacation, and the like, are included. Persons on the payroll of more than one firm during the period are counted by each UI-subject employer if they meet the employment definition noted earlier. The employment count excludes workers who earned no wages during the entire applicable pay period because of work stoppages, temporary layoffs, illness, or unpaid vacations.

Federal employment data are based on reports of monthly employment and quarterly wages submitted each quarter to State agencies for all Federal installations with employees covered by the Unemployment Compensation for Federal Employees (UCFE) program, except for certain national security agencies, which are omitted for security reasons. Employment for all Federal agencies for any given month is based on the number of persons who worked during or received pay for the pay period that included the 12th of the month.

An **establishment** is an economic unit, such as a farm, mine, factory, or store, that produces goods or provides services. It is typically at a single physical location and engaged in one, or predominantly one, type of economic activity for which a single industrial classification may be applied. Occasionally, a single physical location encompasses two or more distinct and significant activities. Each activity should be reported as a separate establishment if separate records are kept and the various activities are classified under different NAICS industries.

Most employers have only one establishment; thus, the establishment is the predominant reporting unit or statistical entity for reporting employment and wages data. Most employers, including State and local governments who operate more than one establishment in a State, file a Multiple Worksite Report each quarter, in addition to their quarterly UI report. The Multiple Worksite Report is used to collect separate employment and wage data for each of the employer's establishments, which are not detailed on the UI report. Some very small multi-establishment employers do not file a Multiple Worksite Report. When the total employment in an employer's secondary establishments (all establishments other than the largest) is 10 or fewer, the employer generally will file a consolidated report for all establishments. Also, some employers either cannot or will not report at the establishment level and thus aggregate establishments into one consolidated unit, or possibly several units, though not at the establishment level.

For the Federal Government, the reporting unit is the **installation**: a single location at which a department, agency, or other government body has civilian employees. Federal agencies follow slightly different criteria than do private employers when breaking down their reports by installation. They are permitted to combine as a single statewide unit: 1) all installations with 10 or fewer workers, and 2) all installations that have a combined total in the State of fewer than 50 workers. Also, when there are fewer than 25 workers in all secondary installations in a State, the secondary installations may be combined and reported with the major installation. Last, if a Federal agency has fewer than five employees in a State, the agency headquarters office (regional office, district office) serving each State may consolidate the employment and wages data for that State with the data reported to the State in which the headquarters is located. As a result of these reporting rules, the number of reporting units is always larger than the number of employers (or government agencies) but smaller than the number of actual establishments (or installations).

Data reported for the first quarter are tabulated into **size** categories ranging from worksites of very small size to those with 1,000 employees or more. The size category is determined by the establishment's March employment level. It is important to note that each establishment of a multi-establishment firm is tabulated separately into the appropriate size category. The total employment level of the reporting multi-establishment firm is not used in the size tabulation.

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

Covered employer contributions for old-age, survivors, and disability insurance (OASDI), health insurance, unemployment insurance, workers' compensation, and private pension and welfare funds are not reported as wages. Employee contributions for the same purposes, however, as well as money withheld for income taxes, union dues, and so forth, are reported even though they are deducted from the worker's gross pay.

Wages of covered Federal workers represent the gross amount of all payrolls for all pay periods ending within the quarter. This includes cash allowances, the cash equivalent of any type of remuneration, severance pay, withholding taxes, and retirement deductions. Federal employee remuneration generally covers the same types of services as for workers in private industry.

Average annual wage per employee for any given industry are computed by dividing total annual wages by annual average employment. A further division by 52 yields average weekly wages per employee. Annual pay data only approximate annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer at a time.

Average weekly or annual wage is affected by the ratio of full-time to part-time workers as well as the number of individuals in high-paying and low-paying occupations. When average pay levels between States and industries are compared, these factors should be taken into consideration. For example, industries characterized by high proportions of part-time workers will show average wage levels appreciably less than the weekly pay levels of regular full-time employees in these industries. The opposite effect characterizes industries with low proportions of part-time workers, or industries that typically schedule heavy weekend and overtime work. Average wage data also may be influenced by work stoppages, labor turnover rates, retroactive payments, seasonal factors, bonus payments, and so on.

Notes on the data

Beginning with the release of data for 2001, publications presenting data from the Covered Employment and Wages program have switched to the 2002 version of the North American Industry Classification System

(NAICS) as the basis for the assignment and tabulation of economic data by industry. NAICS is the product of a cooperative effort on the part of the statistical agencies of the United States, Canada, and Mexico. Due to difference in NAICS and Standard Industrial Classification (SIC) structures, industry data for 2001 is not comparable to the SIC-based data for earlier years.

Effective January 2001, the program began assigning Indian Tribal Councils and related establishments to local government ownership. This BLS action was in response to a change in Federal law dealing with the way Indian Tribes are treated under the Federal Unemployment Tax Act. This law requires federally recognized Indian Tribes to be treated similarly to State and local governments. In the past, the Covered Employment and Wage (CEW) program coded Indian Tribal Councils and related establishments in the private sector. As a result of the new law, CEW data reflects significant shifts in employment and wages between the private sector and local government from 2000 to 2001. Data also reflect industry changes. Those accounts previously assigned to civic and social organizations were assigned to tribal governments. There were no required industry changes for related establishments owned by these Tribal Councils. These tribal business establishments continued to be coded according to the economic activity of that entity.

To insure the highest possible quality of data, State employment security agencies verify with employers and update, if necessary, the industry, location, and ownership classification of all establishments on a 3-year cycle. Changes in establishment classification codes resulting from the verification process are introduced with the data reported for the first quarter of the year. Changes resulting from improved employer reporting also are introduced in the first quarter. For these reasons, some data, especially at more detailed geographic levels, may not be strictly comparable with earlier years.

County definitions are assigned according to Federal Information Processing Standards Publications as issued by the National Institute of Standards and Technology. Areas shown as counties include those designated as independent cities in some jurisdictions and, in Alaska, those areas designated by the Census Bureau where counties have not been created. County data also are presented for the New England States for comparative purposes, even though townships are the more common designation used in New England (and New Jersey).

The Office of Management and Budget (OMB) defines metropolitan areas for use in Federal statistical activities and updates these definitions as needed. Data in this table use metropolitan area criteria established by OMB in definitions issued June 30, 1999 (OMB Bulletin No. 99-04). These definitions reflect information obtained from the 1990 Decennial Census and the 1998 U.S. Census Bureau population estimate. A complete list of metropolitan area definitions is available from the National Technical Information Service (NTIS), Document Sales, 5205 Port Royal Road, Springfield, Va. 22161, telephone 1-800-553-6847.

OMB defines metropolitan areas in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. New England data in this table, however, are based on a county concept defined by OMB as New England County Metropolitan Areas (NECMA) because county-level data are the most detailed available from the Quarterly Census of Employment and Wages. The NECMA is a county-based alternative to the city- and town-based metropolitan areas in New England. The NECMA for a Metropolitan Statistical Area (MSA) include: (1) the county containing the first-named city in that MSA title (this county may include the first-named cities of other MSA, and (2) each additional county having at least half its population in the MSA in which first-named cities are in the county identified in step 1. The NECMA is officially defined areas that are meant to be used by statistical programs that cannot use the regular metropolitan area definitions in New England.

For additional information on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691–6567.

Job Openings and Labor Turnover Survey

Description of the series

Data for the **Job Openings and Labor Turnover Survey** (JOLTS) are collected and compiled from a sample of 16,000 business establishments. Each month, data are collected for total employment, job openings, hires, quits, layoffs and discharges, and other separations. The JOLTS program covers all private nonfarm establishments such as factories, offices, and stores, as well as Federal, State, and local government entities in the 50 States and the District of Columbia. The JOLTS sample design is a random sample drawn from a universe of more than eight million establishments compiled as part of the operations of the Quarterly Census of Employment and Wages, or QCEW, program. This program includes all employers subject to State unemployment insurance (UI) laws and Federal agencies subject to Unemployment Compensation for Federal Employees (UCFE).

The sampling frame is stratified by ownership, region, industry sector, and size class. Large firms fall into the sample with virtual certainty. JOLTS total employment estimates are controlled to the employment estimates of the Current Employment Statistics (CES) survey. A ratio of CES to JOLTS employment is used to adjust the levels for all other JOLTS data elements. Rates then are computed from the adjusted levels.

The monthly JOLTS data series begin with December 2000. Not seasonally adjusted data on job openings, hires, total separations, quits, layoffs and discharges, and other separations levels and rates are available for the total nonfarm sector, 16 private industry divisions and 2 government divisions based on the North American Industry Classification System (NAICS), and four geographic regions. Seasonally adjusted data on job openings, hires, total separations, and quits levels and rates are available for the total nonfarm sector, selected industry sectors, and four geographic regions.

Definitions

Establishments submit **job openings** infor-mation for the last business day of the reference month. A job opening requires that (1) a specific position exists and there is work available for that position; and (2) work could start within 30 days regardless of whether a suitable candidate is found; and (3) the employer is actively recruiting from outside the establishment to fill the position. Included are full-time, part-time, permanent, short-term, and seasonal openings. Active recruiting means that the establishment is taking steps to fill a position by advertising in newspapers or on the Internet, posting help-wanted signs, accepting applications, or using other similar methods.

Jobs to be filled only by internal transfers, promotions, demotions, or recall from layoffs are excluded. Also excluded are jobs with start dates more than 30 days in the future, jobs for which employees have been hired but have not yet reported for work, and jobs to be filled by employees of temporary help agencies, employee leasing companies, outside contractors, or consultants. The job openings rate is computed by dividing the number of job openings by the sum of employment and job openings, and multiplying that quotient by 100.

Hires are the total number of additions

to the payroll occurring at any time during the reference month, including both new and rehired employees and full-time and part-time, permanent, short-term and seasonal employees, employees recalled to the location after a layoff lasting more than 7 days, on-call or intermittent employees who returned to work after having been formally separated, and transfers from other locations. The hires count does not include transfers or promotions within the reporting site, employees returning from strike, employees of temporary help agencies or employee leasing companies, outside contractors, or consultants. The hires rate is computed by dividing the number of hires by employment, and multiplying that quotient by 100.

Separations are the total number of terminations of employment occurring at any time during the reference month, and are reported by type of separation—quits, layoffs and discharges, and other separations. Quits are voluntary separations by employees (except for retirements, which are reported as other separations). Layoffs and discharges are involuntary separations initiated by the employer and include layoffs with no intent to rehire, formal layoffs lasting or expected to last more than 7 days, discharges resulting from mergers, downsizing, or closings, firings or other discharges for cause, terminations of permanent or short-term employees, and terminations of seasonal employees. Other separations include retirements, transfers to other locations, deaths, and separations due to disability. Separations do not include transfers within the same location or employees on strike.

The separations rate is computed by dividing the number of separations by employment, and multiplying that quotient by 100. The quits, layoffs and discharges, and other separations rates are computed similarly, dividing the number by employment and multiplying by 100.

Notes on the data

The JOLTS data series on job openings, hires, and separations are relatively new. The full sample is divided into panels, with one panel enrolled each month. A full complement of panels for the original data series based on the 1987 Standard Industrial Classification (SIC) system was not completely enrolled in the survey until January 2002. The supple-mental panels of establishments needed to create NAICS estimates were not completely enrolled until May 2003. The data collected up until those points are from less than a full sample. Therefore, estimates from earlier months should be used with caution, as fewer sampled units were reporting data at that time.

In March 2002, BLS procedures for collecting hires and separations data were revised to address possible underreporting. As a result, JOLTS hires and separations estimates for months prior to March 2002 may not be comparable with estimates for March 2002 and later.

The Federal Government reorganization that involved transferring approximately 180,000 employees to the new Department of Homeland Security is not reflected in the JOLTS hires and separations estimates for the Federal Government. The Office of Personnel Management's record shows these transfers were completed in March 2003. The inclusion of transfers in the JOLTS definitions of hires and separations is intended to cover ongoing movements of workers between establishments. The Department of Homeland Security reorganization was a massive one-time event, and the inclusion of these intergovernmental transfers would distort the Federal Government time series.

Data users should note that seasonal adjustment of the JOLTS series is conducted with fewer data observations than is customary. The historical data, therefore, may be subject to larger than normal revisions. Because the seasonal patterns in economic data series typically emerge over time, the standard use of moving averages as seasonal filters to capture these effects requires longer series than are currently available. As a result, the stable seasonal filter option is used in the seasonal adjustment of the JOLTS data. When calculating seasonal factors, this filter takes an average for each calendar month after detrending the series. The stable seasonal filter assumes that the seasonal factors are fixed; a necessary assumption until sufficient data are available. When the stable seasonal filter is no longer needed, other program features also may be introduced, such as outlier adjustment and extended diagnostic testing. Additionally, it is expected that more series, such as layoffs and discharges and additional industries, may be seasonally adjusted when more data are available.

JOLTS hires and separations estimates cannot be used to exactly explain net changes in payroll employment. Some reasons why it is problematic to compare changes in payroll employment with JOLTS hires and separations, especially on a monthly basis, are: (1) the reference period for payroll employment is the pay period including the 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

FOR ADDITIONAL INFORMATION on the Job Openings and Labor Turnover Survey, contact the Division of Administrative Statistics and Labor Turnover at (202) 961–5870.

Compensation and Wage Data

(Tables 1–3; 30–37)

The National Compensation Survey (NCS) produces a variety of compensation data. These include: The Employment Cost Index (ECI) and NCS benefit measures of the incidence and provisions of selected employee benefit plans. Selected samples of these measures appear in the following tables. NCS also compiles data on occupational wages and the Employer Costs for Employee Compensation (ECEC).

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It is a Laspeyres Index that uses fixed employment weights to measure change in labor costs free from the influence of employment shifts among occupations and industries.

The ECI provides data for the civilian economy, which includes the total private nonfarm economy excluding private households, and the public sector excluding the Federal government. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Sample establishments are classified by industry categories based on the 2002 North American Classification System (NAICS). Within a sample establishment, specific job categories are selected and classified into about 800 occupations according to the 2000 Standard Occupational Classification (SOC) System. Individual occupations are combined to represent one of ten intermediate aggregations, such as professional and related occupations, or one of five higher level aggre-

gations, such as management, professional, and related occupations.

Fixed employment weights are used each quarter to calculate the most aggregate series—civilian, private, and State and local government. These fixed weights are also used to derive all of the industry and occupational series indexes. Beginning with the March 2006 estimates, 2002 fixed employment weights from the Bureau's Occupational Employment Statistics survey were introduced. From March 1995 to December 2005, 1990 employment counts were used. These fixed weights ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the series based on bargaining status, census region and division, and metropolitan area status, fixed employment data are not available. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable with those for aggregate, occupational, and industry series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The ECI data in these tables reflect the con-version to the 2002 North American Industry Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. ECI series based on NAICS and SOC became the official BLS estimates starting in March 2006.

The ECI for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (December 2005=100) are available on the Internet: **www.bls.gov/ect/**

ADDITIONAL INFORMATION on the Employment Cost Index is available at **www.bls.gov/ncs/ect/home.htm** or by telephone at (202) 691–6199.

National Compensation Survey Benefit Measures

Description of the series

NCS benefit measures of employee benefits are published in two separate reports. The annual summary provides data on the incidence of (access to and participation in) selected benefits and provisions of paid holidays and vacations, life insurance plans, and other selected benefit programs. Data on percentages of establishments offering major employee benefits, and on the employer and employee shares of contributions to medical care premiums also are presented. Selected benefit data appear in the following tables. A second publication, published later, contains more detailed information about health and retirement plans.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Employees are considered as having **access** to a benefit plan if it is available for their use. For example, if an employee is permitted to participate in a medical care plan offered by the employer, but the employee declines to do so, he or she is placed in the category with those having access to medical care.

Employees in contributory plans are considered as **participating** in an insurance or retirement plan if they have paid required contributions and fulfilled any applicable service requirement. Employees in noncontributory plans are counted as participating regardless of whether they have fulfilled the service requirements.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

ADDITIONAL INFORMATION ON THE NCS benefit measures is available at **www.bls.gov/ncs/ebs/home.htm** or by telephone at (202) 691–6199.

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 37.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of esti-

mated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

ADDITIONAL INFORMATION on work stop-pages data is available at **www. bls. gov/cba/home.htm** or by telephone at (202) 691–6199.

Price Data

(Tables 2; 38–46)

Price data are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—December 2003 = 100 for many Producer Price Indexes (unless otherwise noted), 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 39. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of homeownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION, contact the Division of Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the 2002 North American Industry Classification System and product codes developed by the U.S. Census Bureau.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods and services traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allow-

ances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification, the three-digit level for the Standard International Trade Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. The trade weights currently used to compute both indexes relate to 2000.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

FOR ADDITIONAL INFORMATION, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 47–50)

Business and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, nonenergy materials, and purchased business services.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 47–50 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity indexes measure the relationship between output and inputs for selected industries and industry groups, and thus reflect trends in industry efficiency over time. Industry measures include labor productivity, multifactor productivity, compensation, and unit labor costs.

The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series is based on the hours of all workers or, in the case of some transportation industries, on the number of employees. For most industries, the series consists of the hours of all employees. For some trade and services industries, the series also includes the hours of partners, proprietors, and unpaid family workers.

Unit labor costs represent the labor compensation costs per unit of output produced, and are derived by dividing an index of labor compensation by an index of output. **Labor compensation** includes payroll as well as supplemental payments, including both legally required expenditures and payments for voluntary programs.

Multifactor productivity is derived by dividing an index of industry output by an index of combined inputs consumed in producing that output. **Combined inputs** include capital, labor, and intermediate purchases. The measure of **capital input** represents the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories. The measure of **intermediate purchases** is a combination of purchased materials, services, fuels, and electricity.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics and the Census Bureau, with additional data supplied by other government agencies, trade associations, and other sources.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618, or visit the Web site at: **www.bls.gov/lpc/home.htm**

International Comparisons

(Tables 51–53)

Labor force and unemployment

Description of the series

Tables 51 and 52 present comparative measures of the labor force, employment, and unemployment approximating U.S. concepts for the United States, Canada, Australia, Japan, and six European countries. The Bureau adjusts the figures for these selected countries, for all known major definitional differences, to the extent that data to prepare adjustments are available. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review,* June 2000, pp. 3–20, available on the Internet at **www.bls.gov/opub/mlr/2000/06/art1full.pdf**.

Definitions

For the principal U.S. definitions of the labor force, employment, and unemployment, see the Notes section on Employment and Unemployment Data: Household survey data.

Notes on the data

Foreign country data are adjusted as closely as possible to the U.S. definitions. Primary areas of adjustment address conceptual differences in upper age limits and definitions of employment and unemployment, provided that reliable data are available to make these adjustments. Adjustments are made where applicable to include employed and unemployed persons above upper age limits; some European countries do not include persons older than age 64 in their labor force measures, because a large portion of this population has retired. Adjustments are made to exclude active duty military from employment figures, although a small number of career military may be included in some European countries. Adjustments are made to exclude unpaid family workers who worked fewer than 15 hours per week from employment figures; U.S. concepts do not include them in employment, whereas most foreign countries include all unpaid family workers regardless of the number of hours worked. Adjustments are made to include full-time students seeking work and available for work as unemployed when they are classified as not in the labor force.

Where possible, lower age limits are based on the age at which compulsory schooling ends in each country, rather than based on the U.S. standard of 16. Lower age limits have ranged between 13 and 16 over the years covered; currently, the lower age limits are either 15 or 16 in all 10 countries.

Some adjustments for comparability are not made because data are unavailable for adjustment purposes. For example, no adjustments to unemployment are usually made for deviations from U.S. concepts in the treatment of persons waiting to start a new job or passive job seekers. These conceptual differences have little impact on the measures. Furthermore, BLS studies have concluded that no adjustments should be made for persons on layoff who are counted as employed in some countries because of their strong job attachment as evidenced by, for example, payment of salary or the existence of a recall date. In the United States, persons on layoff have weaker job attachment and are classified as unemployed.

The annual labor force measures are obtained from monthly, quarterly, or continuous household surveys and may be calculated as averages of monthly or quarterly data. Quarterly and monthly unemployment rates are based on household surveys. For some countries, they are calculated by applying annual adjustment factors to current published data and, therefore, are less precise indicators of unemployment under U.S. concepts than the annual figures. The labor force measures may have breaks in series over time due to changes in surveys, sources, or estimation methods. Breaks are noted in data tables.

For up-to-date information on adjustments and breaks in series, see the Technical Notes of *Comparative Civilian Labor Force Statistics, 10 Countries*, on the Internet at **www.bls.gov/fls/flscomparelf.htm**, and the Notes of *Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted*, on the Internet at **www.bls.gov/fls/flsjec.pdf**.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654 or **flshelp@bls.gov.**

Manufacturing productivity and labor costs

Description of the series

Table 53 presents comparative indexes of manufacturing output per hour (labor productivity), output, total hours, compensation per hour, and unit labor costs for the United States, Australia, Canada, Japan, the Republic of Korea, Singapore, Taiwan, and 10 European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. BLS does *not* recommend using these series for level comparisons because of technical problems.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to employees (wage and salary earners) in Belgium and Taiwan. For all other economies, the measures refer to all employed persons, including employees, self-employed persons, and unpaid family workers.

The data for recent years are based on the United Nations System of National Accounts 1993 (SNA 93). Manufacturing is generally defined according to the International Standard Industrial Classification (ISIC). However, the measures for France include parts of mining as well. For the United States and Canada, manufacturing is defined according to the North American Industry Classification System (NAICS 97).

Definitions

Output. For most economies, the output measures are real value added in manufacturing from national accounts. However, output for Japan prior to 1970 and for the Netherlands prior to 1960 are indexes of industrial production. The manufacturing value added measures for the United Kingdom are essentially identical to their indexes of industrial production.

For United States, the output measure for the manufacturing sector is a chain-weighted index of real gross product originating (deflated value added) produced by the Bureau of Economic Analysis of the U.S. Department of Commerce. Most of the other economies now also use chain-weighted as opposed to fixed-year weights that are periodically updated.

To preserve the comparability of the U.S. measures with those of other economies, BLS uses gross product originating in manufacturing for the United States. The gross product originating series differs from the manufacturing output series that BLS publishes in its quarterly news releases on U.S. productivity and costs (and that underlies the measures that appear in tables 48 and 50 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total hours refer to hours worked in all economies. The measures are developed from statistics of manufacturing employment and average hours. For most other economies, recent years' aggregate hours series are obtained from national statistical offices, usually from national accounts. However, for some economies and for earlier years, BLS calculates the aggregate hours series using employment figures published with the national accounts, or other comprehensive employment series, and data on average hours worked.

Hourly compensation is total compensation divided by total hours. Total compensation includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. For Australia, Canada, France, Singapore, and Sweden, compensation is increased to account for important taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for subsidies.

Labor productivity is defined as real output per hour worked. Although the labor productivity measure presented in this release relates output to the hours worked of persons employed in manufacturing, it does not measure the specific contributions of labor as a single factor of production. Rather, it reflects the joint effects of many influences, including new technology, capital investment, capacity utilization, energy use, and managerial skills, as well as the skills and efforts of the workforce.

Unit labor costs are defined as the cost of labor input required to produce one unit of output. They are computed as compensation in nominal terms divided by real output. Unit labor costs can also be computed by dividing hourly compensation by output per hour, that is, by labor productivity.

Notes on the data

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, go to **http://www.bls.gov/news.release/prod4.toc.htm** or contact the Division of International Labor Comparison at (202) 691–5654.

Occupational Injury and Illness Data

(Tables 54–55)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both,

because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at: **www.bls. gov/iif/**

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses,which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at: **www.bls.gov/iif/**

1. Labor market indicators

Selected indicators	2007	2008	2007				2008				2009
			I	II	III	IV	I	II	III	IV	I
Employment data											
Employment status of the civilian noninstitutional population (household survey):[1]											
Labor force participation rate	66.0	66.0	65.9	66.6	66.0	65.9	65.7	66.6	65.9	65.7	65.4
Employment-population ratio	63.0	62.2	62.9	63.4	63.0	62.8	62.3	62.8	62.0	61.0	59.5
Unemployment rate	4.6	5.8	4.5	4.5	4.7	4.8	4.9	5.4	6.0	6.9	8.1
Men	4.7	6.1	4.6	4.6	4.8	4.9	5.1	5.6	6.5	7.5	8.8
16 to 24 years	11.6	14.4	10.8	11.5	11.8	12.1	12.7	13.5	14.9	16.5	18.0
25 years and older	3.6	4.8	3.6	3.5	3.6	3.7	3.9	4.2	5.1	6.0	7.4
Women	4.5	5.4	4.4	4.4	4.6	4.7	4.8	5.1	5.6	6.1	7.2
16 to 24 years	9.4	11.2	9.1	9.0	9.7	9.9	10.1	11.1	11.9	11.6	12.9
25 years and older	3.6	4.4	3.5	3.6	3.7	3.8	3.9	4.1	4.5	5.2	6.2
Employment, nonfarm (payroll data), in thousands: [1]											
Total nonfarm	137,598	137,066	137,400	137,645	137,652	138,152	137,814	137,356	136,732	135,074	133,019
Total private	115,380	114,566	115,250	115,400	115,389	115,783	115,373	114,834	114,197	112,542	110,481
Goods-producing	22,233	21,419	22,392	22,289	22,099	22,043	21,800	21,507	21,247	20,532	19,537
Manufacturing	13,879	13,431	13,966	13,889	13,796	13,777	13,643	13,505	13,322	12,902	12,310
Service-providing	115,366	115,646	115,008	115,356	115,553	116,109	116,014	115,849	115,485	114,542	113,482
Average hours:											
Total private	33.9	33.6	33.9	33.9	33.8	33.8	33.8	33.6	33.6	33.3	33.2
Manufacturing	41.2	40.8	41.2	41.3	41.3	41.2	41.2	40.9	40.5	39.9	39.3
Overtime	4.2	3.7	4.3	4.3	4.1	4.1	4.0	3.8	3.5	2.9	2.7
Employment Cost Index[1, 2, 3]											
Total compensation:											
Civilian nonfarm[4]	3.3	2.6	.9	.8	1.0	.6	.8	.7	.8	.3	.4
Private nonfarm	3.0	2.4	.8	.9	.8	.6	.9	.7	.6	.2	.4
Goods-producing[5]	2.4	2.4	.4	1.0	.5	.6	1.0	.7	.4	.3	.4
Service-providing[5]	3.2	2.5	.9	.9	.9	.6	.9	.7	.6	.3	.4
State and local government	4.1	3.0	1.0	.6	1.8	.7	.5	.5	1.7	.3	.6
Workers by bargaining status (private nonfarm):											
Union	2.0	2.8	-.3	1.2	.5	.7	.8	.8	.7	.6	1.0
Nonunion	3.2	2.4	1.0	.9	.8	.6	.9	.7	.6	.2	.3

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

[4] Excludes Federal and private household workers.

[5] Goods-producing industries include mining, construction, and manufacturing. Service-providing industries include all other private sector industries.

NOTE: Beginning in January 2003, household survey data reflect revised population controls. Nonfarm data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC based data.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	2007	2008	2007				2008				2009
			I	II	III	IV	I	II	III	IV	I
Compensation data[1, 2, 3]											
Employment Cost Index—compensation:											
Civilian nonfarm	3.3	2.6	0.9	0.8	1.0	0.6	0.8	0.7	0.8	0.3	0.4
Private nonfarm	3.0	2.4	.8	.9	.8	.6	.9	.7	.6	.2	.4
Employment Cost Index—wages and salaries:											
Civilian nonfarm	3.4	2.7	1.1	.7	1.0	.7	.8	.7	.8	.3	.4
Private nonfarm	3.3	2.6	1.1	.8	.9	.6	.9	.7	.6	.3	.4
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	2.8	3.8	1.8	1.5	.1	.7	1.7	2.5	0	-3.9	1.2
Producer Price Index:											
Finished goods	3.9	6.3	2.2	1.9	.1	1.8	2.8	4.2	-.1	-7.4	.1
Finished consumer goods	4.5	7.4	2.8	2.5	.2	1.9	3.4	5.2	-.4	-9.9	.1
Capital equipment	1.8	2.8	.3	-.1	-.1	1.2	.7	.6	1.0	1.6	.2
Intermediate materials, supplies, and components	4.1	10.5	1.5	3.2	.1	2.0	5.0	6.9	.7	-13.0	-2.7
Crude materials	12.1	21.5	5.7	3.8	-2.4	11.9	14.5	14.9	-15.6	-32.5	-6.9
Productivity data[4]											
Output per hour of all persons:											
Business sector	1.6	2.7	-.7	5.7	7.3	-1.1	2.2	4.7	2.3	-.5	1.1
Nonfarm business sector	1.4	2.8	-.6	4.8	7.0	-.5	2.6	4.7	2.2	-.6	.8
Nonfinancial corporations[5]	.7	-	-.6	3.8	3.0	1.2	-.4	8.5	6.4	-3.9	-

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

[4] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[5] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly change					Four quarters ending—				
	2008				2009	2008				2009
	I	II	III	IV	I	I	II	III	IV	I
Average hourly compensation: [1]										
All persons, business sector	3.5	1.9	5.7	4.9	4.1	3.5	3.4	3.7	4.0	4.1
All persons, nonfarm business sector	3.7	1.7	5.7	5.2	4.1	3.5	3.6	3.9	4.1	4.2
Employment Cost Index—compensation: [2]										
Civilian nonfarm[3]	.8	.7	.8	.3	.4	3.3	3.1	2.9	2.6	2.1
Private nonfarm	.9	.7	.6	.2	.4	3.2	3.0	2.8	2.4	1.9
Union	.8	.8	.7	.6	1.0	3.1	2.7	2.9	2.8	3.0
Nonunion	.9	.7	.6	.2	.3	3.2	3.0	2.8	2.4	1.8
State and local government	.5	.5	1.7	.3	.6	3.6	3.5	3.4	3.0	3.1
Employment Cost Index—wages and salaries: [2]										
Civilian nonfarm[3]	.8	.7	.8	.3	.4	3.2	3.2	3.1	2.7	2.2
Private nonfarm	.9	.7	.6	.3	.4	3.2	3.1	2.9	2.6	2.0
Union	.8	1.1	.7	.7	.6	2.6	2.9	2.9	3.2	3.1
Nonunion	.9	.7	.6	.2	.4	3.3	3.2	3.0	2.5	1.9
State and local government	.6	.5	1.8	.3	.5	3.5	3.4	3.5	3.1	3.0

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

[3] Excludes Federal and private household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
TOTAL															
Civilian noninstitutional population[1]	231,867	233,788	233,198	233,405	233,627	233,864	234,107	234,360	234,612	234,828	235,035	234,739	234,913	235,086	235,271
Civilian labor force	153,124	154,287	153,932	154,510	154,400	154,506	154,823	154,621	154,878	154,620	154,447	153,716	154,214	154,048	154,731
Participation rate	66.0	66.0	66.0	66.2	66.1	66.1	66.1	66.0	66.0	65.8	65.7	65.5	65.6	65.5	65.8
Employed	146,047	145,362	146,257	145,974	145,738	145,596	145,273	145,029	144,657	144,144	143,338	142,099	141,748	140,887	141,007
Employment-population ratio[2]	63.0	62.2	62.7	62.5	62.4	62.3	62.1	61.9	61.7	61.4	61.0	60.5	60.3	59.9	59.9
Unemployed	7,078	8,924	7,675	8,536	8,662	8,910	9,550	9,592	10,221	10,476	11,108	11,616	12,467	13,161	13,724
Unemployment rate	4.6	5.8	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5	8.9
Not in the labor force	78,743	79,501	79,267	78,895	79,227	79,358	79,284	79,739	79,734	80,208	80,588	81,023	80,699	81,038	80,541
Men, 20 years and over															
Civilian noninstitutional population[1]	103,555	104,453	104,152	104,258	104,371	104,490	104,613	104,741	104,869	104,978	105,083	104,902	104,999	105,095	105,196
Civilian labor force	78,596	79,047	78,820	78,913	79,055	79,286	79,308	79,392	79,380	79,335	78,998	78,585	78,687	78,578	79,081
Participation rate	75.9	75.7	75.7	75.7	75.7	75.9	75.8	75.8	75.7	75.6	75.2	74.9	74.9	74.8	75.2
Employed	75,337	74,750	75,147	74,992	74,949	74,973	74,737	74,503	74,292	74,045	73,285	72,613	72,293	71,655	71,678
Employment-population ratio[2]	72.8	71.6	72.2	71.9	71.8	71.8	71.4	71.1	70.8	70.5	69.7	69.2	68.9	68.2	68.1
Unemployed	3,259	4,297	3,673	3,921	4,106	4,313	4,572	4,889	5,088	5,290	5,714	5,972	6,394	6,923	7,403
Unemployment rate	4.1	5.4	4.7	5.0	5.2	5.4	5.8	6.2	6.4	6.7	7.2	7.6	8.1	8.8	9.4
Not in the labor force	24,959	25,406	25,332	25,345	25,315	25,204	25,305	25,349	25,489	25,643	26,085	26,318	26,312	26,516	26,115
Women, 20 years and over															
Civilian noninstitutional population[1]	111,330	112,260	111,990	112,083	112,183	112,290	112,401	112,518	112,633	112,731	112,825	112,738	112,824	112,908	112,999
Civilian labor force	67,516	68,382	68,118	68,367	68,421	68,273	68,666	68,385	68,700	68,753	68,891	68,584	68,917	68,977	69,148
Participation rate	60.6	60.9	60.8	61.0	61.0	60.8	61.1	60.8	61.0	61.0	61.1	60.8	61.1	61.1	61.2
Employed	64,799	65,039	65,196	65,114	65,169	65,103	65,003	65,008	64,975	64,902	64,860	64,298	64,271	64,148	64,226
Employment-population ratio[2]	58.2	57.9	58.2	58.1	58.1	58.0	57.8	57.8	57.7	57.6	57.5	57.0	57.0	56.8	56.8
Unemployed	2,718	3,342	2,923	3,252	3,252	3,170	3,662	3,377	3,725	3,851	4,031	4,286	4,646	4,828	4,922
Unemployment rate	4.0	4.9	4.3	4.8	4.8	4.6	5.3	4.9	5.4	5.6	5.9	6.2	6.7	7.0	7.1
Not in the labor force	43,814	43,878	43,872	43,716	43,762	44,017	43,736	44,133	43,933	43,978	43,935	44,154	43,907	43,931	43,850
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	16,982	17,075	17,056	17,064	17,073	17,084	17,092	17,101	17,110	17,118	17,126	17,098	17,090	17,083	17,076
Civilian labor force	7,012	6,858	6,993	7,231	6,924	6,947	6,849	6,844	6,799	6,531	6,557	6,547	6,610	6,493	6,501
Participation rate	41.3	40.2	41.0	42.4	40.6	40.7	40.1	40.0	39.7	38.2	38.3	38.3	38.7	38.0	38.1
Employed	5,911	5,573	5,914	5,868	5,620	5,520	5,533	5,518	5,390	5,196	5,194	5,188	5,184	5,083	5,103
Employment-population ratio[2]	34.8	32.6	34.7	34.4	32.9	32.3	32.4	32.3	31.5	30.4	30.3	30.3	30.3	29.8	29.9
Unemployed	1,101	1,285	1,079	1,363	1,304	1,427	1,316	1,326	1,408	1,335	1,363	1,359	1,427	1,410	1,398
Unemployment rate	15.7	18.7	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7	21.5
Not in the labor force	9,970	10,218	10,063	9,834	10,149	10,137	10,243	10,257	10,311	10,587	10,568	10,551	10,480	10,590	10,575
White[3]															
Civilian noninstitutional population[1]	188,253	189,540	189,147	189,281	189,428	189,587	189,747	189,916	190,085	190,221	190,351	190,225	190,331	190,436	190,552
Civilian labor force	124,935	125,635	125,198	125,759	125,712	125,979	125,987	125,844	126,298	126,029	125,634	125,312	125,703	125,599	126,110
Participation rate	66.4	66.3	66.2	66.4	66.4	66.4	66.4	66.3	66.4	66.3	66.0	65.9	66.0	66.0	66.2
Employed	119,792	119,126	119,644	119,611	119,417	119,432	119,082	118,964	118,722	118,226	117,357	116,692	116,481	115,693	115,977
Employment-population ratio[2]	63.6	62.8	63.3	63.2	63.0	63.0	62.8	62.6	62.5	62.2	61.7	61.3	61.2	60.8	60.9
Unemployed	5,143	6,509	5,554	6,148	6,295	6,547	6,904	6,880	7,577	7,803	8,277	8,621	9,222	9,906	10,133
Unemployment rate	4.1	5.2	4.4	4.9	5.0	5.2	5.5	5.5	6.0	6.2	6.6	6.9	7.3	7.9	8.0
Not in the labor force	63,319	63,905	63,949	63,523	63,716	63,608	63,761	64,072	63,787	64,193	64,718	64,913	64,628	64,837	64,441
Black or African American[3]															
Civilian noninstitutional population[1]	27,485	27,843	27,746	27,780	27,816	27,854	27,896	27,939	27,982	28,021	28,059	28,052	28,085	28,118	28,153
Civilian labor force	17,496	17,740	17,755	17,737	17,708	17,744	17,949	17,733	17,768	17,708	17,796	17,791	17,703	17,542	17,816
Participation rate	63.7	63.7	64.0	63.8	63.7	63.7	64.3	63.5	63.5	63.2	63.4	63.4	63.0	62.4	63.3
Employed	16,051	15,953	16,200	16,009	16,041	15,989	16,026	15,709	15,762	15,703	15,674	15,546	15,336	15,212	15,142
Employment-population ratio[2]	58.4	57.3	58.4	57.6	57.7	57.4	57.4	56.2	56.3	56.0	55.9	55.4	54.6	54.1	53.8
Unemployed	1,445	1,788	1,555	1,728	1,667	1,755	1,923	2,024	2,006	2,005	2,122	2,245	2,368	2,330	2,673
Unemployment rate	8.3	10.1	8.8	9.7	9.4	9.9	10.7	11.4	11.3	11.3	11.9	12.6	13.4	13.3	15.0
Not in the labor force	9,989	10,103	9,991	10,043	10,109	10,111	9,947	10,206	10,214	10,313	10,263	10,261	10,382	10,576	10,337

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	31,383	32,141	31,911	31,998	32,087	32,179	32,273	32,369	32,465	32,558	32,649	32,417	32,501	32,585	32,671
Civilian labor force	21,602	22,024	21,920	22,125	22,100	22,062	22,201	22,259	22,187	22,074	22,134	21,931	22,100	22,175	22,376
Participation rate	68.8	68.5	68.7	69.1	68.9	68.6	68.8	68.8	68.3	67.8	67.8	67.7	68.0	68.1	68.5
Employed	20,382	20,346	20,392	20,565	20,391	20,396	20,404	20,506	20,232	20,168	20,096	19,800	19,684	19,640	19,854
Employment-population ratio[2]	64.9	63.3	63.9	64.3	63.5	63.4	63.2	63.4	62.3	61.9	61.6	61.1	60.6	60.3	60.8
Unemployed	1,220	1,678	1,528	1,560	1,709	1,665	1,797	1,752	1,955	1,906	2,038	2,132	2,416	2,536	2,521
Unemployment rate	5.6	7.6	7.0	7.0	7.7	7.5	8.1	7.9	8.8	8.6	9.2	9.7	10.9	11.4	11.3
Not in the labor force	9,781	10,116	9,990	9,873	9,987	10,117	10,072	10,111	10,278	10,484	10,515	10,486	10,401	10,410	10,295

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

[3] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

NOTE: Estimates for the above race groups (white and black or African American) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Beginning in January 2003, data reflect revised population controls used in the household survey.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Characteristic															
Employed, 16 years and older	146,047	145,362	146,257	145,974	145,738	145,596	145,273	145,029	144,657	144,144	143,338	142,099	141,748	140,887	141,007
Men	78,254	77,486	78,029	77,932	77,726	77,683	77,484	77,249	76,938	76,577	75,847	75,092	74,777	74,053	74,116
Women	67,792	67,876	68,228	68,042	68,012	67,913	67,789	67,780	67,720	67,567	67,491	67,007	66,970	66,834	66,890
Married men, spouse present	46,314	45,860	45,968	45,871	45,902	46,093	45,804	45,887	45,787	45,610	45,182	44,712	44,502	44,470	44,469
Married women, spouse present	35,832	35,869	36,144	36,122	36,189	36,110	35,994	35,864	35,590	35,649	35,632	35,375	35,563	35,481	35,444
Persons at work part time[1]															
All industries:															
Part time for economic reasons	4,401	5,875	5,240	5,290	5,495	5,813	5,879	6,292	6,848	7,323	8,038	7,839	8,626	9,049	8,910
Slack work or business conditions	2,877	4,169	3,580	3,658	3,905	4,220	4,240	4,418	4,953	5,399	6,020	5,766	6,443	6,857	6,699
Could only find part-time work	1,210	1,389	1,325	1,305	1,359	1,300	1,412	1,514	1,514	1,585	1,617	1,667	1,764	1,839	1,810
Part time for noneconomic reasons	19,756	19,343	19,792	19,396	19,428	19,348	19,690	19,275	19,083	18,886	18,922	18,864	18,855	18,833	19,065
Nonagricultural industries:															
Part time for economic reasons	4,317	5,773	5,152	5,218	5,390	5,693	5,802	6,167	6,742	7,209	7,932	7,705	8,543	8,942	8,826
Slack work or business conditions	2,827	4,097	3,537	3,599	3,839	4,160	4,171	4,279	4,889	5,304	5,938	5,660	6,390	6,773	6,650
Could only find part-time work	1,199	1,380	1,328	1,297	1,340	1,287	1,385	1,541	1,499	1,579	1,619	1,658	1,760	1,850	1,802
Part time for noneconomic reasons	19,419	19,005	19,436	18,997	19,036	18,992	19,269	18,930	18,808	18,635	18,642	18,567	18,562	18,493	18,661

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Characteristic															
Total, 16 years and older	4.6	5.8	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5	8.9
Both sexes, 16 to 19 years	15.7	18.7	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7	21.5
Men, 20 years and older	4.1	5.4	4.7	5.0	5.2	5.4	5.8	6.2	6.4	6.7	7.2	7.6	8.1	8.8	9.4
Women, 20 years and older	4.0	4.9	4.3	4.8	4.8	4.6	5.3	4.9	5.4	5.6	5.9	6.2	6.7	7.0	7.1
White, total [1]	4.1	5.2	4.4	4.9	5.0	5.2	5.5	5.5	6.0	6.2	6.6	6.9	7.3	7.9	8.0
Both sexes, 16 to 19 years	13.9	16.8	14.2	16.5	17.0	19.1	17.3	17.5	18.6	18.4	18.7	18.4	19.1	20.0	19.7
Men, 16 to 19 years	15.7	19.1	15.2	18.1	18.7	22.4	19.5	19.7	22.6	21.4	21.4	21.8	22.2	23.3	22.5
Women, 16 to 19 years	12.1	14.4	13.1	14.8	15.3	15.6	15.0	15.2	14.4	15.3	16.0	14.8	16.0	16.7	16.9
Men, 20 years and older	3.7	4.9	4.2	4.5	4.6	4.8	5.1	5.5	5.8	6.1	6.5	6.8	7.4	8.0	8.5
Women, 20 years and older	3.6	4.4	3.7	4.1	4.2	4.2	4.7	4.2	4.9	5.1	5.5	5.8	6.1	6.5	6.4
Black or African American, total [1]	8.3	10.1	8.8	9.7	9.4	9.9	10.7	11.4	11.3	11.3	11.9	12.6	13.4	13.3	15.0
Both sexes, 16 to 19 years	29.4	31.2	24.6	32.3	29.8	32.0	29.3	29.8	32.9	32.2	33.7	36.5	38.8	32.5	34.7
Men, 16 to 19 years	33.8	35.9	27.8	39.9	35.4	37.7	29.8	32.9	37.2	42.0	35.2	44.0	45.6	41.2	42.1
Women, 16 to 19 years	25.3	26.8	22.0	25.2	24.4	26.8	28.9	26.7	27.8	23.2	32.2	29.8	32.1	25.2	27.2
Men, 20 years and older	7.9	10.2	8.6	9.2	9.7	10.3	10.6	11.9	11.8	12.1	13.4	14.1	14.9	15.4	17.2
Women, 20 years and older	6.7	8.1	7.6	8.2	7.5	7.5	9.1	9.3	8.9	9.0	8.9	9.2	9.9	9.9	11.5
Hispanic or Latino ethnicity	5.6	7.6	7.0	7.0	7.7	7.5	8.1	7.9	8.8	8.6	9.2	9.7	10.9	11.4	11.3
Married men, spouse present	2.5	3.4	2.8	3.0	3.1	3.3	3.7	3.9	4.1	4.2	4.4	5.0	5.5	5.8	6.3
Married women, spouse present	2.8	3.6	3.0	3.2	3.4	3.4	3.7	3.5	4.2	4.3	4.5	4.7	5.1	5.4	5.5
Full-time workers	4.6	5.8	5.0	5.5	5.6	5.8	6.3	6.3	6.8	7.0	7.5	8.0	8.6	9.2	9.6
Part-time workers	4.9	5.5	5.0	5.5	5.4	5.6	5.7	5.9	5.7	5.8	5.9	5.9	5.8	5.9	6.1
Educational attainment [2]															
Less than a high school diploma	7.1	9.0	7.9	8.4	8.9	8.6	9.7	9.8	10.4	10.6	10.9	12.0	12.6	13.3	14.8
High school graduates, no college [3]	4.4	5.7	5.0	5.2	5.2	5.3	5.8	6.3	6.5	6.9	7.7	8.0	8.3	9.0	9.3
Some college or associate degree	3.6	4.6	4.0	4.3	4.4	4.6	5.0	5.1	5.3	5.5	5.6	6.2	7.0	7.2	7.4
Bachelor's degree and higher [4]	2.0	2.6	2.1	2.3	2.4	2.5	2.7	2.6	3.1	3.2	3.7	3.8	4.1	4.3	4.4

[1] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

[2] Data refer to persons 25 years and older.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Less than 5 weeks	2,542	2,932	2,496	3,257	2,733	2,884	3,242	2,864	3,108	3,255	3,267	3,658	3,404	3,371	3,346
5 to 14 weeks	2,232	2,804	2,529	2,478	3,012	2,853	2,874	3,083	3,055	3,141	3,398	3,519	3,969	4,041	3,982
15 weeks and over	2,303	3,188	2,652	2,808	2,966	3,168	3,447	3,662	4,109	3,964	4,517	4,634	5,264	5,715	6,211
15 to 26 weeks	1,061	1,427	1,277	1,238	1,345	1,450	1,568	1,621	1,834	1,757	1,927	1,987	2,347	2,534	2,531
27 weeks and over	1,243	1,761	1,375	1,570	1,621	1,718	1,878	2,041	2,275	2,207	2,591	2,647	2,917	3,182	3,680
Mean duration, in weeks	16.8	17.9	17.0	16.8	17.6	17.3	17.6	18.7	19.8	18.9	19.7	19.8	19.8	20.1	21.4
Median duration, in weeks	8.5	9.4	9.3	8.3	10.1	9.8	9.3	10.3	10.6	10.0	10.6	10.3	11.0	11.2	12.5

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Job losers[1]	3,515	4,789	4,043	4,319	4,465	4,595	4,994	5,348	5,811	6,156	6,471	6,980	7,696	8,243	8,814
On temporary layoff	976	1,176	1,103	1,121	1,106	1,041	1,279	1,396	1,367	1,413	1,524	1,441	1,488	1,557	1,625
Not on temporary layoff	2,539	3,614	2,939	3,197	3,358	3,554	3,715	3,952	4,443	4,744	4,946	5,539	6,208	6,686	7,189
Job leavers	793	896	860	881	847	875	999	982	946	940	1,007	917	820	887	890
Reentrants	2,142	2,472	2,145	2,522	2,562	2,668	2,678	2,587	2,650	2,655	2,777	2,751	2,834	2,974	3,087
New entrants	627	766	625	832	761	818	829	822	825	760	829	780	1,005	868	900
Percent of unemployed															
Job losers[1]	49.7	53.7	52.7	50.5	51.7	51.3	52.6	54.9	56.8	58.6	58.4	61.1	62.3	63.5	64.4
On temporary layoff	13.8	13.2	14.4	13.1	12.8	11.6	13.5	14.3	13.4	13.4	13.8	12.6	12.0	12.0	11.9
Not on temporary layoff	35.9	40.5	38.3	37.4	38.9	39.7	39.1	40.6	43.4	45.1	44.6	48.5	50.2	51.5	52.5
Job leavers	11.2	10.0	11.2	10.3	9.8	9.8	10.5	10.1	9.2	8.9	9.1	8.0	6.6	6.8	6.5
Reentrants	30.3	27.7	28.0	29.5	29.7	29.8	28.2	26.6	25.9	25.3	25.1	24.1	22.9	22.9	22.5
New entrants	8.9	8.6	8.1	9.7	8.8	9.1	8.7	8.4	8.1	7.2	7.5	6.8	8.1	6.7	6.6
Percent of civilian labor force															
Job losers[1]	2.3	3.1	2.6	2.8	2.9	3.0	3.2	3.5	3.8	4.0	4.2	4.5	5.0	5.4	5.7
Job leavers	.5	.6	.6	.6	.5	.6	.6	.6	.6	.6	.7	.6	.5	.6	.6
Reentrants	1.4	1.6	1.4	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	2.0
New entrants	.4	.5	.4	.5	.5	.5	.5	.5	.5	.5	.5	.5	.7	.6	.6

[1] Includes persons who completed temporary jobs.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Total, 16 years and older	4.6	5.8	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5	8.9
16 to 24 years	10.5	12.8	11.0	13.1	12.9	13.5	13.3	13.4	13.8	13.9	14.7	14.8	15.5	16.3	16.7
16 to 19 years	15.7	18.7	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7	21.5
16 to 17 years	17.5	22.1	20.2	21.5	23.2	24.9	22.2	21.7	23.1	24.1	24.1	21.4	22.9	23.7	23.0
18 to 19 years	14.5	16.8	13.4	17.6	15.9	17.6	17.4	17.8	18.4	18.3	19.1	20.2	21.0	20.9	21.3
20 to 24 years	8.2	10.2	9.0	10.3	10.2	10.4	10.7	10.8	10.6	11.1	12.1	12.1	12.9	14.0	14.7
25 years and older	3.6	4.6	4.0	4.2	4.4	4.5	5.0	5.0	5.3	5.6	6.0	6.4	6.9	7.2	7.5
25 to 54 years	3.7	4.8	4.2	4.5	4.6	4.7	5.2	5.3	5.5	5.8	6.3	6.7	7.2	7.6	7.8
55 years and older	3.1	3.8	3.1	3.3	3.4	3.7	4.1	4.2	4.6	4.8	4.9	5.2	5.6	6.2	6.4
Men, 16 years and older	4.7	6.1	5.2	5.7	5.9	6.2	6.4	6.8	7.2	7.4	7.9	8.3	8.8	9.5	10.0
16 to 24 years	11.6	14.4	12.1	14.1	14.1	15.3	14.6	14.8	16.5	16.1	16.9	17.1	17.6	19.3	19.8
16 to 19 years	17.6	21.2	17.0	20.8	20.8	23.5	21.1	21.4	24.7	24.0	23.3	24.4	24.9	25.7	25.6
16 to 17 years	19.4	25.2	22.5	23.7	26.1	29.3	24.5	23.2	27.3	28.8	27.0	26.5	26.5	28.2	26.3
18 to 19 years	16.5	19.0	14.5	19.8	17.5	20.1	19.0	20.4	21.7	21.2	21.5	22.8	24.7	24.6	25.3
20 to 24 years	8.9	11.4	10.0	11.1	11.2	11.7	11.7	11.9	12.9	12.9	14.2	14.1	14.6	16.7	17.5
25 years and older	3.6	4.8	4.0	4.3	4.5	4.8	5.1	5.5	5.6	5.9	6.4	6.9	7.5	7.9	8.3
25 to 54 years	3.7	5.0	4.3	4.5	4.7	5.0	5.3	5.8	5.8	6.1	6.7	7.3	7.9	8.3	8.8
55 years and older	3.2	3.9	3.0	3.5	3.5	3.8	4.3	4.5	4.7	5.1	5.1	5.3	6.0	6.3	6.7
Women, 16 years and older	4.5	5.4	4.8	5.3	5.3	5.3	5.9	5.5	5.9	6.1	6.4	6.7	7.3	7.5	7.6
16 to 24 years	9.4	11.2	9.8	11.9	11.5	11.6	12.0	11.9	10.7	11.5	12.4	12.2	13.3	13.1	13.3
16 to 19 years	13.8	16.2	13.9	16.7	16.8	17.4	17.3	17.3	16.5	16.7	18.2	17.1	18.3	17.8	17.4
16 to 17 years	15.7	19.1	18.1	19.2	20.4	20.5	20.1	20.3	19.2	19.7	21.2	16.2	19.8	19.4	19.9
18 t0 19 years	12.5	14.3	12.2	15.2	14.1	14.9	15.6	14.9	14.7	15.1	16.6	17.5	17.0	17.2	17.1
20 to 24 years	7.3	8.8	7.7	9.5	8.9	8.9	9.5	9.4	8.1	9.2	9.8	10.0	10.9	11.0	11.5
25 years and older	3.6	4.4	3.9	4.1	4.2	4.2	4.9	4.4	5.1	5.2	5.4	5.8	6.2	6.5	6.6
25 to 54 years	3.8	4.6	4.1	4.4	4.5	4.4	5.1	4.6	5.2	5.4	5.7	6.0	6.4	6.7	6.7
55 years and older[1]	3.0	3.7	2.8	2.8	3.4	4.3	4.5	3.9	4.3	4.3	4.3	5.4	5.3	5.8	5.4

[1] Data are not seasonally adjusted.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

10. Unemployment rates by State, seasonally adjusted

State	Mar. 2008	Feb. 2009[p]	Mar. 2009[p]	State	Mar. 2008	Feb. 2009[p]	Mar. 2009[p]
Alabama	4.3	8.4	9.0	Missouri	5.6	8.3	8.7
Alaska	6.5	7.9	8.4	Montana	4.1	6.0	6.1
Arizona	4.7	7.4	7.8	Nebraska	3.1	4.3	4.7
Arkansas	4.8	6.4	6.5	Nevada	5.6	10.0	10.4
California	6.4	10.6	11.2	New Hampshire	3.7	5.7	6.2
Colorado	4.6	7.2	7.5	New Jersey	4.8	8.2	8.3
Connecticut	5.3	7.4	7.5	New Mexico	3.9	5.4	5.9
Delaware	4.1	7.3	7.6	New York	4.8	7.8	7.8
District of Columbia	6.2	9.9	9.7	North Carolina	5.4	10.7	10.8
Florida	5.4	9.6	9.8	North Dakota	3.0	4.3	4.2
Georgia	5.6	9.2	9.2	Ohio	6.1	9.5	9.7
Hawaii	3.1	6.5	7.1	Oklahoma	3.3	5.5	5.9
Idaho	4.1	6.7	7.0	Oregon	5.5	10.7	11.9
Illinois	6.0	8.6	9.0	Pennsylvania	4.9	7.5	7.8
Indiana	5.3	9.4	10.0	Rhode Island	6.8	10.5	10.6
Iowa	3.9	4.9	5.2	South Carolina	5.9	10.9	11.4
Kansas	4.1	5.9	6.1	South Dakota	2.8	4.6	4.9
Kentucky	5.9	9.3	9.8	Tennessee	5.7	9.0	9.6
Louisiana	4.2	5.7	5.8	Texas	4.6	6.5	6.7
Maine	5.0	7.8	8.1	Utah	3.3	5.1	5.2
Maryland	3.8	6.8	6.9	Vermont	4.6	7.1	7.2
Massachusetts	4.7	7.7	7.7	Virginia	3.6	6.6	6.8
Michigan	7.6	12.0	12.6	Washington	4.8	8.3	9.1
Minnesota	5.1	8.0	8.2	West Virginia	4.2	6.0	6.8
Mississippi	6.1	9.1	9.4	Wisconsin	4.4	7.8	8.5
				Wyoming	2.9	3.9	4.5

[p] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

State	Mar. 2008	Feb. 2009[p]	Mar. 2009[p]	State	Mar. 2008	Feb. 2009[p]	Mar. 2009[p]
Alabama	2,166,366	2,145,502	2,142,080	Missouri	3,015,046	3,019,674	3,014,046
Alaska	355,551	358,704	358,322	Montana	504,979	501,843	501,020
Arizona	3,090,448	3,157,285	3,137,010	Nebraska	993,123	992,445	990,165
Arkansas	1,366,462	1,377,064	1,359,628	Nevada	1,352,855	1,403,105	1,394,336
California	18,269,099	18,580,954	18,614,914	New Hampshire	739,633	742,425	743,788
Colorado	2,722,799	2,731,554	2,725,094	New Jersey	4,485,501	4,514,619	4,540,571
Connecticut	1,868,105	1,890,346	1,884,885	New Mexico	954,996	957,436	954,599
Delaware	441,147	440,145	436,166	New York	9,631,336	9,756,388	9,762,516
District of Columbia	332,507	331,791	328,454	North Carolina	4,520,484	4,584,277	4,554,471
Florida	9,163,303	9,263,707	9,218,209	North Dakota	367,937	371,315	370,123
Georgia	4,834,846	4,811,586	4,783,304	Ohio	5,975,797	5,993,089	5,953,746
Hawaii	651,683	650,254	644,426	Oklahoma	1,735,230	1,757,714	1,763,261
Idaho	751,498	752,227	750,049	Oregon	1,944,465	1,997,891	2,000,064
Illinois	6,726,327	6,603,239	6,577,979	Pennsylvania	6,348,351	6,459,235	6,433,548
Indiana	3,226,776	3,241,553	3,219,896	Rhode Island	568,978	566,039	564,449
Iowa	1,675,749	1,668,976	1,674,810	South Carolina	2,131,288	2,189,322	2,187,149
Kansas	1,489,741	1,511,388	1,509,008	South Dakota	443,986	447,025	448,089
Kentucky	2,031,400	2,080,623	2,082,311	Tennessee	3,034,931	3,051,531	3,039,502
Louisiana	2,061,140	2,085,337	2,070,503	Texas	11,610,701	11,839,609	11,861,161
Maine	705,262	708,027	705,307	Utah	1,378,140	1,389,134	1,382,215
Maryland	2,989,419	2,969,663	2,961,054	Vermont	354,721	358,111	359,148
Massachusetts	3,418,593	3,427,365	3,421,053	Virginia	4,099,518	4,160,683	4,151,436
Michigan	4,960,868	4,857,714	4,841,297	Washington	3,449,523	3,554,065	3,541,053
Minnesota	2,920,559	2,951,001	2,954,684	West Virginia	807,812	794,137	792,686
Mississippi	1,310,275	1,326,532	1,321,098	Wisconsin	3,080,290	3,122,806	3,104,921
				Wyoming	291,140	292,605	290,250

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the database.

[p] = preliminary

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL NONFARM	137,598	137,066	137,654	137,517	137,356	137,228	137,053	136,732	136,352	135,755	135,074	134,333	133,652	132,953	132,414
TOTAL PRIVATE	115,380	114,566	115,203	115,029	114,834	114,691	114,497	114,197	113,813	113,212	112,542	111,793	111,105	110,412	109,801
GOODS-PRODUCING	22,233	21,419	21,679	21,612	21,507	21,432	21,351	21,247	21,063	20,814	20,532	20,127	19,832	19,514	19,244
Natural resources and mining	724	774	756	763	770	777	787	794	794	793	789	781	771	755	744
Logging	60.1	57.0	58.6	57.3	56.0	55.8	56.1	56.5	56.6	56.6	55.7	55.2	54.5	51.0	49.6
Mining	663.8	717.0	697.8	705.5	713.8	721.3	730.6	737.7	737.7	736.8	733.3	725.3	716.4	703.9	694.2
Oil and gas extraction	146.2	161.6	155.1	158.8	160.7	162.7	164.7	166.3	166.5	167.4	169.4	167.7	167.8	167.1	167.9
Mining, except oil and gas[1]	223.4	227.7	222.9	226.3	226.9	227.6	230.0	230.2	230.5	230.7	229.2	227.9	225.7	222.8	220.6
Coal mining	77.2	80.6	78.1	79.2	79.6	79.5	81.7	82.5	83.1	84.3	84.5	84.9	84.1	83.3	81.5
Support activities for mining	294.3	327.7	319.8	320.4	326.2	331.0	335.9	341.2	340.7	338.7	334.7	329.7	322.9	314.0	305.7
Construction	7,630	7,215	7,337	7,293	7,232	7,201	7,177	7,131	7,066	6,939	6,841	6,706	6,593	6,458	6,348
Construction of buildings	1,774.2	1,659.3	1,693.8	1,676.9	1,660.6	1,655.5	1,647.5	1,625.0	1,609.9	1,588.4	1,572.9	1,536.9	1,509.5	1,481.4	1,459.7
Heavy and civil engineering	1,005.4	970.2	980.5	982.1	972.2	970.9	966.1	960.2	952.6	942.5	933.2	926.6	919.0	906.6	889.4
Speciality trade contractors	4,850.2	4,585.3	4,662.3	4,633.6	4,598.7	4,574.6	4,563.1	4,545.4	4,503.9	4,408.5	4,335.2	4,242.2	4,164.4	4,069.9	3,998.9
Manufacturing	13,879	13,431	13,586	13,556	13,505	13,454	13,387	13,322	13,203	13,082	12,902	12,640	12,468	12,301	12,152
Production workers	9,975	9,649	9,795	9,770	9,723	9,672	9,608	9,543	9,425	9,322	9,174	8,946	8,804	8,656	8,537
Durable goods	8,808	8,476	8,587	8,567	8,533	8,502	8,439	8,392	8,300	8,216	8,085	7,881	7,753	7,626	7,499
Production workers	6,250	5,986	6,099	6,077	6,040	6,006	5,948	5,898	5,805	5,741	5,633	5,458	5,352	5,241	5,135
Wood products	515.3	459.6	477.3	468.3	462.9	458.4	451.9	446.4	438.8	429.8	416.2	403.9	390.4	389.9	388.6
Nonmetallic mineral products	500.5	468.1	477.2	473.0	469.7	466.4	464.5	460.2	458.2	450.1	441.2	434.3	425.8	416.0	415.0
Primary metals	455.8	443.3	449.7	447.9	446.6	444.8	440.8	441.1	438.6	429.8	419.6	409.3	395.2	386.2	374.4
Fabricated metal products	1,562.8	1,528.3	1,546.0	1,544.8	1,534.8	1,528.4	1,530.6	1,519.4	1,505.0	1,486.3	1,461.5	1,425.3	1,399.0	1,369.9	1,341.2
Machinery	1,187.1	1,185.6	1,193.1	1,192.2	1,190.8	1,191.1	1,187.5	1,183.1	1,179.3	1,162.7	1,150.2	1,126.0	1,100.8	1,072.7	1,051.2
Computer and electronic products[1]	1,272.5	1,247.6	1,255.7	1,252.8	1,248.5	1,247.3	1,248.3	1,246.5	1,239.8	1,233.3	1,223.7	1,212.9	1,196.9	1,188.6	1,176.9
Computer and peripheral equipment	186.2	182.8	184.0	183.6	182.1	182.5	182.6	182.8	182.4	181.8	180.0	180.3	175.5	173.8	170.9
Communications equipment	128.1	129.0	129.1	129.1	130.2	129.1	129.1	129.2	128.6	129.5	129.1	129.6	129.0	128.5	128.7
Semiconductors and electronic components	447.5	432.4	437.0	434.4	431.2	431.9	432.3	431.0	428.4	423.2	417.4	410.5	403.3	397.8	390.9
Electronic instruments	443.2	441.6	442.9	443.1	442.4	441.8	442.6	442.5	440.2	438.8	437.5	433.8	431.9	431.9	431.3
Electrical equipment and appliances	429.4	424.9	428.5	428.5	428.3	428.4	425.5	422.6	421.3	417.5	412.0	406.1	399.1	389.8	380.5
Transportation equipment	1,711.9	1,606.5	1,632.1	1,636.6	1,634.3	1,625.7	1,584.5	1,572.6	1,531.3	1,532.5	1,501.8	1,423.5	1,423.7	1,403.3	1,369.5
Furniture and related products	531.1	481.0	495.2	491.6	488.0	483.4	475.7	470.3	458.8	449.6	440.6	428.6	417.4	408.3	400.7
Miscellaneous manufacturing	641.7	630.8	632.5	631.4	629.0	627.9	630.1	629.4	628.5	624.2	618.4	611.0	604.5	601.1	600.5
Nondurable goods	5,071	4,955	4,999	4,989	4,972	4,952	4,948	4,930	4,903	4,866	4,817	4,759	4,715	4,675	4,653
Production workers	3,725	3,663	3,696	3,693	3,683	3,666	3,660	3,645	3,620	3,581	3,541	3,488	3,452	3,415	3,402
Food manufacturing	1,484.1	1,484.8	1,483.2	1,483.1	1,482.1	1,478.1	1,482.7	1,484.3	1,484.7	1,489.0	1,477.6	1,470.7	1,467.2	1,465.2	1,475.2
Beverages and tobacco products	198.2	199.0	201.6	201.4	200.6	200.0	199.2	199.3	197.2	196.4	195.8	194.2	191.3	191.7	190.5
Textile mills	169.7	151.0	155.9	154.3	150.7	149.0	149.5	147.5	145.6	140.6	136.8	133.6	130.0	128.2	127.6
Textile product mills	157.7	147.5	150.1	149.1	147.1	146.2	145.2	145.5	144.5	143.5	141.2	137.4	134.2	129.4	127.2
Apparel	214.6	198.4	202.5	200.8	200.0	199.5	200.4	197.3	192.8	187.1	183.5	178.9	176.3	173.0	169.1
Leather and allied products	33.8	33.6	33.6	33.6	34.2	33.0	34.5	34.3	33.9	32.6	32.6	32.4	31.9	31.8	32.0
Paper and paper products	458.2	445.8	450.6	449.8	448.2	447.1	444.7	441.9	439.7	437.1	433.4	427.3	422.5	419.1	415.6
Printing and related support activities	622.1	594.1	605.6	601.2	594.8	591.5	591.5	587.6	582.3	574.1	567.0	558.1	549.2	539.9	532.2
Petroleum and coal products	114.5	117.1	115.9	117.1	117.6	118.1	118.0	117.9	117.8	117.2	116.9	114.2	114.6	114.5	114.6
Chemicals	860.9	849.8	854.1	854.2	852.8	850.0	847.3	844.3	843.4	842.6	837.1	832.7	828.2	823.1	818.7
Plastics and rubber products	757.2	734.2	745.5	744.3	743.4	739.3	734.7	729.7	721.1	705.9	694.9	679.7	669.3	659.2	650.6
SERVICE-PROVIDING	115,366	115,646	115,975	115,905	115,849	115,796	115,702	115,485	115,289	114,941	114,542	114,206	113,820	113,439	113,170
PRIVATE SERVICE-PROVIDING	93,147	93,146	93,524	93,417	93,327	93,259	93,146	92,950	92,750	92,398	92,010	91,666	91,273	90,898	90,557
Trade, transportation, and utilities	26,630	26,385	26,562	26,503	26,467	26,425	26,354	26,257	26,157	26,005	25,843	25,735	25,605	25,471	25,345
Wholesale trade	6,015.2	5,963.7	5,995.9	5,989.3	5,983.1	5,966.9	5,954.3	5,947.2	5,920.1	5,890.3	5,850.7	5,819.3	5,773.7	5,736.9	5,696.2
Durable goods	3,121.5	3,060.7	3,087.2	3,078.2	3,071.7	3,062.5	3,052.4	3,047.2	3,026.1	3,004.9	2,978.6	2,959.6	2,926.2	2,897.3	2,868.5
Nondurable goods	2,062.2	2,053.0	2,060.9	2,063.7	2,061.5	2,053.2	2,049.0	2,044.1	2,040.5	2,033.6	2,025.1	2,013.9	2,006.6	2,000.4	1,992.7
Electronic markets and agents and brokers	831.5	850.1	847.8	847.4	849.9	851.2	852.9	855.9	853.5	851.8	847.0	845.8	840.9	839.2	835.0
Retail trade	15,520.0	15,356.3	15,457.6	15,419.9	15,404.4	15,380.2	15,334.5	15,278.2	15,216.8	15,126.0	15,037.9	14,991.5	14,934.3	14,870.4	14,823.7
Motor vehicles and parts dealers[1]	1,908.3	1,844.5	1,885.1	1,877.4	1,866.2	1,851.4	1,832.6	1,818.4	1,792.7	1,770.5	1,745.6	1,730.1	1,716.8	1,701.7	1,690.1
Automobile dealers	1,242.2	1,186.0	1,220.9	1,214.6	1,204.7	1,191.5	1,176.2	1,164.8	1,141.7	1,121.2	1,099.9	1,088.6	1,078.7	1,067.3	1,058.0
Furniture and home furnishings stores	574.6	542.8	549.5	547.6	546.5	545.8	542.3	538.4	532.4	522.6	514.2	508.3	499.7	497.9	492.5
Electronics and appliance stores	549.4	549.6	554.5	555.0	552.9	553.0	551.0	547.1	545.1	541.5	538.6	535.5	533.7	518.7	517.1

See notes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted
[In thousands]

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
Building material and garden supply stores	1,309.3	1,253.1	1,254.5	1,256.0	1,252.2	1,244.1	1,245.9	1,248.4	1,245.9	1,235.8	1,227.8	1,214.9	1,207.1	1,193.3	1,185.8
Food and beverage stores	2,843.6	2,858.4	2,866.7	2,864.0	2,863.2	2,863.4	2,853.8	2,846.5	2,851.9	2,843.5	2,835.1	2,835.3	2,826.0	2,824.8	2,820.0
Health and personal care stores	993.1	1,002.4	1,006.9	1,004.8	1,003.6	1,005.4	999.0	998.9	995.9	989.4	991.2	985.7	986.9	985.8	985.7
Gasoline stations	861.5	843.4	848.5	838.1	845.8	843.0	840.9	834.8	836.1	836.9	834.4	833.0	832.1	830.3	831.2
Clothing and clothing accessories stores	1,500.0	1,484.2	1,495.0	1,490.9	1,487.2	1,483.6	1,483.3	1,478.5	1,471.5	1,462.2	1,448.5	1,445.0	1,443.8	1,435.3	1,434.1
Sporting goods, hobby, book, and music stores	656.3	646.7	646.2	649.2	646.9	642.2	645.8	641.6	641.2	633.1	624.3	620.8	613.6	610.2	609.6
General merchandise stores[1]	3,020.6	3,047.1	3,052.9	3,043.2	3,052.0	3,062.3	3,058.2	3,045.8	3,025.5	3,024.5	3,029.2	3,040.7	3,040.7	3,047.4	3,039.3
Department stores	1,591.5	1,557.0	1,576.4	1,564.0	1,561.8	1,563.2	1,554.4	1,541.9	1,523.9	1,517.5	1,521.2	1,529.1	1,532.6	1,531.9	1,518.3
Miscellaneous store retailers	865.4	847.8	855.0	851.8	849.4	848.3	845.6	844.3	845.0	838.3	825.0	819.5	815.1	807.6	802.5
Nonstore retailers	437.9	436.3	442.8	441.9	438.5	437.7	436.1	435.5	433.6	427.7	424.0	422.7	418.8	417.4	415.8
Transportation and warehousing	4,540.9	4,505.0	4,551.7	4,536.3	4,521.1	4,518.0	4,506.0	4,471.3	4,456.9	4,424.4	4,389.9	4,354.4	4,327.0	4,293.6	4,255.5
Air transportation	491.8	492.6	501.9	498.3	494.9	492.9	488.1	483.2	482.1	481.6	477.8	476.8	474.8	472.7	469.5
Rail transportation	233.7	229.5	231.1	230.3	227.1	230.1	228.8	227.6	229.5	229.0	226.8	227.1	224.1	223.4	221.9
Water transportation	65.5	65.2	66.2	65.8	66.1	66.4	64.9	64.5	63.9	62.6	60.3	59.7	60.9	60.0	58.6
Truck transportation	1,439.2	1,391.1	1,410.4	1,405.1	1,393.1	1,391.2	1,390.3	1,378.1	1,370.3	1,358.0	1,340.8	1,323.3	1,313.9	1,299.6	1,283.4
Transit and ground passenger transportation	412.1	418.1	423.0	418.8	421.9	420.8	422.7	414.4	413.8	411.7	410.1	408.1	406.4	405.4	399.2
Pipeline transportation	39.9	42.0	40.9	41.7	42.3	42.7	42.5	43.1	43.3	43.2	43.3	43.1	43.1	42.9	43.2
Scenic and sightseeing transportation	28.6	28.0	28.4	28.1	28.1	27.6	27.3	27.1	27.1	27.2	27.2	26.9	27.0	26.8	27.3
Support activities for transportation	584.2	589.9	593.0	591.5	590.9	592.8	592.1	589.5	588.0	582.2	579.5	569.3	561.0	552.7	550.9
Couriers and messengers	580.7	575.9	577.8	578.9	579.2	577.7	575.7	572.9	570.5	565.7	564.6	563.2	563.7	558.4	557.4
Warehousing and storage	665.2	672.8	679.0	677.8	677.5	675.8	673.6	670.9	668.4	663.2	659.5	656.9	652.1	651.7	644.1
Utilities	553.4	559.5	557.1	557.0	558.2	559.7	559.3	560.5	562.8	564.0	564.6	569.3	570.0	570.3	569.8
Information	3,032	2,997	3,017	3,013	3,006	2,995	2,990	2,986	2,982	2,965	2,940	2,924	2,918	2,904	2,887
Publishing industries, except Internet	901.2	882.6	893.2	890.4	886.8	882.9	879.4	876.6	872.6	863.6	857.8	846.3	836.3	828.1	822.6
Motion picture and sound recording industries	380.6	381.6	384.5	383.3	383.5	380.1	380.0	381.7	388.7	385.0	377.2	376.7	389.8	394.0	394.5
Broadcasting, except Internet.	325.2	315.9	317.3	317.7	315.7	315.9	313.8	313.0	312.9	313.1	308.1	306.5	302.5	299.4	297.0
Internet publishing and broadcasting															
Telecommunications	1,030.6	1,021.4	1,025.5	1,025.3	1,025.5	1,022.8	1,023.1	1,021.6	1,014.5	1,010.2	1,004.0	1,001.6	999.5	995.2	987.6
ISPs, search portals, and data processing	267.8	261.6	263.2	263.3	261.8	260.5	259.8	259.6	258.9	257.5	256.4	257.0	254.6	253.9	253.0
Other information services	126.3	133.6	132.9	132.5	132.2	133.0	133.6	133.6	134.1	135.1	136.5	135.7	134.8	133.4	132.6
Financial activities	8,301	8,146	8,190	8,179	8,162	8,154	8,141	8,115	8,088	8,043	8,010	7,954	7,898	7,855	7,815
Finance and insurance	6,132.0	6,015.2	6,050.8	6,039.7	6,026.1	6,019.9	6,010.6	5,994.3	5,978.7	5,948.7	5,924.0	5,890.4	5,853.9	5,828.7	5,803.4
Monetary authorities—central bank	21.6	22.2	22.7	22.5	22.3	22.3	22.3	22.3	22.1	21.5	21.3	21.0	20.9	20.8	20.5
Credit intermediation and related activities[1]	2,866.3	2,735.8	2,756.6	2,746.7	2,738.5	2,730.9	2,724.4	2,722.4	2,706.4	2,692.8	2,680.8	2,665.3	2,648.8	2,633.7	2,619.7
Depository credit intermediation[1]	1,823.5	1,819.5	1,827.9	1,824.8	1,822.2	1,820.0	1,818.4	1,814.8	1,811.1	1,806.9	1,804.9	1,798.1	1,790.9	1,783.5	1,779.7
Commercial banking	1,351.4	1,359.9	1,363.4	1,363.0	1,362.1	1,361.1	1,360.1	1,359.0	1,356.0	1,352.7	1,351.8	1,346.6	1,340.5	1,334.3	1,330.2
Securities, commodity contracts, investments	848.6	858.1	867.4	865.8	864.4	860.4	861.4	851.4	847.8	842.1	839.9	826.5	814.9	807.5	800.5
Insurance carriers and related activities	2,306.8	2,308.8	2,313.4	2,314.7	2,310.6	2,316.1	2,312.0	2,307.6	2,311.0	2,300.9	2,292.0	2,287.4	2,281.1	2,278.9	2,274.9
Funds, trusts, and other financial vehicles	88.7	90.3	90.7	90.0	90.3	90.2	90.5	90.6	91.4	91.4	90.0	90.2	88.2	87.8	87.8
Real estate and rental and leasing	2,169.1	2,130.2	2,139.6	2,138.9	2,135.9	2,134.4	2,130.0	2,120.6	2,109.0	2,093.8	2,085.8	2,063.2	2,043.8	2,026.4	2,011.8
Real estate	1,500.4	1,481.1	1,486.9	1,486.2	1,485.5	1,481.5	1,482.4	1,474.5	1,471.2	1,461.7	1,458.2	1,444.9	1,432.4	1,421.7	1,411.9
Rental and leasing services	640.3	620.9	624.3	624.8	622.5	624.4	619.4	617.7	609.7	603.8	599.3	589.9	583.2	576.2	571.6
Lessors of nonfinancial intangible assets	28.4	28.2	28.4	27.9	27.9	28.5	28.2	28.4	28.1	28.3	28.3	28.4	28.2	28.5	28.3
Professional and business services	17,942	17,778	17,950	17,887	17,824	17,788	17,727	17,675	17,612	17,488	17,356	17,205	17,029	16,899	16,777
Professional and technical services[1]	7,659.5	7,829.7	7,833.7	7,821.5	7,828.9	7,833.6	7,833.0	7,834.4	7,844.0	7,827.7	7,797.2	7,765.5	7,729.2	7,700.5	7,683.4
Legal services	1,175.4	1,163.7	1,166.6	1,165.2	1,164.5	1,163.0	1,161.0	1,160.2	1,160.2	1,157.7	1,156.8	1,154.1	1,148.7	1,146.5	1,142.8
Accounting and bookkeeping services	935.9	950.1	954.1	944.9	948.3	947.5	947.9	945.6	946.4	941.0	933.7	927.5	924.4	925.3	927.9
Architectural and engineering services	1,432.2	1,444.8	1,451.7	1,449.3	1,450.5	1,449.2	1,447.2	1,441.4	1,437.1	1,428.6	1,419.4	1,411.1	1,394.2	1,379.5	1,366.0

See notes at end of table

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
Computer systems design and related services	1,372.1	1,450.3	1,441.7	1,445.8	1,446.2	1,456.2	1,460.6	1,461.6	1,466.1	1,467.9	1,466.8	1,462.4	1,463.7	1,459.0	1,457.6
Management and technical consulting services	952.7	1,008.9	999.2	1,002.3	1,010.1	1,011.3	1,011.6	1,021.0	1,022.9	1,024.9	1,020.5	1,025.7	1,021.6	1,017.3	1,018.9
Management of companies and enterprises	1,866.4	1,894.6	1,903.8	1,902.1	1,900.6	1,895.3	1,895.2	1,887.1	1,882.8	1,882.0	1,872.1	1,871.7	1,862.1	1,854.8	1,839.6
Administrative and waste services	8,416.3	8,053.7	8,212.0	8,163.3	8,094.9	8,058.6	7,998.6	7,953.2	7,884.8	7,778.3	7,686.3	7,567.5	7,437.8	7,343.4	7,253.5
Administrative and support services[1]	8,061.3	7,693.5	7,853.6	7,804.4	7,736.4	7,699.3	7,637.0	7,591.9	7,522.0	7,414.2	7,324.4	7,203.1	7,076.5	6,982.6	6,892.2
Employment services[1]	3,545.9	3,144.4	3,285.6	3,242.7	3,184.0	3,146.9	3,089.5	3,049.8	2,987.7	2,896.7	2,829.5	2,720.5	2,638.7	2,551.7	2,482.8
Temporary help services	2,597.4	2,342.6	2,464.0	2,426.7	2,383.5	2,349.1	2,301.1	2,264.2	2,218.9	2,128.5	2,055.6	1,965.7	1,892.7	1,821.1	1,758.6
Business support services	817.4	823.2	828.4	822.6	818.1	817.4	814.9	818.1	820.8	823.7	816.0	817.6	805.0	801.6	793.8
Services to buildings and dwellings	1,849.5	1,847.0	1,853.8	1,853.5	1,851.4	1,848.6	1,847.0	1,843.3	1,837.4	1,829.4	1,818.1	1,812.5	1,796.8	1,787.9	1,780.7
Waste management and remediation services	355.0	360.2	358.4	358.9	358.5	359.3	361.6	361.3	362.8	364.1	361.9	364.4	361.3	360.8	361.3
Educational and health services	18,322	18,855	18,752	18,798	18,843	18,888	18,950	18,957	18,981	19,044	19,080	19,119	19,138	19,148	19,163
Educational services	2,941.4	3,036.6	3,017.4	3,025.4	3,049.2	3,062.4	3,083.7	3,055.1	3,047.3	3,066.0	3,063.1	3,088.4	3,083.1	3,077.2	3,075.1
Health care and social assistance	15,380.2	15,818.5	15,734.1	15,772.3	15,794.1	15,825.9	15,865.9	15,901.9	15,934.1	15,977.8	16,017.0	16,030.3	16,054.7	16,071.1	16,087.9
Ambulatory health care services[1]	5,473.5	5,660.7	5,622.6	5,634.9	5,652.0	5,676.3	5,683.8	5,699.5	5,706.1	5,727.7	5,742.6	5,753.3	5,770.1	5,777.5	5,795.2
Offices of physicians	2,201.6	2,265.7	2,251.8	2,256.8	2,264.6	2,272.7	2,272.7	2,279.0	2,283.3	2,289.8	2,294.5	2,300.4	2,304.4	2,307.9	2,310.1
Outpatient care centers	512.0	532.5	530.4	531.5	531.2	535.4	537.2	534.8	536.6	536.9	536.7	538.0	538.5	537.5	540.5
Home health care services	913.8	958.0	948.7	951.8	955.3	961.1	963.4	966.8	968.6	975.6	980.7	981.4	991.0	994.8	1,003.6
Hospitals	4,515.0	4,641.1	4,610.4	4,627.2	4,634.0	4,646.8	4,660.7	4,668.9	4,681.9	4,692.4	4,703.7	4,707.5	4,711.3	4,711.4	4,712.0
Nursing and residential care facilities[1]	2,958.3	3,008.1	3,006.1	3,006.2	3,005.7	3,006.3	3,009.9	3,007.6	3,013.2	3,022.3	3,029.6	3,029.4	3,033.6	3,040.0	3,038.4
Nursing care facilities	1,602.6	1,613.7	1,615.0	1,615.1	1,613.0	1,612.3	1,612.6	1,608.9	1,611.0	1,614.5	1,617.3	1,616.6	1,617.9	1,620.8	1,621.9
Social assistance[1]	2,433.4	2,508.7	2,495.0	2,504.0	2,502.4	2,496.5	2,511.5	2,525.9	2,532.9	2,535.4	2,541.1	2,540.1	2,539.7	2,542.2	2,542.3
Child day care services	850.4	859.2	859.9	863.3	853.8	844.6	851.6	862.5	862.3	863.2	864.3	862.7	860.4	856.4	853.5
Leisure and hospitality	13,427	13,459	13,512	13,495	13,490	13,473	13,454	13,428	13,395	13,344	13,304	13,268	13,236	13,194	13,150
Arts, entertainment, and recreation	1,969.2	1,969.3	1,984.9	1,978.3	1,975.1	1,966.6	1,964.7	1,955.3	1,952.0	1,944.0	1,947.1	1,943.8	1,936.2	1,925.9	1,896.9
Performing arts and spectator sports	405.0	406.3	409.5	409.4	409.7	406.9	406.2	402.9	402.5	398.8	401.4	405.7	398.6	397.7	390.9
Museums, historical sites, zoos, and parks	130.3	131.8	132.9	133.9	132.2	132.1	132.1	130.6	129.6	130.6	130.8	130.3	130.9	129.9	130.0
Amusements, gambling, and recreation	1,433.9	1,431.2	1,442.5	1,435.0	1,433.2	1,427.6	1,426.4	1,421.8	1,419.9	1,414.6	1,414.9	1,407.8	1,406.7	1,398.3	1,376.0
Accommodations and food services	11,457.4	11,489.3	11,527.5	11,516.7	11,515.3	11,506.3	11,489.3	11,472.4	11,442.7	11,399.6	11,356.5	11,323.7	11,299.7	11,267.6	11,253.3
Accommodations	1,866.9	1,857.3	1,881.1	1,872.1	1,865.0	1,854.6	1,843.6	1,841.3	1,827.9	1,812.1	1,794.3	1,768.4	1,754.7	1,732.8	1,724.8
Food services and drinking places	9,590.4	9,632.0	9,646.4	9,644.6	9,650.3	9,651.7	9,645.7	9,631.1	9,614.8	9,587.5	9,562.2	9,555.3	9,545.0	9,534.8	9,528.5
Other services	5,494	5,528	5,541	5,542	5,535	5,536	5,530	5,532	5,535	5,509	5,477	5,461	5,449	5,427	5,420
Repair and maintenance	1,253.4	1,228.2	1,242.2	1,239.6	1,233.6	1,230.6	1,220.6	1,221.2	1,216.4	1,204.7	1,189.9	1,184.7	1,177.3	1,167.6	1,165.1
Personal and laundry services	1,309.7	1,326.6	1,324.9	1,325.3	1,327.4	1,328.9	1,331.7	1,333.9	1,330.1	1,323.2	1,320.9	1,313.6	1,312.5	1,303.9	1,298.6
Membership associations and organizations	2,931.1	2,973.3	2,973.5	2,976.9	2,973.8	2,976.6	2,977.6	2,977.1	2,988.3	2,980.7	2,965.7	2,963.1	2,958.7	2,955.2	2,956.3
Government	22,218	22,500	22,451	22,488	22,522	22,537	22,556	22,535	22,539	22,543	22,532	22,540	22,547	22,541	22,613
Federal	2,734	2,764	2,758	2,763	2,765	2,776	2,768	2,771	2,775	2,783	2,778	2,793	2,796	2,806	2,872
Federal, except U.S. Postal Service	1,964.7	2,016.8	1,996.4	2,007.7	2,014.6	2,020.2	2,027.1	2,034.3	2,043.5	2,052.4	2,057.3	2,065.8	2,071.0	2,082.5	2,145.0
U.S. Postal Service	769.1	747.5	761.3	755.7	750.5	755.8	740.6	736.5	731.9	730.1	720.9	726.9	724.9	723.5	726.7
State	5,122	5,178	5,159	5,167	5,175	5,184	5,204	5,192	5,194	5,197	5,196	5,192	5,192	5,190	5,192
Education	2,317.5	2,359.0	2,340.0	2,348.0	2,355.4	2,365.1	2,379.5	2,373.3	2,372.8	2,380.3	2,381.3	2,380.2	2,382.3	2,382.5	2,388.1
Other State government	2,804.3	2,818.9	2,819.4	2,818.5	2,819.4	2,819.1	2,824.6	2,818.9	2,820.7	2,816.4	2,814.8	2,811.6	2,809.4	2,807.6	2,803.6
Local	14,362	14,557	14,534	14,558	14,582	14,577	14,584	14,572	14,570	14,563	14,558	14,555	14,559	14,545	14,549
Education	7,986.8	8,075.6	8,066.2	8,085.2	8,101.3	8,088.3	8,084.5	8,075.4	8,071.6	8,067.6	8,060.5	8,070.7	8,076.7	8,072.4	8,076.2
Other local government	6,375.5	6,481.8	6,467.6	6,472.9	6,481.1	6,488.2	6,499.4	6,496.4	6,498.3	6,495.6	6,497.7	6,484.7	6,482.5	6,472.5	6,473.2

[1] Includes other industries not shown separately.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

p = preliminary.

13. Average weekly hours of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	33.9	33.6	33.8	33.7	33.6	33.6	33.7	33.6	33.5	33.4	33.3	33.3	33.3	33.2	33.2
GOODS-PRODUCING	40.6	40.2	40.4	40.2	40.3	40.3	40.2	39.9	39.8	39.5	39.4	39.3	39.2	39.0	39.0
Natural resources and mining	45.9	45.1	45.0	44.6	44.9	44.8	45.3	44.5	44.7	45.3	44.3	44.2	43.9	43.4	43.0
Construction	39.0	38.5	38.9	38.5	38.7	38.7	38.6	38.3	38.3	37.7	38.0	37.9	38.0	37.7	37.6
Manufacturing	41.2	40.8	41.0	40.9	40.9	41.0	40.8	40.5	40.4	40.2	39.9	39.8	39.5	39.4	39.6
Overtime hours	4.2	3.7	4.0	3.9	3.8	3.7	3.7	3.5	3.5	3.2	2.9	2.9	2.7	2.6	2.7
Durable goods	41.5	41.1	41.4	41.2	41.2	41.2	41.1	40.6	40.6	40.4	40.0	39.8	39.6	39.4	39.7
Overtime hours	4.2	3.7	4.0	3.9	3.8	3.7	3.7	3.4	3.4	3.1	2.8	2.7	2.5	2.4	2.5
Wood products	39.4	38.6	38.6	39.0	39.1	38.8	38.8	38.4	38.1	37.6	36.8	36.9	37.1	36.9	37.0
Nonmetallic mineral products	42.3	42.1	42.3	42.3	42.0	42.6	42.2	41.9	41.8	40.9	40.9	40.2	40.0	39.9	40.2
Primary metals	42.9	42.2	42.6	42.4	42.5	42.2	42.5	41.8	41.4	40.9	40.5	40.4	40.1	40.2	40.1
Fabricated metal products	41.6	41.3	41.6	41.5	41.2	41.2	41.1	40.9	40.8	40.8	40.3	39.7	39.5	39.0	39.1
Machinery	42.6	42.3	42.5	42.2	42.1	42.1	42.5	42.1	41.8	41.4	41.1	40.9	40.6	40.2	40.5
Computer and electronic products	40.6	41.0	41.1	41.1	41.2	41.1	41.0	40.8	40.8	41.3	40.4	40.7	40.5	39.9	40.3
Electrical equipment and appliances	41.2	40.9	41.0	41.1	40.9	40.8	40.8	41.0	40.4	40.2	39.7	39.4	38.9	38.8	39.6
Transportation equipment	42.8	42.0	42.5	41.9	42.1	42.6	41.7	40.9	41.3	40.9	40.9	40.4	40.1	40.3	41.0
Furniture and related products	39.2	38.1	38.7	38.8	38.7	38.3	37.9	37.4	37.4	37.2	37.3	37.7	37.4	37.7	37.4
Miscellaneous manufacturing	38.9	38.9	39.3	39.2	39.0	39.1	39.4	38.7	38.9	38.5	38.3	38.4	38.2	38.3	38.5
Nondurable goods	40.8	40.4	40.5	40.5	40.4	40.6	40.4	40.2	40.2	39.9	39.7	39.7	39.5	39.4	39.5
Overtime hours	4.1	3.7	3.9	3.8	3.8	3.7	3.8	3.6	3.6	3.4	3.1	3.2	3.0	3.0	3.0
Food manufacturing	40.7	40.5	40.8	40.8	40.6	40.6	40.5	40.3	40.3	39.9	39.8	40.1	39.9	40.0	40.0
Beverage and tobacco products	40.7	38.8	39.4	39.5	38.8	38.7	38.2	38.2	38.1	37.9	36.7	37.0	37.0	36.1	35.8
Textile mills	40.3	38.7	38.4	38.9	38.8	39.2	39.5	38.9	38.4	37.7	37.0	37.1	36.4	36.2	36.3
Textile product mills	39.7	38.6	38.3	38.7	38.9	39.1	38.7	38.1	37.9	37.9	37.1	37.0	37.1	37.0	37.1
Apparel	37.2	36.4	36.6	36.0	36.4	37.0	36.5	35.9	36.3	36.2	36.0	36.0	35.6	36.1	36.1
Leather and allied products	38.2	37.5	38.6	38.8	38.4	38.2	37.5	37.5	36.9	34.4	34.7	34.0	33.3	33.0	32.6
Paper and paper products	43.1	42.9	43.3	42.6	42.7	42.6	42.9	42.4	42.2	42.1	41.9	41.6	41.5	41.0	41.3
Printing and related support activities	39.1	38.3	38.5	38.6	38.1	38.0	38.2	38.3	38.3	38.2	38.0	37.7	37.3	37.5	37.5
Petroleum and coal products	44.1	44.6	43.2	44.1	44.6	45.5	45.6	45.2	45.2	44.4	45.3	45.1	43.8	44.4	44.7
Chemicals	41.9	41.5	41.3	41.2	41.6	41.9	41.4	41.3	41.5	41.3	41.1	41.1	41.1	40.9	40.9
Plastics and rubber products	41.3	41.0	41.0	40.9	41.0	41.3	41.0	40.7	40.6	40.6	40.0	39.9	39.6	39.3	39.8
PRIVATE SERVICE-PROVIDING	32.4	32.3	32.4	32.4	32.3	32.3	32.4	32.3	32.3	32.2	32.2	32.2	32.1	32.1	32.1
Trade, transportation, and utilities	33.3	33.2	33.3	33.2	33.2	33.2	33.2	33.2	33.1	33.0	32.9	32.9	32.8	32.8	32.8
Wholesale trade	38.2	38.2	38.3	38.3	38.3	38.4	38.3	38.1	38.2	38.1	37.8	38.1	37.9	37.7	37.8
Retail trade	30.2	30.0	30.2	30.1	30.0	30.0	30.0	30.1	29.9	29.8	29.7	29.7	29.8	29.8	29.8
Transportation and warehousing	37.0	36.4	36.6	36.4	36.4	36.4	36.4	36.4	36.3	36.1	36.2	36.0	35.7	36.0	36.0
Utilities	42.4	42.7	42.6	42.5	43.0	42.4	42.3	42.7	42.5	42.4	42.9	42.6	43.2	42.5	42.4
Information	36.5	36.7	36.6	36.6	36.7	36.7	36.8	36.9	36.9	37.0	37.0	37.2	36.9	36.7	36.5
Financial activities	35.9	35.8	35.9	35.9	35.8	35.7	36.1	36.0	35.9	36.1	35.9	36.2	36.2	36.0	36.0
Professional and business services	34.8	34.8	34.8	34.9	34.8	34.8	34.9	34.8	34.9	34.9	34.8	34.9	34.8	34.7	34.8
Education and health services	32.6	32.5	32.6	32.7	32.5	32.5	32.6	32.5	32.5	32.4	32.4	32.4	32.3	32.4	32.5
Leisure and hospitality	25.5	25.2	25.4	25.3	25.3	25.2	25.2	25.2	25.1	25.0	25.0	24.8	25.0	24.8	24.8
Other services	30.9	30.8	30.8	30.8	30.7	30.8	30.9	30.7	30.7	30.7	30.6	30.7	30.6	30.5	30.5

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

p = preliminary.

14. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE															
Current dollars	$17.43	$18.08	$17.94	$17.99	$18.04	$18.10	$18.18	$18.21	$18.28	$18.34	$18.40	$18.43	$18.46	$18.50	$18.51
Constant (1982) dollars	8.33	8.30	8.29	8.27	8.20	8.16	8.20	8.21	8.33	8.54	8.65	8.64	8.61	8.64	8.65
GOODS-PRODUCING	18.67	19.33	19.16	19.20	19.27	19.36	19.43	19.48	19.56	19.63	19.69	19.72	19.78	19.86	19.84
Natural resources and mining	20.97	22.50	21.77	21.79	22.04	22.54	23.01	23.08	23.03	23.28	23.23	23.14	23.14	23.41	23.49
Construction	20.95	21.87	21.62	21.72	21.77	21.85	22.02	22.09	22.17	22.28	22.41	22.43	22.42	22.60	22.57
Manufacturing	17.26	17.74	17.64	17.68	17.73	17.80	17.78	17.81	17.89	17.94	17.96	17.99	18.07	18.11	18.13
Excluding overtime	16.43	16.97	16.82	16.88	16.94	17.03	17.01	17.07	17.15	17.25	17.33	17.36	17.47	17.53	17.53
Durable goods	18.20	18.70	18.61	18.63	18.70	18.78	18.74	18.74	18.84	18.91	18.94	18.99	19.09	19.18	19.21
Nondurable goods	15.67	16.15	16.01	16.08	16.11	16.16	16.19	16.28	16.35	16.37	16.39	16.43	16.49	16.46	16.49
PRIVATE SERVICE-PRIVATE SERVICE-PROVIDING	17.11	17.77	17.63	17.69	17.74	17.79	17.87	17.90	17.97	18.03	18.10	18.14	18.17	18.19	18.22
Trade,transportation, and utilities	15.78	16.16	16.08	16.13	16.16	16.17	16.23	16.20	16.23	16.29	16.31	16.36	16.38	16.37	16.40
Wholesale trade	19.59	20.14	20.05	20.07	20.11	20.15	20.28	20.20	20.22	20.29	20.31	20.41	20.52	20.60	20.70
Retail trade	12.75	12.87	12.84	12.87	12.87	12.88	12.92	12.91	12.89	12.93	12.94	12.97	12.96	12.97	12.98
Transportation and warehousing	17.72	18.41	18.31	18.39	18.41	18.42	18.48	18.47	18.58	18.66	18.66	18.72	18.67	18.62	18.62
Utilities	27.88	28.84	28.54	28.81	29.12	28.67	28.89	28.86	28.91	28.91	29.16	29.22	29.67	29.29	29.36
Information	23.96	24.77	24.56	24.71	24.78	24.87	24.95	24.90	24.99	24.94	24.91	24.98	25.09	25.30	25.27
Financial activities	19.64	20.27	20.17	20.23	20.24	20.26	20.37	20.43	20.43	20.41	20.53	20.53	20.55	20.63	20.63
Professional and business services	20.15	21.19	20.90	20.96	21.08	21.19	21.38	21.47	21.63	21.78	21.97	22.04	22.17	22.28	22.30
Education and health services	18.11	18.88	18.74	18.80	18.84	18.92	18.96	19.04	19.08	19.13	19.20	19.18	19.24	19.21	19.29
Leisure and hospitality	10.41	10.84	10.81	10.83	10.85	10.87	10.89	10.90	10.92	10.90	10.94	10.97	10.97	10.97	10.96
Other services	15.42	16.08	16.00	16.04	16.09	16.13	16.17	16.20	16.24	16.29	16.29	16.30	16.25	16.23	16.23

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.
p = preliminary.

15. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	$17.43	$18.08	$17.95	$17.94	$18.00	$18.02	$18.10	$18.25	$18.27	$18.40	$18.40	$18.49	$18.57	$18.56	$18.51
Seasonally adjusted	–	–	17.94	17.99	18.04	18.10	18.18	18.21	18.28	18.34	18.40	18.43	18.46	18.50	18.51
GOODS-PRODUCING	18.67	19.33	19.09	19.15	19.26	19.39	19.53	19.63	19.61	19.65	19.75	19.64	19.64	19.74	19.80
Natural resources and mining	20.97	22.50	21.78	21.52	21.75	22.45	23.06	23.19	22.98	23.31	23.53	23.41	23.19	23.44	23.54
Construction	20.95	21.87	21.49	21.61	21.69	21.90	22.16	22.34	22.28	22.32	22.52	22.32	22.25	22.46	22.45
Manufacturing	17.26	17.74	17.64	17.65	17.73	17.73	17.75	17.84	17.86	17.94	18.06	18.03	18.07	18.09	18.14
Durable goods	18.20	18.70	18.59	18.60	18.70	18.66	18.72	18.80	18.81	18.92	19.06	18.99	19.09	19.18	19.22
Wood products	13.68	14.20	14.00	14.11	14.16	14.25	14.25	14.37	14.44	14.58	14.66	14.69	14.77	14.68	14.70
Nonmetallic mineral products	16.93	16.90	17.12	16.89	16.97	16.93	16.85	16.94	16.92	16.85	16.73	16.82	17.03	17.22	17.45
Primary metals	19.66	20.18	20.21	20.24	20.26	20.43	20.28	20.36	20.01	19.98	20.05	19.80	19.75	19.69	19.91
Fabricated metal products	16.53	16.99	16.82	16.85	16.93	16.94	17.08	17.14	17.18	17.21	17.36	17.24	17.30	17.30	17.45
Machinery	17.72	17.97	17.91	18.01	17.90	17.96	17.97	18.08	18.11	18.18	18.15	18.16	18.17	18.23	18.16
Computer and electronic products	19.94	21.03	20.86	20.95	21.02	21.11	21.21	21.23	21.42	21.37	21.44	21.46	21.42	21.69	21.77
Electrical equipment and appliances	15.93	15.78	15.74	15.66	15.72	15.85	15.94	15.99	15.83	15.74	15.88	15.81	15.93	15.95	15.97
Transportation equipment	23.04	23.83	23.59	23.59	23.86	23.75	23.88	24.05	24.10	24.37	24.58	24.66	24.69	24.82	24.78
Furniture and related products	14.32	14.54	14.45	14.48	14.58	14.52	14.59	14.54	14.55	14.77	14.92	14.95	14.85	15.02	14.98
Miscellaneous manufacturing	14.66	15.19	14.96	14.97	15.15	15.35	15.33	15.31	15.33	15.42	15.60	15.66	15.97	16.00	16.14
Nondurable goods	15.67	16.15	16.03	16.05	16.08	16.20	16.15	16.30	16.32	16.35	16.43	16.51	16.48	16.42	16.49
Food manufacturing	13.55	14.00	13.88	13.91	13.97	14.03	14.02	14.15	14.10	14.17	14.26	14.34	14.30	14.22	14.27
Beverages and tobacco products	18.54	19.35	19.41	19.19	18.74	19.02	18.60	18.97	19.41	19.98	19.95	20.07	20.25	20.40	20.03
Textile mills	13.00	13.57	13.45	13.50	13.58	13.77	13.67	13.72	13.71	13.69	13.80	13.90	13.76	13.89	13.82
Textile product mills	11.78	11.73	11.77	11.86	11.80	11.80	11.78	11.81	11.62	11.59	11.72	11.59	11.53	11.32	11.34
Apparel	11.05	11.40	11.51	11.43	11.35	11.35	11.28	11.48	11.38	11.35	11.38	11.46	11.40	11.25	11.50
Leather and allied products	12.04	12.96	12.63	12.88	12.88	12.85	12.94	12.98	13.14	13.61	13.47	14.10	14.19	14.18	14.27
Paper and paper products	18.44	18.88	18.64	18.79	18.93	19.11	18.81	19.04	19.11	18.89	19.11	19.27	18.99	18.90	19.17
Printing and related support activities	16.15	16.75	16.63	16.66	16.77	16.81	16.83	16.90	16.99	16.86	17.01	16.79	16.79	16.72	16.78
Petroleum and coal products	25.21	27.46	26.96	26.85	26.99	27.54	27.69	28.25	28.69	28.28	28.17	29.13	29.57	29.82	28.88
Chemicals	19.55	19.49	19.35	19.33	19.29	19.41	19.53	19.77	19.67	19.77	19.72	19.89	19.96	19.93	19.94
Plastics and rubber products	15.39	15.85	15.80	15.74	15.72	15.87	15.86	15.94	16.03	16.13	16.24	16.24	16.22	16.17	16.20
PRIVATE SERVICE-PROVIDING	17.11	17.77	17.67	17.64	17.68	17.68	17.73	17.90	17.94	18.10	18.09	18.23	18.33	18.31	18.24
Trade, transportation, and utilities	15.78	16.16	16.13	16.12	16.17	16.18	16.21	16.27	16.24	16.26	16.14	16.37	16.47	16.43	16.41
Wholesale trade	19.59	20.14	20.01	19.93	20.05	20.12	20.23	20.20	20.21	20.41	20.36	20.44	20.65	20.66	20.70
Retail trade	12.75	12.87	12.89	12.89	12.90	12.92	12.93	13.01	12.89	12.85	12.74	12.96	12.99	13.01	13.02
Transportation and warehousing	17.72	18.41	18.30	18.35	18.46	18.54	18.52	18.53	18.55	18.69	18.62	18.68	18.73	18.54	18.51
Utilities	27.88	28.84	28.70	28.84	29.02	28.49	28.64	28.95	29.00	28.96	29.28	29.27	29.70	29.41	29.52
Information	23.96	24.77	24.56	24.65	24.78	24.75	24.87	25.03	25.06	25.03	24.86	25.03	25.12	25.39	25.27
Financial activities	19.64	20.27	20.21	20.19	20.26	20.19	20.29	20.42	20.41	20.54	20.50	20.48	20.68	20.70	20.66
Professional and business services	20.15	21.19	20.91	20.88	21.09	21.06	21.12	21.31	21.45	21.97	22.01	22.16	22.52	22.54	22.28
Education and health services	18.11	18.88	18.75	18.76	18.79	18.96	18.95	19.08	19.04	19.10	19.23	19.26	19.26	19.20	19.29
Leisure and hospitality	10.41	10.84	10.81	10.83	10.78	10.73	10.79	10.89	10.93	10.93	11.05	11.03	11.06	10.99	10.97
Other services	15.42	16.08	16.09	16.11	16.10	16.06	16.10	16.22	16.17	16.24	16.27	16.34	16.34	16.34	16.30

1 Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

16. Average weekly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	$590.04	$607.99	$603.12	$602.78	$613.80	$607.27	$613.59	$613.20	$613.87	$620.08	$610.88	$608.32	$616.52	$616.19	$607.13
Seasonally adjusted	–	–	606.37	606.26	606.14	608.16	612.67	611.86	612.38	612.56	612.72	613.72	614.72	614.20	614.53
GOODS-PRODUCING	757.34	776.60	767.42	769.83	783.88	781.42	794.87	791.09	788.32	782.07	778.15	762.03	758.10	763.94	760.32
Natural resources and mining	962.64	1,013.78	969.21	951.18	985.28	1,005.76	1,051.54	1,041.23	1,038.70	1,072.26	1,040.03	1,020.68	1,008.77	1,005.58	1,002.80
CONSTRUCTION	816.66	842.36	825.22	834.15	854.59	858.48	875.32	869.03	866.69	845.93	840.00	828.07	823.25	837.76	830.65
Manufacturing	711.56	724.23	723.24	721.89	730.48	719.84	727.75	729.66	726.90	726.57	727.82	712.19	708.34	709.13	705.65
Durable goods	754.77	767.56	767.77	766.32	776.05	761.33	775.01	770.80	767.45	766.26	771.93	750.11	748.33	751.86	749.58
Wood products	539.34	547.81	540.40	554.52	566.40	560.03	561.45	561.87	551.61	549.67	538.02	524.43	531.72	531.42	536.55
Nonmetallic mineral products	716.78	711.30	722.46	717.83	724.62	726.30	726.24	725.03	719.10	692.54	677.57	654.30	657.36	675.02	701.49
Primary metals	843.26	850.84	854.88	854.13	871.18	860.10	865.96	861.23	832.42	817.18	818.04	797.94	786.05	793.51	782.46
Fabricated metal products	687.20	701.47	699.71	697.59	699.21	692.85	707.11	707.88	707.82	707.33	706.55	680.98	678.16	671.24	664.85
Machinery	754.19	759.92	761.18	758.22	755.38	750.73	763.73	764.78	760.62	758.11	755.04	740.93	735.89	731.02	722.77
Computer and electronic products	808.80	861.43	853.17	861.05	872.33	861.29	869.61	874.68	876.08	891.13	883.33	866.98	863.23	863.26	862.09
Electrical equipment and appliances	656.46	645.60	643.77	638.93	647.66	640.34	650.35	660.39	645.86	642.19	646.32	621.33	613.31	615.67	616.44
Transportation equipment	986.79	999.94	1,002.58	988.42	1,016.44	978.50	1,002.96	990.86	1,002.56	994.30	1,022.53	993.80	990.07	997.76	996.16
Furniture and related products	560.84	554.20	553.44	557.48	571.54	557.57	566.09	549.61	542.72	546.49	563.98	559.13	547.97	564.75	549.77
Miscellaneous manufacturing	569.99	591.73	586.43	583.83	595.40	594.05	608.60	595.56	593.27	593.67	600.60	599.78	603.67	614.40	616.55
Nondurable goods	639.99	652.20	647.61	646.82	652.85	652.86	654.08	663.41	659.33	658.91	657.20	650.49	644.37	643.66	639.81
Food manufacturing	551.32	566.91	560.75	566.14	568.58	568.22	572.02	581.57	575.28	572.47	573.25	569.30	561.99	561.69	552.25
Beverages and tobacco products	755.22	750.18	770.58	765.68	738.36	741.78	716.10	720.86	729.82	767.23	726.18	728.54	741.15	730.32	703.05
Textile mills	524.40	524.93	515.14	522.45	529.62	535.65	542.70	544.68	525.09	520.22	514.74	510.13	493.98	500.04	491.99
Textile product mills	467.77	453.12	449.61	454.24	468.46	462.56	460.60	452.32	438.07	441.58	441.84	423.04	426.61	418.84	416.18
Apparel	411.39	415.17	423.57	412.62	415.41	416.55	410.59	409.84	411.96	414.28	410.82	407.98	403.56	408.38	410.55
Leather and allied products	459.50	486.49	491.31	502.32	501.03	485.73	481.37	486.75	484.87	462.74	476.84	470.94	465.43	470.78	453.79
Paper and paper products	795.58	809.21	805.25	791.06	806.42	808.35	806.95	818.72	812.18	802.83	814.09	797.78	780.49	769.23	784.05
Printing and related support activities	632.02	642.50	638.59	638.08	633.91	630.38	644.59	655.72	659.21	652.48	654.89	627.95	622.91	628.67	620.86
Petroleum and coal products	1,112.73	1,224.26	1,156.58	1,181.40	1,219.95	1,266.84	1,259.90	1,302.33	1,322.61	1,275.43	1,256.38	1,307.94	1,286.30	1,294.19	1,276.50
Chemicals	819.54	808.80	799.16	790.60	808.25	809.40	810.50	820.46	814.34	822.43	814.44	811.51	820.36	815.14	811.56
Plastics and rubber products	635.63	649.04	647.80	645.34	650.81	647.50	650.26	655.13	652.42	658.10	657.72	647.98	639.07	633.86	633.42
PRIVATE SERVICE-PROVIDING	554.89	574.31	568.97	569.77	579.90	572.83	576.23	578.17	577.67	588.25	578.88	579.71	592.06	589.58	581.86
Trade, transportation, and utilities	526.07	535.79	533.90	533.57	544.93	538.79	541.41	543.42	535.92	536.58	531.01	530.39	538.57	537.26	534.97
Wholesale trade	748.94	769.91	764.38	761.33	779.95	770.60	774.81	767.60	772.02	787.83	767.57	770.59	784.70	780.95	774.18
Retail trade	385.11	386.39	385.41	386.70	393.45	391.48	391.78	395.50	384.12	381.65	380.93	378.43	384.50	385.10	385.39
Transportation and warehousing	654.95	670.33	662.46	664.27	681.17	674.86	679.68	676.35	671.51	680.32	679.63	663.14	663.04	669.29	657.11
Utilities	1,182.65	1,231.19	1,225.49	1,222.82	1,250.76	1,205.13	1,205.74	1,244.85	1,238.30	1,236.59	1,256.11	1,243.98	1,286.01	1,241.10	1,251.65
Information	874.65	908.44	891.53	892.33	919.34	910.80	917.70	926.11	924.71	936.12	917.33	921.10	931.95	934.35	914.77
Financial activities	705.13	726.37	721.50	718.76	737.46	718.76	726.38	728.99	728.64	753.82	731.85	735.23	761.02	753.48	739.63
Professional and business services	700.82	738.25	727.67	726.62	748.70	730.78	739.20	739.46	750.75	775.54	761.55	762.30	785.95	786.65	766.43
Education and health services	590.09	614.30	607.50	609.70	614.43	618.10	617.77	620.10	616.90	624.57	621.13	622.10	624.02	624.00	623.07
Leisure and hospitality	265.52	273.27	272.41	274.00	280.28	276.83	278.38	272.25	273.25	273.25	270.73	264.72	275.39	272.55	269.86
Other services	477.06	494.99	493.96	494.58	500.71	496.25	500.71	497.95	496.42	501.82	496.24	498.37	501.64	498.37	495.52

1 Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.
Dash indicates data not available.
p = preliminary.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Private nonfarm payrolls, 278 industries											
Over 1-month span:												
2005	52.6	60.1	54.1	58.1	56.8	58.3	58.5	59.2	54.2	55.9	62.7	57.6
2006	64.9	62.2	63.8	59.8	49.1	51.8	59.2	55.4	55.7	56.3	59.4	60.7
2007	53.5	55.5	52.4	49.4	55.9	48.3	50.7	46.5	55.9	57.2	59.4	57.9
2008	42.1	40.6	44.1	41.1	42.6	36.9	37.6	39.1	34.7	33.0	27.1	20.5
2009	22.1	20.8	20.3	28.2								
Over 3-month span:												
2005	51.7	57.2	59.0	59.8	57.9	62.0	60.5	62.9	60.3	55.5	56.3	62.7
2006	67.7	68.6	65.1	65.1	60.5	58.9	55.5	57.0	55.0	54.4	59.0	64.2
2007	62.5	54.8	54.2	54.8	54.1	50.4	52.8	48.7	53.3	53.9	58.3	62.5
2008	57.7	44.8	40.2	39.7	37.3	33.6	33.6	32.8	34.9	33.2	26.9	20.8
2009	18.6	14.2	14.6	15.9								
Over 6-month span:												
2005	55.4	57.9	58.1	57.0	58.3	60.9	63.1	63.3	61.6	59.6	61.4	62.5
2006	64.6	63.8	67.5	66.2	65.5	66.6	60.3	61.1	57.9	57.9	62.4	59.0
2007	60.3	57.2	60.5	58.3	55.5	56.5	52.8	52.4	56.6	54.4	56.8	59.0
2008	56.6	53.0	50.7	47.4	40.2	33.4	31.0	33.4	30.6	29.0	26.0	24.4
2009	21.6	17.2	14.2	15.1								
Over 12-month span:												
2005	60.9	60.9	60.0	59.2	58.3	60.3	61.3	63.3	60.7	59.2	59.8	61.8
2006	67.2	65.5	65.9	62.9	65.5	66.8	64.8	64.4	66.6	65.9	64.9	66.2
2007	63.3	59.4	61.1	59.6	59.2	58.3	56.8	57.2	59.4	58.9	58.1	59.6
2008	54.4	56.1	52.6	49.1	50.2	47.8	43.7	42.3	38.0	37.8	32.3	28.2
2009	24.0	22.0	19.7	18.6								
	Manufacturing payrolls, 84 industries											
Over 1-month span:												
2005	36.7	46.4	42.2	46.4	40.4	33.7	41.0	43.4	45.8	47.6	44.6	47.0
2006	57.8	49.4	53.6	47.0	37.3	50.6	49.4	42.2	40.4	42.8	41.0	44.0
2007	44.6	41.0	30.7	24.7	38.0	32.5	43.4	30.7	39.2	42.8	60.8	48.2
2008	30.7	28.9	37.3	32.5	40.4	25.3	25.9	27.7	22.9	18.7	15.1	10.2
2009	6.0	9.6	12.7	26.5								
Over 3-month span:												
2005	36.7	43.4	41.0	41.6	35.5	36.1	34.9	36.7	42.2	44.0	38.6	48.8
2006	56.6	57.2	48.2	48.2	44.6	50.0	43.4	45.2	36.7	33.1	35.5	39.2
2007	40.4	33.1	33.1	28.9	29.5	30.1	31.9	28.9	30.7	30.7	39.2	51.2
2008	48.8	33.7	28.3	29.5	26.5	22.9	19.9	16.9	22.3	21.1	15.1	11.4
2009	6.0	3.6	2.4	10.8								
Over 6-month span:												
2005	33.7	39.8	38.0	36.1	35.5	34.9	39.8	36.1	36.1	38.0	36.7	39.8
2006	45.2	45.2	50.6	48.8	50.6	50.0	45.2	47.0	43.4	42.2	39.8	34.3
2007	37.3	33.1	29.5	28.9	30.7	34.9	28.9	26.5	29.5	28.3	33.7	38.0
2008	34.3	30.1	37.3	35.5	25.3	20.5	17.5	18.1	16.9	13.3	11.4	9.6
2009	9.0	4.8	4.8	7.2								
Over 12-month span:												
2005	45.2	44.0	42.2	41.0	36.7	35.5	32.5	34.3	33.1	33.7	33.7	38.0
2006	44.0	41.0	41.0	39.8	39.8	45.2	42.2	42.8	47.0	48.8	45.8	44.6
2007	39.8	36.7	37.3	30.7	28.9	29.5	30.7	28.9	33.1	28.9	34.3	35.5
2008	27.7	28.9	25.9	25.3	30.7	27.1	24.7	19.3	21.7	21.7	16.9	15.1
2009	8.4	4.8	4.8	4.8								

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

Data for the two most recent months are preliminary.

18. Job openings levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Percent						
	2008			2009				2008			2009			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
Total[2]	3,390	3,311	3,224	2,920	2,973	2,633	2,531	2.4	2.4	2.3	2.1	2.2	1.9	1.9
Industry														
Total private[2]	2,964	2,928	2,861	2,461	2,606	2,269	2,080	2.5	2.5	2.5	2.2	2.3	2.0	1.9
Construction	79	76	66	55	58	51	30	1.1	1.1	0.9	0.8	0.9	0.8	0.5
Manufacturing	230	203	188	115	141	115	95	1.7	1.5	1.4	0.9	1.1	0.9	0.8
Trade, transportation, and utilities	564	624	495	488	488	414	332	2.1	2.3	1.9	1.9	1.9	1.6	1.3
Professional and business services	603	505	562	501	482	428	458	3.3	2.8	3.1	2.8	2.8	2.5	2.7
Education and health services	646	697	685	636	589	537	522	3.3	3.5	3.5	3.2	3.0	2.7	2.7
Leisure and hospitality	417	302	315	272	332	289	330	3.0	2.2	2.3	2.0	2.4	2.1	2.4
Government	427	378	345	417	367	353	450	1.9	1.6	1.5	1.8	1.6	1.5	2.0
Region[3]														
Northeast	636	582	633	560	607	583	550	2.4	2.2	2.4	2.2	2.4	2.3	2.2
South	1,314	1,267	1,245	1,109	1,109	1,000	951	2.6	2.5	2.5	2.2	2.2	2.0	2.0
Midwest	698	644	607	587	563	499	519	2.2	2.0	1.9	1.9	1.8	1.6	1.7
West	734	767	689	655	638	556	572	2.3	2.5	2.2	2.1	2.1	1.8	1.9

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The job openings level is the number of job openings on the last business day of the month; the job openings rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.

[p] = preliminary.

19. Hires levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Percent						
	2008			2009				2008			2009			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
Total[2]	4,486	4,226	4,508	4,460	4,339	4,099	4,165	3.3	3.1	3.3	3.3	3.2	3.1	3.1
Industry														
Total private[2]	4,160	3,928	4,214	4,141	4,042	3,799	3,803	3.7	3.5	3.7	3.7	3.6	3.4	3.5
Construction	380	340	366	381	370	343	348	5.4	4.9	5.3	5.7	5.6	5.3	5.5
Manufacturing	290	257	252	237	257	244	235	2.2	2.0	2.0	1.9	2.1	2.0	1.9
Trade, transportation, and utilities	933	852	891	949	814	883	897	3.6	3.3	3.4	3.7	3.2	3.5	3.5
Professional and business services	788	783	786	762	730	668	743	4.5	4.5	4.5	4.4	4.3	4.0	4.4
Education and health services	544	528	528	539	527	483	486	2.9	2.8	2.8	2.8	2.8	2.5	2.5
Leisure and hospitality	769	706	711	743	704	693	691	5.7	5.3	5.3	5.6	5.3	5.3	5.3
Government	318	281	271	306	275	271	338	1.4	1.2	1.2	1.4	1.2	1.2	1.5
Region[3]														
Northeast	759	661	726	753	837	696	732	3.0	2.6	2.9	3.0	3.3	2.8	2.9
South	1,652	1,572	1,659	1,663	1,566	1,458	1,591	3.4	3.2	3.4	3.4	3.2	3.0	3.3
Midwest	1,051	934	1,009	1,003	904	943	921	3.4	3.0	3.3	3.3	3.0	3.1	3.1
West	1,043	1,043	1,053	1,002	960	931	965	3.4	3.4	3.5	3.3	3.2	3.1	3.3

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The hires level is the number of hires during the entire month; the hires rate is the number of hires during the entire month as a percent of total employment.

[p] = preliminary.

20. Total separations levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Percent						
	2008			2009				2008			2009			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
Total[2]	4,910	4,863	4,958	4,949	4,833	4,712	4,718	3.6	3.6	3.7	3.7	3.6	3.5	3.6
Industry														
Total private[2]	4,607	4,571	4,673	4,686	4,555	4,434	4,431	4.0	4.0	4.1	4.2	4.1	4.0	4.0
Construction	440	472	452	524	463	463	441	6.2	6.8	6.6	7.8	7.0	7.2	7.0
Manufacturing	404	384	419	476	424	401	379	3.1	2.9	3.2	3.8	3.4	3.3	3.1
Trade, transportation, and utilities	1,034	1,030	1,041	1,049	920	1,001	1,008	4.0	4.0	4.0	4.1	3.6	3.9	4.0
Professional and business services	906	909	898	866	951	778	851	5.1	5.2	5.2	5.0	5.6	4.6	5.1
Education and health services	507	466	498	494	498	466	471	2.7	2.4	2.6	2.6	2.6	2.4	2.5
Leisure and hospitality	794	773	755	763	731	751	712	5.9	5.8	5.7	5.7	5.5	5.7	5.4
Government	294	282	278	277	271	265	270	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Region[3]														
Northeast	743	767	799	813	783	878	705	2.9	3.0	3.2	3.2	3.1	3.5	2.8
South	1,782	1,841	1,815	1,898	1,742	1,741	1,704	3.6	3.8	3.7	3.9	3.6	3.6	3.6
Midwest	1,168	1,105	1,088	1,120	1,121	1,085	1,054	3.8	3.6	3.5	3.7	3.7	3.6	3.5
West	1,209	1,205	1,227	1,180	1,188	978	1,231	4.0	4.0	4.0	3.9	4.0	3.3	4.1

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The total separations level is the number of total separations during the entire month; the total separations rate is the number of total separations during the entire month as a percent of total employment.

[p]= preliminary

21. Quits levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Percent						
	2008			2009				2008			2009			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
Total[2]	2,436	2,201	2,114	2,063	1,911	1,856	1,771	1.8	1.6	1.6	1.5	1.4	1.4	1.3
Industry														
Total private[2]	2,305	2,076	1,984	1,945	1,831	1,749	1,674	2.0	1.8	1.8	1.7	1.6	1.6	1.5
Construction	107	109	92	85	87	102	64	1.5	1.6	1.3	1.3	1.3	1.6	1.0
Manufacturing	143	122	87	105	105	81	82	1.1	.9	.7	.8	.8	.7	.7
Trade, transportation, and utilities	548	489	518	469	372	444	385	2.1	1.9	2.0	1.8	1.5	1.7	1.5
Professional and business services	477	349	297	326	310	278	269	2.7	2.0	1.7	1.9	1.8	1.6	1.6
Education and health services	294	251	256	248	258	249	230	1.5	1.3	1.3	1.3	1.3	1.3	1.2
Leisure and hospitality	516	469	461	443	431	433	424	3.8	3.5	3.5	3.3	3.3	3.3	3.2
Government	132	122	130	105	115	107	99	.6	.5	.6	.5	.5	.5	.4
Region[3]														
Northeast	347	321	302	278	271	273	271	1.4	1.3	1.2	1.1	1.1	1.1	1.1
South	949	879	847	790	759	751	682	1.9	1.8	1.7	1.6	1.6	1.6	1.4
Midwest	595	491	452	491	468	431	412	1.9	1.6	1.5	1.6	1.5	1.4	1.4
West	541	510	498	492	453	408	439	1.8	1.7	1.6	1.6	1.5	1.4	1.5

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The quits level is the number of quits during the entire month; the quits rate is the number of quits during the entire month as a percent of total employment.

[p] = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2008.

County by NAICS supersector	Establishments, third quarter 2008 (thousands)	Employment		Average weekly wage[1]	
		September 2008 (thousands)	Percent change, September 2007-08[2]	Third quarter 2008	Percent change, third quarter 2007-08[2]
United States[3]	9,150.8	135,173.8	-0.8	$841	2.8
Private industry	8,857.7	113,499.1	-1.1	833	2.8
Natural resources and mining	126.2	2,003.6	3.6	880	7.3
Construction	889.2	7,255.4	-6.7	922	5.1
Manufacturing	361.0	13,345.0	-3.6	1,006	1.9
Trade, transportation, and utilities	1,927.8	25,953.1	-1.3	719	1.7
Information	146.3	2,973.8	-2.0	1,335	4.9
Financial activities	866.3	7,919.9	-2.5	1,207	.8
Professional and business services	1,528.7	17,752.2	-1.4	1,045	4.6
Education and health services	851.2	17,996.4	2.7	803	3.6
Leisure and hospitality	739.3	13,568.1	.0	358	2.9
Other services	1,205.9	4,482.9	.9	544	2.4
Government	293.1	21,674.7	1.0	886	3.0
Los Angeles, CA	428.8	4,141.1	-1.5	951	3.1
Private industry	424.8	3,581.8	-1.4	923	2.7
Natural resources and mining	.5	11.7	-2.8	1,232	9.3
Construction	14.0	145.0	-9.5	994	5.2
Manufacturing	14.6	432.3	-3.4	1,009	4.6
Trade, transportation, and utilities	53.7	792.1	-2.1	775	2.1
Information	8.7	214.8	([4])	1,551	([4])
Financial activities	24.1	233.8	-5.4	1,482	.1
Professional and business services	42.5	583.7	([4])	1,104	([4])
Education and health services	28.0	488.8	1.7	888	4.5
Leisure and hospitality	27.0	401.6	-.2	536	3.3
Other services	195.2	259.5	4.2	439	.5
Government	4.0	559.3	([4])	1,132	5.8
Cook, IL	140.4	2,504.2	-1.3	988	2.8
Private industry	139.0	2,195.4	-1.5	986	2.8
Natural resources and mining	.1	1.3	-3.6	960	-9.3
Construction	12.4	92.9	-5.9	1,284	5.9
Manufacturing	7.0	226.3	-4.1	1,002	2.5
Trade, transportation, and utilities	27.6	460.4	-2.3	788	1.8
Information	2.5	56.5	-1.5	1,557	10.2
Financial activities	15.7	206.3	-3.2	1,538	-.8
Professional and business services	28.9	434.2	-2.1	1,248	5.3
Education and health services	13.9	378.9	2.9	873	3.3
Leisure and hospitality	11.7	237.8	-1.3	443	3.3
Other services	14.5	96.6	1.5	707	2.2
Government	1.4	308.8	.0	1,009	2.9
New York, NY	118.9	2,363.8	.6	1,552	.5
Private industry	118.6	1,919.7	.7	1,673	.4
Natural resources and mining	.0	.2	-8.9	1,820	14.0
Construction	2.4	37.8	4.1	1,535	5.4
Manufacturing	3.0	35.4	-5.8	1,183	-2.6
Trade, transportation, and utilities	22.1	248.9	.4	1,127	.4
Information	4.6	135.9	.0	1,982	4.2
Financial activities	19.1	372.9	-2.1	2,985	-2.2
Professional and business services	25.6	491.8	1.4	1,799	2.3
Education and health services	8.8	283.4	.6	1,059	4.7
Leisure and hospitality	11.7	218.9	3.9	748	3.2
Other services	18.0	89.1	2.1	919	4.1
Government	.3	444.1	.1	1,027	1.4
Harris, TX	97.3	2,047.2	1.3	1,050	3.0
Private industry	96.7	1,796.9	1.1	1,061	2.9
Natural resources and mining	1.6	84.8	7.9	2,585	([4])
Construction	6.7	157.2	([4])	1,005	([4])
Manufacturing	4.6	187.3	2.8	1,272	-1.1
Trade, transportation, and utilities	22.4	428.3	1.0	919	2.1
Information	1.4	31.9	-2.4	1,285	2.1
Financial activities	10.6	118.2	([4])	1,287	2.6
Professional and business services	19.4	336.5	([4])	1,233	4.8
Education and health services	10.3	218.7	1.6	865	4.3
Leisure and hospitality	7.5	174.2	-1.2	385	5.2
Other services	11.7	58.5	.2	598	1.2
Government	.5	250.3	2.7	973	5.1
Maricopa, AZ	103.0	1,761.0	-3.7	836	1.8
Private industry	102.3	1,535.7	-4.5	825	1.9
Natural resources and mining	.5	8.5	.9	840	16.5
Construction	11.0	130.8	-21.8	878	5.1
Manufacturing	3.6	125.0	-5.6	1,137	2.1
Trade, transportation, and utilities	22.8	361.4	-3.9	770	-.3
Information	1.7	29.8	-2.0	1,083	5.5
Financial activities	12.9	142.4	-4.0	1,004	-1.8
Professional and business services	22.9	293.9	-6.4	863	4.2
Education and health services	10.1	216.2	7.8	906	2.7
Leisure and hospitality	7.4	176.8	-1.7	394	1.8
Other services	7.3	49.2	-2.3	584	3.4
Government	.7	225.3	2.3	915	.9

See footnotes at end of table.

22. Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2008.

County by NAICS supersector	Establishments, third quarter 2008 (thousands)	Employment		Average weekly wage[1]	
		September 2008 (thousands)	Percent change, September 2007-08[2]	Third quarter 2008	Percent change, third quarter 2007-08[2]
United States[3]	9,150.8	135,173.8	-0.8	$841	2.8
Private industry	8,857.7	113,499.1	-1.1	833	2.8
Natural resources and mining	126.2	2,003.6	3.6	880	7.3
Construction	889.2	7,255.4	-6.7	922	5.1
Manufacturing	361.0	13,345.0	-3.6	1,006	1.9
Trade, transportation, and utilities	1,927.8	25,953.1	-1.3	719	1.7
Information	146.3	2,973.8	-2.0	1,335	4.9
Financial activities	866.3	7,919.9	-2.5	1,207	.8
Professional and business services	1,528.7	17,752.2	-1.4	1,045	4.6
Education and health services	851.2	17,996.4	2.7	803	3.6
Leisure and hospitality	739.3	13,568.1	.0	358	2.9
Other services	1,205.9	4,482.9	.9	544	2.4
Government	293.1	21,674.7	1.0	886	3.0
Los Angeles, CA	428.8	4,141.1	-1.5	951	3.1
Private industry	424.8	3,581.8	-1.4	923	2.7
Natural resources and mining	.5	11.7	-2.8	1,232	9.3
Construction	14.0	145.0	-9.5	994	5.2
Manufacturing	14.6	432.3	-3.4	1,009	4.6
Trade, transportation, and utilities	53.7	792.1	-2.1	775	2.1
Information	8.7	214.8	([4])	1,551	([4])
Financial activities	24.1	233.8	-5.4	1,482	.1
Professional and business services	42.5	583.7	([4])	1,104	([4])
Education and health services	28.0	488.8	1.7	888	4.5
Leisure and hospitality	27.0	401.6	-.2	536	3.3
Other services	195.2	259.5	4.2	439	.5
Government	4.0	559.3	([4])	1,132	5.8
Cook, IL	140.4	2,504.2	-1.3	988	2.8
Private industry	139.0	2,195.4	-1.5	986	2.8
Natural resources and mining	.1	1.3	-3.6	960	-9.3
Construction	12.4	92.9	-5.9	1,284	5.9
Manufacturing	7.0	226.3	-4.1	1,002	2.5
Trade, transportation, and utilities	27.6	460.4	-2.3	788	1.8
Information	2.5	56.5	-1.5	1,557	10.2
Financial activities	15.7	206.3	-3.2	1,538	-.8
Professional and business services	28.9	434.2	-2.1	1,248	5.3
Education and health services	13.9	378.9	2.9	873	3.3
Leisure and hospitality	11.7	237.8	-1.3	443	3.3
Other services	14.5	96.6	1.5	707	2.2
Government	1.4	308.8	.0	1,009	2.9
New York, NY	118.9	2,363.8	.6	1,552	.5
Private industry	118.6	1,919.7	.7	1,673	.4
Natural resources and mining	.0	.2	-8.9	1,820	14.0
Construction	2.4	37.8	4.1	1,535	5.4
Manufacturing	3.0	35.4	-5.8	1,183	-2.6
Trade, transportation, and utilities	22.1	248.9	.4	1,127	.4
Information	4.6	135.9	.0	1,982	4.2
Financial activities	19.1	372.9	-2.1	2,985	-2.2
Professional and business services	25.6	491.8	1.4	1,799	2.3
Education and health services	8.8	283.4	.6	1,059	4.7
Leisure and hospitality	11.7	218.9	3.9	748	3.2
Other services	18.0	89.1	2.1	919	4.1
Government	.3	444.1	.1	1,027	1.4
Harris, TX	97.3	2,047.2	1.3	1,050	3.0
Private industry	96.7	1,796.9	1.1	1,061	2.9
Natural resources and mining	1.6	84.8	7.9	2,585	([4])
Construction	6.7	157.2	([4])	1,005	([4])
Manufacturing	4.6	187.3	2.8	1,272	-1.1
Trade, transportation, and utilities	22.4	428.3	1.0	919	2.1
Information	1.4	31.9	-2.4	1,285	2.1
Financial activities	10.6	118.2	([4])	1,287	2.6
Professional and business services	19.4	336.5	([4])	1,233	4.8
Education and health services	10.3	218.7	1.6	865	4.3
Leisure and hospitality	7.5	174.2	-1.2	385	5.2
Other services	11.7	58.5	.2	598	1.2
Government	.5	250.3	2.7	973	5.1
Maricopa, AZ	103.0	1,761.0	-3.7	836	1.8
Private industry	102.3	1,535.7	-4.5	825	1.9
Natural resources and mining	.5	8.5	.9	840	16.5
Construction	11.0	130.8	-21.8	878	5.1
Manufacturing	3.6	125.0	-5.6	1,137	2.1
Trade, transportation, and utilities	22.8	361.4	-3.9	770	-.3
Information	1.7	29.8	-2.0	1,083	5.5
Financial activities	12.9	142.4	-4.0	1,004	-1.8
Professional and business services	22.9	293.9	-6.4	863	4.2
Education and health services	10.1	216.2	7.8	906	2.7
Leisure and hospitality	7.4	176.8	-1.7	394	1.8
Other services	7.3	49.2	-2.3	584	3.4
Government	.7	225.3	2.3	915	.9

See footnotes at end of table.

23. Quarterly Census of Employment and Wages: by State, third quarter 2008.

State	Establishments, third quarter 2008 (thousands)	Employment		Average weekly wage[1]	
		September 2008 (thousands)	Percent change, September 2007-08	Third quarter 2008	Percent change, third quarter 2007-08
United States[2]	9,150.8	135,173.8	-0.8	$841	2.8
Alabama	121.8	1,936.4	-1.2	730	3.3
Alaska	21.6	332.1	1.4	872	3.7
Arizona	164.1	2,570.1	-3.0	798	2.0
Arkansas	86.1	1,185.0	-.1	649	3.0
California	1,344.6	15,527.1	-1.4	959	2.9
Colorado	180.4	2,322.7	.4	877	3.8
Connecticut	113.5	1,692.5	-.3	1,032	1.0
Delaware	29.5	420.6	-1.1	879	2.1
District of Columbia	33.8	688.2	1.4	1,391	1.0
Florida	625.2	7,546.4	-4.1	756	2.2
Georgia	276.6	4,018.6	-1.6	794	1.5
Hawaii	39.1	613.0	-2.1	774	1.8
Idaho	57.0	665.7	-1.4	643	1.3
Illinois	369.7	5,872.8	-.7	891	2.9
Indiana	160.5	2,897.6	-1.4	718	2.3
Iowa	94.6	1,499.0	.2	696	4.2
Kansas	86.7	1,368.9	.0	711	4.6
Kentucky	110.4	1,795.3	-1.0	692	2.4
Louisiana	124.1	1,877.4	-.2	756	5.6
Maine	50.7	610.8	-.6	683	3.5
Maryland	163.9	2,543.4	-.8	920	3.1
Massachusetts	213.9	3,265.7	.0	1,025	2.3
Michigan	259.0	4,093.9	-3.0	820	1.5
Minnesota	171.6	2,699.6	-.5	862	4.7
Mississippi	70.8	1,128.3	-1.3	631	4.0
Missouri	175.4	2,736.1	-.4	739	2.8
Montana	43.3	446.4	.1	628	3.1
Nebraska	60.0	925.7	.2	694	4.2
Nevada	77.5	1,253.0	-2.7	809	2.1
New Hampshire	49.8	634.6	-.5	822	2.8
New Jersey	277.8	3,952.9	-.7	990	2.5
New Mexico	54.7	835.2	.7	712	3.5
New York	586.1	8,633.8	.5	1,030	2.2
North Carolina	259.4	4,064.2	-1.0	741	3.1
North Dakota	25.8	357.0	2.8	665	6.9
Ohio	295.5	5,251.1	-1.5	766	2.8
Oklahoma	100.9	1,562.8	1.2	698	4.5
Oregon	132.5	1,734.1	-1.0	766	2.1
Pennsylvania	343.5	5,679.0	.0	822	2.5
Rhode Island	35.9	476.0	-2.0	778	2.5
South Carolina	119.6	1,874.6	-1.5	683	2.9
South Dakota	30.6	401.3	1.0	623	4.2
Tennessee	143.5	2,730.4	-1.5	745	2.8
Texas	563.6	10,438.3	1.4	850	2.9
Utah	87.3	1,229.3	-.1	717	2.9
Vermont	25.1	304.2	-.5	722	3.3
Virginia	232.7	3,676.1	-.3	877	2.3
Washington	225.5	3,007.5	1.0	903	3.0
West Virginia	48.9	716.4	.6	661	5.9
Wisconsin	161.6	2,788.7	-.6	730	3.4
Wyoming	25.2	294.0	3.3	781	6.4
Puerto Rico	55.6	992.8	-1.6	477	5.5
Virgin Islands	3.5	44.9	-.9	709	4.3

[1] Average weekly wages were calculated using unrounded data.

[2] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

24. Annual data: Quarterly Census of Employment and Wages, by ownership

Year	Average establishments	Average annual employment	Total annual wages (in thousands)	Average annual wage per employee	Average weekly wage
	Total covered (UI and UCFE)				
1998	7,634,018	124,183,549	$3,967,072,423	$31,945	$614
1999	7,820,860	127,042,282	4,235,579,204	33,340	641
2000	7,879,116	129,877,063	4,587,708,584	35,323	679
2001	7,984,529	129,635,800	4,695,225,123	36,219	697
2002	8,101,872	128,233,919	4,714,374,741	36,764	707
2003	8,228,840	127,795,827	4,826,251,547	37,765	726
2004	8,364,795	129,278,176	5,087,561,796	39,354	757
2005	8,571,144	131,571,623	5,351,949,496	40,677	782
2006	8,784,027	133,833,834	5,692,569,465	42,535	818
2007	8,971,897	135,366,106	6,018,089,108	44,458	855
	UI covered				
1998	7,586,767	121,400,660	$3,845,494,089	$31,676	$609
1999	7,771,198	124,255,714	4,112,169,533	33,094	636
2000	7,828,861	127,005,574	4,454,966,824	35,077	675
2001	7,933,536	126,883,182	4,560,511,280	35,943	691
2002	8,051,117	125,475,293	4,570,787,218	36,428	701
2003	8,177,087	125,031,551	4,676,319,378	37,401	719
2004	8,312,729	126,538,579	4,929,262,369	38,955	749
2005	8,518,249	128,837,948	5,188,301,929	40,270	774
2006	8,731,111	131,104,860	5,522,624,197	42,124	810
2007	8,908,198	132,639,806	5,841,231,314	44,038	847
	Private industry covered				
1998	7,381,518	105,082,368	$3,337,621,699	$31,762	$611
1999	7,560,567	107,619,457	3,577,738,557	33,244	639
2000	7,622,274	110,015,333	3,887,626,769	35,337	680
2001	7,724,965	109,304,802	3,952,152,155	36,157	695
2002	7,839,903	107,577,281	3,930,767,025	36,539	703
2003	7,963,340	107,065,553	4,015,823,311	37,508	721
2004	8,093,142	108,490,066	4,245,640,890	39,134	753
2005	8,294,662	110,611,016	4,480,311,193	40,505	779
2006	8,505,496	112,718,858	4,780,833,389	42,414	816
2007	8,681,001	114,012,221	5,057,840,759	44,362	853
	State government covered				
1998	67,347	4,240,779	$142,512,445	$33,605	$646
1999	70,538	4,296,673	149,011,194	34,681	667
2000	65,096	4,370,160	158,618,365	36,296	698
2001	64,583	4,452,237	168,358,331	37,814	727
2002	64,447	4,485,071	175,866,492	39,212	754
2003	64,467	4,481,845	179,528,728	40,057	770
2004	64,544	4,484,997	184,414,992	41,118	791
2005	66,278	4,527,514	191,281,126	42,249	812
2006	66,921	4,565,908	200,329,294	43,875	844
2007	67,381	4,611,395	211,677,002	45,903	883
	Local government covered				
1998	137,902	12,077,513	$365,359,945	$30,251	$582
1999	140,093	12,339,584	385,419,781	31,234	601
2000	141,491	12,620,081	408,721,690	32,387	623
2001	143,989	13,126,143	440,000,795	33,521	645
2002	146,767	13,412,941	464,153,701	34,605	665
2003	149,281	13,484,153	480,967,339	35,669	686
2004	155,043	13,563,517	499,206,488	36,805	708
2005	157,309	13,699,418	516,709,610	37,718	725
2006	158,695	13,820,093	541,461,514	39,179	753
2007	159,816	14,016,190	571,713,553	40,790	784
	Federal government covered (UCFE)				
1998	47,252	2,782,888	$121,578,334	$43,688	$840
1999	49,661	2,786,567	123,409,672	44,287	852
2000	50,256	2,871,489	132,741,760	46,228	889
2001	50,993	2,752,619	134,713,843	48,940	941
2002	50,755	2,758,627	143,587,523	52,050	1,001
2003	51,753	2,764,275	149,932,170	54,239	1,043
2004	52,066	2,739,596	158,299,427	57,782	1,111
2005	52,895	2,733,675	163,647,568	59,864	1,151
2006	52,916	2,728,974	169,945,269	62,274	1,198
2007	63,699	2,726,300	176,857,794	64,871	1,248

NOTE: Data are final. Detail may not add to total due to rounding.

25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, private ownership, by supersector, first quarter 2007

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers[1]	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
Total all industries[2]										
Establishments, first quarter	8,572,894	5,189,837	1,407,987	933,910	648,489	220,564	124,980	30,568	11,049	5,510
Employment, March	112,536,714	7,670,620	9,326,775	12,610,385	19,566,806	15,156,364	18,718,813	10,438,705	7,479,948	11,568,298
Natural resources and mining										
Establishments, first quarter	124,002	69,260	23,451	15,289	10,137	3,250	1,842	519	190	64
Employment, March	1,686,694	111,702	155,044	205,780	304,936	222,684	278,952	179,598	126,338	101,660
Construction										
Establishments, first quarter	883,409	580,647	141,835	84,679	52,336	15,341	6,807	1,326	350	88
Employment, March	7,321,288	835,748	929,707	1,137,104	1,564,722	1,046,790	1,004,689	443,761	232,556	126,211
Manufacturing										
Establishments, first quarter	361,070	136,649	61,845	54,940	53,090	25,481	19,333	6,260	2,379	1,093
Employment, March	13,850,738	238,848	415,276	755,931	1,657,463	1,785,569	2,971,836	2,140,531	1,613,357	2,271,927
Trade, transportation, and utilities										
Establishments, first quarter	1,905,750	1,017,012	381,434	248,880	160,549	53,721	34,536	7,315	1,792	511
Employment, March	25,983,275	1,683,738	2,539,291	3,335,327	4,845,527	3,709,371	5,140,740	2,510,273	1,167,986	1,051,022
Information										
Establishments, first quarter	143,094	81,414	20,986	16,338	13,384	5,609	3,503	1,134	489	237
Employment, March	3,016,454	113,901	139,730	222,710	411,218	387,996	533,877	392,350	335,998	478,674
Financial activities										
Establishments, first quarter	863,784	563,670	155,984	81,849	40,668	12,037	6,313	1,863	939	461
Employment, March	8,146,274	890,816	1,029,911	1,080,148	1,210,332	822,627	945,396	645,988	648,691	872,365
Professional and business services										
Establishments, first quarter	1,456,681	989,991	196,645	125,014	83,127	32,388	20,412	5,902	2,263	939
Employment, March	17,612,073	1,375,429	1,292,744	1,685,085	2,520,739	2,243,595	3,102,005	2,012,609	1,535,591	1,844,276
Education and health services										
Establishments, first quarter	812,914	388,773	179,011	116,031	75,040	27,393	18,815	4,153	1,906	1,792
Employment, March	17,331,231	700,195	1,189,566	1,559,689	2,258,922	1,908,595	2,828,678	1,409,073	1,319,128	4,157,385
Leisure and hospitality										
Establishments, first quarter	716,126	275,121	120,795	132,408	134,766	39,766	10,681	1,639	646	304
Employment, March	12,949,319	439,080	815,688	1,858,394	4,054,666	2,648,733	1,510,212	551,528	438,008	633,010
Other services										
Establishments, first quarter	1,119,209	908,792	118,963	57,419	25,169	5,562	2,731	457	95	21
Employment, March	4,402,263	1,109,065	776,354	756,783	732,313	379,320	401,371	152,994	62,295	31,768

[1] Includes establishments that reported no workers in March 2007.

[2] Includes data for unclassified establishments, not shown separately.

NOTE: Data are final. Detail may not add to total due to rounding.

26. Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	Average annual wages[3]		
	2006	2007	Percent change, 2006-07
Metropolitan areas[4]	$44,165	$46,139	4.5
Abilene, TX	29,842	31,567	5.8
Aguadilla-Isabela-San Sebastian, PR	19,277	20,295	5.3
Akron, OH	38,088	39,499	3.7
Albany, GA	32,335	33,378	3.2
Albany-Schenectady-Troy, NY	41,027	42,191	2.8
Albuquerque, NM	36,934	38,191	3.4
Alexandria, LA	31,329	32,757	4.6
Allentown-Bethlehem-Easton, PA-NJ	39,787	41,784	5.0
Altoona, PA	30,394	31,988	5.2
Amarillo, TX	33,574	35,574	6.0
Ames, IA	35,331	37,041	4.8
Anchorage, AK	42,955	45,237	5.3
Anderson, IN	32,184	32,850	2.1
Anderson, SC	30,373	31,086	2.3
Ann Arbor, MI	47,186	49,427	4.7
Anniston-Oxford, AL	32,724	34,593	5.7
Appleton, WI	35,308	36,575	3.6
Asheville, NC	32,268	33,406	3.5
Athens-Clarke County, GA	33,485	34,256	2.3
Atlanta-Sandy Springs-Marietta, GA	45,889	48,111	4.8
Atlantic City, NJ	38,018	39,276	3.3
Auburn-Opelika, AL	30,468	31,554	3.6
Augusta-Richmond County, GA-SC	35,638	36,915	3.6
Austin-Round Rock, TX	45,737	46,458	1.6
Bakersfield, CA	36,020	38,254	6.2
Baltimore-Towson, MD	45,177	47,177	4.4
Bangor, ME	31,746	32,829	3.4
Barnstable Town, MA	36,437	37,691	3.4
Baton Rouge, LA	37,245	39,339	5.6
Battle Creek, MI	39,362	40,628	3.2
Bay City, MI	35,094	35,680	1.7
Beaumont-Port Arthur, TX	39,026	40,682	4.2
Bellingham, WA	32,618	34,239	5.0
Bend, OR	33,319	34,318	3.0
Billings, MT	33,270	35,372	6.3
Binghamton, NY	35,048	36,322	3.6
Birmingham-Hoover, AL	40,798	42,570	4.3
Bismarck, ND	32,550	34,118	4.8
Blacksburg-Christiansburg-Radford, VA	34,024	35,248	3.6
Bloomington, IN	30,913	32,028	3.6
Bloomington-Normal, IL	41,359	42,082	1.7
Boise City-Nampa, ID	36,734	37,553	2.2
Boston-Cambridge-Quincy, MA-NH	56,809	59,817	5.3
Boulder, CO	50,944	52,745	3.5
Bowling Green, KY	32,529	33,308	2.4
Bremerton-Silverdale, WA	37,694	39,506	4.8
Bridgeport-Stamford-Norwalk, CT	74,890	79,973	6.8
Brownsville-Harlingen, TX	25,795	27,126	5.2
Brunswick, GA	32,717	32,705	0.0
Buffalo-Niagara Falls, NY	36,950	38,218	3.4
Burlington, NC	32,835	33,132	0.9
Burlington-South Burlington, VT	40,548	41,907	3.4
Canton-Massillon, OH	33,132	34,091	2.9
Cape Coral-Fort Myers, FL	37,065	37,658	1.6
Carson City, NV	40,115	42,030	4.8
Casper, WY	38,307	41,105	7.3
Cedar Rapids, IA	38,976	41,059	5.3
Champaign-Urbana, IL	34,422	35,788	4.0
Charleston, WV	36,887	38,687	4.9
Charleston-North Charleston, SC	35,267	36,954	4.8
Charlotte-Gastonia-Concord, NC-SC	45,732	46,975	2.7
Charlottesville, VA	39,051	40,819	4.5
Chattanooga, TN-GA	35,358	36,522	3.3
Cheyenne, WY	35,306	36,191	2.5
Chicago-Naperville-Joliet, IL-IN-WI	48,631	50,823	4.5
Chico, CA	31,557	33,207	5.2
Cincinnati-Middletown, OH-KY-IN	41,447	42,969	3.7
Clarksville, TN-KY	30,949	32,216	4.1
Cleveland, TN	33,075	34,666	4.8
Cleveland-Elyria-Mentor, OH	41,325	42,783	3.5
Coeur d'Alene, ID	29,797	31,035	4.2
College Station-Bryan, TX	30,239	32,630	7.9
Colorado Springs, CO	38,325	39,745	3.7
Columbia, MO	32,207	33,266	3.3
Columbia, SC	35,209	36,293	3.1
Columbus, GA-AL	32,334	34,511	6.7
Columbus, IN	40,107	41,078	2.4
Columbus, OH	41,168	42,655	3.6
Corpus Christi, TX	35,399	37,186	5.0
Corvallis, OR	40,586	41,981	3.4

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	Average annual wages[3]		
	2006	2007	Percent change, 2006-07
Cumberland, MD-WV	$29,859	$31,373	5.1
Dallas-Fort Worth-Arlington, TX	47,525	49,627	4.4
Dalton, GA	33,266	34,433	3.5
Danville, IL	33,141	34,086	2.9
Danville, VA	28,870	30,212	4.6
Davenport-Moline-Rock Island, IA-IL	37,559	39,385	4.9
Dayton, OH	39,387	40,223	2.1
Decatur, AL	34,883	35,931	3.0
Decatur, IL	39,375	41,039	4.2
Deltona-Daytona Beach-Ormond Beach, FL	31,197	32,196	3.2
Denver-Aurora, CO	48,232	50,180	4.0
Des Moines, IA	41,358	42,895	3.7
Detroit-Warren-Livonia, MI	47,455	49,019	3.3
Dothan, AL	31,473	32,367	2.8
Dover, DE	34,571	35,978	4.1
Dubuque, IA	33,044	34,240	3.6
Duluth, MN-WI	33,677	35,202	4.5
Durham, NC	49,314	52,420	6.3
Eau Claire, WI	31,718	32,792	3.4
El Centro, CA	30,035	32,419	7.9
Elizabethtown, KY	32,072	32,701	2.0
Elkhart-Goshen, IN	35,878	36,566	1.9
Elmira, NY	33,968	34,879	2.7
El Paso, TX	29,903	31,354	4.9
Erie, PA	33,213	34,788	4.7
Eugene-Springfield, OR	33,257	34,329	3.2
Evansville, IN-KY	36,858	37,182	0.9
Fairbanks, AK	41,296	42,345	2.5
Fajardo, PR	21,002	22,075	5.1
Fargo, ND-MN	33,542	35,264	5.1
Farmington, NM	36,220	38,572	6.5
Fayetteville, NC	31,281	33,216	6.2
Fayetteville-Springdale-Rogers, AR-MO	35,734	37,325	4.5
Flagstaff, AZ	32,231	34,473	7.0
Flint, MI	39,409	39,310	-0.3
Florence, SC	33,610	34,305	2.1
Florence-Muscle Shoals, AL	29,518	30,699	4.0
Fond du Lac, WI	33,376	34,664	3.9
Fort Collins-Loveland, CO	37,940	39,335	3.7
Fort Smith, AR-OK	30,932	31,236	1.0
Fort Walton Beach-Crestview-Destin, FL	34,409	35,613	3.5
Fort Wayne, IN	35,641	36,542	2.5
Fresno, CA	33,504	35,111	4.8
Gadsden, AL	29,499	30,979	5.0
Gainesville, FL	34,573	36,243	4.8
Gainesville, GA	34,765	36,994	6.4
Glens Falls, NY	32,780	33,564	2.4
Goldsboro, NC	29,331	30,177	2.9
Grand Forks, ND-MN	29,234	30,745	5.2
Grand Junction, CO	33,729	36,221	7.4
Grand Rapids-Wyoming, MI	38,056	38,953	2.4
Great Falls, MT	29,542	31,009	5.0
Greeley, CO	35,144	37,066	5.5
Green Bay, WI	36,677	37,788	3.0
Greensboro-High Point, NC	35,898	37,213	3.7
Greenville, NC	32,432	33,703	3.9
Greenville, SC	35,471	36,536	3.0
Guayama, PR	24,551	26,094	6.3
Gulfport-Biloxi, MS	34,688	34,971	0.8
Hagerstown-Martinsburg, MD-WV	34,621	35,468	2.4
Hanford-Corcoran, CA	31,148	32,504	4.4
Harrisburg-Carlisle, PA	39,807	41,424	4.1
Harrisonburg, VA	31,522	32,718	3.8
Hartford-West Hartford-East Hartford, CT	51,282	54,188	5.7
Hattiesburg, MS	30,059	30,729	2.2
Hickory-Lenoir-Morganton, NC	31,323	32,364	3.3
Hinesville-Fort Stewart, GA	31,416	33,210	5.7
Holland-Grand Haven, MI	36,895	37,470	1.6
Honolulu, HI	39,009	40,748	4.5
Hot Springs, AR	27,684	28,448	2.8
Houma-Bayou Cane-Thibodaux, LA	38,417	41,604	8.3
Houston-Baytown-Sugar Land, TX	50,177	53,494	6.6
Huntington-Ashland, WV-KY-OH	32,648	33,973	4.1
Huntsville, AL	44,659	45,763	2.5
Idaho Falls, ID	31,632	29,878	-5.5
Indianapolis, IN	41,307	42,227	2.2
Iowa City, IA	35,913	37,457	4.3
Ithaca, NY	38,337	39,387	2.7
Jackson, MI	36,836	38,267	3.9
Jackson, MS	34,605	35,771	3.4

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	Average annual wages[3]		
	2006	2007	Percent change, 2006-07
Jackson, TN	$34,477	$35,059	1.7
Jacksonville, FL	40,192	41,437	3.1
Jacksonville, NC	25,854	27,005	4.5
Janesville, WI	36,732	36,790	0.2
Jefferson City, MO	31,771	32,903	3.6
Johnson City, TN	31,058	31,985	3.0
Johnstown, PA	29,972	31,384	4.7
Jonesboro, AR	28,972	30,378	4.9
Joplin, MO	30,111	31,068	3.2
Kalamazoo-Portage, MI	37,099	38,402	3.5
Kankakee-Bradley, IL	32,389	33,340	2.9
Kansas City, MO-KS	41,320	42,921	3.9
Kennewick-Richland-Pasco, WA	38,750	40,439	4.4
Killeen-Temple-Fort Hood, TX	31,511	32,915	4.5
Kingsport-Bristol-Bristol, TN-VA	35,100	36,399	3.7
Kingston, NY	33,697	35,018	3.9
Knoxville, TN	37,216	38,386	3.1
Kokomo, IN	45,808	47,269	3.2
La Crosse, WI-MN	31,819	32,949	3.6
Lafayette, IN	35,380	36,419	2.9
Lafayette, LA	38,170	40,684	6.6
Lake Charles, LA	35,883	37,447	4.4
Lakeland, FL	33,530	34,394	2.6
Lancaster, PA	36,171	37,043	2.4
Lansing-East Lansing, MI	39,890	40,866	2.4
Laredo, TX	28,051	29,009	3.4
Las Cruces, NM	29,969	31,422	4.8
Las Vegas-Paradise, NV	40,139	42,336	5.5
Lawrence, KS	29,896	30,830	3.1
Lawton, OK	29,830	30,617	2.6
Lebanon, PA	31,790	32,876	3.4
Lewiston, ID-WA	30,776	31,961	3.9
Lewiston-Auburn, ME	32,231	33,118	2.8
Lexington-Fayette, KY	37,926	39,290	3.6
Lima, OH	33,790	35,177	4.1
Lincoln, NE	33,703	34,750	3.1
Little Rock-North Little Rock, AR	36,169	39,305	8.7
Logan, UT-ID	26,766	27,810	3.9
Longview, TX	35,055	36,956	5.4
Longview, WA	35,140	37,101	5.6
Los Angeles-Long Beach-Santa Ana, CA	48,680	50,480	3.7
Louisville, KY-IN	38,673	40,125	3.8
Lubbock, TX	31,977	32,761	2.5
Lynchburg, VA	33,242	34,412	3.5
Macon, GA	34,126	34,243	0.3
Madera, CA	31,213	33,266	6.6
Madison, WI	40,007	41,201	3.0
Manchester-Nashua, NH	46,659	49,235	5.5
Mansfield, OH	33,171	33,109	-0.2
Mayaguez, PR	20,619	21,326	3.4
McAllen-Edinburg-Pharr, TX	26,712	27,651	3.5
Medford, OR	31,697	32,877	3.7
Memphis, TN-MS-AR	40,580	42,339	4.3
Merced, CA	31,147	32,351	3.9
Miami-Fort Lauderdale-Miami Beach, FL	42,175	43,428	3.0
Michigan City-La Porte, IN	31,383	32,570	3.8
Midland, TX	42,625	45,574	6.9
Milwaukee-Waukesha-West Allis, WI	42,049	43,261	2.9
Minneapolis-St. Paul-Bloomington, MN-WI	46,931	49,542	5.6
Missoula, MT	30,652	32,233	5.2
Mobile, AL	36,126	36,890	2.1
Modesto, CA	35,468	36,739	3.6
Monroe, LA	30,618	31,992	4.5
Monroe, MI	40,938	41,636	1.7
Montgomery, AL	35,383	36,223	2.4
Morgantown, WV	32,608	35,241	8.1
Morristown, TN	31,914	32,806	2.8
Mount Vernon-Anacortes, WA	32,851	34,620	5.4
Muncie, IN	30,691	31,326	2.1
Muskegon-Norton Shores, MI	33,949	34,982	3.0
Myrtle Beach-Conway-North Myrtle Beach, SC	27,905	28,576	2.4
Napa, CA	41,788	44,171	5.7
Naples-Marco Island, FL	39,320	41,300	5.0
Nashville-Davidson--Murfreesboro, TN	41,003	42,728	4.2
New Haven-Milford, CT	44,892	47,039	4.8
New Orleans-Metairie-Kenner, LA	42,434	43,255	1.9
New York-Northern New Jersey-Long Island, NY-NJ-PA	61,388	65,685	7.0
Niles-Benton Harbor, MI	36,967	38,140	3.2
Norwich-New London, CT	43,184	45,463	5.3
Ocala, FL	31,330	31,623	0.9

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	Average annual wages[3]		
	2006	2007	Percent change, 2006-07
Ocean City, NJ	$31,801	$32,452	2.0
Odessa, TX	37,144	41,758	12.4
Ogden-Clearfield, UT	32,890	34,067	3.6
Oklahoma City, OK	35,846	37,192	3.8
Olympia, WA	37,787	39,678	5.0
Omaha-Council Bluffs, NE-IA	38,139	39,273	3.0
Orlando, FL	37,776	38,633	2.3
Oshkosh-Neenah, WI	39,538	41,014	3.7
Owensboro, KY	32,491	33,593	3.4
Oxnard-Thousand Oaks-Ventura, CA	45,467	47,669	4.8
Palm Bay-Melbourne-Titusville, FL	39,778	40,975	3.0
Panama City-Lynn Haven, FL	33,341	33,950	1.8
Parkersburg-Marietta, WV-OH	32,213	33,547	4.1
Pascagoula, MS	36,287	39,131	7.8
Pensacola-Ferry Pass-Brent, FL	33,530	34,165	1.9
Peoria, IL	42,283	43,470	2.8
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	48,647	50,611	4.0
Phoenix-Mesa-Scottsdale, AZ	42,220	43,697	3.5
Pine Bluff, AR	32,115	33,094	3.0
Pittsburgh, PA	40,759	42,910	5.3
Pittsfield, MA	36,707	38,075	3.7
Pocatello, ID	28,418	29,268	3.0
Ponce, PR	20,266	21,019	3.7
Portland-South Portland-Biddeford, ME	36,979	38,497	4.1
Portland-Vancouver-Beaverton, OR-WA	42,607	44,335	4.1
Port St. Lucie-Fort Pierce, FL	34,408	36,375	5.7
Poughkeepsie-Newburgh-Middletown, NY	39,528	40,793	3.2
Prescott, AZ	30,625	32,048	4.6
Providence-New Bedford-Fall River, RI-MA	39,428	40,674	3.2
Provo-Orem, UT	32,308	34,141	5.7
Pueblo, CO	30,941	32,552	5.2
Punta Gorda, FL	32,370	32,833	1.4
Racine, WI	39,002	40,746	4.5
Raleigh-Cary, NC	41,205	42,801	3.9
Rapid City, SD	29,920	31,119	4.0
Reading, PA	38,048	39,945	5.0
Redding, CA	33,307	34,953	4.9
Reno-Sparks, NV	39,537	41,365	4.6
Richmond, VA	42,495	44,530	4.8
Riverside-San Bernardino-Ontario, CA	36,668	37,846	3.2
Roanoke, VA	33,912	35,419	4.4
Rochester, MN	42,941	44,786	4.3
Rochester, NY	39,481	40,752	3.2
Rockford, IL	37,424	38,304	2.4
Rocky Mount, NC	31,556	32,527	3.1
Rome, GA	34,850	33,041	-5.2
Sacramento--Arden-Arcade--Roseville, CA	44,552	46,385	4.1
Saginaw-Saginaw Township North, MI	37,747	37,507	-0.6
St. Cloud, MN	33,018	33,996	3.0
St. George, UT	28,034	29,052	3.6
St. Joseph, MO-KS	31,253	31,828	1.8
St. Louis, MO-IL	41,354	42,873	3.7
Salem, OR	32,764	33,986	3.7
Salinas, CA	37,974	39,419	3.8
Salisbury, MD	33,223	34,833	4.8
Salt Lake City, UT	38,630	40,935	6.0
San Angelo, TX	30,168	30,920	2.5
San Antonio, TX	36,763	38,274	4.1
San Diego-Carlsbad-San Marcos, CA	45,784	47,657	4.1
Sandusky, OH	33,526	33,471	-0.2
San Francisco-Oakland-Fremont, CA	61,343	64,559	5.2
San German-Cabo Rojo, PR	19,498	19,777	1.4
San Jose-Sunnyvale-Santa Clara, CA	76,608	82,038	7.1
San Juan-Caguas-Guaynabo, PR	24,812	25,939	4.5
San Luis Obispo-Paso Robles, CA	35,146	36,740	4.5
Santa Barbara-Santa Maria-Goleta, CA	40,326	41,967	4.1
Santa Cruz-Watsonville, CA	40,776	41,540	1.9
Santa Fe, NM	35,320	37,395	5.9
Santa Rosa-Petaluma, CA	41,533	42,824	3.1
Sarasota-Bradenton-Venice, FL	35,751	36,424	1.9
Savannah, GA	35,684	36,695	2.8
Scranton--Wilkes-Barre, PA	32,813	34,205	4.2
Seattle-Tacoma-Bellevue, WA	49,455	51,924	5.0
Sheboygan, WI	35,908	37,049	3.2
Sherman-Denison, TX	34,166	35,672	4.4
Shreveport-Bossier City, LA	33,678	34,892	3.6
Sioux City, IA-NE-SD	31,826	33,025	3.8
Sioux Falls, SD	34,542	36,056	4.4
South Bend-Mishawaka, IN-MI	35,089	36,266	3.4
Spartanburg, SC	37,077	37,967	2.4

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	Average annual wages[3]		
	2006	2007	Percent change, 2006-07
Spokane, WA	$34,016	$35,539	4.5
Springfield, IL	40,679	42,420	4.3
Springfield, MA	37,962	39,487	4.0
Springfield, MO	30,786	31,868	3.5
Springfield, OH	31,844	32,017	0.5
State College, PA	35,392	36,797	4.0
Stockton, CA	36,426	37,906	4.1
Sumter, SC	29,294	30,267	3.3
Syracuse, NY	38,081	39,620	4.0
Tallahassee, FL	35,018	36,543	4.4
Tampa-St. Petersburg-Clearwater, FL	38,016	39,215	3.2
Terre Haute, IN	31,341	32,349	3.2
Texarkana, TX-Texarkana, AR	32,545	34,079	4.7
Toledo, OH	37,039	38,538	4.0
Topeka, KS	34,806	36,109	3.7
Trenton-Ewing, NJ	54,274	56,645	4.4
Tucson, AZ	37,119	38,524	3.8
Tulsa, OK	37,637	38,942	3.5
Tuscaloosa, AL	35,613	36,737	3.2
Tyler, TX	36,173	37,184	2.8
Utica-Rome, NY	32,457	33,916	4.5
Valdosta, GA	26,794	27,842	3.9
Vallejo-Fairfield, CA	40,225	42,932	6.7
Vero Beach, FL	33,823	35,901	6.1
Victoria, TX	36,642	38,317	4.6
Vineland-Millville-Bridgeton, NJ	37,749	39,408	4.4
Virginia Beach-Norfolk-Newport News, VA-NC	36,071	37,734	4.6
Visalia-Porterville, CA	29,772	30,968	4.0
Waco, TX	33,450	34,679	3.7
Warner Robins, GA	38,087	39,220	3.0
Washington-Arlington-Alexandria, DC-VA-MD-WV	58,057	60,711	4.6
Waterloo-Cedar Falls, IA	34,329	35,899	4.6
Wausau, WI	34,438	35,710	3.7
Weirton-Steubenville, WV-OH	31,416	32,893	4.7
Wenatchee, WA	28,340	29,475	4.0
Wheeling, WV-OH	30,620	31,169	1.8
Wichita, KS	38,763	39,662	2.3
Wichita Falls, TX	30,785	32,320	5.0
Williamsport, PA	31,431	32,506	3.4
Wilmington, NC	32,948	34,239	3.9
Winchester, VA-WV	34,895	36,016	3.2
Winston-Salem, NC	37,712	38,921	3.2
Worcester, MA	42,726	44,652	4.5
Yakima, WA	28,401	29,743	4.7
Yauco, PR	19,001	19,380	2.0
York-Hanover, PA	37,226	38,469	3.3
Youngstown-Warren-Boardman, OH-PA	33,852	34,698	2.5
Yuba City, CA	33,642	35,058	4.2
Yuma, AZ	28,369	30,147	6.3

[1] Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

[2] Includes data for Metropolitan Statistical Areas (MSA) as defined by OMB Bulletin No. 04-03 as of February 18, 2004.

[3] Each year's total is based on the MSA definition for the specific year. Annual changes include differences resulting from changes in MSA definitions.

[4] Totals do not include the six MSAs within Puerto Rico.

27. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1998[1]	1999[1]	2000[1]	2001[1]	2002	2003	2004	2005	2006	2007	2008
Civilian noninstitutional population	205,220	207,753	212,577	215,092	217,570	221,168	223,357	226,082	228,815	231,867	233,788
Civilian labor force	137,673	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428	153,124	154,287
Labor force participation rate	67.1	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2	66.0	66.0
Employed	131,463	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047	145,362
Employment-population ratio	64.1	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1	63.0	62.2
Unemployed	6,210	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001	7,078	8,924
Unemployment rate	4.5	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8
Not in the labor force	67,547	68,385	69,994	71,359	72,707	74,658	75,956	76,762	77,387	78,743	79,501

[1] Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

Industry	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total private employment	106,021	108,686	110,995	110,708	108,828	108,416	109,814	111,899	114,113	115,420	114,792
Total nonfarm employment	125,930	128,993	131,785	131,826	130,341	129,999	131,435	133,703	136,086	137,623	137,248
Goods-producing	24,354	24,465	24,649	23,873	22,557	21,816	21,882	22,190	22,531	22,221	21,404
Natural resources and mining	645	598	599	606	583	572	591	628	684	723	774
Construction	6,149	6,545	6,787	6,826	6,716	6,735	6,976	7,336	7,691	7,614	7,175
Manufacturing	17,560	17,322	17,263	16,441	15,259	14,510	14,315	14,226	14,155	13,884	13,455
Private service-providing	81,667	84,221	86,346	86,834	86,271	86,600	87,932	89,709	91,582	93,199	93,387
Trade, transportation, and utilities	25,186	25,771	26,225	25,983	25,497	25,287	25,533	25,959	26,276	26,608	26,332
Wholesale trade	5,795	5,893	5,933	5,773	5,652	5,608	5,663	5,764	5,905	6,028	6,012
Retail trade	14,609	14,970	15,280	15,239	15,025	14,917	15,058	15,280	15,353	15,491	15,265
Transportation and warehousing	4,168	4,300	4,410	4,372	4,224	4,185	4,249	4,361	4,470	4,536	4,495
Utilities	613	609	601	599	596	577	564	554	549	553	560
Information	3,218	3,419	3,630	3,629	3,395	3,188	3,118	3,061	3,038	3,029	2,987
Financial activities	7,462	7,648	7,687	7,808	7,847	7,977	8,031	8,153	8,328	8,308	8,192
Professional and business services	15,147	15,957	16,666	16,476	15,976	15,987	16,394	16,954	17,566	17,962	17,863
Education and health services	14,446	14,798	15,109	15,645	16,199	16,588	16,953	17,372	17,826	18,327	18,878
Leisure and hospitality	11,232	11,543	11,862	12,036	11,986	12,173	12,493	12,816	13,110	13,474	13,615
Other services	4,976	5,087	5,168	5,258	5,372	5,401	5,409	5,395	5,438	5,491	5,520
Government	19,909	20,307	20,790	21,118	21,513	21,583	21,621	21,804	21,974	22,203	22,457

29. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Private sector:											
Average weekly hours	34.5	34.3	34.3	34.0	33.9	33.7	33.7	33.8	33.9	33.8	33.6
Average hourly earnings (in dollars)	13.01	13.49	14.02	14.54	14.97	15.37	15.69	16.13	16.76	17.42	18.05
Average weekly earnings (in dollars)	448.56	463.15	481.01	493.79	506.75	518.06	529.09	544.33	567.87	589.72	606.84
Goods-producing:											
Average weekly hours	40.8	40.8	40.7	39.9	39.9	39.8	40.0	40.1	40.5	40.6	40.2
Average hourly earnings (in dollars)	14.23	14.71	15.27	15.78	16.33	16.80	17.19	17.60	18.02	18.67	19.31
Average weekly earnings (in dollars)	580.99	599.99	621.86	630.01	651.61	669.13	688.13	705.31	730.16	757.06	775.28
Natural resources and mining											
Average weekly hours	44.9	44.2	44.4	44.6	43.2	43.6	44.5	45.6	45.6	45.9	45.0
Average hourly earnings (in dollars)	16.20	16.33	16.55	17.00	17.19	17.56	18.07	18.72	19.90	20.96	22.42
Average weekly earnings (in dollars)	727.28	721.74	734.92	757.92	741.97	765.94	803.82	853.71	907.95	961.78	1008.27
Construction:											
Average weekly hours	38.8	39.0	39.2	38.7	38.4	38.4	38.3	38.6	39.0	39.0	38.5
Average hourly earnings (in dollars)	16.23	16.80	17.48	18.00	18.52	18.95	19.23	19.46	20.02	20.95	21.86
Average weekly earnings (in dollars)	629.75	655.11	685.78	695.89	711.82	726.83	735.55	750.22	781.21	816.06	841.46
Manufacturing:											
Average weekly hours	41.4	41.4	41.3	40.3	40.5	40.4	40.8	40.7	41.1	41.2	40.8
Average hourly earnings (in dollars)	13.45	13.85	14.32	14.76	15.29	15.74	16.14	16.56	16.81	17.26	17.72
Average weekly earnings (in dollars)	557.09	573.25	590.77	595.19	618.75	635.99	658.49	673.33	691.02	711.36	723.51
Private service-providing:											
Average weekly hours	32.8	32.7	32.7	32.5	32.5	32.3	32.3	32.4	32.5	32.4	32.3
Average hourly earnings (in dollars)	12.61	13.09	13.62	14.18	14.59	14.99	15.29	15.74	16.42	17.10	17.73
Average weekly earnings (in dollars)	413.50	427.98	445.74	461.08	473.80	484.68	494.22	509.58	532.78	554.78	572.96
Trade, transportation, and utilities:											
Average weekly hours	34.2	33.9	33.8	33.5	33.6	33.6	33.5	33.4	33.4	33.3	33.2
Average hourly earnings (in dollars)	12.39	12.82	13.31	13.70	14.02	14.34	14.58	14.92	15.39	15.79	16.19
Average weekly earnings (in dollars)	423.30	434.31	449.88	459.53	471.27	481.14	488.42	498.43	514.34	526.38	537.00
Wholesale trade:											
Average weekly hours	38.6	38.6	38.8	38.4	38.0	37.9	37.8	37.7	38.0	38.2	38.2
Average hourly earnings (in dollars)	15.07	15.62	16.28	16.77	16.98	17.36	17.65	18.16	18.91	19.59	20.13
Average weekly earnings (in dollars)	582.21	602.77	631.40	643.45	644.38	657.29	667.09	685.00	718.63	748.90	769.74
Retail trade:											
Average weekly hours	30.9	30.8	30.7	30.7	30.9	30.9	30.7	30.6	30.5	30.2	30.0
Average hourly earnings (in dollars)	10.05	10.45	10.86	11.29	11.67	11.90	12.08	12.36	12.57	12.76	12.90
Average weekly earnings (in dollars)	582.21	602.77	631.40	643.45	644.38	657.29	667.09	685.00	718.63	748.90	769.74
Transportation and warehousing:											
Average weekly hours	38.7	37.6	37.4	36.7	36.8	36.8	37.2	37.0	36.9	36.9	36.4
Average hourly earnings (in dollars)	14.12	14.55	15.05	15.33	15.76	16.25	16.52	16.70	17.28	17.73	18.39
Average weekly earnings (in dollars)	546.86	547.97	562.31	562.70	579.75	598.41	614.82	618.58	636.97	654.83	669.44
Utilities:											
Average weekly hours	42.0	42.0	42.0	41.4	40.9	41.1	40.9	41.1	41.4	42.4	42.6
Average hourly earnings (in dollars)	21.48	22.03	22.75	23.58	23.96	24.77	25.61	26.68	27.40	27.87	28.84
Average weekly earnings (in dollars)	902.94	924.59	955.66	977.18	979.09	1017.27	1048.44	1095.90	1135.34	1182.17	1230.08
Information:											
Average weekly hours	36.6	36.7	36.8	36.9	36.5	36.2	36.3	36.5	36.6	36.5	36.7
Average hourly earnings (in dollars)	17.67	18.40	19.07	19.80	20.20	21.01	21.40	22.06	23.23	23.94	24.74
Average weekly earnings (in dollars)	646.34	675.47	700.86	730.88	737.77	760.45	777.25	805.08	850.42	873.63	907.02
Financial activities:											
Average weekly hours	36.0	35.8	35.9	35.8	35.6	35.5	35.5	35.9	35.7	35.9	35.9
Average hourly earnings (in dollars)	13.93	14.47	14.98	15.59	16.17	17.14	17.52	17.95	18.80	19.64	20.28
Average weekly earnings (in dollars)	500.98	517.57	537.37	557.92	575.54	609.08	622.87	644.99	672.21	705.29	727.38
Professional and business services:											
Average weekly hours	34.3	34.4	34.5	34.2	34.2	34.1	34.2	34.2	34.6	34.8	34.8
Average hourly earnings (in dollars)	14.27	14.85	15.52	16.33	16.81	17.21	17.48	18.08	19.13	20.13	21.15
Average weekly earnings (in dollars)	490.00	510.99	535.07	557.84	574.66	587.02	597.56	618.87	662.27	700.15	736.55
Education and health services:											
Average weekly hours	32.2	32.1	32.2	32.3	32.4	32.3	32.4	32.6	32.5	32.6	32.5
Average hourly earnings (in dollars)	13.00	13.44	13.95	14.64	15.21	15.64	16.15	16.71	17.38	18.11	18.78
Average weekly earnings (in dollars)	418.82	431.35	449.29	473.39	492.74	505.69	523.78	544.59	564.94	590.18	611.03
Leisure and hospitality:											
Average weekly hours	26.2	26.1	26.1	25.8	25.8	25.6	25.7	25.7	25.7	25.5	25.2
Average hourly earnings (in dollars)	7.67	7.96	8.32	8.57	8.81	9.00	9.15	9.38	9.75	10.41	10.83
Average weekly earnings (in dollars)	200.82	208.05	217.20	220.73	227.17	230.42	234.86	241.36	250.34	265.45	272.97
Other services:											
Average weekly hours	32.6	32.5	32.5	32.3	32.0	31.4	31.0	30.9	30.9	30.9	30.8
Average hourly earnings (in dollars)	11.79	12.26	12.73	13.27	13.72	13.84	13.98	14.34	14.77	15.42	15.86
Average weekly earnings (in dollars)	384.25	398.77	413.41	428.64	439.76	434.41	433.04	443.37	456.50	476.80	488.22

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

30. Employment Cost Index, compensation,[1] by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Civilian workers[2]	104.2	105.0	106.1	106.7	107.6	108.3	109.2	109.5	109.9	0.4	2.1
Workers by occupational group											
Management, professional, and related	104.7	105.5	106.7	107.2	108.3	109.0	110.1	110.4	110.9	.5	2.4
Management, business, and financial	104.4	105.2	106.2	106.6	108.2	108.9	109.7	109.8	110.0	.2	1.7
Professional and related	104.9	105.7	107.0	107.6	108.4	109.0	110.4	110.7	111.3	.5	2.7
Sales and office	103.8	104.8	105.5	106.4	106.8	107.7	108.2	108.3	108.4	.1	1.5
Sales and related	102.4	103.6	104.1	105.2	105.0	106.1	106.0	105.5	104.3	-1.1	-.7
Office and administrative support	104.7	105.5	106.4	107.1	108.0	108.6	109.5	110.0	110.8	.7	2.6
Natural resources, construction, and maintenance	104.1	105.1	106.1	106.8	107.7	108.4	109.3	109.8	110.1	.3	2.2
Construction and extraction	104.3	105.7	106.5	107.4	108.5	109.6	110.3	110.8	111.0	.2	2.3
Installation, maintenance, and repair	103.7	104.4	105.6	106.2	106.7	107.0	108.0	108.6	109.1	.5	2.2
Production, transportation, and material moving	102.7	103.5	104.2	104.7	105.6	106.2	106.9	107.2	108.0	.7	2.3
Production	102.1	102.8	103.3	104.1	104.8	105.3	105.9	106.2	107.2	.9	2.3
Transportation and material moving	103.4	104.4	105.3	105.6	106.6	107.3	108.1	108.4	108.9	.5	2.2
Service occupations	104.8	105.5	106.9	107.7	108.4	109.1	110.2	110.6	111.5	.8	2.9
Workers by industry											
Goods-producing	102.9	103.9	104.4	105.0	106.1	106.8	107.3	107.5	108.0	.5	1.8
Manufacturing	102.0	102.9	103.2	103.8	104.7	105.1	105.6	105.9	106.5	.6	1.7
Service-providing	104.4	105.2	106.4	107.0	107.8	108.5	109.5	109.8	110.3	.5	2.3
Education and health services	104.9	105.5	107.2	107.9	108.6	109.2	110.8	111.1	111.7	.5	2.9
Health care and social assistance	105.4	106.1	107.1	107.9	108.9	109.6	110.4	110.8	111.7	.8	2.6
Hospitals	105.1	105.7	106.7	107.5	108.4	109.2	110.2	110.8	111.7	.8	3.0
Nursing and residential care facilities	104.5	105.0	105.6	106.3	107.3	108.2	109.0	109.6	110.3	.6	2.8
Education services	104.5	104.9	107.3	107.9	108.3	108.9	111.1	111.3	111.8	.4	3.2
Elementary and secondary schools	104.6	105.0	107.4	107.9	108.2	108.8	111.1	111.4	111.9	.4	3.4
Public administration[3]	105.6	106.6	108.0	109.1	109.7	110.1	111.6	112.0	113.0	.9	3.0
Private industry workers	104.0	104.9	105.7	106.3	107.3	108.0	108.7	108.9	109.3	.4	1.9
Workers by occupational group											
Management, professional, and related	104.6	105.5	106.4	106.8	108.1	108.9	109.6	109.9	110.4	.5	2.1
Management, business, and financial	104.3	105.1	106.0	106.3	108.0	108.7	109.3	109.5	109.6	.1	1.5
Professional and related	104.9	105.9	106.7	107.3	108.3	109.0	109.9	110.3	111.0	.6	2.5
Sales and office	103.7	104.7	105.3	106.1	106.6	107.5	107.9	107.9	107.9	.0	1.2
Sales and related	102.4	103.6	104.2	105.2	105.0	106.2	106.0	105.5	104.3	-1.1	-.7
Office and administrative support	104.5	105.4	106.0	106.7	107.8	108.5	109.2	109.6	110.5	.8	2.5
Natural resources, construction, and maintenance	104.0	105.0	105.9	106.7	107.6	108.3	109.0	109.6	109.9	.3	2.1
Construction and extraction	104.4	105.7	106.5	107.4	108.6	109.7	110.3	110.8	110.9	.1	2.1
Installation, maintenance, and repair	103.5	104.1	105.2	105.8	106.3	106.6	107.4	108.1	108.6	.5	2.2
Production, transportation, and material moving	102.5	103.3	103.9	104.5	105.5	106.0	106.6	106.9	107.7	.7	2.1
Production	102.1	102.8	103.2	104.0	104.8	105.2	105.8	106.1	107.1	.9	2.2
Transportation and material moving	103.1	104.1	104.9	105.3	106.4	107.2	107.7	107.9	108.4	.5	1.9
Service occupations	104.5	105.2	106.4	107.0	107.8	108.7	109.4	109.8	110.7	.8	2.7
Workers by industry and occupational group											
Goods-producing industries	102.9	103.9	104.4	105.0	106.1	106.8	107.2	107.5	107.9	.4	1.7
Management, professional, and related	102.7	103.8	104.3	104.4	106.1	106.6	106.7	106.6	106.8	.2	.7
Sales and office	103.0	103.7	104.1	104.8	105.1	106.3	106.7	107.1	107.3	.2	2.1
Natural resources, construction, and maintenance	104.0	105.3	106.1	107.0	108.1	109.0	109.8	110.4	110.4	.0	2.1
Production, transportation, and material moving	102.1	102.9	103.3	104.0	104.8	105.3	105.8	106.2	107.0	.8	2.1
Construction	104.7	105.9	106.9	107.6	108.9	110.1	110.6	110.9	110.9	.0	1.8
Manufacturing	102.0	102.9	103.2	103.8	104.7	105.1	105.6	105.9	106.5	.6	1.7
Management, professional, and related	102.0	103.3	103.3	103.5	104.9	105.2	105.4	105.4	105.7	.3	.8
Sales and office	102.4	103.2	103.5	104.3	105.0	106.1	106.7	107.0	107.3	.3	2.2
Natural resources, construction, and maintenance	101.7	102.4	102.8	103.9	104.6	104.5	105.3	106.0	106.6	.6	1.9
Production, transportation, and material moving	101.9	102.6	103.1	103.8	104.5	105.0	105.5	105.8	106.7	.9	2.1
Service-providing industries	104.3	105.2	106.1	106.7	107.7	108.5	109.1	109.4	109.8	.4	1.9
Management, professional, and related	105.0	105.9	106.8	107.3	108.5	109.3	110.2	110.6	111.1	.5	2.4
Sales and office	103.7	104.8	105.4	106.3	106.8	107.7	108.0	108.0	108.0	.0	1.1
Natural resources, construction, and maintenance	104.0	104.5	105.7	106.2	106.7	107.3	107.8	108.4	109.0	.6	2.2
Production, transportation, and material moving	103.0	104.0	104.7	105.2	106.4	107.0	107.6	107.8	108.5	.6	2.0
Service occupations	104.5	105.3	106.4	107.1	107.9	108.7	109.5	109.8	110.7	.8	2.6
Trade, transportation, and utilities	103.1	104.2	104.7	105.5	106.1	107.3	107.6	107.5	107.8	.3	1.6

See footnotes at end of table.

30. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Wholesale trade	103.7	104.6	104.2	105.3	105.7	107.2	107.1	106.8	107.1	0.3	1.3
Retail trade	102.9	103.9	105.1	106.1	106.6	107.6	108.2	108.1	108.3	.2	1.6
Transportation and warehousing	102.8	104.0	104.5	104.5	105.6	106.4	106.8	106.9	107.4	.5	1.7
Utilities	102.8	104.7	105.0	105.6	106.5	108.1	108.1	108.9	109.6	.6	2.9
Information	104.3	105.6	105.8	106.1	106.1	106.2	107.2	107.4	107.7	.3	1.5
Financial activities	104.2	104.6	105.4	105.6	106.8	107.3	107.4	107.1	106.8	-.3	.0
Finance and insurance	104.6	104.9	105.7	106.1	107.0	107.7	107.6	107.2	106.9	-.3	-.1
Real estate and rental and leasing	102.2	103.0	104.1	103.7	105.5	105.7	106.4	106.6	106.6	.0	1.0
Professional and business services	104.7	105.9	106.9	107.5	109.0	109.9	110.8	111.6	111.9	.3	2.7
Education and health services	105.1	105.7	106.9	107.7	108.6	109.4	110.3	110.6	111.5	.8	2.7
Education services	104.5	104.9	106.7	107.5	108.1	109.1	111.4	111.3	111.9	.5	3.5
Health care and social assistance	105.2	105.9	106.9	107.8	108.8	109.4	110.1	110.5	111.5	.9	2.5
Hospitals	105.0	105.6	106.5	107.3	108.2	109.1	110.1	110.7	111.5	.7	3.0
Leisure and hospitality	105.3	106.0	107.5	108.1	109.0	109.3	110.6	111.4	112.2	.7	2.9
Accommodation and food services	105.8	106.4	108.1	108.6	109.5	110.0	111.4	112.1	113.0	.8	3.2
Other services, except public administration	105.7	106.1	107.1	107.6	108.7	109.4	109.9	109.9	110.8	.8	1.9
State and local government workers	105.1	105.7	107.6	108.4	108.9	109.4	111.3	111.6	112.3	.6	3.1
Workers by occupational group											
Management, professional, and related	104.9	105.4	107.5	108.3	108.8	109.3	111.3	111.6	112.0	.4	2.9
Professional and related	104.8	105.3	107.5	108.2	108.6	109.1	111.1	111.4	111.9	.4	3.0
Sales and office	105.6	106.2	107.9	108.6	108.8	109.3	111.0	111.3	112.4	1.0	3.3
Office and administrative support	105.7	106.4	108.2	108.9	109.3	109.8	111.4	111.8	112.8	.9	3.2
Service occupations	105.4	106.3	108.0	109.1	109.7	110.0	111.9	112.4	113.4	.9	3.4
Workers by industry											
Education and health services	104.8	105.3	107.5	108.2	108.6	109.1	111.2	111.5	111.9	.4	3.0
Education services	104.6	105.0	107.4	108.0	108.4	108.8	111.0	111.2	111.8	.5	3.1
Schools	104.6	104.9	107.4	108.0	108.4	108.8	111.0	111.2	111.8	.5	3.1
Elementary and secondary schools	104.7	105.0	107.4	108.0	108.3	108.8	111.1	111.4	112.0	.5	3.4
Health care and social assistance	107.1	107.6	108.6	109.3	110.1	111.1	112.7	113.2	113.3	.1	2.9
Hospitals	105.6	106.3	107.5	108.2	109.2	109.7	110.8	111.3	112.4	1.0	2.9
Public administration [3]	105.6	106.6	108.0	109.1	109.7	110.1	111.6	112.0	113.0	.9	3.0

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

31. Employment Cost Index, wages and salaries, by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Civilian workers[1]	104.3	105.0	106.0	106.7	107.6	108.4	109.3	109.6	110.0	0.4	2.2
Workers by occupational group											
Management, professional, and related	104.7	105.4	106.6	107.1	108.2	109.0	110.1	110.5	111.0	.5	2.6
Management, business, and financial	104.7	105.4	106.4	106.7	108.2	109.0	109.8	110.1	110.4	.3	2.0
Professional and related	104.7	105.3	106.7	107.4	108.3	109.0	110.3	110.7	111.2	.5	2.7
Sales and office	103.8	104.8	105.4	106.2	106.7	107.7	108.1	108.1	108.1	.0	1.3
Sales and related	102.7	103.9	104.3	105.5	105.2	106.6	106.3	105.6	104.3	-1.2	-.9
Office and administrative support	104.5	105.3	106.1	106.8	107.8	108.5	109.3	109.8	110.6	.7	2.6
Natural resources, construction, and maintenance	104.3	105.1	106.3	107.1	108.1	109.0	109.9	110.6	110.7	.1	2.4
Construction and extraction	104.6	105.7	106.6	107.7	109.0	109.9	110.7	111.3	111.4	.1	2.2
Installation, maintenance, and repair	103.8	104.4	105.8	106.4	107.0	107.8	108.8	109.6	110.0	.4	2.8
Production, transportation, and material moving	103.2	103.9	104.7	105.1	106.1	106.9	107.7	108.0	108.5	.5	2.3
Production	103.2	103.6	104.3	104.7	105.7	106.5	107.2	107.5	108.2	.7	2.4
Transportation and material moving	103.3	104.2	105.1	105.5	106.6	107.3	108.2	108.5	108.8	.3	2.1
Service occupations	104.6	105.3	106.5	107.3	108.0	108.7	109.9	110.3	111.2	.8	3.0
Workers by industry											
Goods-producing	103.9	104.7	105.4	106.0	107.1	108.0	108.6	109.0	109.2	.2	2.0
Manufacturing	103.3	103.9	104.5	104.9	105.9	106.7	107.4	107.7	108.1	.4	2.1
Service-providing	104.3	105.1	106.2	106.8	107.7	108.5	109.4	109.7	110.2	.5	2.3
Education and health services	104.4	104.9	106.6	107.4	108.0	108.7	110.2	110.5	111.0	.5	2.8
Health care and social assistance	105.1	105.9	107.1	107.9	108.9	109.6	110.4	110.9	111.7	.7	2.6
Hospitals	104.8	105.6	106.7	107.4	108.4	109.4	110.5	111.3	112.0	.6	3.3
Nursing and residential care facilities	104.1	104.7	105.8	106.4	107.4	108.1	109.1	109.7	110.3	.5	2.7
Education services	103.7	104.0	106.2	106.9	107.3	107.9	110.0	110.2	110.5	.3	3.0
Elementary and secondary schools	103.6	103.8	106.0	106.6	107.0	107.5	109.9	110.1	110.4	.3	3.2
Public administration [2]	104.5	105.2	106.4	107.4	108.2	108.6	109.9	110.4	111.3	.8	2.9
Private industry workers	104.3	105.1	106.0	106.6	107.6	108.4	109.1	109.4	109.8	.4	2.0
Workers by occupational group											
Management, professional, and related	104.9	105.8	106.7	107.2	108.5	109.3	110.1	110.5	111.1	.5	2.4
Management, business, and financial	104.7	105.5	106.3	106.6	108.2	109.0	109.7	110.0	110.3	.3	1.9
Professional and related	105.1	106.0	107.0	107.6	108.7	109.5	110.4	110.9	111.6	.6	2.7
Sales and office	103.8	104.8	105.3	106.2	106.7	107.7	108.0	108.0	107.9	-.1	1.1
Sales and related	102.8	104.0	104.4	105.5	105.3	106.6	106.4	105.7	104.3	-1.3	-.9
Office and administrative support	104.5	105.4	106.0	106.7	107.7	108.5	109.2	109.7	110.6	.8	2.7
Natural resources, construction, and maintenance	104.2	105.1	106.2	107.1	108.1	109.0	109.8	110.5	110.6	.1	2.3
Construction and extraction	104.7	105.8	106.7	107.8	109.2	110.1	110.8	111.5	111.4	-.1	2.0
Installation, maintenance, and repair	103.7	104.2	105.6	106.1	106.8	107.6	108.5	109.3	109.7	.4	2.7
Production, transportation, and material moving	103.1	103.8	104.5	105.0	106.0	106.8	107.5	107.8	108.3	.5	2.2
Production	103.1	103.6	104.2	104.6	105.6	106.4	107.2	107.4	108.1	.7	2.4
Transportation and material moving	103.2	104.1	105.0	105.4	106.5	107.4	108.0	108.3	108.5	.2	1.9
Service occupations	104.6	105.3	106.5	107.1	107.9	108.8	109.7	110.1	111.0	.8	2.9
Workers by industry and occupational group											
Goods-producing industries	103.9	104.7	105.4	106.0	107.1	108.0	108.6	109.0	109.2	.2	2.0
Management, professional, and related	104.4	105.3	105.9	106.0	107.7	108.4	108.7	108.8	109.3	.5	1.5
Sales and office	103.4	104.1	104.7	105.5	105.8	107.2	107.6	107.9	108.1	.2	2.2
Natural resources, construction, and maintenance	104.4	105.6	106.5	107.6	108.8	109.6	110.5	111.3	111.1	-.2	2.1
Production, transportation, and material moving	103.2	103.7	104.4	104.8	105.7	106.6	107.3	107.6	108.0	.4	2.2
Construction	104.9	106.0	107.0	107.8	109.0	110.0	110.6	111.1	111.2	.1	2.0
Manufacturing	103.3	103.9	104.5	104.9	105.9	106.7	107.4	107.7	108.1	.4	2.1
Management, professional, and related	103.8	104.6	105.0	105.3	106.7	107.2	107.6	107.8	108.4	.6	1.6
Sales and office	102.4	103.2	103.9	104.7	105.5	106.9	107.6	108.1	108.2	.1	2.6
Natural resources, construction, and maintenance	103.8	104.3	105.0	105.9	106.8	107.1	108.1	109.0	108.8	-.2	1.9
Production, transportation, and material moving	103.1	103.6	104.2	104.5	105.4	106.3	107.1	107.3	107.7	.4	2.2
Service-providing industries	104.4	105.3	106.1	106.8	107.7	108.6	109.3	109.6	110.0	.4	2.1
Management, professional, and related	105.0	105.9	106.8	107.4	108.6	109.4	110.3	110.8	111.4	.5	2.6
Sales and office	103.8	104.9	105.4	106.3	106.8	107.7	108.0	108.0	107.9	-.1	1.0
Natural resources, construction, and maintenance	103.9	104.3	105.7	106.3	106.9	108.0	108.6	109.3	109.9	.5	2.8
Production, transportation, and material moving	103.0	104.0	104.6	105.2	106.3	107.1	107.8	108.1	108.6	.5	2.2
Service occupations	104.6	105.3	106.6	107.2	108.0	108.8	109.7	110.1	111.0	.8	2.8
Trade, transportation, and utilities	103.2	104.3	104.6	105.5	105.9	107.2	107.5	107.4	107.8	.4	1.8

31. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Wholesale trade	103.8	104.8	104.0	105.2	105.2	107.2	106.8	106.4	106.8	0.4	1.5
Retail trade	103.1	104.2	105.1	106.1	106.4	107.6	108.1	108.1	108.3	.2	1.8
Transportation and warehousing	102.5	103.7	104.1	104.2	105.0	106.0	106.7	106.9	107.2	.3	2.1
Utilities	104.3	105.5	106.1	106.8	108.0	109.3	109.3	109.6	111.0	1.3	2.8
Information	103.8	104.9	105.2	105.3	105.3	106.3	107.3	107.5	107.8	.3	2.4
Financial activities	104.7	104.9	106.0	105.9	107.2	107.7	107.7	107.2	106.8	-.4	-.4
Finance and insurance	105.4	105.5	106.5	106.6	107.9	108.4	108.2	107.6	107.1	-.5	-.7
Real estate and rental and leasing	101.6	102.4	103.6	103.1	104.5	104.7	105.3	105.7	105.6	-.1	1.1
Professional and business services	104.8	105.9	106.7	107.5	109.1	110.0	111.0	111.9	112.3	.4	2.9
Education and health services	104.8	105.6	106.9	107.7	108.6	109.2	110.2	110.6	111.4	.7	2.6
Education services	104.2	104.6	106.4	107.4	107.9	108.6	110.8	110.8	111.1	.3	3.0
Health care and social assistance	104.9	105.8	107.0	107.8	108.7	109.4	110.1	110.6	111.5	.8	2.6
Hospitals	104.6	105.4	106.5	107.2	108.2	109.2	110.3	111.1	111.8	.6	3.3
Leisure and hospitality	105.7	106.4	108.1	108.8	109.7	109.9	111.4	112.3	113.1	.7	3.1
Accommodation and food services	106.0	106.5	108.4	109.0	110.0	110.4	111.9	112.8	113.7	.8	3.4
Other services, except public administration	105.7	106.1	107.3	107.9	109.2	109.9	110.4	110.4	111.4	.9	2.0
State and local government workers	104.1	104.6	106.4	107.1	107.7	108.2	110.1	110.4	110.9	.5	3.0
Workers by occupational group											
Management, professional, and related	104.0	104.3	106.3	107.0	107.6	108.2	110.1	110.4	110.7	.3	2.9
Professional and related	103.9	104.2	106.3	107.0	107.5	108.1	110.1	110.3	110.6	.3	2.9
Sales and office	104.5	104.8	106.3	107.0	107.4	107.9	109.3	109.7	110.5	.7	2.9
Office and administrative support	104.7	105.0	106.5	107.3	107.8	108.3	109.7	110.1	111.0	.8	3.0
Service occupations	104.5	105.2	106.5	107.7	108.3	108.6	110.4	110.9	112.0	1.0	3.4
Workers by industry											
Education and health services	104.0	104.2	106.3	107.1	107.5	108.1	110.2	110.5	110.7	.2	3.0
Education services	103.7	103.9	106.1	106.8	107.2	107.7	109.9	110.1	110.4	.3	3.0
Schools	103.6	103.9	106.1	106.8	107.2	107.7	109.9	110.1	110.4	.3	3.0
Elementary and secondary schools	103.6	103.8	106.0	106.6	106.9	107.5	109.8	110.1	110.3	.2	3.2
Health care and social assistance	106.6	107.2	108.2	109.2	110.1	111.0	112.8	113.4	113.1	-.3	2.7
Hospitals	105.7	106.5	107.6	108.6	109.8	110.3	111.4	112.1	112.8	.6	2.7
Public administration [2]	104.5	105.2	106.4	107.4	108.2	108.6	109.9	110.4	111.3	.8	2.9

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

32. Employment Cost Index, benefits, by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Civilian workers	104.0	105.1	106.1	106.8	107.6	108.1	108.9	109.1	109.7	0.5	2.0
Private industry workers	103.2	104.3	105.0	105.6	106.5	107.0	107.5	107.7	108.2	.5	1.6
Workers by occupational group											
Management, professional, and related	103.8	104.9	105.6	106.0	107.3	107.9	108.5	108.5	108.8	.3	1.4
Sales and office	103.4	104.3	105.2	106.0	106.5	107.0	107.6	107.8	108.0	.2	1.4
Natural resources, construction, and maintenance	103.4	104.8	105.3	105.9	106.5	107.0	107.5	107.7	108.2	.5	1.6
Production, transportation, and material moving	101.2	102.4	102.7	103.7	104.4	104.5	104.8	105.1	106.4	1.2	1.9
Service occupations	104.2	105.1	106.0	106.7	107.6	108.5	108.7	108.8	109.7	.8	2.0
Workers by industry											
Goods-producing	100.9	102.2	102.4	103.2	104.0	104.4	104.6	104.7	105.4	.7	1.3
Manufacturing	99.6	101.0	100.7	101.7	102.3	102.2	102.3	102.5	103.5	1.0	1.2
Service-providing	104.1	105.2	106.0	106.6	107.6	108.1	108.7	108.9	109.3	.4	1.6
State and local government workers	107.0	108.0	110.3	111.0	111.4	111.8	113.9	114.2	115.2	.9	3.4

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

33. Employment Cost Index, private industry workers by bargaining status and region

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
COMPENSATION											
Workers by bargaining status[1]											
Union	102.7	103.9	104.4	105.1	105.9	106.7	107.4	108.0	109.1	1.0	3.0
Goods-producing	101.5	102.8	103.1	104.0	104.6	105.6	106.2	106.9	108.0	1.0	3.3
Manufacturing	99.2	100.0	100.0	101.0	101.4	101.7	102.1	102.8	104.4	1.6	3.0
Service-providing	103.7	104.7	105.4	106.0	107.0	107.5	108.3	108.8	109.9	1.0	2.7
Nonunion	104.2	105.1	105.9	106.5	107.5	108.3	108.9	109.1	109.4	.3	1.8
Goods-producing	103.3	104.2	104.8	105.4	106.5	107.1	107.6	107.7	107.9	.2	1.3
Manufacturing	102.8	103.7	104.1	104.6	105.6	106.2	106.6	106.8	107.1	.3	1.4
Service-providing	104.4	105.3	106.2	106.8	107.7	108.6	109.2	109.4	109.8	.4	1.9
Workers by region[1]											
Northeast	104.0	105.1	106.2	106.8	107.4	108.1	108.7	109.5	109.8	.3	2.2
South	104.3	105.3	106.1	106.7	107.8	108.5	109.1	109.3	109.8	.5	1.9
Midwest	103.3	104.2	104.6	105.3	106.0	107.0	107.4	107.6	107.9	.3	1.8
West	104.2	104.9	105.7	106.5	107.8	108.4	109.3	109.4	109.9	.5	1.9
WAGES AND SALARIES											
Workers by bargaining status[1]											
Union	102.8	103.7	104.4	104.7	105.5	106.7	107.4	108.1	108.8	.6	3.1
Goods-producing	102.7	103.6	104.3	104.3	105.2	106.4	107.1	107.7	108.2	.5	2.9
Manufacturing	102.0	102.5	102.9	102.6	103.4	104.4	104.9	105.5	106.0	.5	2.5
Service-providing	102.9	103.8	104.6	104.9	105.8	106.9	107.7	108.3	109.2	.8	3.2
Nonunion	104.5	105.3	106.2	106.9	107.9	108.7	109.4	109.6	110.0	.4	1.9
Goods-producing	104.2	105.0	105.8	106.4	107.7	108.4	109.0	109.3	109.5	.2	1.7
Manufacturing	103.6	104.2	104.9	105.5	106.6	107.3	108.0	108.2	108.6	.4	1.9
Service-providing	104.6	105.4	106.3	107.0	107.9	108.8	109.4	109.7	110.1	.4	2.0
Workers by region[1]											
Northeast	104.0	105.0	106.1	106.6	107.5	108.2	108.7	109.6	109.9	.3	2.2
South	104.6	105.6	106.5	107.0	108.1	109.1	109.8	110.0	110.4	.4	2.1
Midwest	103.6	104.4	105.0	105.6	106.3	107.5	107.9	108.0	108.4	.4	2.0
West	104.8	105.4	106.2	107.0	108.3	108.9	109.9	110.1	110.5	.4	2.0

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the Monthly Labor Review Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

34. National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003–2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
All retirement					
Percentage of workers with access					
All workers	57	59	60	60	61
White-collar occupations[2]	67	69	70	69	-
Management, professional, and related	-	-	-	-	76
Sales and office	-	-	-	-	64
Blue-collar occupations[2]	59	59	60	62	-
Natural resources, construction, and maintenance	-	-	-	-	61
Production, transportation, and material moving	-	-	-	-	65
Service occupations	28	31	32	34	36
Full-time	67	68	69	69	70
Part-time	24	27	27	29	31
Union	86	84	88	84	84
Non-union	54	56	56	57	58
Average wage less than $15 per hour	45	46	46	47	47
Average wage $15 per hour or higher	76	77	78	77	76
Goods-producing industries	70	70	71	73	70
Service-providing industries	53	55	56	56	58
Establishments with 1-99 workers	42	44	44	44	45
Establishments with 100 or more workers	75	77	78	78	78
Percentage of workers participating					
All workers	49	50	50	51	51
White-collar occupations[2]	59	61	61	60	-
Management, professional, and related	-	-	-	-	69
Sales and office	-	-	-	-	54
Blue-collar occupations[2]	50	50	51	52	-
Natural resources, construction, and maintenance	-	-	-	-	51
Production, transportation, and material moving	-	-	-	-	54
Service occupations	21	22	22	24	25
Full-time	58	60	60	60	60
Part-time	18	20	19	21	23
Union	83	81	85	80	81
Non-union	45	47	46	47	47
Average wage less than $15 per hour	35	36	35	36	36
Average wage $15 per hour or higher	70	71	71	70	69
Goods-producing industries	63	63	64	64	61
Service-providing industries	45	47	47	47	48
Establishments with 1-99 workers	35	37	37	37	37
Establishments with 100 or more workers	65	67	67	67	66
Take-up rate (all workers)[3]	-	-	85	85	84
Defined Benefit					
Percentage of workers with access					
All workers	20	21	22	21	21
White-collar occupations[2]	23	24	25	23	-
Management, professional, and related	-	-	-	-	29
Sales and office	-	-	-	-	19
Blue-collar occupations[2]	24	26	26	25	-
Natural resources, construction, and maintenance	-	-	-	-	26
Production, transportation, and material moving	-	-	-	-	26
Service occupations	8	6	7	8	8
Full-time	24	25	25	24	24
Part-time	8	9	10	9	10
Union	74	70	73	70	69
Non-union	15	16	16	15	15
Average wage less than $15 per hour	12	11	12	11	11
Average wage $15 per hour or higher	34	35	35	34	33
Goods-producing industries	31	32	33	32	29
Service-providing industries	17	18	19	18	19
Establishments with 1-99 workers	9	9	10	9	9
Establishments with 100 or more workers	34	35	37	35	34

See footnotes at end of table.

34. Continued—National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003–2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
Percentage of workers participating					
All workers	20	21	21	20	20
White-collar occupations [2]	22	24	24	22	-
Management, professional, and related	-	-	-	-	28
Sales and office	-	-	-	-	17
Blue-collar occupations [2]	24	25	26	25	-
Natural resources, construction, and maintenance	-	-	-	-	25
Production, transportation, and material moving	-	-	-	-	25
Service occupations	7	6	7	7	7
Full-time	24	24	25	23	23
Part-time	8	9	9	8	9
Union	72	69	72	68	67
Non-union	15	15	15	14	15
Average wage less than $15 per hour	11	11	11	10	10
Average wage $15 per hour or higher	33	35	34	33	32
Goods-producing industries	31	31	32	31	28
Service-providing industries	16	18	18	17	18
Establishments with 1-99 workers	8	9	9	9	9
Establishments with 100 or more workers	33	34	36	33	32
Take-up rate (all workers) [3]	-	-	97	96	95
Defined Contribution					
Percentage of workers with access					
All workers	51	53	53	54	55
White-collar occupations [2]	62	64	64	65	-
Management, professional, and related	-	-	-	-	71
Sales and office	-	-	-	-	60
Blue-collar occupations [2]	49	49	50	53	-
Natural resources, construction, and maintenance	-	-	-	-	51
Production, transportation, and material moving	-	-	-	-	56
Service occupations	23	27	28	30	32
Full-time	60	62	62	63	64
Part-time	21	23	23	25	27
Union	45	48	49	50	49
Non-union	51	53	54	55	56
Average wage less than $15 per hour	40	41	41	43	44
Average wage $15 per hour or higher	67	68	69	69	69
Goods-producing industries	60	60	61	63	62
Service-providing industries	48	50	51	52	53
Establishments with 1-99 workers	38	40	40	41	42
Establishments with 100 or more workers	65	68	69	70	70
Percentage of workers participating					
All workers	40	42	42	43	43
White-collar occupations [2]	51	53	53	53	-
Management, professional, and related	-	-	-	-	60
Sales and office	-	-	-	-	47
Blue-collar occupations [2]	38	38	38	40	-
Natural resources, construction, and maintenance	-	-	-	-	40
Production, transportation, and material moving	-	-	-	-	41
Service occupations	16	18	18	20	20
Full-time	48	50	50	51	50
Part-time	14	14	14	16	18
Union	39	42	43	44	41
Non-union	40	42	41	43	43
Average wage less than $15 per hour	29	30	29	31	30
Average wage $15 per hour or higher	57	59	59	58	57
Goods-producing industries	49	49	50	51	49
Service-providing industries	37	40	39	40	41
Establishments with 1-99 workers	31	32	32	33	33
Establishments with 100 or more workers	51	53	53	54	53
Take-up rate (all workers) [3]	-	-	78	79	77

See footnotes at end of table.

34. Continued—National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003–2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
Employee Contribution Requirement					
Employee contribution required	-	-	61	61	65
Employee contribution not required	-	-	31	33	35
Not determinable	-	-	8	6	0
Percent of establishments					
Offering retirement plans	47	48	51	48	46
Offering defined benefit plans	10	10	11	10	10
Offering defined contribution plans	45	46	48	47	44

[1] The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

[2] The white-collar and blue-collar occupation series were discontinued effective 2007.

[3] The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

35. National Compensation Survey: Health insurance benefits in private industry by access, particpation, and selected series, 2003-2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
Medical insurance					
Percentage of workers with access					
All workers	60	69	70	71	71
White-collar occupations[2]	65	76	77	77	-
Management, professional, and related	-	-	-	-	85
Sales and office	-	-	-	-	71
Blue-collar occupations[2]	64	76	77	77	-
Natural resources, construction, and maintenance	-	-	-	-	76
Production, transportation, and material moving	-	-	-	-	78
Service occupations	38	42	44	45	46
Full-time	73	84	85	85	85
Part-time	17	20	22	22	24
Union	67	89	92	89	88
Non-union	59	67	68	68	69
Average wage less than $15 per hour	51	57	58	57	57
Average wage $15 per hour or higher	74	86	87	88	87
Goods-producing industries	68	83	85	86	85
Service-providing industries	57	65	66	66	67
Establishments with 1-99 workers	49	58	59	59	59
Establishments with 100 or more workers	72	82	84	84	84
Percentage of workers participating					
All workers	45	53	53	52	52
White-collar occupations[2]	50	59	58	57	-
Management, professional, and related	-	-	-	-	67
Sales and office	-	-	-	-	48
Blue-collar occupations[2]	51	60	61	60	-
Natural resources, construction, and maintenance	-	-	-	-	61
Production, transportation, and material moving	-	-	-	-	60
Service occupations	22	24	27	27	28
Full-time	56	66	66	64	64
Part-time	9	11	12	13	12
Union	60	81	83	80	78
Non-union	44	50	49	49	49
Average wage less than $15 per hour	35	40	39	38	37
Average wage $15 per hour or higher	61	71	72	71	70
Goods-producing industries	57	69	70	70	68
Service-providing industries	42	48	48	47	47
Establishments with 1-99 workers	36	43	43	43	42
Establishments with 100 or more workers	55	64	65	63	62
Take-up rate (all workers)[3]	-	-	75	74	73
Dental					
Percentage of workers with access					
All workers	40	46	46	46	46
White-collar occupations[2]	47	53	54	53	-
Management, professional, and related	-	-	-	-	62
Sales and office	-	-	-	-	47
Blue-collar occupations[2]	40	47	47	46	-
Natural resources, construction, and maintenance	-	-	-	-	43
Production, transportation, and material moving	-	-	-	-	49
Service occupations	22	25	25	27	28
Full-time	49	56	56	55	56
Part-time	9	13	14	15	16
Union	57	73	73	69	68
Non-union	38	43	43	43	44
Average wage less than $15 per hour	30	34	34	34	34
Average wage $15 per hour or higher	55	63	62	62	61
Goods-producing industries	48	56	56	56	54
Service-providing industries	37	43	43	43	44
Establishments with 1-99 workers	27	31	31	31	30
Establishments with 100 or more workers	55	64	65	64	64

See footnotes at end of table.

35. Continued—National Compensation Survey: Health insurance benefits in private industry by access, particpation, and selected series, 2003-2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
Percentage of workers participating					
All workers	32	37	36	36	36
White-collar occupations[2]	37	43	42	41	-
Management, professional, and related	-	-	-	-	51
Sales and office	-	-	-	-	33
Blue-collar occupations[2]	33	40	39	38	-
Natural resources, construction, and maintenance	-	-	-	-	36
Production, transportation, and material moving	-	-	-	-	38
Service occupations	15	16	17	18	20
Full-time	40	46	45	44	44
Part-time	6	8	9	10	9
Union	51	68	67	63	62
Non-union	30	33	33	33	33
Average wage less than $15 per hour	22	26	24	23	23
Average wage $15 per hour or higher	47	53	52	52	51
Goods-producing industries	42	49	49	49	45
Service-providing industries	29	33	33	32	33
Establishments with 1-99 workers	21	24	24	24	24
Establishments with 100 or more workers	44	52	51	50	49
Take-up rate (all workers)[3]	-	-	78	78	77
Vision care					
Percentage of workers with access	25	29	29	29	29
Percentage of workers participating	19	22	22	22	22
Outpatient Prescription drug coverage					
Percentage of workers with access	-	-	64	67	68
Percentage of workers participating	-	-	48	49	49
Percent of estalishments offering healthcare benefits	58	61	63	62	60
Percentage of medical premium paid by Employer and Employee					
Single coverage					
Employer share	82	82	82	82	81
Employee share	18	18	18	18	19
Family coverage					
Employer share	70	69	71	70	71
Employee share	30	31	29	30	29

[1] The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

[2] The white-collar and blue-collar occupation series were discontinued effective 2007.

[3] The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

36. National Compensation Survey: Percent of workers in private industry with access to selected benefits, 2003-2007

Benefit	Year				
	2003	2004	2005	2006	2007
Life insurance	50	51	52	52	58
Short-term disabilty insurance	39	39	40	39	39
Long-term disability insurance	30	30	30	30	31
Long-term care insurance	11	11	11	12	12
Flexible work place	4	4	4	4	5
Section 125 cafeteria benefits					
Flexible benefits	-	-	17	17	17
Dependent care reimbursement account	-	-	29	30	31
Healthcare reimbursement account	-	-	31	32	33
Health Savings Account	-	-	5	6	8
Employee assistance program	-	-	40	40	42
Paid leave					
Holidays	79	77	77	76	77
Vacations	79	77	77	77	77
Sick leave	-	59	58	57	57
Personal leave	-	-	36	37	38
Family leave					
Paid family leave	-	-	7	8	8
Unpaid family leave	-	-	81	82	83
Employer assistance for child care	18	14	14	15	15
Nonproduction bonuses	49	47	47	46	47

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

37. Work stoppages involving 1,000 workers or more

Measure	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]
Number of stoppages:															
Beginning in period	21	15	1	2	2	1	2	2	1	0	0	0	0	0	0
In effect during period	23	16	2	4	2	1	2	2	2	1	0	0	0	0	0
Workers involved:															
Beginning in period (in thousands)	189.2	72.2	2.3	4.2	4.2	8.5	7.0	28.2	6.0	0.0	0.0	0.0	0.0	0.0	0.0
In effect during period (in thousands)	220.9	136.8	5.9	10.1	4.2	8.5	7.0	28.2	33.0	0.0	0.0	0.0	0.0	0.0	0.0
Days idle:															
Number (in thousands)	1264.8	1954.1	102.2	129.0	12.3	42.5	100.6	469.8	600.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent of estimated working time [1]	0.01	0.01	0	0	0	0	0	0.02	0.02	0	0	0	0	0	0

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in "Total economy measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

NOTE: p = preliminary.

38. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	207.342	215.303	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	211.143	212.193	212.709	213.240
All items (1967 = 100)	621.106	644.951	643.515	648.933	655.474	658.915	656.284	655.376	648.758	636.332	629.751	632.491	635.637	637.182	638.771
Food and beverages	203.300	214.225	211.365	212.251	213.383	215.326	216.419	217.672	218.705	218.752	218.839	219.729	219.333	218.794	218.364
Food	202.916	214.106	211.102	212.054	213.243	215.299	216.422	217.696	218.738	218.749	218.805	219.675	219.205	218.600	218.162
Food at home	201.245	214.125	210.851	211.863	213.171	215.785	217.259	218.629	219.660	219.086	218.683	219.744	218.389	217.110	215.783
Cereals and bakery products	222.107	244.853	240.034	244.192	245.758	250.321	250.080	250.924	252.832	252.723	253.063	254.445	254.187	253.698	252.709
Meats, poultry, fish, and eggs	195.616	204.653	200.770	200.960	202.914	205.075	207.488	209.937	210.706	209.602	208.890	208.616	207.963	206.348	205.699
Dairy and related products[1]	194.770	210.396	207.680	207.778	209.117	213.981	214.748	213.533	212.733	213.102	210.838	209.632	204.537	199.687	197.124
Fruits and vegetables	262.628	278.932	272.746	276.481	277.957	280.209	283.296	285.986	285.484	283.677	281.706	282.601	278.721	274.759	274.297
Nonalcoholic beverages and beverage materials	153.432	160.045	159.730	158.336	158.320	159.346	160.055	161.499	163.727	163.015	162.750	164.882	164.213	165.656	162.889
Other foods at home	173.275	184.166	181.806	182.680	183.804	185.725	186.991	187.944	189.348	189.301	190.203	192.492	192.404	192.234	191.352
Sugar and sweets	176.772	186.577	184.878	185.097	185.558	187.067	187.813	189.929	190.515	191.756	193.312	197.429	196.676	197.137	197.301
Fats and oils	172.921	196.751	190.640	193.364	196.150	201.205	203.059	206.274	208.300	205.806	206.710	206.886	205.359	204.776	200.464
Other foods	188.244	198.103	195.993	196.787	197.888	199.566	200.961	201.388	202.993	203.058	203.902	206.343	206.621	206.367	205.734
Other miscellaneous foods[1,2]	115.105	119.924	118.500	118.744	118.453	120.510	121.033	121.144	122.699	123.543	123.791	124.012	122.580	122.402	122.883
Food away from home[1]	206.659	215.769	213.083	213.967	215.015	216.376	217.063	218.225	219.290	220.043	220.684	221.319	221.968	222.216	222.905
Other food away from home[1,2]	144.068	150.640	148.667	149.666	149.873	151.120	151.133	152.040	153.544	153.978	154.062	153.402	154.726	154.414	155.099
Alcoholic beverages	207.026	214.484	213.503	213.532	213.912	214.394	215.094	216.055	216.972	217.492	217.975	219.113	219.682	219.999	219.671
Housing	209.586	216.264	214.890	215.809	217.941	219.610	219.148	218.184	217.383	216.467	216.073	216.928	217.180	217.374	217.126
Shelter	240.611	246.666	246.004	246.069	247.083	248.075	247.985	247.737	247.844	247.463	247.085	248.292	248.878	249.597	249.855
Rent of primary residence	234.679	243.271	241.474	241.803	242.640	243.367	244.181	244.926	245.855	246.681	247.278	247.974	248.305	248.639	248.899
Lodging away from home	142.813	143.664	146.378	145.634	148.621	153.032	149.146	143.597	141.140	133.555	129.157	133.559	135.809	137.715	137.700
Owners' equivalent rent of primary residence[3]	246.235	252.426	251.418	251.576	252.170	252.504	252.957	253.493	253.902	254.669	254.875	255.500	255.779	256.321	256.622
Tenants' and household insurance[1,2]	117.004	118.843	118.422	118.411	119.092	118.764	118.562	119.944	119.916	120.232	120.019	120.402	120.683	120.737	120.675
Fuels and utilities	200.632	220.018	213.302	219.881	231.412	239.039	235.650	228.450	221.199	216.285	215.184	215.232	213.520	210.501	207.175
Fuels	181.744	200.808	194.121	201.212	213.762	221.742	217.455	209.501	201.176	195.599	194.335	194.149	192.168	188.736	184.903
Fuel oil and other fuels	251.453	334.405	342.811	363.872	389.423	395.706	367.794	349.164	318.667	281.869	256.209	247.163	242.264	230.837	228.107
Gas (piped) and electricity	186.262	202.212	194.379	200.999	213.375	221.805	218.656	210.950	203.503	199.435	199.487	199.791	197.886	194.752	190.686
Household furnishings and operations	126.875	127.800	127.332	127.598	127.625	127.884	128.013	128.584	128.789	128.554	128.535	128.761	129.170	129.669	129.654
Apparel	118.998	118.907	122.113	120.752	117.019	114.357	116.376	121.168	122.243	121.262	117.078	114.764	118.825	122.545	123.208
Men's and boys' apparel	112.368	113.032	116.653	116.479	112.011	109.669	110.180	112.720	115.067	114.239	110.767	110.797	115.202	117.748	117.195
Women's and girls' apparel	110.296	107.460	111.221	108.722	104.312	100.049	104.211	111.774	111.833	110.588	105.456	100.638	105.777	111.079	111.871
Infants' and toddlers' apparel[1]	113.948	113.762	116.358	114.582	111.555	109.218	109.558	113.494	116.158	116.010	112.568	112.321	113.544	115.548	117.084
Footwear	122.374	124.157	126.212	125.537	123.568	122.421	121.982	124.907	126.442	126.788	124.093	122.363	124.301	126.707	128.057
Transportation	184.682	195.549	198.608	205.262	211.787	212.806	206.739	203.861	192.709	173.644	164.628	166.738	169.542	169.647	171.987
Private transportation	180.778	191.039	194.574	201.133	207.257	208.038	201.779	199.153	187.976	168.527	159.411	161.788	164.871	165.023	167.516
New and used motor vehicles[2]	94.303	93.291	93.973	93.705	93.598	93.650	93.260	92.480	92.071	91.618	91.408	91.831	92.224	92.109	92.381
New vehicles	136.254	134.194	135.175	134.669	134.516	134.397	133.404	132.399	132.264	132.359	132.308	133.273	134.186	134.611	134.863
Used cars and trucks[1]	135.747	133.951	136.787	136.325	135.980	135.840	135.405	132.916	129.733	126.869	125.883	124.863	122.837	121.061	121.213
Motor fuel	239.070	279.652	294.291	322.124	347.418	349.731	323.822	315.078	268.537	187.189	149.132	156.604	167.395	168.404	177.272
Gasoline (all types)	237.959	277.457	291.910	319.787	344.981	347.357	321.511	313.535	266.382	184.235	146.102	154.488	166.118	167.826	176.704
Motor vehicle parts and equipment	121.583	128.747	126.049	126.824	127.824	129.118	130.327	131.048	131.917	132.947	133.077	133.414	134.108	134.484	134.640
Motor vehicle maintenance and repair	222.963	233.859	230.528	231.730	233.162	234.788	236.125	237.121	238.227	239.048	239.356	241.076	241.689	242.118	242.649
Public transportation	230.002	250.549	244.164	251.600	264.681	270.002	268.487	261.318	252.323	243.385	237.638	234.394	231.529	230.735	229.827
Medical care	351.054	364.065	363.184	363.396	363.616	363.963	364.477	365.036	365.746	366.613	367.133	369.830	372.405	373.189	374.170
Medical care commodities	289.999	296.045	296.951	294.896	295.194	294.777	295.003	295.461	295.791	297.317	298.361	299.998	302.184	302.908	303.979
Medical care services	369.302	384.943	383.292	384.505	384.685	385.361	385.990	386.579	387.440	387.992	388.267	391.365	394.047	394.837	395.753
Professional services	300.792	310.968	309.227	310.917	311.317	311.926	312.396	312.527	312.914	313.328	313.886	315.603	316.992	317.460	317.661
Hospital and related services	498.922	533.953	530.144	531.022	531.606	533.558	535.501	537.728	540.853	543.183	543.585	551.305	558.373	560.995	564.785
Recreation[2]	111.443	113.254	112.874	112.987	112.991	113.277	113.786	114.032	114.169	114.078	113.674	113.822	114.461	114.625	114.261
Video and audio[1,2]	102.949	102.632	103.477	102.988	102.306	102.203	102.546	102.706	102.193	101.831	101.629	101.347	101.704	102.000	102.300
Education and communication[2]	119.577	123.631	122.073	122.348	122.828	123.445	124.653	125.505	125.686	125.758	125.921	126.151	126.190	126.187	126.273
Education[2]	171.388	181.277	177.754	177.994	178.385	179.229	183.184	186.148	186.669	186.733	186.916	187.175	187.256	187.298	187.416
Educational books and supplies	420.418	450.187	442.160	442.770	443.309	444.382	458.989	462.787	463.825	462.694	464.544	468.432	469.996	472.185	472.507
Tuition, other school fees, and child care	494.079	522.098	511.887	512.579	513.743	516.264	527.230	536.082	537.606	537.906	538.309	538.765	538.878	538.813	539.149
Communication[1,2]	83.367	84.185	83.670	83.929	84.394	84.840	84.701	84.524	84.535	84.601	84.737	84.928	84.945	84.922	84.985
Information and information processing[1,2]	80.720	81.352	80.921	81.080	81.513	81.965	81.815	81.635	81.652	81.723	81.886	82.030	82.052	82.022	82.090
Telephone services[1,2]	98.247	100.451	99.494	99.879	100.677	101.339	101.301	101.311	101.407	101.538	101.688	101.880	101.895	101.991	102.072
Information and information processing other than telephone services[1,4]	10.597	10.061	10.170	10.118	10.071	10.087	10.012	9.901	9.874	9.867	9.906	9.919	9.926	9.872	9.881
Personal computers and peripheral equipment[1,2]	108.411	94.944	98.853	97.028	95.663	94.711	92.921	90.797	89.945	88.984	88.529	88.522	87.696	86.213	85.714
Other goods and services	333.328	345.381	343.410	344.709	345.885	346.810	346.990	348.166	349.276	349.040	349.220	350.259	351.223	361.156	370.606
Tobacco and smoking products	554.184	588.682	576.359	581.185	589.904	596.782	597.361	597.581	599.744	599.820	602.644	607.403	611.549	679.078	742.443
Personal care[1]	195.622	201.279	201.028	201.523	201.537	201.545	201.623	202.486	203.107	202.921	202.774	203.080	203.391	204.117	204.896
Personal care products[1]	158.285	159.290	159.398	158.790	158.868	158.989	159.252	159.643	159.826	161.000	161.397	162.588	162.508	162.696	163.777
Personal care services[1]	216.559	223.669	222.799	223.649	223.520	223.719	224.151	224.614	225.564	226.197	226.281	225.734	225.895	227.982	227.913

See footnotes at end of table.

38. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers

U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Miscellaneous personal services	324.984	338.921	337.685	339.824	340.547	340.077	341.053	343.431	343.131	340.174	339.698	340.608	341.188	341.570	342.641
Commodity and service group:															
Commodities	167.509	174.764	175.838	178.341	180.534	181.087	179.148	179.117	175.257	167.673	163.582	164.360	165.891	166.645	167.816
Food and beverages	203.300	214.225	211.365	212.251	213.383	215.326	216.419	217.672	218.705	218.752	218.839	219.729	219.333	218.794	218.364
Commodities less food and beverages	147.515	153.034	155.690	158.778	161.337	161.301	158.179	157.621	151.874	141.397	135.720	136.427	138.702	139.962	141.753
Nondurables less food and beverages	182.526	196.192	200.926	207.875	213.489	213.363	207.284	206.919	195.127	173.346	161.681	162.938	167.560	170.200	173.855
Apparel	118.998	118.907	122.113	120.752	117.019	114.357	116.376	121.168	122.243	121.262	117.078	114.764	118.825	122.545	123.208
Non durables less food, beverages, and apparel	226.224	248.809	254.599	266.943	278.584	280.062	268.740	265.100	244.935	209.569	192.948	196.490	201.554	203.557	209.177
Durables	112.473	110.877	111.671	111.362	111.232	111.275	110.779	110.077	109.677	109.191	108.811	109.025	109.221	109.264	109.404
Services	246.848	255.498	253.426	254.509	256.668	258.422	258.638	258.059	257.559	256.967	256.731	257.780	258.328	258.597	258.466
Rent of shelter [3]	250.813	257.152	256.463	256.532	257.585	258.637	258.547	258.255	258.368	257.961	257.567	258.830	259.440	260.197	260.469
Transportation services	233.731	244.074	240.150	242.343	245.759	247.869	248.806	248.047	247.762	247.030	246.287	247.006	248.114	247.912	248.696
Other services	285.559	295.780	293.016	293.959	294.668	295.677	297.923	299.598	299.923	299.996	300.067	300.614	301.471	302.024	301.668
Special indexes:															
All items less food	208.098	215.528	215.462	217.411	219.757	220.758	219.552	218.991	216.250	211.421	208.855	209.777	211.076	211.775	212.464
All items less shelter	196.639	205.453	205.040	207.566	210.242	211.468	210.264	209.936	206.776	201.075	198.127	198.936	200.184	200.626	201.271
All items less medical care	200.080	207.777	207.317	209.170	211.408	212.576	211.653	211.321	209.021	204.721	202.442	203.281	204.265	204.766	205.275
Commodities less food	149.720	155.310	157.870	160.880	163.385	163.364	160.341	159.825	154.250	144.055	138.536	139.258	141.491	142.728	144.464
Nondurables less food	184.012	197.297	201.693	208.233	213.538	213.447	207.769	207.483	196.442	175.979	165.032	166.282	170.665	173.167	176.587
Nondurables less food and apparel	223.411	244.443	249.571	260.703	271.235	272.612	262.470	259.278	241.183	209.344	194.403	197.704	202.323	204.159	209.195
Nondurables	193.468	205.901	207.096	211.240	214.783	215.628	212.882	213.274	207.435	195.773	189.557	190.649	192.943	194.105	195.864
Services less rent of shelter [3]	260.764	273.000	269.007	271.467	275.200	277.982	278.606	277.615	276.297	275.425	275.370	276.227	276.739	276.407	275.752
Services less medical care services	236.847	244.987	242.921	243.982	246.219	248.007	248.198	247.563	246.997	246.351	246.090	247.013	247.439	247.675	247.490
Energy	207.723	236.666	240.194	257.106	275.621	280.833	266.283	258.020	231.561	189.938	171.158	174.622	178.741	177.454	179.704
All items less energy	208.925	214.751	213.851	214.101	214.600	215.335	215.873	216.397	216.695	216.417	215.930	216.586	217.325	218.033	218.388
All items less food and energy	210.729	215.572	215.059	215.180	215.553	216.045	216.476	216.862	217.023	216.690	216.100	216.719	217.685	218.639	219.143
Commodities less food and energy	140.053	140.246	141.156	140.677	139.925	139.535	139.785	140.528	140.659	140.236	139.228	139.111	140.270	141.662	142.489
Energy commodities	241.018	284.352	298.757	326.414	351.886	354.423	328.240	318.918	272.921	193.395	155.745	162.395	172.428	172.787	181.102
Services less energy	253.058	261.017	259.503	260.049	261.216	262.323	262.867	262.980	263.156	262.901	262.636	263.759	264.547	265.147	265.399
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	202.767	211.053	210.698	212.788	215.223	216.304	215.247	214.935	212.182	207.296	204.813	205.700	206.708	207.218	207.925
All items (1967 = 100)	603.982	628.661	627.606	633.830	641.082	644.303	641.155	640.226	632.025	617.472	610.075	612.719	615.719	617.239	619.344
Food and beverages	202.531	213.546	210.559	211.438	212.700	214.662	215.850	217.098	218.141	218.178	218.269	219.123	218.645	218.119	217.653
Food	202.134	213.376	210.252	211.200	212.514	214.577	215.812	217.090	218.120	218.114	218.155	218.998	218.449	217.855	217.376
Food at home	200.273	213.017	209.657	210.624	212.079	214.679	216.214	217.594	218.600	217.956	217.498	218.485	217.111	215.922	214.654
Cereals and bakery products	222.409	245.472	240.663	244.648	246.493	250.972	250.842	251.448	253.561	253.498	253.759	255.055	254.775	254.395	253.556
Meats, poultry, fish, and eggs	195.193	204.255	200.285	200.501	202.424	204.557	207.211	209.515	210.314	209.297	208.639	208.161	207.656	206.094	205.527
Dairy and related products [1]	194.474	209.773	207.135	207.088	208.510	213.582	214.139	212.841	211.808	212.184	209.922	208.530	203.023	198.048	195.714
Fruits and vegetables	260.484	276.759	270.169	274.136	276.641	278.885	282.171	284.612	283.549	281.279	278.835	279.906	275.884	271.727	271.771
Nonalcoholic beverages and beverage materials	152.786	159.324	158.799	157.285	157.309	158.527	159.024	160.850	163.265	162.472	162.280	164.514	163.821	165.437	162.464
Other foods at home	172.630	183.637	181.215	182.241	183.342	185.174	186.458	187.467	188.806	188.685	189.527	191.782	191.620	191.594	190.650
Sugar and sweets	175.323	185.494	183.725	184.127	184.378	186.054	186.860	188.914	189.574	190.501	192.120	195.867	195.395	196.015	195.858
Fats and oils	173.640	197.512	191.560	194.228	197.155	201.821	203.721	207.069	208.973	206.870	207.439	207.400	206.185	205.693	201.474
Other foods	188.405	198.303	196.106	197.081	198.153	199.722	201.119	201.632	203.138	203.126	203.937	206.490	206.547	206.468	205.820
Other miscellaneous foods [1,2]	115.356	120.348	118.751	119.248	118.879	121.015	121.443	121.589	123.026	123.837	124.144	124.477	122.994	122.837	123.112
Food away from home [1]	206.412	215.613	212.794	213.723	214.851	216.177	217.002	218.147	219.219	220.107	220.847	221.497	222.101	222.336	222.957
Other food away from home [1,2]	143.462	149.731	147.335	148.517	149.306	150.232	150.301	151.321	152.910	153.464	153.646	153.397	154.520	154.054	154.414
Alcoholic beverages	207.097	214.579	213.633	213.486	213.976	214.440	214.931	215.728	216.953	217.626	218.445	219.458	220.029	220.500	220.243
Housing	204.795	211.839	210.161	211.191	213.441	215.026	214.743	213.954	213.156	212.591	212.452	213.078	213.192	213.213	212.885
Shelter	232.998	239.128	238.261	238.353	239.198	239.845	240.038	240.163	240.517	240.740	240.752	241.651	242.051	242.605	242.857
Rent of primary residence	233.806	242.196	240.507	240.818	241.623	242.276	243.010	243.741	244.624	245.425	246.026	246.696	246.991	247.285	247.517
Lodging away from home [2]	142.339	143.164	145.936	144.979	148.378	152.248	148.368	142.591	140.763	133.747	129.982	134.235	136.255	138.008	138.008
Owners' equivalent rent of primary residence [3]	223.175	228.758	227.893	228.007	228.536	228.824	229.219	229.670	230.028	230.743	230.926	231.503	231.746	232.235	232.503
Tenants' and household insurance [1,2]	117.366	119.136	118.683	118.615	119.293	119.006	118.894	120.279	120.258	120.589	120.360	120.715	120.960	121.099	121.084
Fuels and utilities	198.863	217.883	210.912	217.388	228.843	236.381	233.373	226.709	219.325	214.700	213.861	213.882	212.353	209.400	205.840
Fuels	179.031	197.537	190.657	197.554	209.843	217.640	213.807	206.544	198.191	193.000	192.050	191.852	190.110	186.809	182.795
Fuel oil and other fuels	251.121	331.784	339.009	358.947	381.903	388.208	363.535	345.907	317.012	283.747	260.185	251.976	246.781	236.237	232.068
Gas (piped) and electricity	184.357	200.265	192.434	199.045	211.398	219.612	216.557	209.442	201.651	197.507	197.545	197.703	196.040	192.922	188.735
Household furnishings and operations	122.477	123.635	123.108	123.287	123.434	123.798	123.944	124.500	124.719	124.466	124.314	124.454	124.865	125.337	125.458
Apparel	118.518	118.735	121.855	120.407	116.706	113.978	116.214	120.990	121.957	121.149	117.006	114.969	118.766	122.162	122.709
Men's and boys' apparel	112.224	113.490	117.136	116.621	112.395	109.969	110.513	112.973	115.495	114.651	111.232	111.879	116.332	118.735	117.834
Women's and girls' apparel	110.202	107.489	110.971	108.594	104.062	99.772	104.584	112.304	111.880	110.612	105.413	100.751	105.538	110.380	110.990
Infants' and toddlers' apparel [1]	116.278	116.266	119.200	117.213	114.057	111.502	111.593	115.764	118.496	118.611	115.003	114.775	116.001	117.944	119.873
Footwear	122.062	124.102	126.150	125.335	123.381	122.380	122.026	124.873	126.352	126.689	124.152	122.753	124.494	126.858	128.312
Transportation	184.344	195.692	199.556	206.757	213.633	214.533	207.796	204.785	192.198	170.870	160.914	163.215	165.976	165.978	168.539
Private transportation	181.496	192.492	196.641	203.781	210.423	211.201	204.348	201.476	188.871	167.301	157.272	159.719	162.645	162.659	165.299
New and used motor vehicles [2]	93.300	92.146	93.158	92.850	92.714	92.686	92.287	91.305	90.530	89.783	89.482	89.774	89.728	89.418	89.620

See footnotes at end of table.

38. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
New vehicles	137.415	135.338	136.456	135.933	135.728	135.556	134.540	133.504	133.351	133.380	133.317	134.490	135.248	135.744	135.911
Used cars and trucks [1]	136.586	134.731	137.616	137.145	136.790	136.639	136.186	133.669	130.444	127.540	126.526	125.485	123.443	121.669	121.850
Motor fuel	239.900	280.817	295.618	323.495	348.762	351.124	325.116	316.717	269.639	187.770	149.650	157.265	168.028	169.060	177.982
Gasoline (all types)	238.879	278.728	293.349	321.291	346.459	348.888	322.930	315.324	267.580	184.855	146.644	155.204	166.831	168.574	177.510
Motor vehicle parts and equipment	121.356	128.776	126.032	126.742	127.750	128.997	130.228	131.072	132.088	133.125	133.295	133.645	134.264	134.485	134.614
Motor vehicle maintenance and repair	225.535	236.353	232.983	234.221	235.550	237.324	238.583	239.571	240.688	241.509	241.855	243.594	244.219	244.650	245.180
Public transportation	228.531	247.865	241.966	249.310	261.779	266.259	264.755	258.142	249.168	240.496	235.199	232.422	229.404	229.034	228.525
Medical care	350.882	364.208	363.356	363.462	363.628	363.942	364.652	365.250	366.000	366.800	367.301	370.001	372.630	373.541	374.599
Medical care commodities	282.558	287.970	288.796	286.825	287.033	286.562	286.880	287.397	287.725	289.046	290.080	291.710	293.917	294.728	295.699
Medical care services	370.111	386.317	384.753	385.769	385.911	386.560	387.420	388.036	388.947	389.493	389.744	392.831	395.563	396.489	397.553
Professional services	303.169	313.446	311.757	313.294	313.618	314.235	314.893	314.977	315.458	315.825	316.435	318.110	319.663	320.231	320.407
Hospital and related services	493.740	530.193	526.495	527.230	527.948	529.798	532.065	534.394	537.382	539.864	540.101	547.655	554.390	557.167	561.516
Recreation [2]	108.572	110.143	109.775	109.876	109.905	110.198	110.698	110.904	110.947	110.826	110.487	110.630	111.257	111.436	111.182
Video and audio [1,2]	102.559	102.654	103.414	102.958	102.306	102.267	102.643	102.819	102.267	101.974	101.810	101.488	101.857	102.153	102.516
Education and communication [2]	116.301	119.827	118.462	118.737	119.264	119.852	120.809	121.439	121.569	121.636	121.819	122.025	122.092	122.087	122.152
Education [2]	169.280	178.892	175.545	175.791	176.148	176.879	180.819	183.613	184.091	184.115	184.352	184.642	184.765	184.824	184.892
Educational books and supplies	423.730	452.880	444.594	445.394	445.740	446.741	461.104	465.570	466.885	465.576	467.179	471.061	473.012	474.880	474.950
Tuition, other school fees, and child care	477.589	504.163	494.711	495.384	496.449	498.598	509.241	517.389	518.726	518.938	519.500	519.987	520.159	520.146	520.348
Communication [1,2]	85.782	86.807	86.244	86.496	87.017	87.490	87.369	87.224	87.226	87.300	87.444	87.599	87.640	87.615	87.671
Information and information processing [1,2]	83.928	84.828	84.320	84.511	85.007	85.484	85.355	85.208	85.214	85.292	85.454	85.581	85.624	85.595	85.655
Telephone services [1,2]	98.373	100.502	99.566	99.939	100.723	101.375	101.339	101.350	101.436	101.564	101.720	101.876	101.890	101.977	102.048
Information and information processing other than telephone services [1,4]	11.062	10.567	10.671	10.621	10.585	10.600	10.525	10.414	10.375	10.367	10.406	10.418	10.442	10.378	10.385
Personal computers and peripheral equipment [1,2]	108.164	94.863	98.820	97.010	95.766	94.691	92.931	90.722	89.690	88.631	88.176	88.178	87.622	86.004	85.406
Other goods and services	344.004	357.906	354.887	356.523	358.419	359.961	360.102	361.125	362.354	362.550	362.986	364.333	365.522	380.208	394.902
Tobacco and smoking products	555.502	591.100	578.296	583.296	592.248	599.180	599.823	600.293	602.533	602.881	605.662	610.503	615.012	682.115	747.906
Personal care [1]	193.590	199.170	198.859	199.367	199.404	199.495	199.501	200.284	200.930	201.036	200.918	201.209	201.426	202.099	203.010
Personal care products [1]	158.268	159.410	159.585	158.993	159.052	159.237	159.345	159.730	159.914	160.994	161.295	162.683	162.543	162.516	163.911
Personal care services [1]	216.823	223.978	223.088	223.922	223.838	223.994	224.464	224.910	225.800	226.433	226.578	225.951	226.088	228.201	228.119
Miscellaneous personal services	326.100	340.533	338.851	341.212	341.921	341.763	342.974	345.175	344.622	342.853	342.530	343.022	343.443	344.021	345.016
Commodity and service group:															
Commodities	169.554	177.618	178.900	181.837	184.495	185.105	182.846	182.647	177.906	168.926	164.233	165.151	166.673	167.514	169.005
Food and beverages	202.531	213.546	210.559	211.438	212.700	214.662	215.850	217.098	218.141	218.178	218.269	219.123	218.645	218.119	217.653
Commodities less food and beverages	150.865	157.481	160.488	164.188	167.344	167.376	163.761	162.971	155.982	143.544	137.015	137.932	140.235	141.615	143.871
Nondurables less food and beverages	189.507	205.279	210.558	218.794	225.585	225.595	218.454	217.828	203.762	178.209	164.879	166.694	171.698	174.838	179.415
Apparel	118.518	118.735	121.855	120.407	116.706	113.978	116.214	120.990	121.957	121.149	117.006	114.969	118.766	122.162	122.709
Nondurables less food, beverages, and apparel	237.858	263.756	270.496	285.024	298.593	300.341	287.124	283.056	259.204	217.500	198.108	202.400	208.255	211.287	218.502
Durables	112.640	111.217	112.171	111.845	111.769	111.820	111.357	110.451	109.782	109.038	108.576	108.689	108.592	108.413	108.596
Services	241.696	250.272	248.045	249.175	251.365	252.991	253.304	252.861	252.369	252.144	252.176	253.033	253.456	253.591	253.403
Rent of shelter [3]	224.617	230.555	229.719	229.810	230.620	231.255	231.445	231.541	231.885	232.096	232.112	232.981	233.365	233.903	234.148
Transporatation services	233.420	242.563	239.044	240.728	243.395	245.005	246.041	245.722	246.003	246.126	245.881	246.931	248.029	247.862	248.809
Other services	275.218	284.319	281.829	282.720	283.449	284.449	286.389	287.792	287.898	288.082	288.227	288.627	289.432	290.043	289.738
Special indexes:															
All items less food	202.698	210.452	210.583	212.870	215.498	216.407	214.950	214.361	210.949	205.214	202.292	203.186	204.465	205.167	206.081
All items less shelter	193.940	203.102	202.931	205.774	208.817	210.069	208.544	208.068	204.149	197.342	193.918	194.811	196.052	196.551	197.432
All items less medical care	196.564	204.626	204.290	206.423	208.906	210.002	208.900	208.563	205.726	200.707	198.153	198.978	199.928	200.421	201.112
Commodities less food	152.875	159.538	162.455	166.070	169.169	169.213	165.689	164.937	158.132	145.985	139.620	140.543	142.809	144.172	146.371
Nondurables less food	190.698	206.047	211.005	218.809	225.276	225.309	218.562	218.010	204.734	180.533	167.933	169.708	174.484	177.487	181.815
Nondurables less food and apparel	234.201	258.423	264.488	277.717	290.127	291.760	279.753	276.112	254.473	216.516	198.909	202.906	208.291	211.094	217.649
Nondurables	196.772	210.333	211.757	216.582	220.813	221.740	218.473	218.725	211.680	198.009	190.910	192.284	194.740	196.174	198.408
Services less rent of shelter [3]	230.876	241.567	237.922	240.181	243.780	246.411	246.834	245.787	244.331	243.599	243.646	244.376	244.791	244.413	243.718
Services less medical care services	232.195	240.275	238.048	239.167	241.422	243.071	243.354	242.868	242.316	242.058	242.079	242.819	243.128	243.223	242.980
Energy	208.066	237.414	241.518	258.903	277.597	282.579	267.624	259.864	232.106	188.375	168.726	172.463	177.033	175.947	178.485
All items less energy	203.002	208.719	207.812	208.021	208.458	209.062	209.718	210.325	210.649	210.541	210.168	210.707	211.279	211.989	212.472
All items less food and energy	203.554	208.147	207.687	207.747	208.007	208.317	208.857	209.329	209.511	209.383	208.925	209.404	210.203	211.178	211.857
Commodities less food and energy	140.612	141.084	142.040	141.558	140.878	140.492	140.802	141.428	141.375	140.793	139.731	139.614	140.554	142.077	143.237
Energy commodities	241.257	284.270	298.852	326.565	351.873	354.402	328.310	319.507	272.894	192.494	154.744	161.781	171.978	172.563	181.021
Services less energy	247.888	255.598	254.031	254.517	255.513	256.365	257.072	257.411	257.774	258.008	258.039	258.976	259.643	260.158	260.439

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

NOTE: Index applied to a month as a whole, not to any specific date.

39. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

	Pricing schedule[1]	All Urban Consumers						Urban Wage Earners					
		2008		2009				2008		2009			
		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
U.S. city average	M	212.425	210.228	211.143	212.193	212.709	213.240	207.296	204.813	205.700	206.708	207.218	207.925
Region and area size[2]													
Northeast urban	M	227.236	225.091	225.436	226.754	227.309	227.840	223.741	221.446	221.704	222.945	223.626	224.252
Size A—More than 1,500,000	M	229.625	227.681	227.852	229.262	229.749	230.400	224.621	222.628	222.707	224.084	224.597	225.214
Size B/C—50,000 to 1,500,000[3]	M	134.445	132.830	133.308	133.967	134.411	134.547	134.757	132.938	133.345	133.908	134.558	134.951
Midwest urban[4]	M	201.737	199.582	200.815	201.453	202.021	202.327	196.346	193.987	195.245	195.813	196.453	196.933
Size A—More than 1,500,000	M	202.922	200.465	202.001	202.639	203.240	203.463	196.770	194.120	195.621	196.147	196.855	197.192
Size B/C—50,000 to 1,500,000[3]	M	129.018	128.018	128.636	129.057	129.334	129.604	128.186	127.005	127.768	128.167	128.468	128.968
Size D—Nonmetropolitan (less than 50,000)	M	197.883	195.383	195.843	196.421	197.267	197.644	195.114	192.391	192.907	193.527	194.393	194.651
South urban	M	205.559	203.501	204.288	205.343	206.001	206.657	201.821	199.399	200.067	201.150	201.737	202.619
Size A—More than 1,500,000	M	208.644	206.414	207.035	207.929	208.529	208.934	205.753	203.121	203.519	204.501	205.066	205.733
Size B/C—50,000 to 1,500,000[3]	M	130.324	129.099	129.615	130.380	130.873	131.370	128.504	127.055	127.529	128.276	128.686	129.309
Size D—Nonmetropolitan (less than 50,000)	M	206.659	204.428	205.766	206.671	206.927	207.898	205.777	203.054	204.316	205.337	205.744	206.921
West urban	M	217.113	214.685	215.923	217.095	217.357	217.910	210.870	208.088	209.367	210.492	210.661	211.386
Size A—More than 1,500,000	M	220.925	218.698	219.806	220.955	221.124	221.790	213.143	210.637	211.857	212.890	212.965	213.646
Size B/C—50,000 to 1,500,000[3]	M	131.440	129.725	130.682	131.636	131.775	131.912	130.684	128.641	129.639	130.649	130.674	131.103
Size classes:													
A[5]	M	194.628	192.646	193.412	194.354	194.750	195.207	192.508	190.272	191.023	191.927	192.327	192.861
B/C[3]	M	130.857	129.519	130.135	130.855	131.230	131.557	129.723	128.157	128.783	129.488	129.833	130.361
D	M	204.856	202.359	203.409	203.999	204.672	205.421	202.041	199.228	200.057	200.681	201.485	202.351
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	209.053	205.959	207.616	207.367	207.462	207.886	202.022	198.434	200.222	199.944	200.218	200.607
Los Angeles–Riverside–Orange County, CA	M	222.229	219.620	220.719	221.439	221.376	221.693	214.083	211.007	212.454	213.234	213.013	213.405
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	234.498	233.012	233.402	234.663	235.067	235.582	228.727	227.223	227.503	228.653	229.064	229.639
Boston–Brockton–Nashua, MA–NH–ME–CT	1	232.354	–	230.806	–	232.155	–	231.854	–	230.095	–	231.884	–
Cleveland–Akron, OH	1	198.187	–	198.232	–	199.457	–	188.860	–	188.798	–	190.107	–
Dallas–Ft Worth, TX	1	200.051	–	198.623	–	200.039	–	201.479	–	199.416	–	200.770	–
Washington–Baltimore, DC–MD–VA–WV[7]	1	138.547	–	137.598	–	138.620	–	137.700	–	136.359	–	137.539	–
Atlanta, GA	2	–	196.961	–	199.190	–	199.210	–	195.310	–	197.528	–	197.676
Detroit–Ann Arbor–Flint, MI	2	–	197.991	–	201.913	–	202.373	–	192.808	–	196.191	–	197.239
Houston–Galveston–Brazoria, TX	2	–	185.930	–	187.972	–	189.701	–	183.088	–	185.015	–	186.970
Miami–Ft. Lauderdale, FL	2	–	218.324	–	220.589	–	220.740	–	215.867	–	217.635	–	217.900
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	–	218.186	–	220.262	–	221.686	–	217.610	–	219.356	–	220.732
San Francisco–Oakland–San Jose, CA	2	–	218.528	–	222.166	–	223.854	–	213.685	–	216.797	–	218.587
Seattle–Tacoma–Bremerton, WA	2	–	222.580	–	224.737	–	225.918	–	216.424	–	218.752	–	220.208

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M—Every month.
1—January, March, May, July, September, and November.
2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnatti, OH–KY–IN; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Port-land–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date. Dash indicates data not available.

40. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Consumer Price Index for All Urban Consumers:											
All items:											
Index	163.0	166.6	172.2	177.1	179.9	184.0	188.9	195.3	201.6	207.342	215.303
Percent change	1.6	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2	2.8	3.8
Food and beverages:											
Index	161.1	164.6	168.4	173.6	176.8	180.5	186.6	191.2	195.7	203.300	214.225
Percent change	2.2	2.2	2.3	3.1	1.8	2.1	3.3	2.5	2.4	3.9	5.4
Housing:											
Index	160.4	163.9	169.6	176.4	180.3	184.8	189.5	195.7	203.2	209.586	216.264
Percent change	2.3	2.2	3.5	4.0	2.2	2.5	2.5	3.3	3.8	3.1	3.2
Apparel:											
Index	133.0	131.3	129.6	127.3	124.0	120.9	120.4	119.5	119.5	118.998	118.907
Percent change	.1	–1.3	–1.3	–1.8	–2.6	–2.5	–.4	–.7	.0	-0.4	-0.1
Transportation:											
Index	141.6	144.4	153.3	154.3	152.9	157.6	163.1	173.9	180.9	184.682	195.549
Percent change	–1.9	2.0	6.2	0.7	–.9	3.1	3.5	6.6	4.0	2.1	5.9
Medical care:											
Index	242.1	250.6	260.8	272.8	285.6	297.1	310.1	323.2	336.2	351.054	364.065
Percent change	3.2	3.5	4.1	4.6	4.7	4.0	4.4	4.2	4.0	4.4	3.7
Other goods and services:											
Index	237.7	258.3	271.1	282.6	293.2	298.7	304.7	313.4	321.7	333.328	345.381
Percent change	5.7	8.7	5.0	4.2	3.8	1.9	2.0	2.9	2.6	3.6	3.6
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index	159.7	163.2	168.9	173.5	175.9	179.8	184.5	191.0	197.1	202.767	211.053
Percent change	1.3	2.2	3.5	2.7	1.4	2.2	5.1	1.1	3.2	2.9	4.1

41. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2008									2009			
	2007	2008	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]
Finished goods	166.6	177.1	176.5	179.8	182.4	185.1	182.2	182.2	177.4	172.0	168.8	170.3	170.1	168.9	169.9
Finished consumer goods	173.5	186.3	185.8	190.3	193.8	197.2	193.2	193.0	185.5	178.2	173.7	175.7	175.4	173.9	175.5
Finished consumer foods	167.0	178.3	175.5	177.6	180.0	181.0	181.3	181.5	180.7	179.8	177.7	177.6	174.9	174.0	175.8
Finished consumer goods excluding foods	175.6	189.1	189.6	195.0	199.0	203.4	197.5	197.2	187.0	177.0	171.5	174.2	174.7	173.1	174.6
Nondurable goods less food	191.7	210.5	211.7	220.0	226.4	233.1	223.9	223.4	205.4	190.6	182.1	186.1	186.9	184.6	186.8
Durable goods	138.3	141.2	140.5	140.3	139.7	139.6	140.2	140.3	144.8	144.2	144.4	144.4	144.4	144.2	144.3
Capital equipment	149.5	153.8	152.4	152.7	152.7	153.3	153.9	154.3	157.0	156.9	157.2	157.5	157.4	157.0	156.6
Intermediate materials, supplies, and components	170.7	188.3	187.3	192.8	197.2	203.1	199.4	198.6	189.0	179.2	171.6	171.6	169.8	168.1	167.7
Materials and components for manufacturing	162.4	177.2	175.5	179.1	182.4	187.4	188.7	186.7	180.3	171.1	163.7	162.9	161.2	160.2	158.4
Materials for food manufacturing	161.4	180.4	180.3	182.7	185.4	187.6	187.5	185.2	179.4	175.5	170.8	167.3	164.1	163.6	164.1
Materials for nondurable manufacturing	184.0	214.3	209.5	215.9	222.8	234.8	238.6	234.7	222.4	200.6	185.0	188.3	186.7	184.8	181.3
Materials for durable manufacturing	189.8	203.3	205.6	211.9	215.4	219.2	218.9	214.5	202.2	190.0	178.6	171.6	167.1	166.0	162.7
Components for manufacturing	136.3	140.3	138.6	139.4	140.1	141.3	141.9	142.4	142.5	142.3	141.9	141.7	141.6	141.2	140.6
Materials and components for construction	192.5	205.4	200.2	203.3	206.5	209.8	212.9	214.0	212.2	210.2	207.9	206.2	204.9	204.2	202.5
Processed fuels and lubricants	173.9	206.2	211.8	227.3	238.4	250.1	225.2	224.5	193.9	168.7	151.2	154.3	150.1	145.0	148.6
Containers	180.3	191.8	187.0	187.6	189.2	191.9	195.0	198.4	199.1	199.0	198.1	198.0	199.3	198.4	196.7
Supplies	161.7	173.8	171.3	173.1	174.6	178.3	178.9	179.0	177.0	175.3	173.4	173.2	172.5	172.0	171.8
Crude materials for further processing	207.1	251.8	274.6	293.1	301.2	313.3	274.6	254.2	212.0	183.3	172.6	166.9	160.3	159.9	164.8
Foodstuffs and feedstuffs	146.7	163.4	168.1	173.2	178.1	178.9	170.6	167.6	147.9	144.2	135.5	136.7	133.1	130.5	136.7
Crude nonfood materials	246.3	313.9	352.4	382.4	393.0	414.9	350.0	314.2	253.9	203.2	191.6	179.8	170.9	172.7	175.8
Special groupings:															
Finished goods, excluding foods	166.2	176.6	176.4	180.1	182.8	185.9	182.2	182.1	176.3	169.6	166.1	167.9	168.2	167.0	167.9
Finished energy goods	156.3	178.7	182.4	194.8	204.6	214.0	198.6	197.0	167.8	144.1	130.6	135.9	136.4	132.4	135.7
Finished goods less energy	162.8	169.8	168.0	168.8	169.4	170.2	170.8	171.2	173.1	172.7	172.3	172.6	172.3	171.9	172.3
Finished consumer goods less energy	168.7	176.9	174.9	175.9	176.8	177.7	178.3	178.7	180.2	179.7	179.0	179.3	178.7	178.5	179.3
Finished goods less food and energy	161.7	167.2	165.7	166.1	166.0	166.7	167.4	167.9	170.8	170.6	170.8	171.3	171.6	171.4	171.3
Finished consumer goods less food and energy	170.0	176.4	174.8	175.2	175.2	175.9	176.6	177.2	180.2	180.0	180.1	180.7	181.2	181.4	181.5
Consumer nondurable goods less food and energy	197.0	206.8	204.3	205.4	206.0	207.6	208.5	209.7	210.7	210.9	211.0	212.1	213.3	213.8	214.0
Intermediate materials less foods and feeds	171.5	188.7	187.7	193.3	197.8	203.6	199.7	199.1	189.5	179.4	171.8	172.0	170.1	168.4	167.9
Intermediate foods and feeds	154.4	181.6	180.5	184.5	186.6	195.5	194.3	190.0	179.9	174.7	167.9	166.9	164.7	164.0	164.4
Intermediate energy goods	174.6	208.1	213.4	228.7	240.3	253.5	231.3	227.5	197.4	167.3	147.7	153.2	148.7	142.6	146.2
Intermediate goods less energy	167.6	180.9	178.4	181.4	183.9	187.9	188.9	188.8	184.5	179.8	175.3	174.0	172.8	172.3	170.9
Intermediate materials less foods and energy	168.4	180.9	178.3	181.2	183.8	187.5	188.7	188.8	184.8	180.2	175.9	174.6	173.6	173.0	171.5
Crude energy materials	232.8	309.4	346.1	386.1	400.4	426.5	339.1	303.7	244.4	194.9	181.1	165.0	151.0	153.8	158.2
Crude materials less energy	182.6	205.4	218.5	223.9	228.2	231.7	222.3	211.7	182.0	167.6	159.8	160.9	158.6	155.7	160.6
Crude nonfood materials less energy	282.6	324.4	366.7	372.4	373.8	386.1	374.2	337.5	276.7	224.8	221.3	221.7	225.3	221.7	220.5

p = preliminary.

42. Producer Price Indexes for the net output of major industry groups

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2008									2009			
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]
	Total mining industries (December 1984=100)	301.6	329.0	341.4	363.8	299.2	273.4	223.3	184.9	174.8	164.1	155.0	157.2	161.1
211	Oil and gas extraction (December 1985=100)	390.8	436.2	456.0	490.4	383.6	341.2	259.4	199.5	184.1	165.7	150.3	152.9	159.4
212	Mining, except oil and gas	186.1	184.7	185.8	191.8	190.4	188.9	184.1	174.7	173.0	175.4	179.9	181.6	184.6
213	Mining support activities	170.1	172.2	173.1	175.9	177.1	177.6	179.3	179.9	177.0	175.9	167.9	168.2	162.2
	Total manufacturing industries (December 1984=100)	175.3	179.4	182.0	185.6	182.6	182.9	176.8	169.4	164.1	164.7	164.2	163.0	163.8
311	Food manufacturing (December 1984=100)	171.2	174.0	176.1	180.3	180.5	179.2	176.4	173.4	171.1	170.0	168.7	167.7	168.5
312	Beverage and tobacco manufacturing	112.9	114.2	114.1	115.0	114.8	115.2	116.1	116.0	116.3	117.8	119.4	120.3	119.9
313	Textile mills	110.6	111.4	111.7	112.6	114.2	114.9	114.9	114.7	113.5	113.9	113.0	112.7	112.9
315	Apparel manufacturing	102.2	102.2	102.1	102.3	102.5	102.7	103.0	103.2	103.2	103.2	103.8	103.8	103.7
316	Leather and allied product manufacturing (December 1984=100)	152.7	152.4	153.4	153.8	154.1	154.8	154.6	154.3	154.3	155.2	155.1	155.0	154.5
321	Wood products manufacturing	106.2	108.2	109.2	108.9	109.1	109.1	107.6	106.7	106.2	104.9	104.0	103.0	102.7
322	Paper manufacturing	120.2	120.5	120.9	121.8	124.5	126.6	127.3	127.2	127.0	126.4	126.2	125.6	124.6
323	Printing and related support activities	109.0	109.2	109.5	109.8	110.0	110.4	110.3	110.2	110.3	109.9	109.6	109.4	109.5
324	Petroleum and coal products manufacturing (December 1984=100)	347.7	384.1	406.0	429.6	382.2	382.6	300.0	221.4	167.0	180.7	177.9	166.6	182.5
325	Chemical manufacturing (December 1984=100)	221.1	224.5	228.5	234.5	238.2	240.4	239.3	234.5	229.7	225.7	227.1	226.9	224.0
326	Plastics and rubber products manufacturing (December 1984=100)	156.8	158.3	159.4	162.9	165.2	166.9	167.8	166.9	165.0	162.9	161.3	160.6	160.5
331	Primary metal manufacturing (December 1984=100)	211.5	221.1	227.8	232.7	233.5	228.9	214.9	199.9	185.6	176.4	170.5	169.1	163.8
332	Fabricated metal product manufacturing (December 1984=100)	171.1	173.0	174.7	177.2	178.8	179.6	179.6	179.3	178.5	178.1	177.5	176.6	175.1
333	Machinery manufacturing	115.1	115.8	116.4	117.9	118.3	118.8	119.4	119.9	120.0	120.7	120.6	120.5	120.3
334	Computer and electronic products manufacturing	92.7	92.8	92.8	92.8	92.7	92.7	92.7	92.6	92.4	92.9	92.7	92.3	92.5
335	Electrical equipment, appliance, and components manufacturing	127.3	127.8	128.2	129.1	129.3	129.8	129.4	127.3	126.9	126.2	126.8	126.9	127.7
336	Transportation equipment manufacturing	106.7	106.6	105.9	105.9	106.5	106.6	110.4	110.0	110.1	109.8	110.2	109.5	109.2
337	Furniture and related product manufacturing (December 1984=100)	169.5	170.2	171.3	172.3	173.5	174.3	175.1	175.3	175.7	175.9	176.3	176.9	176.5
339	Miscellaneous manufacturing	109.3	109.4	109.9	110.8	110.5	110.4	110.6	110.4	110.8	112.2	111.5	111.6	111.1
	Retail trade													
441	Motor vehicle and parts dealers	118.9	118.3	118.1	118.4	117.5	117.6	116.8	118.5	117.1	117.4	116.4	117.2	118.5
442	Furniture and home furnishings stores	119.4	120.2	119.6	120.3	122.0	121.1	121.0	120.8	120.6	121.1	121.0	120.7	121.4
443	Electronics and appliance stores	119.7	118.7	105.8	106.5	111.0	110.8	108.9	108.1	107.8	112.7	107.1	102.4	106.9
446	Health and personal care stores	127.2	127.3	127.8	133.8	133.3	134.0	134.6	136.4	136.4	135.3	137.5	137.9	139.7
447	Gasoline stations (June 2001=100)	65.7	59.3	67.6	77.2	72.7	81.7	76.8	76.3	77.7	67.1	71.0	62.4	59.2
454	Nonstore retailers	136.4	136.5	141.8	140.6	162.4	150.6	148.7	154.1	155.2	152.0	152.7	159.0	146.5
	Transportation and warehousing													
481	Air transportation (December 1992=100)	199.5	203.7	213.5	213.6	213.0	208.6	209.3	203.8	198.5	197.8	189.3	184.9	186.7
483	Water transportation	121.1	124.7	127.0	130.4	133.7	135.1	135.0	130.6	128.0	126.6	120.6	117.5	118.0
491	Postal service (June 1989=100)	175.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	181.6	181.6	181.6
	Utilities													
221	Utilities	134.5	137.0	141.7	146.8	145.7	140.8	136.0	133.4	133.1	133.1	132.6	130.2	126.7
	Health care and social assistance													
6211	Office of physicians (December 1996=100)	123.2	123.2	123.2	123.5	123.6	123.7	124.0	124.3	124.2	124.6	125.5	125.7	125.8
6215	Medical and diagnostic laboratories	107.3	106.9	106.9	106.9	106.9	107.6	107.7	107.7	107.8	108.0	108.3	108.4	109.0
6216	Home health care services (December 1996=100)	125.4	125.4	125.4	125.6	126.3	126.5	127.3	127.3	127.4	127.4	127.6	127.4	127.2
622	Hospitals (December 1992=100)	162.7	162.7	162.6	163.2	163.2	163.0	164.9	164.9	165.3	165.2	166.2	166.4	166.6
6231	Nursing care facilities	118.5	118.6	118.6	119.4	119.7	119.8	120.6	120.6	120.7	121.7	122.1	121.7	122.6
62321	Residential mental retardation facilities	118.2	118.5	118.5	118.6	118.7	118.9	119.1	119.2	119.2	119.2	119.8	120.4	120.5
	Other services industries													
511	Publishing industries, except Internet	110.9	110.7	110.4	111.0	111.1	110.2	110.9	111.1	110.7	111.9	111.9	111.4	111.5
515	Broadcasting, except Internet	106.4	105.5	104.4	103.9	105.5	107.0	112.0	111.5	109.3	107.0	108.6	109.3	106.6
517	Telecommunications	101.0	101.3	101.1	101.0	101.5	101.5	101.2	101.2	101.4	101.2	101.1	101.0	100.6
5182	Data processing and related services	100.4	100.8	100.8	100.9	101.0	101.1	101.3	101.3	101.3	100.6	100.7	100.8	100.9
523	Security, commodity contracts, and like activity	119.6	119.6	120.2	119.1	120.2	120.5	117.7	115.8	115.2	113.4	112.4	108.4	110.9
53112	Lessors or nonresidental buildings (except miniwarehouse)	109.5	110.5	110.4	110.9	112.7	111.7	111.5	111.7	112.8	113.8	108.5	110.1	109.1
5312	Offices of real estate agents and brokers	110.2	106.9	106.9	106.8	104.4	103.8	103.1	103.0	102.8	98.6	101.6	101.6	101.9
5313	Real estate support activities	107.3	108.3	108.2	109.2	109.3	108.6	109.2	108.2	109.8	108.5	110.2	110.8	109.6
5321	Automotive equipment rental and leasing (June 2001=100)	120.3	122.0	125.4	136.7	135.0	131.3	128.2	126.9	123.7	129.6	133.1	133.0	134.9
5411	Legal services (December 1996=100)	161.1	160.9	161.1	161.5	161.5	162.6	163.2	163.2	163.2	164.2	164.6	166.0	166.1
541211	Offices of certified public accountants	112.7	114.0	112.7	115.3	115.5	115.4	115.6	115.0	115.7	115.1	115.1	115.3	115.2
5413	Architectural, engineering, and related services (December 1996=100)	140.5	140.5	141.3	141.6	141.6	141.6	141.8	141.8	141.9	142.0	142.3	142.3	142.9
54181	Advertising agencies	105.7	106.3	106.3	106.3	106.3	106.3	106.3	106.3	106.3	104.9	105.2	105.3	105.4
5613	Employment services (December 1996=100)	122.9	122.7	122.8	123.0	123.4	123.1	123.6	124.1	124.2	123.3	124.1	123.2	124.1
56151	Travel agencies	98.8	98.8	98.8	98.8	98.8	101.4	101.4	101.4	101.4	101.4	101.4	102.6	99.7
56172	Janitorial services	108.9	109.0	109.1	109.0	109.3	109.4	109.4	109.4	109.1	109.8	109.7	109.5	109.6
5621	Waste collection	112.2	111.9	112.6	112.3	113.3	114.0	113.0	113.3	111.3	113.6	114.3	116.4	116.3
721	Accommodation (December 1996=100)	145.6	144.9	147.0	149.9	150.9	146.9	145.6	144.3	141.6	142.4	139.7	142.3	142.0

p = preliminary.

43. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Finished goods											
Total	130.7	133.0	138.0	140.7	138.9	143.3	148.5	155.7	160.4	166.6	177.1
Foods	134.3	135.1	137.2	141.3	140.1	145.9	152.7	155.7	156.7	167.0	178.3
Energy	75.1	78.8	94.1	96.7	88.8	102.0	113.0	132.6	145.9	156.3	178.7
Other	143.7	146.1	148.0	150.0	150.2	150.5	152.7	156.4	158.7	161.7	167.2
Intermediate materials, supplies, and components											
Total	123.0	123.2	129.2	129.7	127.8	133.7	142.6	154.0	164.0	170.7	188.3
Foods	123.2	120.8	119.2	124.3	123.2	134.4	145.0	146.0	146.2	161.4	180.4
Energy	80.8	84.3	101.7	104.1	95.9	111.9	123.2	149.2	162.8	174.6	208.1
Other	133.5	133.1	136.6	136.4	135.8	138.5	146.5	154.6	163.8	168.4	180.9
Crude materials for further processing											
Total	96.8	98.2	120.6	121.0	108.1	135.3	159.0	182.2	184.8	207.1	251.8
Foods	103.9	98.7	100.2	106.1	99.5	113.5	127.0	122.7	119.3	146.7	163.4
Energy	68.6	78.5	122.1	122.3	102.0	147.2	174.6	234.0	226.9	232.8	309.4
Other	84.5	91.1	118.0	101.5	101.0	116.9	149.2	176.7	210.0	238.7	308.5

44. U.S. export price indexes by end-use category

[2000 = 100]

Category	2008									2009			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
ALL COMMODITIES	124.4	124.8	126.1	128.0	125.9	124.9	122.3	118.4	115.8	116.6	116.2	115.4	116.0
Foods, feeds, and beverages	192.8	193.3	198.0	211.5	189.6	190.4	175.0	164.8	155.1	165.4	162.1	156.5	162.6
Agricultural foods, feeds, and beverages	198.2	198.9	204.0	218.9	194.7	195.6	178.3	166.9	156.6	167.6	164.1	158.1	164.8
Nonagricultural (fish, beverages) food products	146.4	145.5	146.1	147.0	145.7	145.5	147.8	148.3	143.5	147.9	145.7	144.1	145.2
Industrial supplies and materials	167.9	169.6	173.2	177.8	174.0	169.4	161.8	148.2	139.6	139.0	137.8	136.4	136.7
Agricultural industrial supplies and materials	157.9	156.9	158.0	162.8	160.9	157.4	148.5	134.2	126.1	125.6	125.9	123.3	123.6
Fuels and lubricants	259.3	275.8	297.2	312.3	275.8	267.2	239.2	193.4	166.8	165.8	156.2	146.6	158.2
Nonagricultural supplies and materials, excluding fuel and building materials	160.1	160.1	161.6	165.1	165.3	160.8	155.5	145.6	138.8	138.2	138.0	137.9	136.7
Selected building materials	114.1	113.9	113.8	114.5	115.2	115.4	116.6	115.6	115.1	115.5	115.7	114.5	114.0
Capital goods	101.5	101.6	102.0	101.9	101.9	101.8	101.7	101.6	101.5	102.1	102.3	102.2	102.6
Electric and electrical generating equipment	108.7	108.6	108.9	109.3	109.2	109.5	109.7	109.2	109.0	107.3	106.6	106.8	106.8
Nonelectrical machinery	93.9	93.9	94.2	94.0	94.1	93.9	93.6	93.5	93.3	93.7	94.0	93.7	94.0
Automotive vehicles, parts, and engines	107.5	107.5	107.4	107.7	107.8	107.9	108.2	108.1	108.0	108.4	108.1	108.2	108.2
Consumer goods, excluding automotive	108.1	108.1	108.2	108.5	109.0	109.3	109.9	109.1	109.0	109.2	109.2	108.2	108.3
Nondurables, manufactured	109.8	110.0	110.1	109.8	109.6	109.0	108.9	107.4	107.2	108.8	109.1	106.9	107.2
Durables, manufactured	105.1	105.1	105.2	106.0	107.2	108.7	109.9	109.8	109.7	109.7	109.8	109.8	109.7
Agricultural commodities	190.5	190.8	195.2	208.2	188.2	188.3	172.5	160.6	150.8	159.7	156.9	151.5	157.0
Nonagricultural commodities	119.6	120.1	121.2	122.3	121.5	120.4	118.7	115.4	113.2	113.5	113.3	112.8	113.1

45. U.S. import price indexes by end-use category

[2000 = 100]

Category	2008									2009			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
ALL COMMODITIES	137.3	141.2	145.5	147.5	143.0	137.8	129.6	120.0	114.5	113.0	112.9	113.1	114.9
Foods, feeds, and beverages	143.7	145.0	147.7	149.7	150.4	147.9	146.0	139.5	142.3	142.3	137.7	136.8	136.6
Agricultural foods, feeds, and beverages	159.8	162.2	165.1	167.6	167.9	165.1	162.8	154.4	159.4	159.0	152.9	151.1	150.5
Nonagricultural (fish, beverages) food products	107.2	105.9	108.4	109.1	110.9	109.1	108.0	105.8	103.8	104.5	103.4	104.6	105.1
Industrial supplies and materials	248.7	265.0	283.0	290.7	270.7	248.9	213.5	174.6	150.4	143.7	144.7	147.3	155.3
Fuels and lubricants	354.6	388.3	423.7	437.6	392.0	346.3	274.1	197.8	153.9	146.6	150.3	157.8	177.0
Petroleum and petroleum products	375.8	412.2	450.3	465.0	419.5	371.5	288.9	201.6	150.8	143.8	151.4	163.4	188.5
Paper and paper base stocks	116.2	117.1	117.3	118.9	119.7	119.9	116.4	115.1	113.2	110.3	108.4	105.8	104.1
Materials associated with nondurable supplies and materials	148.7	149.6	152.9	157.4	159.6	162.4	160.2	155.0	148.5	138.8	137.1	137.4	134.8
Selected building materials	114.3	116.2	119.2	121.3	122.1	122.7	120.4	118.8	118.1	117.2	116.6	116.4	115.5
Unfinished metals associated with durable goods	259.2	263.6	273.2	273.4	270.3	255.4	236.7	209.3	185.7	176.5	175.8	171.2	170.2
Nonmetals associated with durable goods	106.2	107.3	107.6	110.7	111.8	111.4	110.9	110.4	109.0	107.1	106.2	105.1	104.7
Capital goods	93.0	93.3	93.2	93.4	93.4	93.3	93.3	92.9	92.7	92.7	92.2	91.6	91.7
Electric and electrical generating equipment	111.5	111.7	112.0	112.7	113.0	112.9	112.3	111.8	111.4	111.1	110.2	109.7	109.6
Nonelectrical machinery	88.0	88.4	88.2	88.4	88.3	88.2	88.1	87.7	87.5	87.5	87.1	86.3	86.4
Automotive vehicles, parts, and engines	107.8	107.8	107.9	108.1	108.3	108.1	108.3	107.9	107.8	108.0	107.9	107.7	107.6
Consumer goods, excluding automotive	104.6	104.8	104.9	105.1	105.2	105.1	105.1	104.6	104.4	104.4	104.4	103.9	104.1
Nondurables, manufactured	107.9	108.0	107.9	108.2	108.4	108.2	108.1	108.0	108.2	108.9	108.9	108.4	108.5
Durables, manufactured	101.1	101.3	101.5	101.7	101.7	101.8	101.8	101.1	100.7	100.1	99.9	99.7	100.0
Nonmanufactured consumer goods	105.6	105.8	106.6	106.7	106.6	106.6	105.9	103.2	103.6	102.7	104.4	101.1	102.6

46. U.S. international price Indexes for selected categories of services

[2000 = 100, unless indicated otherwise]

Category	2007				2008				2009
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
Import air freight	130.7	132.3	134.2	141.8	144.4	158.7	157.1	138.5	132.8
Export air freight	117.0	117.0	119.8	127.1	132.0	140.8	144.3	135.0	122.8
Import air passenger fares (Dec. 2006 = 100)	122.9	144.6	140.2	135.3	131.3	171.6	161.3	157.3	134.9
Export air passenger fares (Dec. 2006 = 100)	140.2	147.3	154.6	155.7	156.4	171.4	171.9	164.6	140.0

47. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	2006				2007				2008				2009
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Business													
Output per hour of all persons	135.9	136.5	136.0	135.9	135.7	137.5	140.0	139.6	140.4	142.0	142.8	142.6	143.2
Compensation per hour	167.8	168.1	169.0	172.6	174.3	175.4	177.4	178.9	180.5	181.3	183.9	185.8	187.8
Real compensation per hour	120.4	119.6	119.2	122.1	122.1	121.6	122.3	121.6	121.3	120.6	120.4	124.4	126.5
Unit labor costs	123.5	123.1	124.3	127.0	128.5	127.5	126.7	128.2	128.6	127.7	128.8	130.3	131.2
Unit nonlabor payments	133.4	136.3	136.3	133.3	134.3	137.5	139.8	139.0	140.2	142.4	144.3	141.8	142.3
Implicit price deflator	127.2	128.0	128.8	129.4	130.7	131.2	131.6	132.2	132.9	133.2	134.6	134.6	135.3
Nonfarm business													
Output per hour of all persons	134.8	135.6	135.1	134.9	134.7	136.3	138.7	138.5	139.4	141.0	141.7	141.5	142.1
Compensation per hour	166.5	167.0	168.0	171.7	173.4	174.0	175.8	177.8	179.4	180.2	182.7	184.7	186.8
Real compensation per hour	119.5	118.9	118.5	121.4	121.5	120.6	121.2	120.8	120.6	119.8	119.7	123.7	125.8
Unit labor costs	123.5	123.1	124.3	127.2	128.7	127.6	126.8	128.4	128.7	127.8	128.9	130.5	131.5
Unit nonlabor payments	135.5	138.6	138.4	134.7	135.1	138.3	140.5	139.7	141.0	143.3	145.6	143.4	144.2
Implicit price deflator	127.9	128.8	129.5	130.0	131.1	131.5	131.8	132.5	133.2	133.5	135.0	135.2	136.2
Nonfinancial corporations													
Output per hour of all employees	146.0	145.7	146.7	145.6	145.4	146.7	147.8	148.3	148.1	151.2	153.6	151.9	151.1
Compensation per hour	164.2	164.4	165.1	167.8	170.0	171.1	172.8	174.9	176.1	177.4	180.0	182.1	184.9
Real compensation per hour	117.8	117.0	116.5	118.7	119.1	118.6	119.1	118.9	118.4	118.0	117.9	121.9	124.5
Total unit costs	112.6	113.3	113.1	115.6	117.1	116.9	117.2	118.3	119.0	118.0	118.3	121.2	124.1
Unit labor costs	112.5	112.8	112.5	115.3	116.9	116.6	116.9	117.9	118.9	117.3	117.3	119.9	122.4
Unit nonlabor costs	113.0	114.6	114.5	116.5	117.6	117.9	118.2	119.3	119.4	119.8	121.3	124.9	129.0
Unit profits	182.6	183.4	193.4	174.4	172.4	173.1	167.4	156.4	150.8	147.8	156.7	144.1	136.1
Unit nonlabor payments	131.6	133.0	135.6	132.0	132.2	132.6	131.4	129.2	127.8	127.2	130.8	130.0	130.9
Implicit price deflator	118.8	119.5	120.3	120.8	122.1	122.0	121.7	121.7	121.8	120.6	121.8	123.3	125.2
Manufacturing													
Output per hour of all persons	172.6	172.5	174.4	175.3	176.9	178.2	180.1	181.6	182.8	181.6	180.3	178.2	177.0
Compensation per hour	170.7	169.4	170.4	174.4	176.6	176.3	177.0	179.6	181.1	182.7	185.1	190.3	196.4
Real compensation per hour	122.5	120.6	120.2	123.4	123.7	122.3	122.0	122.1	121.7	121.5	121.2	127.4	132.3
Unit labor costs	98.9	98.2	97.7	99.5	99.8	99.0	98.2	98.9	99.1	100.6	102.7	106.8	111.0

NOTE: Dash indicates data not available.

48. Annual indexes of multifactor productivity and related measures, selected years

[2000 = 100, unless otherwise indicated]

Item	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Private business													
Productivity:													
Output per hour of all persons	90.0	91.7	94.3	97.2	100.0	102.8	107.1	111.2	114.5	116.6	117.6	119.5	122.7
Output per unit of capital services	105.3	105.3	103.8	102.3	100.0	96.0	94.7	95.5	97.2	98.1	98.4	97.7	95.6
Multifactor productivity	95.3	96.2	97.4	98.8	100.0	100.4	102.5	105.4	108.2	109.7	110.3	110.7	112.0
Output	82.8	87.2	91.5	96.2	100.0	100.5	102.0	105.2	109.7	113.6	117.1	119.5	120.4
Inputs:													
Labor input	90.8	94.4	96.5	98.8	100.0	98.2	96.2	95.8	96.9	98.8	101.2	102.3	100.3
Capital services	78.7	82.9	88.2	94.1	100.0	104.6	107.7	110.2	112.9	115.8	119.1	122.3	125.9
Combined units of labor and capital input	86.9	90.7	93.9	97.4	100.0	100.0	99.5	99.9	101.4	103.6	106.2	108.0	107.6
Capital per hour of all persons	85.5	87.1	90.9	95.0	100.0	107.0	113.1	116.5	117.8	118.9	119.6	122.3	128.3
Private nonfarm business													
Productivity:													
Output per hour of all persons	90.5	92.0	94.5	97.3	100.0	102.7	107.1	111.1	114.2	116.1	117.2	118.9	122.3
Output per unit of capital services	106.1	105.8	104.2	102.6	100.0	96.0	94.5	95.2	96.9	97.7	97.9	97.0	95.1
Multifactor productivity	95.8	96.5	97.7	99.0	100.0	100.4	102.5	105.2	108.0	109.3	109.9	110.1	111.4
Output	82.8	87.2	91.5	96.3	100.0	100.5	102.1	105.2	109.6	113.5	117.1	119.4	120.4
Inputs:													
Labor input	90.4	94.0	96.3	98.8	100.0	98.4	96.4	96.0	97.1	99.1	101.6	102.8	100.9
Capital services	78.1	82.4	87.8	93.9	100.0	104.7	107.9	110.5	113.1	116.1	119.6	123.1	126.7
Combined units of labor and capital input	86.5	90.4	93.7	97.3	100.0	100.2	99.6	100.0	101.5	103.8	106.6	108.4	108.1
Capital per hour of all persons	85.3	86.9	90.7	94.8	100.0	107.0	113.2	116.7	117.8	118.9	119.7	122.6	128.8
Manufacturing [1996 = 100]													
Productivity:													
Output per hour of all persons	82.7	87.3	92.0	96.1	100.0	101.6	108.6	115.3	117.9	123.5	125.0	–	–
Output per unit of capital services	98.0	100.6	100.7	100.4	100.0	93.5	92.3	93.2	95.4	98.9	100.2	–	–
Multifactor productivity	91.2	93.8	95.9	96.7	100.0	98.7	102.4	105.2	108.0	108.4	110.1	–	–
Output	83.1	89.2	93.8	97.4	100.0	94.9	94.3	95.2	96.9	100.4	102.3	–	–
Inputs:												–	–
Hours of all persons	100.4	102.2	101.9	101.3	100.0	93.5	86.8	82.6	82.2	81.3	81.8	–	–
Capital services	84.8	88.7	93.2	97.0	100.0	101.5	102.1	102.1	101.6	101.5	102.0	–	–
Energy	110.4	108.2	105.4	105.5	100.0	90.6	89.3	84.4	84.0	91.6	86.6	–	–
Nonenergy materials	86.0	92.9	97.7	102.6	100.0	93.3	88.4	87.7	87.3	92.4	91.5	–	–
Purchased business services	88.5	92.1	95.0	100.0	100.0	100.7	98.2	99.1	97.0	104.5	106.6	–	–
Combined units of all factor inputs	91.1	95.1	97.8	100.7	100.0	96.2	92.1	90.5	89.7	92.7	92.9	–	–

NOTE: Dash indicates data not available.

49. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1963	1973	1983	1993	2000	2001	2002	2003	2004	2005	2006	2007	2008
Business													
Output per hour of all persons	55.0	73.4	83.0	100.4	116.1	119.1	123.9	128.7	132.4	134.8	136.1	138.2	141.9
Compensation per hour	15.6	28.9	66.3	102.2	134.7	140.3	145.3	151.2	157.0	163.2	169.4	176.5	182.8
Real compensation per hour	66.6	85.1	90.5	99.8	112.0	113.5	115.7	117.7	119.0	119.7	120.3	121.9	121.6
Unit labor costs	28.4	39.4	79.8	101.8	116.0	117.9	117.3	117.5	118.5	121.0	124.5	127.7	128.8
Unit nonlabor payments	26.6	37.5	76.3	102.6	107.2	110.0	114.2	118.3	124.6	130.5	134.8	137.7	142.1
Implicit price deflator	27.7	38.7	78.5	102.1	112.7	114.9	116.1	117.8	120.8	124.6	128.3	131.4	133.8
Nonfarm business													
Output per hour of all persons	57.8	75.3	84.5	100.4	115.7	118.6	123.5	128.0	131.6	133.9	135.1	137.0	140.9
Compensation per hour	16.1	29.1	66.6	102.0	134.2	139.5	144.6	150.4	156.0	162.1	168.3	175.2	181.7
Real compensation per hour	68.7	85.5	91.1	99.5	111.6	112.8	115.1	117.1	118.2	118.9	119.5	121.0	120.8
Unit labor costs	27.8	38.6	78.9	101.6	116.0	117.7	117.1	117.5	118.5	121.1	124.5	127.9	129.0
Unit nonlabor payments	26.3	35.3	76.1	103.1	108.7	111.6	116.0	119.6	125.5	132.1	136.8	138.4	143.3
Implicit price deflator	27.3	37.4	77.9	102.1	113.3	115.4	116.7	118.3	121.1	125.1	129.1	131.7	134.2
Nonfinancial corporations													
Output per hour of all employees	62.6	74.8	85.7	100.3	122.5	124.7	129.7	134.6	139.7	143.4	146.0	147.1	151.2
Compensation per hour	17.9	31.0	68.9	101.8	133.0	138.6	143.6	149.5	154.0	159.6	165.4	172.2	178.9
Real compensation per hour	76.4	91.2	94.2	99.3	110.6	112.1	114.3	116.4	116.8	117.1	117.5	118.9	119.0
Total unit costs	27.2	39.9	80.7	101.0	107.4	111.6	110.7	111.0	110.0	111.7	113.6	117.4	119.1
Unit labor costs	28.6	41.4	80.4	101.4	108.6	111.2	110.7	111.0	110.3	111.3	113.3	117.1	118.3
Unit nonlabor costs	23.4	35.7	81.6	99.9	104.2	112.6	110.8	111.1	109.3	112.7	114.6	118.3	121.3
Unit profits	57.3	54.9	91.2	114.1	108.7	82.2	98.0	109.9	144.8	163.0	183.5	167.3	149.9
Unit nonlabor payments	32.5	40.8	84.2	103.7	105.4	104.5	107.4	110.7	118.8	126.2	133.0	131.4	129.0
Implicit price deflator	29.9	41.2	81.7	102.2	107.5	108.9	109.6	110.9	113.1	116.3	119.9	121.9	121.9
Manufacturing													
Output per hour of all persons	–	–	–	102.6	139.1	141.2	151.0	160.4	164.0	171.9	173.7	179.2	180.7
Compensation per hour	–	–	–	102.0	134.7	137.8	147.8	158.2	161.5	164.5	171.2	177.4	184.7
Real compensation per hour	–	–	–	99.6	112.0	111.5	117.7	123.2	122.5	120.7	121.6	122.5	122.8
Unit labor costs	–	–	–	99.5	96.9	97.6	97.9	98.7	98.5	95.7	98.6	99.0	102.2
Unit nonlabor payments	–	–	–	101.1	103.5	102.0	100.3	102.9	110.2	122.2	126.6	–	–
Implicit price deflator	–	–	–	100.6	101.4	100.6	99.5	101.5	106.4	113.5	117.4	–	–

Dash indicates data not available.

50. Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	Mining												
21	Mining	85.3	100.0	103.5	111.4	111.0	109.1	113.5	116.0	106.8	96.0	87.3	81.7
211	Oil and gas extraction	80.1	100.0	101.2	107.9	119.4	121.6	123.8	130.1	111.7	107.8	100.4	97.0
2111	Oil and gas extraction	80.1	100.0	101.2	107.9	119.4	121.6	123.8	130.1	111.7	107.8	100.4	97.0
212	Mining, except oil and gas	69.3	100.0	104.5	105.8	106.3	109.0	110.7	113.8	116.2	114.2	111.0	105.2
2121	Coal mining	57.8	100.0	106.5	110.3	115.8	114.3	111.7	113.4	113.4	107.8	99.8	101.0
2122	Metal ore mining	71.0	100.0	108.9	112.3	121.5	132.2	138.2	142.2	137.1	129.9	123.1	104.2
2123	Nonmetallic mineral mining and quarrying	88.0	100.0	101.2	101.2	96.1	99.4	103.6	108.3	114.3	118.4	120.0	109.8
213	Support activities for mining	79.4	100.0	96.0	98.5	100.9	110.4	103.5	136.3	170.3	144.9	147.0	156.8
2131	Support activities for mining	79.4	100.0	96.0	98.5	100.9	110.4	103.5	136.3	170.3	144.9	147.0	156.8
	Utilities												
2211	Power generation and supply	65.6	100.0	103.7	103.5	107.0	106.4	102.9	105.1	107.5	114.3	115.4	113.3
2212	Natural gas distribution	67.8	100.0	99.0	102.7	113.2	110.1	115.4	114.1	118.3	122.2	119.1	119.7
	Manufacturing												
311	Food	94.1	100.0	103.9	105.9	107.1	109.5	113.8	116.8	117.3	123.3	121.1	-
3111	Animal food	83.6	100.0	109.0	110.9	109.7	131.4	142.7	165.8	149.5	165.5	150.4	-
3112	Grain and oilseed milling	81.1	100.0	107.5	116.1	113.1	119.5	122.4	123.9	130.3	133.0	130.7	-
3113	Sugar and confectionery products	87.6	100.0	103.5	106.5	109.9	108.6	108.0	112.5	118.2	130.7	129.2	-
3114	Fruit and vegetable preserving and specialty	92.4	100.0	107.1	109.5	111.8	121.4	126.9	123.0	126.2	132.0	126.9	-
3115	Dairy products	82.7	100.0	100.0	93.6	95.9	97.1	105.0	110.5	107.4	109.6	110.2	-
3116	Animal slaughtering and processing	97.4	100.0	100.0	101.2	102.6	103.7	107.3	106.6	108.0	117.4	116.9	-
3117	Seafood product preparation and packaging	123.1	100.0	120.2	131.6	140.5	153.0	169.8	173.2	162.2	186.1	203.8	-
3118	Bakeries and tortilla manufacturing	100.9	100.0	103.8	108.6	108.3	109.9	108.9	109.3	113.8	115.4	110.5	-
3119	Other food products	97.5	100.0	107.8	111.4	112.6	106.2	111.9	118.8	119.3	116.2	116.3	-
312	Beverages and tobacco products	78.1	100.0	97.6	87.3	88.3	89.5	82.6	90.9	94.7	100.5	94.0	-
3121	Beverages	77.1	100.0	99.0	90.7	90.8	92.7	99.4	108.3	114.1	120.3	112.0	-
3122	Tobacco and tobacco products	71.9	100.0	98.5	91.0	95.9	98.2	67.0	78.7	82.4	93.1	94.9	-
313	Textile mills	73.7	100.0	102.6	106.2	106.7	109.5	125.3	136.1	138.6	152.8	150.5	-
3131	Fiber, yarn, and thread mills	66.5	100.0	102.1	103.9	101.3	109.1	133.3	148.8	154.1	143.5	139.7	-
3132	Fabric mills	68.0	100.0	104.2	110.0	110.1	110.3	125.4	137.3	138.6	164.2	170.5	-
3133	Textile and fabric finishing mills	91.3	100.0	101.2	102.2	104.4	108.5	119.8	125.1	127.7	139.8	126.2	-
314	Textile product mills	93.0	100.0	98.7	102.5	107.1	104.5	107.3	112.7	123.4	128.0	121.1	-
3141	Textile furnishings mills	91.2	100.0	99.3	99.1	104.5	103.1	105.5	114.4	122.3	125.7	117.3	-
3149	Other textile product mills	92.2	100.0	96.7	107.6	108.9	103.1	105.1	104.2	120.4	128.9	126.1	-
315	Apparel	71.9	100.0	101.8	111.7	116.8	116.5	102.9	112.4	103.4	110.9	114.0	-
3151	Apparel knitting mills	76.2	100.0	96.1	101.4	108.9	105.6	112.0	105.6	96.6	120.0	123.7	-
3152	Cut and sew apparel	69.8	100.0	102.3	114.6	119.8	119.5	103.9	117.2	108.4	113.5	117.6	-
3159	Accessories and other apparel	97.8	100.0	109.0	99.3	98.3	105.2	76.1	78.7	70.8	74.0	67.3	-
316	Leather and allied products	71.6	100.0	106.6	112.7	120.3	122.4	97.7	99.8	109.5	123.6	132.5	-
3161	Leather and hide tanning and finishing	94.0	100.0	100.3	98.1	100.1	100.3	81.2	82.2	93.5	118.7	118.1	-
3162	Footwear	76.7	100.0	102.1	117.3	122.3	130.7	102.7	104.8	100.7	105.6	115.4	-
3169	Other leather products	92.3	100.0	113.3	110.4	122.8	117.6	96.2	100.3	127.7	149.7	174.6	-
321	Wood products	95.0	100.0	101.2	102.9	102.7	106.1	113.6	114.7	115.6	123.1	124.9	-
3211	Sawmills and wood preservation	77.6	100.0	100.3	104.7	105.4	108.8	114.4	121.3	118.2	127.3	129.7	-
3212	Plywood and engineered wood products	99.7	100.0	105.1	98.7	98.8	105.2	110.3	107.0	102.9	110.2	117.4	-
3219	Other wood products	103.0	100.0	101.0	104.5	103.0	104.7	113.9	113.9	119.6	126.3	125.3	-
322	Paper and paper products	85.8	100.0	102.3	104.1	106.3	106.8	114.2	118.9	123.4	124.5	127.3	-
3221	Pulp, paper, and paperboard mills	81.7	100.0	102.5	111.1	116.3	119.9	133.1	141.4	148.0	147.7	151.1	-
3222	Converted paper products	89.0	100.0	102.5	100.1	101.1	100.5	105.6	109.6	112.9	114.8	116.6	-
323	Printing and related support activities	97.6	100.0	100.6	102.8	104.6	105.3	110.2	111.1	114.5	119.5	121.1	-
3231	Printing and related support activities	97.6	100.0	100.6	102.8	104.6	105.3	110.2	111.1	114.5	119.5	121.1	-
324	Petroleum and coal products	71.1	100.0	102.2	107.1	113.5	112.1	118.0	119.2	123.4	123.8	122.8	-
3241	Petroleum and coal products	71.1	100.0	102.2	107.1	113.5	112.1	118.0	119.2	123.4	123.8	122.8	-
325	Chemicals	85.9	100.0	99.9	103.5	106.6	105.3	114.2	118.4	125.8	134.1	137.5	-
3251	Basic chemicals	94.6	100.0	102.8	115.7	117.5	108.8	123.8	136.0	154.4	165.2	169.3	-
3252	Resin, rubber, and artificial fibers	77.4	100.0	106.0	109.8	109.8	106.2	123.1	122.2	121.9	130.5	134.9	-
3253	Agricultural chemicals	80.4	100.0	98.8	87.4	92.1	90.0	99.2	108.4	117.4	132.5	130.7	-
3254	Pharmaceuticals and medicines	87.3	100.0	93.8	95.7	95.6	99.5	97.4	101.5	104.1	110.0	115.0	-
3255	Paints, coatings, and adhesives	89.4	100.0	100.1	100.3	100.8	105.6	108.9	115.2	119.1	120.8	115.4	-
3256	Soap, cleaning compounds, and toiletries	84.4	100.0	98.0	93.0	102.8	106.0	124.1	118.2	135.3	153.1	162.9	-
3259	Other chemical products and preparations	75.4	100.0	99.2	109.3	119.7	110.4	120.8	123.0	121.3	123.5	118.1	-
326	Plastics and rubber products	80.9	100.0	103.2	107.9	110.2	112.3	120.8	126.0	128.7	132.6	132.8	-
3261	Plastics products	83.1	100.0	104.2	109.9	112.3	114.6	123.8	129.5	131.9	135.6	133.8	-
3262	Rubber products	75.5	100.0	99.4	100.2	101.7	102.3	107.1	111.0	114.4	118.7	124.9	-
327	Nonmetallic mineral products	87.6	100.0	103.7	104.3	102.5	100.0	104.6	111.2	108.7	115.3	114.6	-
3271	Clay products and refractories	86.9	100.0	101.2	102.7	102.9	98.4	99.7	103.5	109.2	114.6	111.9	-

50. Continued - Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
3272	Glass and glass products	82.4	100.0	101.3	106.7	108.1	102.9	107.5	115.3	113.8	123.1	132.9	-
3273	Cement and concrete products	93.6	100.0	105.1	105.9	101.6	98.0	102.4	108.3	102.8	106.5	103.1	-
3274	Lime and gypsum products	88.2	100.0	114.9	104.4	98.5	101.8	99.0	107.1	104.7	119.3	116.5	-
3279	Other nonmetallic mineral products	83.0	100.0	99.0	95.6	96.6	98.6	106.9	113.6	110.6	118.9	116.3	-
331	Primary metals	81.0	100.0	102.0	102.8	101.3	101.0	115.2	118.2	132.0	135.5	134.3	-
3311	Iron and steel mills and ferroalloy production	64.8	100.0	101.3	104.8	106.0	104.4	125.1	130.4	164.9	163.1	163.5	-
3312	Steel products from purchased steel	79.7	100.0	100.6	93.8	96.4	97.9	96.8	93.9	88.6	90.8	86.1	-
3313	Alumina and aluminum production	90.5	100.0	101.5	103.5	96.6	96.2	124.5	126.8	137.3	154.4	151.7	-
3314	Other nonferrous metal production	96.8	100.0	111.3	108.4	102.3	99.5	107.6	120.6	123.1	122.3	115.7	-
3315	Foundries	81.4	100.0	101.2	104.5	103.6	107.4	116.7	116.3	123.9	128.6	131.8	-
332	Fabricated metal products	87.3	100.0	101.3	103.0	104.8	104.8	110.9	114.4	113.4	116.9	119.7	-
3321	Forging and stamping	85.4	100.0	103.5	110.9	121.1	120.7	125.0	133.1	142.0	147.6	152.7	-
3322	Cutlery and handtools	86.3	100.0	99.9	108.0	105.9	110.3	113.4	113.2	107.6	114.1	116.6	-
3323	Architectural and structural metals	88.7	100.0	100.9	102.0	100.6	101.6	106.0	108.8	105.4	109.2	113.5	-
3324	Boilers, tanks, and shipping containers	86.0	100.0	100.0	96.5	94.2	94.4	98.9	101.6	93.6	95.7	96.6	-
3325	Hardware	88.7	100.0	100.5	105.2	114.3	113.5	115.5	125.4	126.0	131.8	131.1	-
3326	Spring and wire products	82.2	100.0	110.6	111.4	112.6	111.9	125.7	135.3	133.8	143.2	140.6	-
3327	Machine shops and threaded products	76.9	100.0	99.6	104.2	108.2	108.8	114.8	115.7	114.6	116.3	117.1	-
3328	Coating, engraving, and heat treating metals	75.5	100.0	100.9	101.0	105.5	107.3	116.1	118.3	125.3	136.5	135.5	-
3329	Other fabricated metal products	91.0	100.0	101.9	99.6	99.9	96.7	106.5	111.6	111.2	112.5	117.7	-
333	Machinery	82.3	100.0	102.9	104.7	111.5	109.0	116.6	125.2	127.0	134.1	137.4	-
3331	Agriculture, construction, and mining machinery	74.6	100.0	103.3	94.3	100.3	100.3	103.7	116.1	125.4	129.4	129.1	-
3332	Industrial machinery	75.1	100.0	95.1	105.8	130.0	105.8	117.6	117.0	126.5	122.4	135.3	-
3333	Commercial and service industry machinery	87.0	100.0	106.3	110.0	101.3	94.5	97.8	104.7	106.5	115.1	122.3	-
3334	HVAC and commercial refrigeration equipment	84.0	100.0	106.2	110.2	107.9	110.8	118.6	130.0	132.8	137.1	133.4	-
3335	Metalworking machinery	85.1	100.0	99.1	100.3	106.1	103.3	112.7	115.2	117.1	127.3	128.3	-
3336	Turbine and power transmission equipment	80.2	100.0	105.0	110.8	114.9	126.9	130.7	143.0	126.4	132.5	128.5	-
3339	Other general purpose machinery	83.5	100.0	103.7	106.0	113.7	110.5	117.9	128.1	127.1	138.4	143.8	-
334	Computer and electronic products	28.4	100.0	118.4	149.5	181.8	181.4	188.0	217.2	244.3	259.6	282.2	-
3341	Computer and peripheral equipment	11.0	100.0	140.4	195.9	235.0	252.2	297.4	373.4	415.1	543.3	715.7	-
3342	Communications equipment	39.8	100.0	107.1	135.4	164.1	152.9	128.2	143.1	148.4	143.7	178.2	-
3343	Audio and video equipment	61.7	100.0	105.4	119.6	126.3	128.4	150.1	171.0	239.3	230.2	240.7	-
3344	Semiconductors and electronic components	17.0	100.0	125.8	173.9	232.2	230.0	263.1	321.6	360.0	381.6	380.4	-
3345	Electronic instruments	70.2	100.0	102.3	106.7	116.7	119.3	118.1	125.3	145.4	146.6	150.6	-
3346	Magnetic media manufacturing and reproduction	85.7	100.0	106.4	108.9	105.8	99.8	110.4	126.1	142.6	142.1	137.7	-
335	Electrical equipment and appliances	75.5	100.0	103.9	106.6	111.5	111.4	113.4	117.2	123.3	130.0	129.4	-
3351	Electric lighting equipment	91.1	100.0	104.4	102.8	102.0	106.7	112.4	111.4	122.7	130.3	136.7	-
3352	Household appliances	73.3	100.0	105.2	104.0	117.2	124.6	132.3	146.7	159.6	164.5	173.2	-
3353	Electrical equipment	68.7	100.0	100.2	98.7	99.4	101.0	101.8	103.4	110.8	118.5	118.1	-
3359	Other electrical equipment and components	78.8	100.0	105.8	114.7	119.7	113.1	114.0	116.2	115.6	121.6	115.7	-
336	Transportation equipment	81.6	100.0	109.7	118.0	109.4	113.6	127.4	137.5	134.9	140.9	142.4	-
3361	Motor vehicles	75.4	100.0	113.4	122.6	109.7	110.0	126.0	140.7	142.1	148.4	163.8	-
3362	Motor vehicle bodies and trailers	85.0	100.0	102.9	103.1	98.8	88.7	105.4	109.8	110.7	114.2	110.9	-
3363	Motor vehicle parts	78.7	100.0	104.9	110.0	112.3	114.8	130.5	137.0	138.0	144.1	143.7	-
3364	Aerospace products and parts	87.2	100.0	119.1	120.8	103.4	115.7	118.6	119.0	113.2	125.0	117.9	-
3365	Railroad rolling stock	55.6	100.0	103.3	116.5	118.5	126.1	146.1	139.8	131.5	137.3	148.0	-
3366	Ship and boat building	95.5	100.0	99.3	112.0	122.0	121.5	131.0	133.9	138.7	131.7	127.3	-
3369	Other transportation equipment	73.8	100.0	111.5	113.8	132.4	140.2	150.9	163.0	168.3	184.1	197.8	-
337	Furniture and related products	84.8	100.0	102.0	101.6	101.4	103.4	112.6	117.0	118.4	125.0	127.8	-
3371	Household and institutional furniture	85.2	100.0	102.2	103.1	101.9	105.5	111.8	114.7	113.6	120.8	124.0	-
3372	Office furniture and fixtures	85.8	100.0	100.0	98.2	100.2	98.0	115.9	125.2	130.7	134.9	134.4	-
3379	Other furniture related products	86.3	100.0	106.9	102.0	99.5	105.0	110.2	110.0	121.3	128.3	130.8	-
339	Miscellaneous manufacturing	81.1	100.0	105.2	107.8	114.7	116.6	124.2	132.7	134.9	144.6	149.8	-
3391	Medical equipment and supplies	76.3	100.0	109.0	111.1	115.5	120.7	129.1	138.9	139.5	148.5	152.8	-
3399	Other miscellaneous manufacturing	85.4	100.0	102.1	105.0	113.6	111.8	118.0	124.7	128.6	137.8	143.2	-
	Wholesale trade												
42	Wholesale trade	73.2	100.0	103.4	111.2	116.5	117.7	123.3	127.5	134.8	135.8	138.6	141.5
423	Durable goods	62.3	100.0	107.1	119.2	125.0	128.9	140.2	146.6	161.5	167.4	174.5	178.4
4231	Motor vehicles and parts	74.5	100.0	106.4	120.4	116.7	120.0	133.4	137.6	143.5	146.5	162.7	161.8
4232	Furniture and furnishings	80.5	100.0	99.9	102.3	112.5	110.7	116.0	123.9	130.0	127.1	130.6	131.1
4233	Lumber and construction supplies	109.1	100.0	105.4	109.3	107.7	116.6	123.9	133.0	139.4	140.2	135.4	124.5
4234	Commercial equipment	28.0	100.0	125.5	162.0	181.9	217.9	264.9	299.1	352.8	402.0	447.3	508.5
4235	Metals and minerals	101.7	100.0	100.9	94.0	93.9	94.4	96.3	97.5	106.3	104.2	99.9	94.4
4236	Electric goods	42.8	100.0	105.9	127.5	152.8	147.6	159.5	165.7	194.1	204.6	222.1	235.1
4237	Hardware and plumbing	82.2	100.0	101.8	104.4	103.7	100.5	102.6	103.9	107.3	104.5	105.6	105.8
4238	Machinery and supplies	74.1	100.0	104.3	102.9	105.5	102.9	100.3	103.4	112.4	117.6	121.2	121.5

50. Continued - Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
4239	Miscellaneous durable goods	89.8	100.0	100.8	113.7	114.7	116.8	124.6	119.6	135.0	135.5	122.3	118.4
424	Nondurable goods	91.0	100.0	99.1	100.8	105.1	105.1	105.8	110.5	113.6	114.3	113.1	115.0
4241	Paper and paper products	85.6	100.0	98.4	100.1	100.9	104.6	116.6	119.7	130.9	141.7	136.9	146.5
4242	Druggists' goods	70.7	100.0	94.2	93.1	85.9	84.9	89.8	100.2	105.8	112.1	109.7	104.3
4243	Apparel and piece goods	86.3	100.0	103.6	105.1	108.8	115.2	122.8	125.9	131.0	140.8	146.6	148.3
4244	Grocery and related products	87.9	100.0	101.1	101.0	102.4	101.9	98.6	104.9	104.1	103.4	103.8	109.7
4245	Farm product raw materials	81.6	100.0	94.3	101.6	105.1	102.1	98.1	98.2	109.3	111.0	117.9	125.1
4246	Chemicals	90.4	100.0	97.1	93.3	87.9	85.3	89.1	92.2	91.2	87.4	85.1	86.4
4247	Petroleum	84.4	100.0	88.5	102.9	138.1	140.6	153.6	151.1	163.2	153.3	149.4	149.1
4248	Alcoholic beverages	99.3	100.0	106.5	105.6	108.4	106.4	106.8	107.9	103.1	104.0	107.4	108.5
4249	Miscellaneous nondurable goods	111.2	100.0	105.4	106.8	115.0	111.9	106.1	109.8	120.7	124.1	121.9	117.1
425	Electronic markets and agents and brokers	64.3	100.0	102.4	112.3	120.1	110.7	109.8	104.5	101.6	91.5	95.0	98.3
4251	Electronic markets and agents and brokers	64.3	100.0	102.4	112.3	120.1	110.7	109.8	104.5	101.6	91.5	95.0	98.3
	Retail trade												
44-45	Retail trade	79.2	100.0	105.7	112.7	116.1	120.1	125.6	131.6	137.9	141.3	147.3	152.7
441	Motor vehicle and parts dealers	78.4	100.0	106.4	115.1	114.3	116.0	119.9	124.3	127.3	126.7	129.3	132.2
4411	Automobile dealers	79.2	100.0	106.5	116.3	113.7	115.5	117.2	119.5	124.7	123.5	125.8	129.8
4412	Other motor vehicle dealers	74.1	100.0	109.6	114.8	115.3	124.6	133.6	133.8	143.3	134.6	142.6	146.9
4413	Auto parts, accessories, and tire stores	71.8	100.0	105.1	107.6	108.4	101.3	107.7	115.1	110.1	115.5	115.9	112.0
442	Furniture and home furnishings stores	75.1	100.0	104.1	110.8	115.9	122.4	129.3	134.6	146.7	150.5	158.2	168.7
4421	Furniture stores	77.3	100.0	104.3	107.5	112.0	119.7	125.2	128.8	139.2	142.3	151.1	156.6
4422	Home furnishings stores	71.3	100.0	104.1	115.2	121.0	126.1	134.9	142.6	156.8	161.4	168.3	184.6
443	Electronics and appliance stores	38.0	100.0	122.6	150.6	173.7	196.7	233.5	292.7	334.1	367.5	412.0	471.1
4431	Electronics and appliance stores	38.0	100.0	122.6	150.6	173.7	196.7	233.5	292.7	334.1	367.5	412.0	471.1
444	Building material and garden supply stores	75.8	100.0	107.4	113.8	113.3	116.8	120.8	127.1	134.6	134.8	137.9	142.2
4441	Building material and supplies dealers	77.6	100.0	108.3	115.3	115.1	116.7	121.3	127.4	134.0	134.9	138.0	140.0
4442	Lawn and garden equipment and supplies stores	66.9	100.0	102.4	105.5	103.1	118.4	118.3	125.7	140.1	134.7	138.3	162.1
445	Food and beverage stores	110.8	100.0	99.9	101.9	101.0	103.8	104.7	107.2	112.9	117.9	120.6	123.8
4451	Grocery stores	111.1	100.0	99.6	102.5	101.1	103.3	104.8	106.7	112.2	116.8	118.2	120.6
4452	Specialty food stores	138.5	100.0	100.5	96.4	98.5	108.2	105.3	112.2	120.3	125.3	139.4	145.4
4453	Beer, wine, and liquor stores	93.6	100.0	104.6	99.1	105.7	107.1	110.1	117.0	127.8	139.8	146.1	156.8
446	Health and personal care stores	84.0	100.0	104.0	107.1	112.2	116.2	122.9	129.5	134.3	133.4	139.3	139.0
4461	Health and personal care stores	84.0	100.0	104.0	107.1	112.2	116.2	122.9	129.5	134.3	133.4	139.3	139.0
447	Gasoline stations	83.9	100.0	106.7	110.7	107.7	112.9	125.1	119.9	122.2	124.7	124.9	129.3
4471	Gasoline stations	83.9	100.0	106.7	110.7	107.7	112.9	125.1	119.9	122.2	124.7	124.9	129.3
448	Clothing and clothing accessories stores	66.3	100.0	106.3	114.0	123.5	126.4	131.3	138.9	139.1	147.6	162.4	176.6
4481	Clothing stores	67.1	100.0	108.7	114.2	125.0	130.3	136.0	141.8	140.9	153.0	169.4	186.9
4482	Shoe stores	65.3	100.0	94.2	104.9	110.0	111.5	125.2	132.5	124.8	132.0	145.1	141.6
4483	Jewelry, luggage, and leather goods stores	64.5	100.0	108.7	122.5	130.5	123.9	118.7	132.9	144.3	138.9	148.3	162.9
451	Sporting goods, hobby, book, and music stores	74.9	100.0	107.9	114.0	121.1	127.1	127.6	131.5	151.1	163.5	170.5	167.8
4511	Sporting goods and musical instrument stores	73.2	100.0	111.5	119.8	129.4	134.5	136.0	141.1	166.0	179.3	191.4	189.2
4512	Book, periodical, and music stores	78.9	100.0	101.0	103.2	105.8	113.0	111.6	113.7	123.6	134.3	132.4	128.3
452	General merchandise stores	73.5	100.0	105.3	113.4	120.2	124.8	129.1	136.9	140.7	145.0	149.8	152.5
4521	Department stores	87.2	100.0	100.4	104.5	106.2	103.8	102.0	106.8	109.0	110.0	112.7	107.0
4529	Other general merchandise stores	54.8	100.0	114.7	131.0	147.3	164.7	179.3	188.8	192.9	199.8	204.8	219.3
453	Miscellaneous store retailers	65.1	100.0	108.9	111.3	114.1	112.6	119.1	126.1	130.8	139.2	155.0	160.8
4531	Florists	77.6	100.0	102.3	116.2	115.2	102.7	113.8	108.9	103.4	123.7	145.1	132.9
4532	Office supplies, stationery and gift stores	61.4	100.0	111.5	119.2	127.3	132.3	141.5	153.9	172.8	182.4	204.8	224.5
4533	Used merchandise stores	64.5	100.0	119.1	113.4	116.5	121.9	142.0	149.7	152.6	156.6	167.6	182.0
4539	Other miscellaneous store retailers	68.3	100.0	105.3	103.0	104.4	96.9	94.4	99.9	96.9	101.6	114.0	115.4
454	Nonstore retailers	50.7	100.0	114.3	128.9	152.2	163.6	182.1	195.5	215.5	220.6	261.9	290.8
4541	Electronic shopping and mail-order houses	39.4	100.0	120.2	142.6	160.2	179.6	212.7	243.6	273.0	290.1	355.9	397.2
4542	Vending machine operators	95.5	100.0	106.3	105.4	111.1	95.7	91.3	102.3	110.5	114.4	125.7	132.4
4543	Direct selling establishments	70.8	100.0	101.9	104.3	122.5	127.9	135.1	127.0	130.3	119.6	127.5	138.4
	Transportation and warehousing												
481	Air transportation	78.0	100.0	96.4	95.9	97.7	92.5	101.7	112.1	126.3	135.9	142.9	145.4
482111	Line-haul railroads	58.9	100.0	102.1	105.5	114.3	121.9	131.9	138.5	141.4	136.3	144.2	137.7
48412	General freight trucking, long-distance	85.7	100.0	99.4	99.1	101.9	103.2	107.0	110.7	110.7	113.3	113.3	115.3
48421	Used household and office goods moving	106.7	100.0	91.0	96.1	94.8	84.0	81.6	86.2	88.6	88.5	88.9	93.2
491	U.S. Postal service	90.9	100.0	101.6	102.8	105.5	106.3	106.4	107.8	110.0	111.2	111.3	112.0
4911	U.S. Postal service	90.9	100.0	101.6	102.8	105.5	106.3	106.4	107.8	110.0	111.2	111.3	112.0
492	Couriers and messengers	148.3	100.0	114.8	122.2	128.8	132.6	143.2	146.4	138.5	136.5	140.3	132.5
493	Warehousing and storage	-	100.0	106.4	107.7	109.3	115.3	122.1	124.8	122.5	123.5	119.4	115.5
4931	Warehousing and storage	-	100.0	106.4	107.7	109.3	115.3	122.1	124.8	122.5	123.5	119.4	115.5
49311	General warehousing and storage	-	100.0	112.1	112.9	115.8	126.3	136.1	138.9	130.9	132.0	130.1	124.2
49312	Refrigerated warehousing and storage	-	100.0	97.9	103.4	95.4	85.4	87.2	92.2	99.3	88.8	80.4	85.1

50. Continued - Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	Information												
511	Publishing industries, except internet	64.1	100.0	116.1	116.3	117.1	116.6	117.2	126.4	130.7	136.7	144.3	150.1
5111	Newspaper, book, and directory publishers	105.0	100.0	103.9	104.1	107.7	105.8	104.7	109.6	106.7	107.9	112.2	114.1
5112	Software publishers	10.2	100.0	134.8	129.2	119.2	117.4	122.1	138.1	160.6	173.5	178.7	184.6
51213	Motion picture and video exhibition	90.7	100.0	99.8	101.8	106.5	101.6	99.8	100.4	103.6	102.4	107.3	110.6
515	Broadcasting, except internet	99.5	100.0	100.8	102.9	103.6	99.2	104.0	107.9	112.5	116.1	123.1	132.8
5151	Radio and television broadcasting	98.1	100.0	91.5	92.6	92.1	89.6	95.1	94.6	96.6	99.0	106.8	110.8
5152	Cable and other subscription programming	105.6	100.0	136.2	139.1	141.2	128.1	129.8	146.0	158.7	163.7	168.1	192.5
5171	Wired telecommunications carriers	56.9	100.0	107.7	116.7	122.7	116.7	124.1	130.5	131.9	138.3	142.4	142.2
5172	Wireless telecommunications carriers	75.6	100.0	110.5	145.2	152.8	191.9	217.9	242.6	292.4	381.9	431.6	456.5
5175	Cable and other program distribution	105.2	100.0	97.1	95.8	91.6	87.7	95.0	101.3	113.8	110.5	110.7	123.8
	Finance and insurance												
52211	Commercial banking	73.6	100.0	97.7	100.8	104.8	102.4	106.9	111.7	117.8	119.3	122.7	123.8
	Real estate and rental and leasing												
532111	Passenger car rental	92.7	100.0	100.1	112.2	112.3	111.1	114.6	121.1	118.2	109.8	111.4	130.1
53212	Truck, trailer, and RV rental and leasing	60.3	100.0	115.4	121.0	121.8	113.5	114.0	116.3	137.7	147.1	168.9	173.8
53223	Video tape and disc rental	77.0	100.0	113.2	129.4	134.9	133.3	130.3	148.5	154.5	144.2	176.2	223.0
	Professional and technical services												
541213	Tax preparation services	82.9	100.0	107.6	105.8	100.9	94.4	111.4	110.0	99.9	103.7	103.2	117.4
54131	Architectural services	90.0	100.0	111.4	106.8	107.6	111.0	107.6	112.6	118.3	119.8	118.9	124.5
54133	Engineering services	90.2	100.0	98.2	98.0	102.0	100.1	100.5	100.5	107.8	112.3	113.1	110.0
54181	Advertising agencies	95.9	100.0	89.2	97.9	107.5	106.9	113.1	121.1	133.5	132.9	134.1	139.1
541921	Photography studios, portrait	98.1	100.0	124.8	109.8	108.9	102.2	97.6	104.2	93.1	93.6	98.8	104.5
	Administrative and waste services												
56131	Employment placement agencies	-	100.0	86.8	93.2	89.8	99.6	116.8	115.4	119.8	116.0	123.8	132.8
56151	Travel agencies	89.3	100.0	111.4	115.5	119.4	115.2	127.6	147.2	167.2	179.2	183.4	190.6
56172	Janitorial services	75.1	100.0	95.3	98.6	101.0	102.1	105.6	118.8	116.6	120.7	116.1	122.3
	Health care and social assistance												
6215	Medical and diagnostic laboratories	-	100.0	118.8	124.7	131.9	135.3	137.6	140.8	140.8	137.8	139.7	136.0
621511	Medical laboratories	-	100.0	117.2	121.4	127.4	127.7	123.1	128.6	130.7	125.8	127.3	130.0
621512	Diagnostic imaging centers	-	100.0	121.4	129.7	139.9	148.3	163.3	160.0	153.5	154.1	156.8	138.9
	Arts, entertainment, and recreation												
71311	Amusement and theme parks	111.9	100.0	110.5	105.2	106.0	93.0	106.5	113.2	101.4	109.9	97.7	103.2
71395	Bowling centers	106.0	100.0	89.9	89.4	93.4	94.3	96.4	102.4	107.9	106.5	102.6	122.8
	Accommodation and food services												
72	Accommodation and food services	93.1	100.0	100.7	102.2	105.8	104.7	105.7	107.3	109.0	108.6	108.7	107.9
721	Accommodation	85.8	100.0	100.0	105.3	110.3	107.9	112.0	113.1	119.2	114.3	110.8	109.0
7211	Traveler accommodation	84.8	100.0	99.6	105.4	111.2	108.4	112.2	113.2	119.4	114.9	110.9	109.0
722	Food services and drinking places	96.0	100.0	101.0	100.9	103.5	103.8	104.4	106.3	107.0	107.9	109.1	108.7
7221	Full-service restaurants	92.1	100.0	100.9	100.8	103.0	103.6	104.4	104.2	104.8	105.2	105.5	104.0
7222	Limited-service eating places	96.5	100.0	101.2	100.4	102.0	102.5	102.7	105.4	106.8	107.4	109.1	109.1
7223	Special food services	89.9	100.0	100.6	105.2	115.0	115.3	114.9	117.6	118.0	119.2	117.9	120.4
7224	Drinking places, alcoholic beverages	136.7	100.0	99.7	98.8	100.6	97.6	102.9	118.6	112.2	120.6	134.2	137.6
	Other services												
8111	Automotive repair and maintenance	85.9	100.0	103.6	106.1	109.4	108.9	103.7	104.1	112.0	112.1	111.4	110.4
81142	Reupholstery and furniture repair	105.3	100.0	95.8	105.0	105.5	105.0	102.0	97.2	99.8	101.4	100.0	105.8
81211	Hair, nail, and skin care services	83.5	100.0	108.6	108.6	108.2	114.6	110.4	119.7	125.0	130.0	129.8	134.5
81221	Funeral homes and funeral services	103.7	100.0	106.8	103.3	94.8	91.8	94.6	95.7	92.9	93.1	99.5	97.0
8123	Drycleaning and laundry services	97.1	100.0	100.1	105.0	107.6	110.9	112.5	103.8	110.6	121.1	119.7	114.6
81292	Photofinishing	95.8	100.0	69.3	76.3	73.8	81.2	100.5	100.5	102.0	112.4	111.3	110.2

NOTE: Dash indicates data are not available.

51. Unemployment rates, approximating U.S. concepts, 10 countries, seasonally adjusted

[Percent]

Country	2006	2007	2006				2007				2008		
			I	II	III	IV	I	II	III	IV	I	II	III
United States	4.6	4.6	4.7	4.7	4.7	4.4	4.5	4.5	4.7	4.8	4.9	5.3	6.0
Canada	5.5	5.3	5.7	5.4	5.6	5.4	5.4	5.3	5.2	5.2	5.2	5.3	5.3
Australia	4.8	4.4	5.0	4.9	4.7	4.5	4.5	4.3	4.3	4.3	4.1	4.3	4.2
Japan	4.2	3.9	4.2	4.2	4.2	4.1	4.0	3.8	3.8	3.9	3.9	4.0	4.1
France	9.5	8.6	9.9	9.5	9.5	9.2	9.1	8.7	8.5	8.2	8.0	8.0	8.3
Germany	10.4	8.7	11.1	10.6	10.1	9.6	9.3	8.9	8.5	8.1	7.8	7.6	7.5
Italy	6.9	6.2	7.3	6.9	6.7	6.5	6.2	6.1	6.2	6.4	6.7	6.8	-
Netherlands	3.9	3.2	4.3	3.9	3.8	3.8	3.6	3.2	3.0	3.0	2.9	2.8	2.5
Sweden	7.0	6.1	7.3	7.3	6.7	6.5	6.4	6.1	5.8	5.9	5.8	5.8	5.9
United Kingdom	5.5	5.4	5.3	5.5	5.5	5.5	5.5	5.4	5.3	5.2	5.3	5.4	-

NOTE: Dash indicates data not available.

Quarterly figures for France, Germany, Italy, and the Netherlands are calculated by applying annual adjustment factors to current published data and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. Quarterly figures for Sweden are BLS seasonally adjusted estimates derived from Swedish not seasonally adjusted data. For further qualifications and historical annual data, see the BLS report *International comparisons of annual labor force statistics, 10 countries* (on the internet at **http://www.bls.gov/fls/flscomparelf.htm**). For monthly unemployment rates, as well as the quarterly and annual rates published in this table, see the BLS report *Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted* (on the Internet at **http://www.bls.gov/fls/flsjec.pdf**). Unemployment rates may differ between the two reports mentioned, because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.

52. Annual data: employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Civilian labor force											
United States	136,297	137,673	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428	153,124
Canada	14,884	15,135	15,403	15,637	15,891	16,366	16,733	16,955	17,108	17,351	17,696
Australia	9,204	9,339	9,414	9,590	9,744	9,893	10,079	10,221	10,506	10,699	10,949
Japan	67,200	67,240	67,090	66,990	66,860	66,240	66,010	65,770	65,850	65,960	66,080
France	25,116	25,434	25,791	26,099	26,393	26,646	26,851	26,937	27,092	27,322	27,535
Germany	39,415	39,752	39,375	39,302	39,459	39,413	39,276	39,711	40,760	41,250	41,416
Italy	22,753	23,004	23,176	23,361	23,524	23,728	24,020	24,084	24,179	24,395	24,459
Netherlands	7,612	7,744	7,881	8,052	8,199	8,345	8,379	8,439	8,459	8,541	8,686
Sweden	4,414	4,401	4,423	4,482	4,522	4,537	4,557	4,571	4,694	4,748	4,823
United Kingdom	28,403	28,474	28,786	28,962	29,092	29,343	29,564	29,802	30,138	30,600	30,790
Participation rate[1]											
United States	67.1	67.1	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2	66.0
Canada	65.1	65.4	65.9	66.0	66.1	67.1	67.7	67.7	67.4	67.4	67.7
Australia	64.3	64.3	64.0	64.4	64.4	64.3	64.6	64.6	65.3	65.6	66.0
Japan	63.2	62.8	62.4	62.0	61.6	60.8	60.3	60.0	60.0	60.0	60.0
France	55.6	56.0	56.3	56.6	56.7	56.8	56.8	56.6	56.5	56.6	56.7
Germany	57.3	57.7	56.9	56.7	56.7	56.4	56.0	56.4	57.6	58.2	58.4
Italy	47.3	47.7	47.9	48.1	48.3	48.5	49.1	49.1	48.7	48.9	48.6
Netherlands	61.1	61.8	62.5	63.4	64.0	64.7	64.6	64.8	64.7	65.1	65.9
Sweden	63.2	62.8	62.7	63.7	63.6	63.9	63.8	63.6	64.8	64.9	65.3
United Kingdom	62.5	62.4	62.8	62.8	62.7	62.9	62.9	63.0	63.1	63.5	63.4
Employed											
United States	129,558	131,463	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047
Canada	13,637	13,973	14,331	14,681	14,866	15,223	15,586	15,861	16,080	16,393	16,767
Australia	8,444	8,618	8,762	8,989	9,086	9,264	9,480	9,668	9,975	10,186	10,470
Japan	64,900	64,450	63,920	63,790	63,460	62,650	62,510	62,640	62,910	63,210	63,510
France	22,176	22,597	23,080	23,714	24,167	24,312	24,373	24,354	24,493	24,717	25,162
Germany	35,508	36,059	36,042	36,236	36,350	36,018	35,615	35,604	36,185	36,978	37,815
Italy	20,169	20,370	20,617	20,973	21,359	21,666	21,972	22,124	22,290	22,721	22,953
Netherlands	7,189	7,408	7,605	7,813	8,014	8,114	8,069	8,052	8,056	8,205	8,408
Sweden	3,969	4,033	4,110	4,222	4,295	4,303	4,293	4,271	4,334	4,416	4,530
United Kingdom	26,413	26,684	27,058	27,375	27,603	27,815	28,077	28,379	28,674	28,930	29,138
Employment-population ratio[2]											
United States	63.8	64.1	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1	63.0
Canada	59.6	60.4	61.3	62.0	61.9	62.4	63.1	63.3	63.4	63.6	64.2
Australia	59.0	59.3	59.6	60.3	60.0	60.2	60.7	61.1	62.0	62.5	63.1
Japan	61.0	60.2	59.4	59.0	58.4	57.5	57.1	57.1	57.3	57.5	57.6
France	49.1	49.7	50.4	51.4	51.9	51.8	51.5	51.1	51.1	51.2	51.8
Germany	51.6	52.3	52.1	52.2	52.2	51.5	50.8	50.6	51.2	52.2	53.3
Italy	41.9	42.2	42.6	43.2	43.8	44.3	44.9	45.1	44.9	45.5	45.6
Netherlands	57.7	59.1	60.3	61.5	62.6	62.9	62.2	61.8	61.6	62.5	63.8
Sweden	56.8	57.6	58.3	60.0	60.4	60.6	60.1	59.4	59.9	60.4	61.3
United Kingdom	58.1	58.5	59.0	59.4	59.5	59.6	59.8	60.0	60.0	60.1	60.0
Unemployed											
United States	6,739	6,210	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001	7,078
Canada	1,248	1,162	1,072	956	1,026	1,143	1,147	1,093	1,028	958	929
Australia	759	721	652	602	658	629	599	553	531	512	478
Japan	2,300	2,790	3,170	3,200	3,400	3,590	3,500	3,130	2,940	2,750	2,570
France	2,940	2,837	2,711	2,385	2,226	2,334	2,478	2,583	2,599	2,605	2,374
Germany	3,907	3,693	3,333	3,065	3,110	3,396	3,661	4,107	4,575	4,272	3,601
Italy	2,584	2,634	2,559	2,388	2,164	2,062	2,048	1,960	1,889	1,673	1,506
Netherlands	423	337	277	239	186	231	310	387	402	336	278
Sweden	445	368	313	260	227	234	264	300	361	332	293
United Kingdom	1,991	1,790	1,728	1,587	1,488	1,528	1,488	1,422	1,463	1,670	1,652
Unemployment rate											
United States	4.9	4.5	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6
Canada	8.4	7.7	7.0	6.1	6.5	7.0	6.9	6.4	6.0	5.5	5.3
Australia	8.3	7.7	6.9	6.3	6.8	6.4	5.9	5.4	5.1	4.8	4.4
Japan	3.4	4.1	4.7	4.8	5.1	5.4	5.3	4.8	4.5	4.2	3.9
France	11.7	11.2	10.5	9.1	8.4	8.8	9.2	9.6	9.6	9.5	8.6
Germany	9.9	9.3	8.5	7.8	7.9	8.6	9.3	10.3	11.2	10.4	8.7
Italy	11.4	11.5	11.0	10.2	9.2	8.7	8.5	8.1	7.8	6.9	6.2
Netherlands	5.6	4.4	3.5	3.0	2.3	2.8	3.7	4.6	4.8	3.9	3.2
Sweden	10.1	8.4	7.1	5.8	5.0	5.2	5.8	6.6	7.7	7.0	6.1
United Kingdom	7.0	6.3	6.0	5.5	5.1	5.2	5.0	4.8	4.9	5.5	5.4

[1] Labor force as a percent of the working-age population.

[2] Employment as a percent of the working-age population.

NOTE: There are breaks in series for the United States (1997, 1998, 1999, 2000, 2003, 2004), Australia (2001), Germany (1999, 2005), the Netherlands (2000, 2003), and Sweden (2005). For further qualifications and historical annual data, see the BLS report *International comparisons of annual labor force statistics, 10 countries* (on the Internet at **http://www.bls.gov/fls/flscomparelf.htm**). Unemployment rates may differ from those in the BLS report *Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted* (on the Internet at **http://www.bls.gov/fls/flsjec.pdf**), because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.

53. Annual indexes of manufacturing productivity and related measures, 17 economies

[1996 = 100]

Measure and economy	1980	1990	1993	1994	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Output per hour																
United States	58.6	80.1	88.1	92.7	96.2	104.2	111.5	117.1	126.1	127.4	140.9	149.8	159.0	162.2	169.9	177.8
Canada	66.5	85.2	94.0	99.3	100.5	104.5	109.6	114.2	121.1	118.5	120.5	121.1	122.4	126.6	129.3	132.8
Australia	72.5	91.1	95.8	98.4	97.1	102.0	106.9	108.5	115.1	117.9	122.9	125.2	126.8	127.6	128.8	131.3
Japan	54.8	81.3	87.6	89.0	95.6	103.5	104.5	107.3	113.0	110.6	114.7	122.5	131.0	139.6	141.0	145.8
Korea, Rep. of	–	58.0	75.9	82.8	90.9	112.8	125.7	139.8	151.7	150.6	165.3	176.8	197.2	212.1	233.5	253.9
Singapore	–	68.2	82.3	89.5	95.5	103.2	111.2	122.5	130.8	122.9	133.8	138.7	147.3	149.9	153.5	147.5
Taiwan	40.4	73.9	83.4	86.6	93.0	104.1	109.2	116.0	122.2	127.7	139.2	143.6	150.9	162.3	173.4	188.5
Belgium	57.2	84.7	89.6	94.4	98.6	106.3	107.6	106.8	110.9	111.0	114.6	117.8	123.7	127.0	131.8	137.6
Denmark	75.3	90.3	92.0	103.4	103.4	108.0	107.4	109.1	113.0	113.2	113.9	118.7	125.5	129.6	135.5	136.0
France	56.9	84.2	90.0	95.9	99.7	105.9	111.4	116.2	124.5	127.0	132.4	138.4	142.2	148.7	154.6	158.5
Germany	67.1	86.1	89.1	95.8	97.3	105.9	106.3	108.9	116.5	119.5	120.7	125.0	129.7	137.1	148.6	155.9
Italy	60.1	82.5	87.2	94.9	99.5	102.0	100.6	101.4	106.7	107.0	105.7	103.5	105.0	106.4	105.9	105.4
Netherlands	57.2	81.4	86.2	94.1	97.9	100.3	103.2	107.4	115.2	115.7	119.2	121.7	129.9	135.8	140.2	144.0
Norway	77.3	96.8	98.3	98.3	97.1	100.2	97.7	101.1	104.2	107.1	110.2	119.7	126.8	131.2	128.5	128.2
Spain	62.8	86.8	94.9	97.8	101.2	101.0	102.7	104.5	105.6	108.0	108.4	111.1	113.2	115.4	117.7	122.2
Sweden	60.0	73.9	82.6	91.1	96.8	109.1	115.6	126.2	134.8	131.0	145.3	157.1	173.9	184.7	202.0	203.0
United Kingdom	55.9	87.8	100.1	102.7	101.0	102.0	102.9	108.0	115.4	119.4	123.0	128.2	136.2	141.9	149.1	153.0
Output																
United States	60.5	80.7	85.7	92.2	96.4	106.1	113.2	118.1	125.5	118.5	121.8	123.2	130.1	131.2	138.4	142.4
Canada	71.2	88.7	87.7	94.4	98.7	106.3	111.7	121.0	133.1	128.0	129.0	128.3	130.9	132.9	132.3	131.1
Australia	80.2	93.1	92.7	97.5	96.9	102.3	105.2	105.0	110.0	108.9	114.2	116.2	116.3	115.8	114.7	118.4
Japan	59.0	94.3	93.5	92.1	95.9	102.5	97.1	96.7	101.8	96.2	94.7	99.8	105.6	111.1	114.9	119.1
Korea, Rep. of	20.5	63.2	75.5	84.1	94.0	104.9	96.6	117.6	137.6	140.6	151.2	159.6	177.3	189.8	205.9	219.3
Singapore	–	66.2	78.5	88.4	97.3	104.3	103.5	117.0	134.7	119.1	129.1	132.9	151.3	165.7	185.4	196.2
Taiwan	38.2	76.7	85.0	90.1	95.0	105.7	109.1	117.1	125.7	116.4	126.7	133.5	146.5	156.7	167.9	185.3
Belgium	74.8	96.6	92.8	97.0	99.6	104.8	106.5	106.9	111.6	111.8	110.9	109.3	113.2	113.1	116.3	119.3
Denmark	85.6	94.7	90.3	100.0	104.8	108.2	109.1	110.0	113.9	114.0	110.7	107.6	109.3	109.9	114.5	118.6
France	83.2	97.5	93.8	96.8	100.3	104.7	109.7	113.4	118.6	119.8	119.7	121.9	123.0	125.9	127.2	128.8
Germany	92.3	107.2	99.9	103.1	102.1	104.4	105.6	106.6	113.9	115.8	113.4	114.2	118.3	122.3	131.2	139.2
Italy	74.7	92.6	89.9	95.9	100.5	101.5	102.4	102.2	106.5	106.2	105.0	102.2	103.0	102.5	103.7	104.8
Netherlands	68.7	89.2	90.2	95.0	98.6	101.4	104.8	108.7	116.0	115.8	115.9	114.6	118.5	120.9	124.1	128.1
Norway	96.7	92.9	93.2	95.7	96.1	104.3	103.6	103.5	102.9	102.2	101.6	105.0	111.0	115.9	119.4	125.7
Spain	75.5	94.6	92.4	94.0	97.6	106.4	112.9	119.3	124.6	128.6	128.4	130.0	130.9	132.4	134.8	138.6
Sweden	67.1	80.4	74.1	85.5	96.8	107.8	116.7	127.6	138.1	134.9	143.4	150.4	164.2	171.8	185.3	189.6
United Kingdom	80.3	96.9	93.4	97.8	99.3	101.8	102.4	103.6	105.9	104.5	102.2	101.9	104.2	104.0	105.8	106.5
Total hours																
United States	103.3	100.7	97.3	99.5	100.2	101.8	101.5	100.9	99.6	93.0	86.5	82.2	81.8	80.9	81.5	80.1
Canada	107.0	104.1	93.3	95.1	98.3	101.6	101.9	105.9	109.9	107.9	107.1	105.9	106.9	105.0	102.3	98.7
Australia	110.6	102.2	96.9	99.1	99.8	100.3	98.4	96.7	95.6	92.4	92.9	92.8	91.7	90.7	89.1	90.2
Japan	107.6	115.9	106.7	103.5	100.4	99.1	92.9	90.2	90.1	87.0	82.6	81.4	80.6	79.6	81.5	81.6
Korea, Rep. of	–	109.0	99.5	101.6	103.3	93.0	76.8	84.1	90.7	93.3	91.5	90.2	89.9	89.5	88.2	86.4
Singapore	–	96.9	95.3	98.8	101.9	101.1	93.1	95.6	103.0	96.9	96.5	95.8	102.8	110.5	120.8	133.0
Taiwan	94.5	103.7	101.9	104.0	102.2	101.6	99.9	101.0	102.9	91.1	91.1	92.9	97.1	96.5	96.8	98.3
Belgium	130.9	114.1	103.5	102.8	101.0	98.6	98.9	100.0	100.7	100.7	96.8	92.8	91.5	89.0	88.2	86.7
Denmark	113.7	104.8	98.1	96.7	101.4	100.2	101.5	100.8	100.8	100.7	97.2	90.7	87.1	84.8	84.5	87.2
France	146.3	115.8	104.1	101.0	100.6	98.9	98.5	97.6	95.3	94.3	90.4	88.1	86.5	84.7	82.3	81.2
Germany	137.4	124.6	112.1	107.6	105.0	98.6	99.4	97.9	97.7	96.9	94.0	91.4	91.2	89.2	88.3	89.3
Italy	124.3	112.2	103.1	101.1	100.9	99.5	101.8	100.8	99.9	99.3	99.3	98.8	98.1	96.4	97.9	99.4
Netherlands	120.1	109.6	104.6	100.9	100.7	101.0	101.5	101.2	100.7	100.1	97.2	94.1	91.2	89.0	88.5	88.9
Norway	125.1	96.0	94.8	97.3	99.0	104.1	106.1	102.4	98.8	95.4	92.3	87.7	87.5	88.4	92.9	98.0
Spain	120.3	109.0	97.4	96.1	96.4	105.4	109.9	114.1	118.0	119.0	118.4	117.0	115.6	114.7	114.6	113.4
Sweden	111.8	108.8	89.7	93.9	100.0	98.8	100.9	101.1	102.4	103.0	98.7	95.7	94.4	93.0	91.7	93.4
United Kingdom	143.8	110.4	93.3	95.2	98.3	99.8	99.6	95.9	91.8	87.5	83.1	79.5	76.5	73.3	71.0	69.6
Hourly compensation (national currency basis)																
United States	51.2	82.7	93.3	96.3	98.1	102.6	108.6	112.9	123.2	126.1	135.2	144.7	147.7	150.5	156.7	162.2
Canada	43.8	82.4	93.5	96.2	98.5	102.4	107.7	110.0	113.6	116.7	120.6	125.5	129.9	135.5	139.7	144.6
Australia	–	79.5	88.9	90.0	95.6	102.7	106.9	111.2	116.1	123.5	129.0	134.1	141.1	150.1	160.2	168.6
Japan	53.7	83.0	94.1	96.0	99.2	103.3	105.9	105.7	105.1	106.5	107.2	104.9	105.9	106.8	105.6	105.4
Korea, Rep. of	–	36.1	61.6	70.8	85.9	108.7	118.4	119.0	127.1	131.1	144.4	151.5	173.0	186.8	202.9	218.6
Singapore	–	64.6	84.3	89.1	93.1	104.4	110.5	101.0	103.7	111.8	114.9	115.6	112.5	111.3	108.7	104.1
Taiwan	23.1	66.5	82.6	86.6	93.8	103.1	107.0	108.9	111.0	118.1	114.4	116.3	118.2	122.8	126.7	130.6
Belgium	47.5	81.4	94.8	95.5	98.2	103.8	105.3	106.7	108.5	113.1	118.0	122.0	125.2	129.0	133.7	140.7
Denmark	39.5	83.1	90.9	94.1	96.0	103.4	106.1	108.8	110.9	116.2	121.2	129.4	134.4	142.0	149.0	152.9
France	34.6	78.9	91.8	95.3	98.1	102.9	103.7	107.0	112.8	115.8	122.8	125.7	129.7	134.4	140.9	145.0
Germany	43.3	72.3	86.7	90.6	95.5	102.0	103.4	105.8	111.3	114.7	117.5	120.2	120.8	122.4	127.4	129.5
Italy	22.6	70.5	85.1	89.6	94.9	104.7	102.8	105.4	108.1	111.8	115.0	119.3	123.4	127.4	129.9	132.7
Netherlands	52.3	78.8	91.6	95.6	98.1	102.6	106.9	110.5	115.9	120.8	127.5	132.6	138.2	140.3	144.2	148.5
Norway	34.3	81.2	89.2	91.9	96.0	104.5	110.6	116.9	123.5	130.9	138.8	144.5	149.2	156.2	165.8	173.7
Spain	23.1	65.9	90.3	93.6	97.6	102.4	103.2	102.9	104.5	108.7	111.8	117.4	121.5	127.3	132.7	139.2
Sweden	32.9	77.4	85.8	88.0	92.8	105.4	109.4	112.8	117.2	122.8	129.4	135.2	138.9	143.6	147.8	154.8
United Kingdom	33.4	82.8	96.2	98.6	100.3	104.4	112.3	118.9	126.2	131.8	139.1	146.1	153.2	163.2	173.7	174.9

See notes at end of table.

53. Continued— Annual indexes of manufacturing productivity and related measures, 17 economies

[1996 = 100]

Measure and economy	1980	1990	1993	1994	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Unit labor costs (national currency basis)																
United States	87.4	103.3	106.0	103.9	102.0	98.5	97.4	96.4	97.7	99.0	96.0	96.6	92.9	92.8	92.2	91.2
Canada	65.9	96.7	99.5	96.9	98.0	98.0	98.3	96.3	93.8	98.5	100.0	103.6	106.1	107.1	108.0	108.9
Australia	–	87.3	92.8	91.5	98.4	100.7	100.0	102.4	100.9	104.8	105.0	107.1	111.3	117.6	124.4	128.4
Japan	98.0	102.1	107.5	107.9	103.8	99.8	101.3	98.6	93.0	96.2	93.5	85.6	80.8	76.5	74.9	72.3
Korea, Rep. of	33.6	62.3	81.2	85.5	94.5	96.4	94.2	85.1	83.8	87.0	87.3	85.7	87.8	88.1	86.9	86.1
Singapore	–	94.7	102.5	99.5	97.5	101.2	99.3	82.5	79.3	91.0	85.9	83.3	76.4	74.2	70.8	70.6
Taiwan	57.1	89.9	99.1	100.0	100.9	99.0	97.9	93.9	90.9	92.5	82.2	81.0	78.4	75.7	73.1	69.2
Belgium	83.0	96.1	105.7	101.2	99.6	97.6	97.9	99.9	97.9	101.9	103.0	103.5	101.2	101.5	101.4	102.3
Denmark	52.5	91.9	98.9	91.0	92.9	95.7	98.8	99.7	98.1	102.7	106.4	109.0	107.0	109.6	109.9	112.4
France	60.9	93.7	102.0	99.4	98.5	97.2	93.1	92.1	90.6	91.2	92.8	90.8	91.2	90.4	91.2	91.5
Germany	64.5	84.0	97.3	94.6	98.2	96.3	97.3	97.1	95.5	96.0	97.4	96.1	93.2	89.3	85.8	83.1
Italy	37.6	85.4	97.5	94.4	95.3	102.7	102.2	104.0	101.4	104.5	108.7	115.3	117.6	119.8	122.6	125.8
Netherlands	91.5	96.8	106.3	101.6	100.3	102.3	103.6	102.9	100.6	104.4	106.9	108.9	106.3	103.3	102.9	103.1
Norway	44.4	83.9	90.7	93.4	98.9	104.2	113.2	115.7	118.5	122.2	126.0	120.7	117.6	119.1	129.0	135.5
Spain	36.8	76.0	95.1	95.7	96.5	101.4	100.4	98.5	99.0	100.6	103.1	105.6	107.3	110.3	112.7	113.9
Sweden	54.9	104.8	103.9	96.6	95.8	96.6	94.7	89.4	86.9	93.8	89.1	86.1	79.9	77.8	73.2	76.3
United Kingdom	59.8	94.3	96.1	96.0	99.4	102.4	109.2	110.1	109.4	110.4	113.1	113.9	112.4	115.1	116.6	114.3
Unit labor costs (U.S. dollar basis)																
United States	87.4	103.3	106.0	103.9	102.0	98.5	97.4	96.4	97.7	99.0	96.0	96.6	92.9	92.8	92.2	91.2
Canada	76.8	113.1	105.2	96.7	97.4	96.5	90.4	88.4	86.1	86.7	86.9	100.9	111.2	120.5	129.9	138.4
Australia	–	87.1	80.6	85.5	93.1	95.7	80.4	84.5	75.0	69.2	72.9	89.3	104.7	114.6	119.7	137.6
Japan	47.0	76.6	105.2	114.8	120.2	89.7	84.1	94.3	93.9	86.1	81.2	80.3	81.3	75.6	70.1	66.7
Korea, Rep. of	44.6	70.5	81.1	85.3	98.4	81.9	54.1	57.6	59.6	54.2	56.2	57.9	61.7	69.3	73.3	74.6
Singapore	–	73.7	89.4	91.9	97.0	96.0	83.7	68.6	64.8	71.6	67.6	67.4	63.7	62.9	62.8	66.1
Taiwan	43.6	91.8	103.0	103.8	104.6	94.5	80.2	79.8	79.9	75.1	65.4	64.6	64.5	64.7	61.7	57.9
Belgium	87.9	89.1	94.7	93.7	104.7	84.4	83.5	81.7	69.4	70.0	74.8	90.0	96.6	97.0	97.8	107.6
Denmark	54.1	86.2	88.4	83.1	96.2	84.0	85.5	82.7	70.3	71.5	78.2	96.1	103.7	106.0	107.3	119.8
France	73.7	88.0	92.1	91.7	101.0	85.2	80.7	76.5	65.2	63.7	68.4	80.2	88.5	87.8	89.3	97.8
Germany	53.4	78.2	88.5	87.8	103.2	83.5	83.2	79.6	67.8	66.1	70.8	83.7	89.2	85.5	82.9	87.6
Italy	67.7	110.0	95.6	90.4	90.2	93.0	90.8	88.2	74.6	74.5	81.9	104.0	116.5	118.8	122.7	137.5
Netherlands	77.7	89.6	96.4	94.1	105.4	88.4	88.0	83.9	71.1	71.5	77.4	94.3	101.2	98.4	98.9	108.1
Norway	58.1	86.6	82.6	85.5	100.8	95.0	96.8	95.7	86.9	87.8	101.9	110.1	112.7	119.4	130.0	149.4
Spain	65.0	94.4	94.5	90.5	98.0	87.6	85.1	79.9	69.6	68.6	74.2	91.1	101.6	104.5	107.8	118.9
Sweden	87.0	118.7	89.4	84.0	90.0	84.7	79.8	72.5	63.6	60.8	61.4	71.5	72.9	69.8	66.6	75.7
United Kingdom	89.1	107.8	92.5	94.3	100.5	107.4	116.0	114.1	106.3	101.9	108.9	119.3	132.0	134.2	137.7	146.7

NOTE: Data for Germany for years before 1993 are for the former West Germany. Data for 1993 onward are for unified Germany. Dash indicates data not available.

54. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
PRIVATE SECTOR[5]													
Total cases	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1	5.7
Lost workday cases	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0	2.8
Lost workdays	78.7	84.0	86.5	93.8	–	–	–	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]													
Total cases	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1	7.3
Lost workday cases	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6	3.6
Lost workdays	100.9	112.2	108.3	126.9	–	–	–	–	–	–	–	–	–
Mining													
Total cases	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7	4.0
Lost workday cases	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0	2.4
Lost workdays	137.2	119.5	129.6	204.7	–	–	–	–	–	–	–	–	–
Construction													
Total cases	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3	7.9
Lost workday cases	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1	4.0
Lost workdays	143.3	147.9	148.1	161.9	–	–	–	–	–	–	–	–	–
General building contractors:													
Total cases	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8	6.9
Lost workday cases	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9	3.5
Lost workdays	137.3	137.6	132.0	142.7	–	–	–	–	–	–	–	–	–
Heavy construction, except building:													
Total cases	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6	7.8
Lost workday cases	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7	4.0
Lost workdays	147.1	144.6	160.1	165.8	–	–	–	–	–	–	–	–	–
Special trades contractors:													
Total cases	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6	8.2
Lost workday cases	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3	4.1
Lost workdays	144.9	153.1	151.3	168.3	–	–	–	–	–	–	–	–	–
Manufacturing													
Total cases	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0	8.1
Lost workday cases	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5	4.1
Lost workdays	113.0	120.7	121.5	124.6	–	–	–	–	–	–	–	–	–
Durable goods:													
Total cases	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	–	8.8
Lost workday cases	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	–	4.3
Lost workdays	116.5	123.3	122.9	126.7	–	–	–	–	–	–	–	–	–
Lumber and wood products:													
Total cases	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1	10.6
Lost workday cases	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1	5.5
Lost workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–	–
Furniture and fixtures:													
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–	–
Stone, clay, and glass products:													
Total cases	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4	10.1
Lost workday cases	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5	5.1
Lost workdays	149.8	160.5	156.0	152.2	–	–	–	–	–	–	–	–	–
Primary metal industries:													
Total cases	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6	10.7
Lost workday cases	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3	5.3
Lost workdays	168.3	180.2	169.1	175.5	–	–	–	–	–	–	–	–	11.1
Fabricated metal products:													
Total cases	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9	11.1
Lost workday cases	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5	5.3
Lost workdays	147.6	155.7	146.6	144.0	–	–	–	–	–	–	–	–	–
Industrial machinery and equipment:													
Total cases	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2	11.0
Lost workday cases	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6	6.0
Lost workdays	86.8	88.9	86.6	87.7	–	–	–	–	–	–	–	–	–
Electronic and other electrical equipment:													
Total cases	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7	5.0
Lost workday cases	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9	2.5
Lost workdays	77.5	79.4	83.0	81.2	–	–	–	–	–	–	–	–	–
Transportation equipment:													
Total cases	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7	12.6
Lost workday cases	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3	6.0
Lost workdays	138.6	153.7	166.1	186.6	–	–	–	–	–	–	–	–	–
Instruments and related products:													
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–	–
Miscellaneous manufacturing industries:													
Total cases	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2	6.4
Lost workday cases	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6	3.2
Lost workdays	97.6	113.1	104.0	108.2	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

54. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 workers [3]												
	1989 [1]	1990	1991	1992	1993 [4]	1994 [4]	1995 [4]	1996 [4]	1997 [4]	1998 [4]	1999 [4]	2000 [4]	2001 [4]
Nondurable goods:													
Total cases	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2	7.8	7.8	6.8
Lost workday cases	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3	4.2	4.2	3.8
Lost workdays	107.8	116.9	119.7	121.8	–	–	–	–	–	-	–	–	–
Food and kindred products:													
Total cases	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6	12.7	12.4	10.9
Lost workday cases	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5	7.3	7.3	6.3
Lost workdays	174.7	202.6	207.2	211.9	–	–	–	–	–	-	–	–	–
Tobacco products:													
Total cases	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4	5.5	6.2	6.7
Lost workday cases	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.4	2.2	3.1	4.2
Lost workdays	64.2	62.3	52.0	42.9	–	–	–	–	–	-	–	–	–
Textile mill products:													
Total cases	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	7.4	6.4	6.0	5.2
Lost workday cases	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4	3.2	3.2	2.7
Lost workdays	81.4	85.1	88.3	87.1	–	–	–	–	–	–	–	–	–
Apparel and other textile products:													
Total cases	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2	5.8	6.1	5.0
Lost workday cases	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6	2.8	3.0	2.4
Lost workdays	80.5	92.1	99.9	104.6	–	–	–	–	–	-	–	–	–
Paper and allied products:													
Total cases	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1	7.0	6.5	6.0
Lost workday cases	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7	3.7	3.4	3.2
Lost workdays	132.9	124.8	122.7	125.9	–	–	–	–	–	–	–	–	–
Printing and publishing:													
Total cases	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4	5.0	5.1	4.6
Lost workday cases	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8	2.6	2.6	2.4
Lost workdays	63.8	69.8	74.5	74.8	–	–	–	–	–	–	–	–	–
Chemicals and allied products:													
Total cases	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2	4.4	4.2	4.0
Lost workday cases	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1	2.3	2.2	2.1
Lost workdays	63.4	61.6	62.4	64.2	–	–	–	–	–	–	–	–	–
Petroleum and coal products:													
Total cases	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9	4.1	3.7	2.9
Lost workday cases	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8	1.8	1.9	1.4
Lost workdays	68.1	77.3	68.2	71.2	–	–	–	–	–	–	–	–	–
Rubber and miscellaneous plastics products:													
Total cases	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2	10.1	10.7	8.7
Lost workday cases	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8	5.5	5.8	4.8
Lost workdays	147.2	151.3	150.9	153.3	–	–	–	–	–	–	–	–	–
Leather and leather products:													
Total cases	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8	10.3	9.0	8.7
Lost workday cases	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5	5.0	4.3	4.4
Lost workdays	130.4	152.3	140.8	128.5	–	–	–	–	–	–	–	–	–
Transportation and public utilities													
Total cases	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3	7.3	6.9	6.9
Lost workday cases	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3	4.4	4.3	4.3
Lost workdays	121.5	134.1	140.0	144.0	–	–	–	–	–	–	–	–	–
Wholesale and retail trade													
Total cases	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5	6.1	5.9	6.6
Lost workday cases	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8	2.7	2.7	2.5
Lost workdays	63.5	65.6	72.0	80.1	–	–	–	–	–	–	–	–	–
Wholesale trade:													
Total cases	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5	6.3	5.8	5.3
Lost workday cases	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3	3.3	3.1	2.8
Lost workdays	71.9	71.5	79.2	82.4	–	–	–	–	–	–	–	–	–
Retail trade:													
Total cases	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5	6.1	5.9	5.7
Lost workday cases	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7	2.5	2.5	2.4
Lost workdays	60.0	63.2	69.1	79.2	–	–	–	–	–	–	–	–	–
Finance, insurance, and real estate													
Total cases	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	.7	1.8	1.9	1.8
Lost workday cases	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	.9	.5	.8	.8	.7
Lost workdays	17.6	27.3	24.1	32.9	–	–	–	–	–	–	–	–	–
Services													
Total cases	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2	4.9	4.9	4.6
Lost workday cases	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.2	2.2
Lost workdays	51.2	56.4	60.0	68.6	–	–	–	–	–	–	–	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:
N = number of injuries and illnesses or lost workdays;
EH = total hours worked by all employees during the calendar year; and
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

NOTE: Dash indicates data not available.

55. Fatal occupational injuries by event or exposure, 1996-2005

Event or exposure[1]	1996-2000 (average)	2001-2005 (average)[2]	2005[3]	
			Number	Percent
All events	6,094	5,704	5,734	100
Transportation incidents	2,608	2,451	2,493	43
Highway	1,408	1,394	1,437	25
Collision between vehicles, mobile equipment	685	686	718	13
Moving in same direction	117	151	175	3
Moving in opposite directions, oncoming	247	254	265	5
Moving in intersection	151	137	134	2
Vehicle struck stationary object or equipment on side of road	264	310	345	6
Noncollision	372	335	318	6
Jack-knifed or overturned--no collision	298	274	273	5
Nonhighway (farm, industrial premises)	378	335	340	6
Noncollision accident	321	277	281	5
Overturned	212	175	182	3
Worker struck by vehicle, mobile equipment	376	369	391	7
Worker struck by vehicle, mobile equipment in roadway	129	136	140	2
Worker struck by vehicle, mobile equipment in parking lot or non-road area	171	166	176	3
Water vehicle	105	82	88	2
Aircraft	263	206	149	3
Assaults and violent acts	1,015	850	792	14
Homicides	766	602	567	10
Shooting	617	465	441	8
Suicide, self-inflicted injury	216	207	180	3
Contact with objects and equipment	1,005	952	1,005	18
Struck by object	567	560	607	11
Struck by falling object	364	345	385	7
Struck by rolling, sliding objects on floor or ground level	77	89	94	2
Caught in or compressed by equipment or objects	293	256	278	5
Caught in running equipment or machinery	157	128	121	2
Caught in or crushed in collapsing materials	128	118	109	2
Falls	714	763	770	13
Fall to lower level	636	669	664	12
Fall from ladder	106	125	129	2
Fall from roof	153	154	160	3
Fall to lower level, n.e.c.	117	123	117	2
Exposure to harmful substances or environments	535	498	501	9
Contact with electric current	290	265	251	4
Contact with overhead power lines	132	118	112	2
Exposure to caustic, noxious, or allergenic substances	112	114	136	2
Oxygen deficiency	92	74	59	1
Fires and explosions	196	174	159	3
Fires--unintended or uncontrolled	103	95	93	2
Explosion	92	78	65	1

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Manual.
[2] Excludes fatalities from the Sept. 11, 2001, terrorist attacks.
[3] The BLS news release of August 10, 2006, reported a total of 5,702 fatal work injuries for calendar year 2005. Since then, an additional 32 job-related fatalities were identified, bringing the total job-related fatality count for 2005 to 5,734.

NOTE: Totals for all years are revised and final. Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. N.e.c. means "not elsewhere classified."

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.