Estimating gross flows consistent with stocks in the CPS

The basic gross-flow table formerly used by the Bureau of Labor Statistics in examining labor market flows was expanded and the resulting tables were raked iteratively in order to produce labor market flow statistics compatible with CPS stocks

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The Current Population Survey (CPS) is primarily a cross-sectional survey designed to estimate the distribution of labor force states—employed (E), unemployed (U), or not in the labor force (N)—among the population[1] for a given month. However, the CPS also can be used to examine the number of persons who change their labor force state between months.

Gross-flow estimates describe the month-to-month transitions from one labor force state to another. The following 3×3 matrix gives an example in which EU represents the number of persons who were employed in the previous month (May) and are unemployed in the current month (June), and similarly for the other entries:

		Current month (June)		
		E	U	N
Previous month (May)	E	EE	EU	EN
	U	UE	UU	UN
	N	NE	NU	NN

Gross-flow estimation is possible in the CPS because households are interviewed for 4 consecutive months, are then rotated out of the survey for 8 months, and are then interviewed for another 4 consecutive months. About three-fourths of the sample households are in common across 2 consecutive months. Household records can be linked, and month-to-month labor force transitions determined, for most persons in those households.

Gross-flow statistics from the CPS were published from 1948 until 1952. Publication was stopped because there were clear discrepancies between labor force changes derived from the flows and labor force changes derived from the monthly stock estimates. (The sources of these differences are explained later.) Over the years, many analysts have called for the Bureau of Labor Statistics (BLS) to resume publishing gross flows. This article describes a new method of obtaining flow statistics that are compatible with the monthly stock numbers. Seasonal adjustment of gross-flow series also is discussed.

Existing gross-flow data problems

The Census Bureau generates unpublished gross-flow estimates as part of its monthly production of CPS data. The current procedure used by the Census Bureau to generate the tabulations each month starts by matching respondents in the current month to respondents in the previous month; about 72 percent are matched. Next, the sampling weights of the matched respondents are adjusted so that weighted sample totals, by sex, match known population totals. The adjusted weights are then used to compute weighted estimates of labor force transition flows. The analysis that follows focuses on two types of error inherent in this procedure: classification error and margin error.

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Classification error. For a variety of reasons, some CPS respondents may be classified into the wrong labor force state. Errors in classifying the respondent can have large effects on gross-flow calculations. In stock data, classification errors tend to offset each other, whereas in flow data, errors tend to be additive. For example, if equal numbers of respondents are erroneously classified as employed when they are unemployed and as unemployed when they are employed, stock data will be unaffected, but both EU and UE flows will be increased.

Although research indicates that classification error may have large effects on gross flows, the Bureau of Labor Statistics has no current plans to publish classification-error-corrected flows. While measurement error probabilities could be derived from reinterview data, it is not entirely clear how such data should be used. In their attempts to correct for classification error, John Abowd and Arnold Zellner,[2] and James Poterba and Lawrence Summers,[3] used "reconciled" reinterview data, whereby the interviewer attempted to establish a true labor force state in the case of contradiction between the original survey and the reinterview. Because of data quality problems, however, reconciled reinterview data are no longer being produced. Tin Chiu Chua and Wayne Fuller[4] used unreconciled reinterview data, but doing so requires additional statistical assumptions. Moreover, the reinterview sample may not be representative of the CPS sample as a whole, because response rates are lower than they are for the CPS. (Currently, reinterview response rates are approximately 80 percent, compared with 90–95 percent in the CPS.)

Margin error. CPS stock estimates for a given month use responses from all eight panels. Gross-flow estimates, by contrast, are restricted to the six panels in months-in-sample (MIS) groups that continue from one month to the next. These groups are MIS1–MIS3 and MIS5–MIS7 in the previous month and become MIS2–MIS4 and MIS6–MIS8, respectively, in the current month. Moreover, because the CPS does not track persons who change their residence, and because respondents may be absent or refuse to complete the survey in a given month, not all persons in the survey can be matched, even in the continuing months-in-sample.

It is natural to attempt to derive implied changes in stocks by adding up gross flows. For example, one could derive an estimate of the change in employment by adding the flows into employment (UE and NE) and subtracting the flows out of employment (EU and EN). Consistently, the implied changes in stocks do not match the changes in stocks estimated from the CPS as a whole. The gross flows tend to show net flows out of the labor force, in contrast to the stock numbers. For example, the following tabulation shows both the average (not seasonally adjusted) monthly changes in stocks directly from the CPS between December 1994 and December 2004 and the changes in stocks implied by adding up the flows calculated by the current procedure over the same period (numbers are in thousands):

	Change in—		
Method	*Employed*	*Unemployed*	*Not in labor force*
CPS	130	8	87
Current method	–203	–231	434

Whereas the stock numbers show large increases in employment and a smaller increase in the number not in the labor force, adding up the flows implies large decreases in both employment and unemployment and a large increase in those not in the labor force.

There are three sources of the discrepancy between published estimates of changes in stocks and estimates from gross-flow data. First, there is the problem of "nonidenticals": respondents who match from month to month may be systematically different from those in the relevant MIS who do not match due to nonresponse, changing addresses, and so forth. Unmatched respondents are part of the stocks, but not the flows. Second is the problem of rotation group effects: it is known that respondents' answers to questions about their labor force status systematically differ by MIS. Third, the current gross-flow method does not take into account changes in the population aged 16 years and older.

The research preparatory to this article showed that rotation group effects are the most important reason for the discrepancy between stocks and flows. It has long been known that the labor force state a respondent reports in the CPS is affected by MIS. For example, in 2003, the average weighted percentage of respondents who reported that they were not in the labor force ranged from 32.8 percent in MIS1, to 33.4 percent in MIS2, to 34.3 percent in MIS8, with corresponding decreases in both the percentage employed and the percentage unemployed.[5]

These rotation group effects have clear implications for gross flows. Because respondents in MIS1 and MIS5 cannot be matched to the previous month, the increase in respondents reporting that they were not in the labor force for other MIS's implies that matched samples will show flows out of the labor force even if there is no change in the stocks.

As mentioned, another source of margin discrepancies is that the current gross-flow method does not account for population growth and, more broadly, does not account for flows into and out of the scope of the CPS. Abowd and Zellner pointed out that the in-scope population for the CPS is not static.[6] Thus, a complete table of flows would include not only flows between labor force states, but also flows from the labor force out of the scope of the CPS (because of death, entry into the Armed Forces, emigration, and the like) and flows from out-of-scope states to a labor force state (for example, due to turning 16 and immigration). It is easy to deal with entering the scope of the survey due to turning age 16, because 15-year-olds are in the survey (and their birth dates are collected). Other flows into and out of scope are more difficult to deal with, because

complete data do not exist within the CPS: persons exiting households are imperfectly tracked, and persons entering households are not asked retrospective questions.[7]

A method for correcting margin error

The basic approach set forth in this article is to adjust the flows in the matched CPS data by a method known as *raking*, so that they correspond to the labor force stocks in both the current and the previous month. The method accounts for flows into and out of the scope of the CPS and thus corrects for all sources of margin discrepancies, so that implied changes in stocks derived from the flows match changes in CPS stock estimates. As a basis for discussing this method, table 1 expands upon the basic 3×3 gross-flow matrix shown earlier, in order to deal with flows into and out of the scope of the CPS.

Deaths refers to those individuals who were in scope in the previous month, but had died by the current month. *Just 16* refers to those individuals who just turned 16 in the current month. The portions of the table set in roman type correspond to the estimates of flows and stocks presented here, with P denoting the previous month and C denoting the current month. The remaining parts of the table consist of indirectly estimated residual totals that are used to make the table "add up."

As noted, the four boldface estimates JE, JU, JN, and JP in the "Just 16" row can be computed directly from the CPS by using the known ages of respondents in the previous and current months, as well as their labor force status in the current month. (Note that JP is simply the stock estimate of those who just turned of age as of the current month.) Deaths are reported in the CPS, but for various reasons are undercounted by nearly half, so to estimate flows that are out of scope due to death, a less direct approach needs to be adopted. To get a more accurate estimate, average death rates for each gender are derived from mortality tables published annually by the National Center for Health Statistics.[8] These death rates are then applied to the CPS data to estimate total deaths each month (DC in table 1). Finally, the deaths are allocated among labor force states on the basis of those states' average allocation of deaths from historical CPS data, generating the boldface estimates ED, UD, and ND in the "Deaths" column of the table.

Three cells in table 1 are defined to be zero: those who would be classified as inflows, but were immediate outflows due to death, and those who would be defined simultaneously as *other inflows* and *other outflows*.

Details

This section discusses in detail the computation of raked tables. All cases presented refer to the table structure defined in table 1. Gross-flow tables are computed for men and women separately.

Margin adjustment step. Construct the stock labor force estimates EP, UP, NP, and JP for the previous month, using the previous month's sampling weight, and construct the stock labor force estimates EC, UC, and NC for the current month, using that month's sampling weight. Now construct the death estimates ED, UD, and ND by first estimating the number of deaths (the sum of ED, UD, and ND) by taking the previous month's total population and multiplying that by a death rate (obtained from records on vital statistics) appropriate to each sex. Next, distribute the total death estimate among the three labor force estimates (ED, UD, and ND) on the basis of 3-year

Table 1. Structure of basic gross flows

Row and column category			Current month					
			Labor force status			Other outflow		Row total
			E	U	N	Deaths	Other outflow	
Previous month	Labor force status	E	EE	EU	EN	**ED**	EO	EP
		U	UE	UU	UN	**UD**	UO	UP
		N	NE	NU	NN	**ND**	NO	NP
	Inflow	Just 16	**JE**	**JU**	**JN**	0	JO	**JP**
		Other inflow	IE	IU	IN	0	0	IP
	Column total		EC	UC	NC	**DC**	OC	Total

NOTE: Shading indicates original 3×3 gross-flow matrix used as example early in text.

average estimates of the proportion of deaths by labor force classification. These estimates are obtained from the CPS.

The adjustments so far yield a total of P0 = (EP + UP + NP + JP) – (ED + UD + ND) as a potential population in the scope of the CPS during the current month. The actual in-scope population is P1 = EC + UC + NC. Usually, due to immigration, P1 will be greater than P0. If so, then *other inflow* estimates (IE, IU, and IN) are set by allocating the discrepancy (P1 – P0) to labor force states in proportion to their shares of the current month's population, and *other outflow* is set to zero. Some of the time when CPS population controls are adjusted, P0 will be greater than P1. In this case, *other outflow* estimates (EO, UO, NO, and JO) are set by allocating (P0 – P1) in proportion to EC, UC, NC, and JP, respectively (the totals by labor force state in the previous month, plus JP).

Matching step. Construct weighted counts of the 12 flow cells (EE, EU, EN, UE, UU, UN, NE, NU, NN, JE, JU, and JN), using the sampling weight for the current month for those individuals who had a labor force status in both the previous and the current month. These totals are constructed for each sex. The weighted flow counts will be too small by approximately 25 percent, because about 75 percent of the sample overlaps from month to month. The initial iteration step presented next will correct this undercount.

Iteration step. The table constructed in the matching step is not entirely consistent, because not all the cells are guaranteed to add up to the appropriate row and column totals. In order to obtain consistency, iterative raking is performed. The death estimates (ED, UD, ND, and DC) and the inflows or outflows are held fixed, while the remaining interior cells of the tables are raked by iterative proportional fitting to ensure additivity to the stock estimates in the row and column totals.

Final factor calculation. The procedure presented next produces gross-flow microweights. Compute factors for each of the 12 raked cells (EE, EU,..., JN) for each table (for men and for women) by dividing the final estimate obtained in the iteration step by the initial cell value (the weighted sample count, using the current-month sampling weight, for those individuals who are in the sample both months). When applied to the current-month weights of matched individuals, the factors yield gross-flow weights that enable the re-creation of the flows for both men 16 years and older and women 16 years and older. The computation of flows for demographic groups other than those two will be facilitated by these weights, but will not be perfectly consistent with CPS stock numbers.

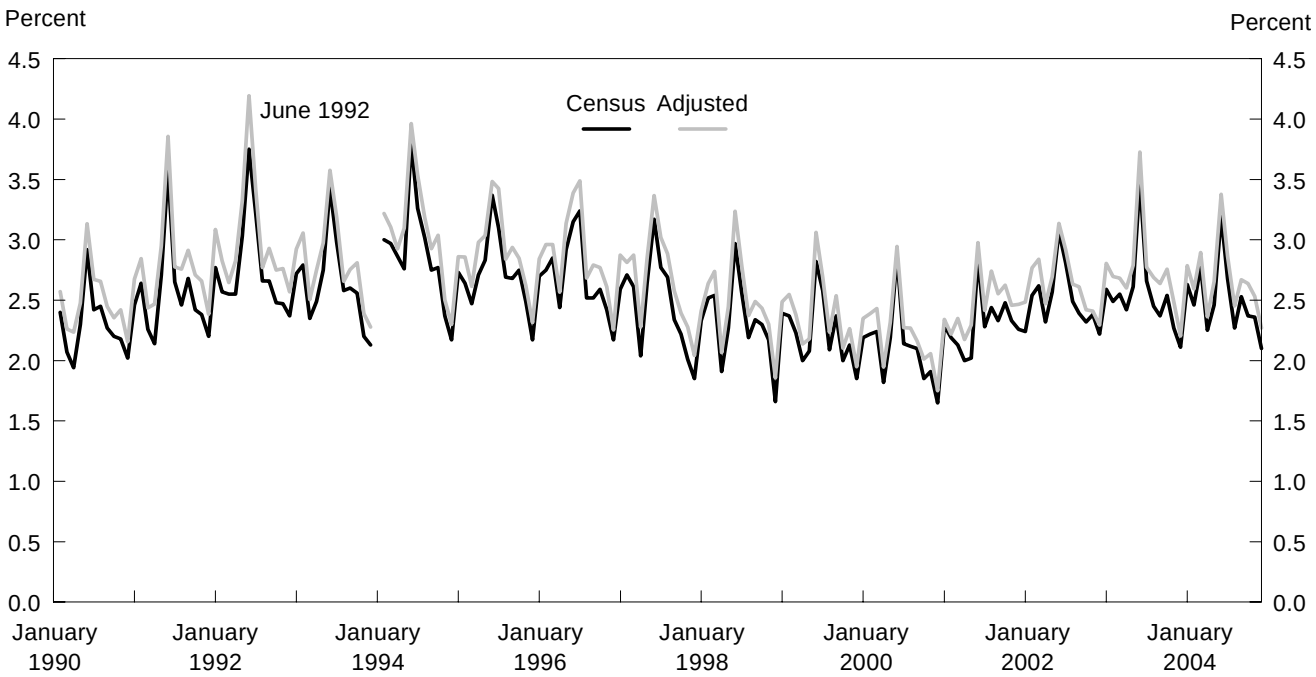
Results

The foregoing procedure was implemented with data from 1990 through 2004. Table 2 shows a comparison of row percentages—flows as a percentage of the population in a labor force state the previous month—for the current procedure and for the procedure just set forth.[9] As can be seen, the average differences are fairly small, 7 percent or less in magnitude. This is to be expected, because the aim of the raking procedure is to revise the existing flow data as little as possible while forcing compatibility with the margins. Earlier, it was noted that rotation group bias caused the current procedure to show more substantial flows out of the labor force than could be reconciled with the stock data. Table 2 reflects this movement, because the new procedure slightly reduces flows out of the labor force. In some months, there are more substantial differences. For example, in June 1992, NU flows were 3.7 percent of the previous month's not-in-the-labor-force stocks under the current procedure, but 4.2 percent under the new procedure, a 12-percent increase. This discrepancy is associated with an unusually high increase in unemployment, from 9.4 million to 10.4 million. Chart 1 shows the time series of NU flows. The June 1992 point in the adjusted series is a multiyear high, whereas the point in the current series is not much different from other Junes.

Table 2. Gross-flow row percentages, 1990-2004 CPS, different methods of estimation

Flow	Average row percentage, current method	Average row percentage, adjusted method divided by current method	Average percent increase, adjusted method divided by current method	Average absolute percent change, adjusted method divided by current method	Minimum percent increase	Maximum percent increase
EE	95.8	95.9	0	0	0	0
EU	1.4	1.4	4	4	–2	13
EN	2.8	2.7	–4	4	–11	6
UE	27.5	27.3	0	2	–5	4
UU	49.7	50.9	2	2	–2	6
UN	22.8	21.8	–4	4	–10	0
NE	4.7	4.9	4	4	–6	15
NU	2.5	2.7	7	7	1	16
NN	92.8	92.4	0	0	–1	0

Chart 1. NU flows, 1990–2004, row percent



Seasonal adjustment

Seasonal adjustment is a natural way to further improve the utility of gross flows, and it is also highly useful as an analysis tool to evaluate data quality and to uncover hidden or hard-to-see characteristics. One major wrinkle in seasonally adjusting gross-flow data is that the adjusted flow data need to be made compatible with seasonally adjusted stocks. Accordingly, once the raked gross flows are seasonally adjusted, they are raked a second time, this time to the total seasonally adjusted stock numbers from the CPS. Final raked and seasonally adjusted flows were examined as part of the research for this article, because it was not known exactly how reraking would affect the flows. It is important that extraneous seasonality or any other systematic effects not be introduced and that the seasonal factors remain reasonably stable from year to year.

Seasonal adjustment is performed with the Census Bureau's X-12-ARIMA program, the current standard at the Bureau of Labor Statistics.[10] Data from February 1990 to March 2004 were examined, with a missing data point in January 1994 due to a survey redesign. Initially, the research analyzed flows for a variety of demographic breaks by age, sex, and race. However, because these breaks resulted in smaller sample sizes and flow estimates that were subject to greater sampling error, it was determined that only flows for men 16 years and older and women 16 years and older could be adequately seasonally adjusted.

The 3×3 flows between the labor force states were seasonally adjusted. The X-12-ARIMA procedure indicated that all of the flows showed seasonality, although it was relatively weak for UN flows for both men and women and UU flows for women. These flows may be even more seasonal than is indicated here, but sampling error is likely masking some seasonal properties, because the diagnostic statistics indicating the presence of seasonality increase when flows for men and women are added. Flows with the largest seasonal factors are EU, EN, and NE, while EE and NN factors are by far the smallest. In general, the seasonally adjusted flows appear to have explainable seasonal patterns.

A few of the flows show signs of seasonal factors that are unstable from year to year. This instability can be expected, because, clearly, some of the smaller flows are fairly noisy. Plotting the seasonal factors for each month over the years of the sample period showed no factors unstable enough to cause serious concern.

An examination of the seasonally adjusted flow data revealed another pattern. The CPS is fielded on the week containing the 19th of each month[11] and asks questions referring to the week of the 12th. Thus, CPS reference weeks are separated by either 4 or 5 weeks. The adjusted series revealed systematic differences in the flows, depending on the distance between the reference

periods. Note that such differences are quite plausible: respondents have more opportunities to change their labor force status, and thus end up in the off-diagonal cells, when reference periods are 5 weeks apart. Population growth also implies that reference-week intervals can affect levels of all the cells. Modeling these calendar effects often results in smoother seasonally adjusted series.[12] In this case, modeling the calendar effects with dummy variables resulted in seasonally adjusted series with no apparent residual seasonality.

After seasonal adjustment, the flows for men and women are raked to their respective published CPS seasonally adjusted controls. The complete matrix for the flows, as shown in table 1, has a row for 15-year-olds turning 16 (JE, JU, and JN). These series are too small to adjust reliably, so, as reasonable approximations, CPS seasonal factors for 16-to-19-year-old employed, unemployed, and not-in-the-labor-force men and women are applied to the cells corresponding to those categories in the "Just 16" row of the matrix. Other cells for flows into and out of the scope of the survey are assumed to be nonseasonal.

Once the seasonally adjusted flows were raked, they were reexamined for differences with the unraked series, residual seasonality, and stability of the seasonal factors. Basic statistics for differences between the unraked seasonally adjusted flows and the raked seasonally adjusted flows are presented as row percentages (as in table 2) in table 3. The overall effect of raking seasonally adjusted flows to seasonally adjusted stocks is less than the effect of raking the flows that are not seasonally adjusted, as is shown in table 2. The mean percentage difference between raked and unraked seasonally adjusted flows is in all cases less than 0.5 percent, and the mean absolute percentage difference is in all cases less than 2 percent. None of the percentage differences is large; the largest differences between raked and unraked flows were approximately 5 percent. Not surprisingly, the two largest flows have by far the smallest percentage differences.

The final check on the raked flows was to see whether seasonal or calendar patterns were reintroduced by raking. A comparison of the seasonally adjusted flows and the raked seasonally adjusted flows showed some differences along this dimension. Unfortunately, it appears that some of the calendar effects are reintroduced into the final raked seasonally adjusted series, but not enough to cause serious concern.

MORE THAN 50 YEARS AGO, the Bureau of Labor Statistics stopped publishing series of labor market flows when it was discovered that the published flows were incompatible with the monthly labor force stock numbers. This article describes efforts to produce labor market flow statistics from the CPS without the incompatibilities that led to their curtailment. The basic gross-flow table was expanded to estimate flows into and out of the scope of the CPS. The resulting gross-flow tables were then raked in an iterative process to match both the previous month's and the current month's stock estimates. As part of this project, a method was developed to seasonally adjust the flow series while maintaining the flows' compatibility with the seasonally adjusted stocks. The Bureau of Labor Statistics is continuing to work on this research, with the expectation of eventually resuming publication of the gross flows.[13] □

Table 3. Seasonally adjusted gross-flow row percentages, 1990–2004 CPS, unraked and raked

Flow	Average row percentage, seasonally adjusted	Average row percentage, seasonally adjusted and raked	Average percent increase, adjusted divided by raked	Average absolute percent change, adjusted divided by raked	Minimum percent increase	Maximum percent increase
EE	95.9	95.9	0	0	0	0
EU	1.4	1.4	0	1	–5	5
EN	2.7	2.7	0	1	–4	3
UE	27.4	27.4	0	1	–2	3
UU	50.8	50.8	0	1	–3	3
UN	21.8	21.8	0	1	–3	3
NE	4.9	4.9	0	1	–3	4
NU	2.7	2.7	0	1	–5	5
NN	92.4	92.5	0	0	0	0

Notes

ACKNOWLEDGMENT: The authors thank Fran Horvath of the Office of Employment and Unemployment Statistics for his contributions to the research preparatory to this article.

[1] "Population" refers to the U.S. civilian noninstitutional population aged 16 and older.

[2] John M. Abowd and Arnold Zellner, "Estimating Gross Labor-Force Flows," *Journal of Business and Economic Statistics*, July 1985, pp. 254–83.

[3] James M. Poterba and Lawrence Summers, "Reporting Errors and Labor Market Dynamics," *Econometrica*, November 1986, pp. 1319–38.

[4] Tin Chiu Chua and Wayne A. Fuller, "A Model for Multinomial

Response Error Applied to Labor Flows," *Journal of the American Statistical Association*, March 1987, pp. 46–51.

[5] Here is an example that shows how little difference matching makes relative to the rotation group effect. In 1996, the average monthly change in the percentage of the population that was employed was 0.16 percent, the average change for the percentage unemployed was –0.07 percent, and the average change for the percentage not in the labor force was 0.09 percent. If, instead, one computes the same figures, but this time using the changes in percentage from rotation groups MIS1–3 and MIS5–7 in the first month to rotation groups MIS2–4 and MIS6–8, respectively, in the next month, whether the observations do or do not match between months, the numbers are 0.02 percent for the employed, –0.16 percent for the unemployed, and 0.13 percent for those not in the labor force. (Due to rounding, the preceding numbers may not add to zero.) If one now computes the same figures, but using only matched observations from rotation groups MIS1–3 and MIS5–7 in the first month and rotation groups MIS2–4 and MIS6–8 in the next month, the numbers are 0.03 percent for the employed, –0.17 percent for the unemployed, and 0.14 percent for those not in the labor force—very close to the unmatched figures, showing that failure to match makes little additional difference after accounting for the rotation group.

[6] Abowd and Zellner, "Estimating Gross Labor-Force Flows."

[7] The CPS uses an address-based sample and does not attempt to interview persons who moved out of the sampled address. If a household member exits the household between interviews, a remaining household member is asked the reason for the exit. If the entire household is replaced, no such question is asked.

[8] National Center for Health Statistics, *Vital Statistics of the United States* (Atlanta, Centers for Disease Control and Prevention, published annually).

[9] Flows from April 1994 are missing in the current series; January 1994 also is excluded, due to linking problems associated with a redesign of the survey.

[10] *x-12-ARIMA Reference Manual*, version 0.2.10 (Census Bureau, 2002).

[11] For those Decembers when this date would conflict with holidays, the survey is fielded during the week that includes the 12th of the month.

[12] Stephanie Cano, Patricia M. Getz, Jurgen Kropf, Stuart Scott, and George Stamas, "Adjusting for a Calendar Effect in Employment Time Series," *Proceedings of the Survey Research Methods Section, 1996* (Alexandria, VA, American Statistical Association, 1996), explain how this approach is similarly implemented in seasonal adjustment for the BLS Current Employment Statistics survey. For an in-depth discussion of calendar effects in the present case, see Thomas D. Evans, "Analysis of Raking on Seasonally Adjusted Household Gross Flows Data," *ASA Proceedings of the Joint Statistical Meetings, 2004*, (Alexandria, VA, American Statistical Association, 2004), pp. 1166-73.

[13] The utility of the new gross-flow series to analysts is discussed in the companion article to this one, "Analyzing CPS data using gross flows," by Randy Ilg, this issue, pp. 10–18.

Analyzing CPS data using gross flows

Improved gross flow data provide the necessary linkage between stocks and flows; therefore, they may prove useful in analyzing movements in labor force measures

Randy Ilg

Each month, the Bureau of Labor Statistics (BLS) publishes estimates of employment and unemployment derived from the Current Population Survey (CPS). These measures are highly scrutinized by business economists, policy analysts, and financial investors for information about the state of the labor market.

The published labor force data show the net change in the number of employed or unemployed persons (the stocks) over any given time period. The specific sources of the net change, however, are not discernible from the published data because there is a significant amount of "churning" as individuals move from one labor force status to another. These dynamic "gross flows" underlie the net changes in the labor force measures. Researchers from the BLS Office of Employment and Unemployment Statistics recently developed several new seasonally-adjusted gross-flow series. The improved gross flow data provide the necessary linkage between stocks and flows and, therefore, may prove useful in analyzing movements in labor force measures.

This article provides some background and conceptual information on the new gross-flow series. (A more complete description is provided in an accompanying article in this issue.[1]) In addition, it demonstrates some uses of the gross-flow series by examining changes in various labor force stock measures and reconciling those movements with the seasonally adjusted gross-flow series over selected time periods.

The gross-flow data presented in this article support information collected in other BLS surveys; during the recession, flows out of employment were greater than flows into employment.[2] Indeed, the decline in the employment-population ratio during the past two labor market downturns reflected increased flows out of employment, rather than reduced flows into employment. The data also show that the jobless rate appeared to be more sensitive to the pace of rising or declining flows into unemployment, rather than to changes in the level of flows out of unemployment.

Gross-flow measures

Each month, the CPS is administered to about three-quarters of the same households (sample) as in the previous month.[3] This month-to-month overlap allows for the calculation of "flows" in labor force status from one month to the next. However, while all eight "rotation" groups in the CPS are represented in the stock data, only six are represented in the flow data.[4] Moreover, some of the flows involve movements into or out of the survey scope. While these flows contribute to the change in stock measures, they are not captured in the sample overlap. Thus, the sum of the flows does not match the change in the stock estimates. Due to these discrepancies between the flows and changes in the monthly labor force measures (stocks), BLS has not published gross-flow data on a continuous basis since 1952, other than periodically in some research.[5] Despite such limitations, however, gross-flow data have been shown to provide useful information in analyzing short-term labor force developments.[6]

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The newly-developed gross-flows series have been adjusted to account for the discrepancies outlined above so that they closely correspond to the labor force stocks.[7] This "matching" property greatly aids in the comparative analysis of changes in the stock estimates of employment, unemployment, and persons not in the labor force. In addition, the new gross-flow series have been *seasonally adjusted* to allow for month-to-month types of analyses.

Types of flows. The nine labor force flows are discussed in more detail below.

	Status in current month		
Status in prior month	*Employed*	*Unemployed*	*Not in the labor force*
Employed	EE	EU	EN
Unemployed	UE	UU	UN
Not in the labor force	NE	NU	NN

Flows into employment. For simplicity, the flows into employment are represented by EE, UE, and NE. EE represents all individuals who remained employed from last month to the current month. UE reflects the number of unemployed persons who became employed. NE represents the transition from not in the labor force last month into employment this month.

Flows into unemployment. The flows into unemployment are represented by EU, UU, and NU. EU represents the total transitions from employment last month into unemployment this month; those transitions could include quits, terminations, and layoffs. UU represents all individuals who remained unemployed from month to month. The transition from not in the labor force last month into unemployment this month (NU) represents reentrants and new entrants to the labor force.

Flows into not in the labor force. The total transitions from employment last month into not in the labor force this month (EN) could include retirements as well as completed spells of seasonal employment. It also could represent persons who lost their jobs and left the labor force, rather than seek other employment. UN represents the total transitions from unemployment into not in the labor force. Reasons for such transitions would include, but are not limited to, discouragement over job prospects.[8] NN represents all persons who continue in a not-in-a-labor-force state, for reasons such as retirement, school, disability, family responsibilities, or discouragement.

This article focuses primarily on the six flows where labor force status changed, rather than on the flows (represented as EE, UU, and NN), where labor force status continued in the same state. (UU flows, however, do provide a measure of persistence of unemployment and will be briefly discussed.)

As described in the article by Duff and colleagues in this issue, BLS statisticians have developed a method that forces mathematical reconciliation between the gross flows and stock estimates. Adjustments also are made to the "core" flows (as presented in the illustration above) for persons flowing in scope and out of scope between months for each of the labor force categories. These adjustments expand the 3X3 core matrix to account for persons who just turned 16 years of age, for persons who immigrated, and for standardized death rates. Clearly, there are constant inflows to employment from out of scope (due to increasing population), so employment stock would increase even in the absence of net inflows in the 3X3 matrix; it simply would increase at a faster pace when employment within the 3X3 matrix is net positive. Due to their marginal influence in analyzing short-term changes to labor force estimates, however, such adjustments are not discussed in more detail in this article.[9]

Recent developments tied to gross flows

Discussion in this section focuses on the stock changes in labor force measures during the 2001 recession and its aftermath, with comparisons to the recession of the early 1990s. When linking these changes in stock data to the gross-flow series, it is worth noting that the gross-flow data can be viewed from two different perspectives. The primary focus here is to view the data from the current month's perspective; that is, from which labor force status individuals came. Thus, we can use gross-flow data to help determine what contributed to the stock changes in employment, unemployment, and not in the labor force over selected time periods. The discussion also touches upon what happens to unemployed individuals in any particular labor force status in the next month. This latter perspective addresses the likelihood of unemployed individuals finding employment, remaining unemployed, or leaving the labor force.

Changes in employment. Following a long-term period of employment growth from 1991 through 2000, employment declined in 2001. In 2002, employment growth was rather tepid, but increased substantially again in 2003 and 2004.[10] The employment-population ratio—that is, the proportion of the population that is employed—peaked at 64.7 percent in April 2000 and trended downward until the end of 2001. Throughout most of 2002, the ratio showed little movement until late in the year and then continued to trend down again until mid-2003. From mid-2003 until mid-2004, the ratio remained in a fairly narrow range of 62.1 to 62.3 percent, even as employment rose sharply.[11] The ratio finally began

to drift upward only in the last half of 2004. How would these trends look when analyzed with gross-flow data?

Chart 1 presents the flows in and out of employment as a percent of the population from March 1990 through December 2004, seasonally-adjusted 3-month-moving averages.[12] Recall that UE plus NE represent inflows to employment, while EU plus EN represent outflows from employment.

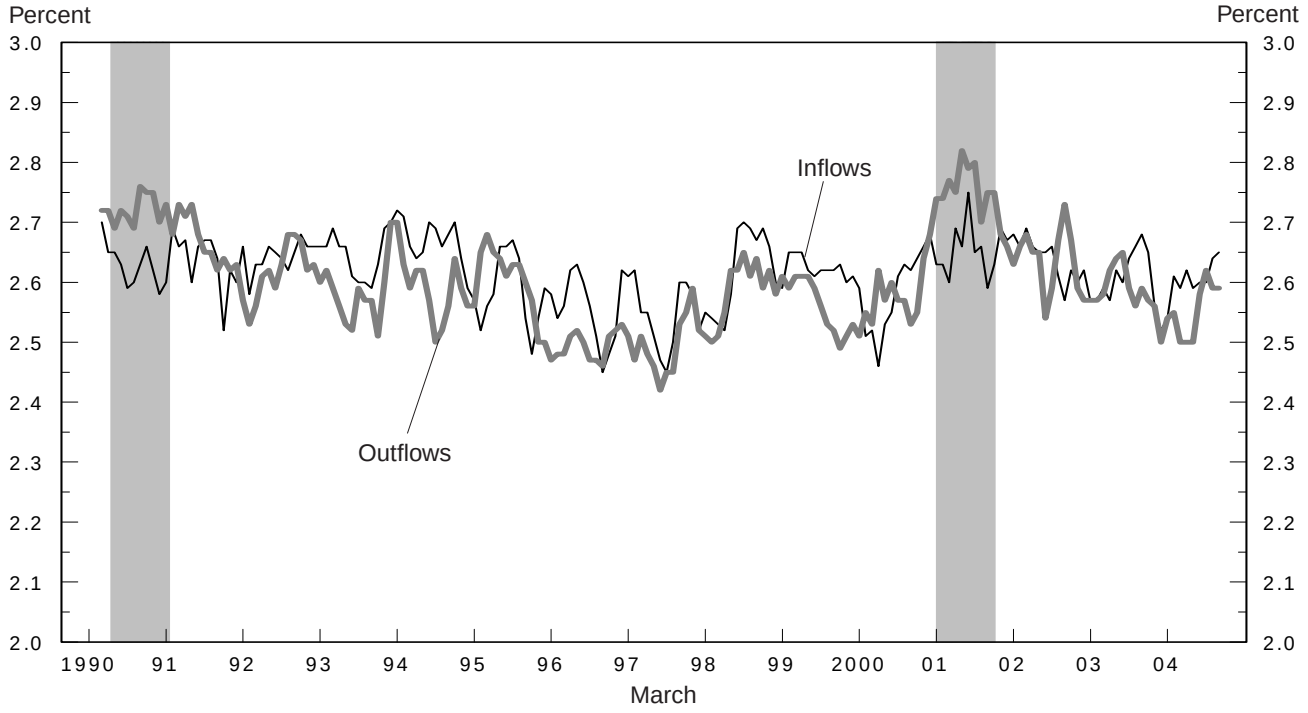
Beginning in 2000, flows out of employment as a share of the population began trending up, and in 2001, outflows accelerated and rose sharply. Outflows from employment as a share of the population peaked above 2.8 percent in mid-2001. While flows into employment also increased somewhat, outflows were consistently and substantially higher throughout the year. Disaggregating the outflows into the two components shows that the employment decline in 2001 was associated with relatively high flows out of employment into not in the labor force (EN), but also into unemployment (EU). As a result, the employment-population ratio fell by 1.5 percentage points.

From the beginning of 2002 through mid-2003, the difference between inflows and outflows lessened. Both flows trended down from their highs in 2001, although outflows tended to fluctuate more widely. Since mid-2003, flows into employment have exceeded outflows. However, there seemed to have been a time lag between when inflows exceeded outflows and when the employment-population ratio began to rise. The ratio began to drift upward in the latter half of 2004, only after a considerable time period during which flows into employment were sufficiently larger than outflows.

During the early 1990s, the employment-population ratio peaked at 63.2 percent in the first quarter of 1990 then declined by 2 full percentage points by the end of 1991. (The National Bureau of Economic Research designated the period from July 1990-March 1991 as a recession. However, many labor market measures showed little, if any, growth for several months following the official end of the recession.) As shown in chart 1, there also were relatively large flows out of employment into the other labor status categories during this period, a scenario quite similar to that in 2001. In the intervening years between these periods of labor market weakness, inflows into employment nearly always exceeded outflows, resulting in a steady rise in the employment-population ratio.

Looking more closely at the flows into employment, persons from outside the labor force (NE) have usually contributed a larger share of employment growth than have the unemployed (UE). Over the last 4 years in particular, individuals from outside the labor force contributed an even larger

Chart 1. Employment flows as a percent of the population, May 1990–December 2004, seasonally-adjusted 3-month-moving averages



NOTE: Shaded areas represent recessions.

share than they did during the early 1990s, or even the majority of the 90s overall. In contrast, a larger proportion of employment came from the ranks of the unemployed during the early 1990s than during the recent downturn. (See chart 2.)

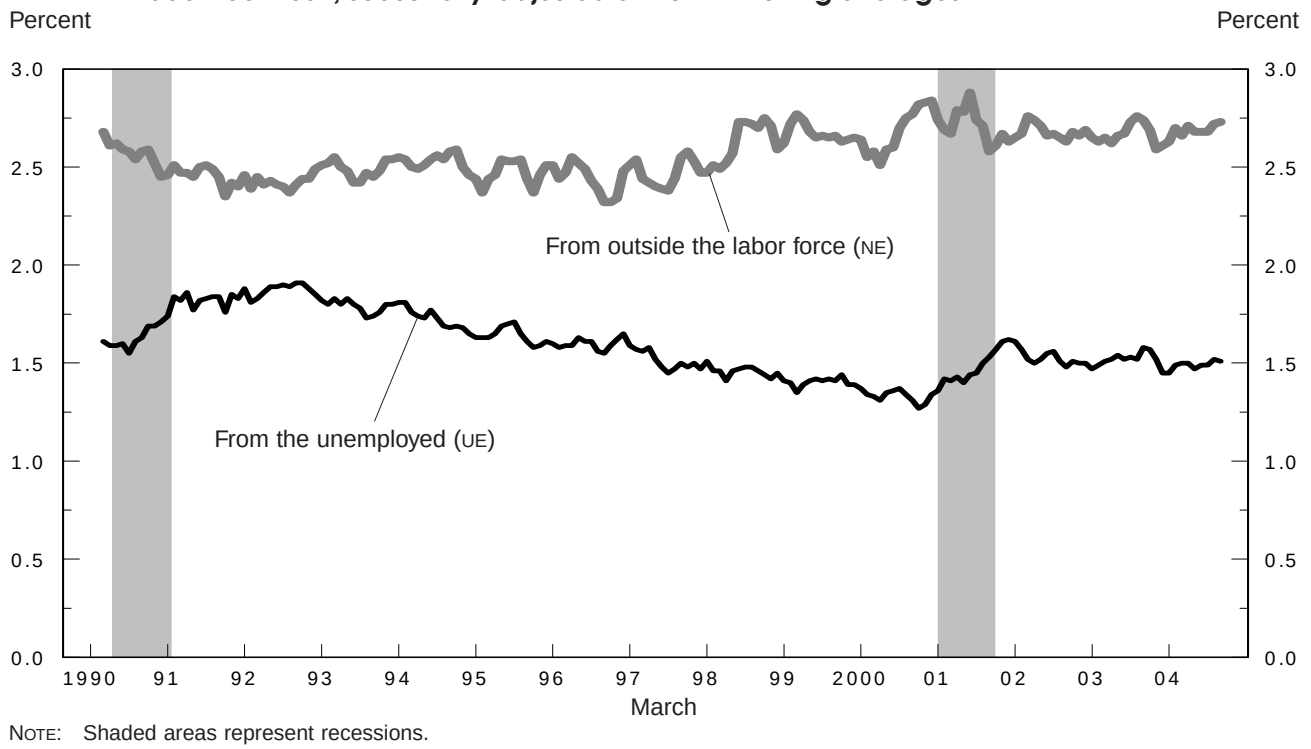
Changes in unemployment. In and around recessionary periods, the unemployment rate receives ample attention from economists and policymakers because it is viewed as a barometer of the economy's health. The recent economic downturn was no exception. The unemployment rate rose to a high of 6.3 percent in June 2003, from 3.9 percent in December 2000. From that peak, the jobless rate trended down to 5.6 percent by mid-2004. Throughout the remainder of the year, it was either 5.5 or 5.4 percent.

Chart 3 presents the flows in and out of unemployment as a percent of the labor force from March 1990 through December 2004, again using seasonally-adjusted 3-month-moving averages. EU plus NU represent inflows into unemployment, while UE plus UN represent outflows from unemployment. The chart also includes the series history of UU, the share of the labor force who remained unemployed from one month to the next. In addition, the chart illustrates the share of the labor force comprised of persons who have been unemployed for 27 weeks and longer, thereby providing some comparison of the extent of long-term unemployment.

During the rapid economic expansion of the second half of the 1990s and most of 2000, the share of the labor force comprised of flows into and out of unemployment trended down, with outflows slightly exceeding inflows. As a result, the unemployment rate declined over this period. Beginning in 2001, however, both flows into and out of unemployment swelled, with inflows rising faster than outflows. The unemployment rate rose accordingly. Since about mid-2003, flows into unemployment have declined at a faster pace than outflows, and the unemployment rate has trended down. The pattern during the early 1990s was quite similar. The jobless rate was driven upward when inflows rose faster than outflows. Conversely, it descended when inflows into unemployment receded at a faster pace than exits.

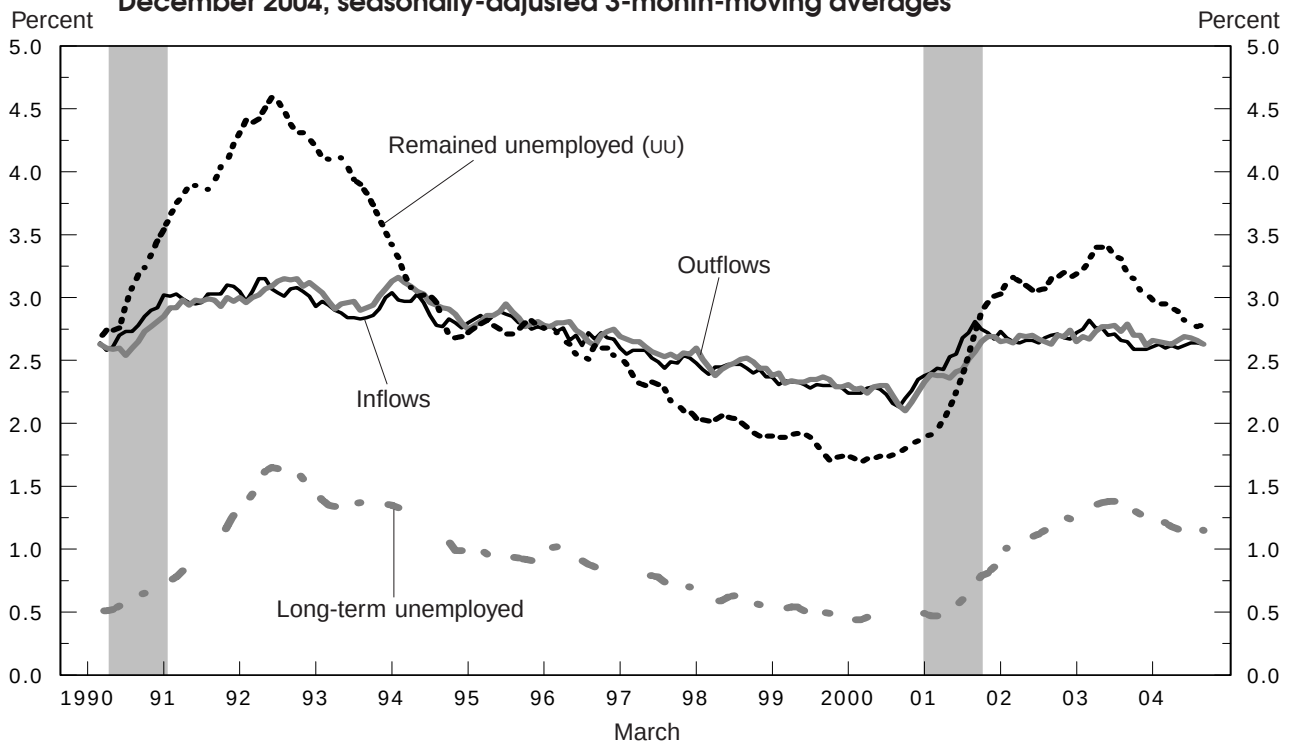
During economic downturns, the number of persons who remain unemployed from month to month (UU) far exceeds other transitions to and from unemployment. The share of the labor force made up of persons who remained unemployed from month to month rose to nearly 3.5 percent in the aftermath of the recent recession and reached more than 4.5 percent during the early 1990s. The unemployed also remained

Chart 2. Share of employment provided from unemployment and not in the labor force, May 1990–December 2004, seasonally-adjusted 3-month-moving averages



NOTE: Shaded areas represent recessions.

Chart 3. Unemployment flows and duration as a percent of the labor force, May 1990–December 2004, seasonally-adjusted 3-month-moving averages



NOTE: Shaded areas represent recessions.

unemployed even longer during these periods. Thus, the overall rise in the unemployment rate reflected to a large degree an increased likelihood of remaining unemployed, as well as a somewhat higher likelihood of becoming unemployed. In the aftermath of the recent downturn, the share of the labor force that was unemployed for 27 weeks and more not only rose but sustained that level for an extended time period. As of December 2004, unemployed persons who had been unemployed for 27 weeks and more exceeded 1 percent of the labor force for 33 consecutive months.

Not in the labor force. There is a fair amount of "*churning*" going on in the labor market during any given point in the business cycle. As more individuals move from one labor force status to another, it is more pronounced. Beginning in 2001, flows from employment increased, as shown in chart 1. In addition, flows in and out of the not in the labor force category also rose, as shown in chart 4. Indeed, both the flows of employment into not in the labor force (EN) and vice versa (NE) were higher than historical levels. (See charts 2 and 5.) One similarity between the most recent recession and that of the early 1990s was the relatively high and sustained level of transition from unemployment into not in the labor force (UN). During periods of labor market weakness, more unemployed individuals opt out of the labor force (for various reasons, including discouragement over job prospects). (See chart 5.)

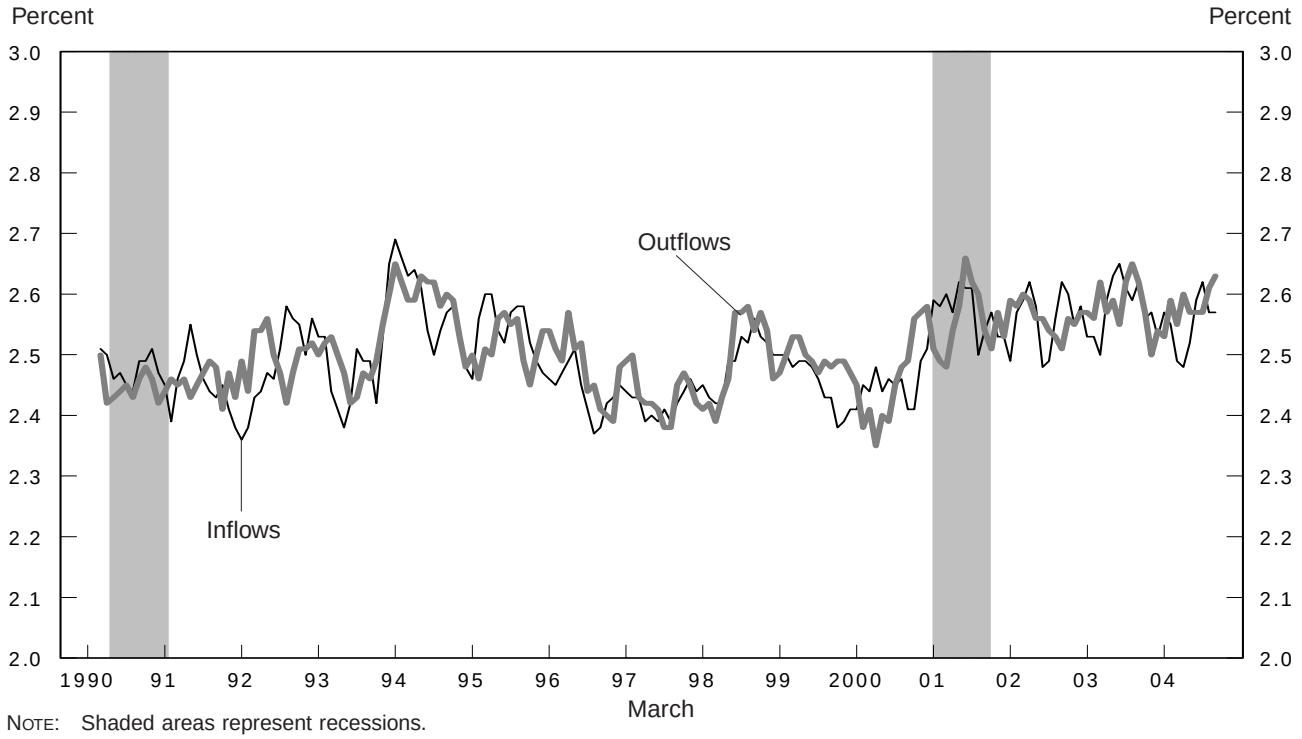
A closer look at unemployment

While gross flows provide useful information with regard to labor force behavior in and around recessions, they also are practical for assessing shorter-term changes in stock measures. For example, a closer examination of unemployment for 2003 provides a stark contrast between the first and second half of the year.[13] (See tabulation below.)

	Uunemployment changes in 2003	
	January-June	*June-December*
Unemployment	+744,000	–829,000
Unemployment rate	+0.5	–0.6

As previously noted, employment increased substantially in 2003. In the first half of 2003, however, the number of unemployed persons and the unemployment rate rose; both measures declined in the second half of the year.

Chart 4. Not in the labor force flows as a percent of the population, May 1990–December 2004, seasonally-adjusted 3-month-moving averages



NOTE: Shaded areas represent recessions.

Chart 5. Share of not in the labor force provided by employment and unemployment, May 1990–December 2004, seasonally-adjusted 3-month-moving averages

NOTE: Shaded areas represent recessions.

As shown in table 1, the average inflows into unemployment from both employment (EU) and not in the labor force (NU) were substantially smaller during the second half of 2003 compared with the first half. Conversely, average outflows into both employment (UE) and not in the labor force (UN) were considerably larger during the second half of the year. The combination of reduced flows into unemployment and increased outflows ((EU+NU)–(UE+UN)) resulted in a large net stock decline in unemployment during the second half of the year, thus offsetting rising unemployment during the first part of the year.

The average monthly increase in UE and decrease in EU reflect improvements in the labor market to some extent. More unemployed workers found jobs, and fewer employed individuals became unemployed. Other flows, however, may not provide an unambiguous view of an improving labor market. More unemployed individuals quit searching for work (UN), and fewer individuals began a search (NU). We do not know the extent to which those decisions are independent of labor market conditions. The decrease in NU could reflect the possibility that entrants to the labor force were more successful in finding employment or that fewer individuals attempted a job search because they viewed their prospects as poor.

What happens to the unemployed? As previously mentioned, gross-flow data can provide information from different perspectives. Having examined where individuals in various labor force categories came from, focus now switches to what happens to individuals in a particular labor force status, specifically unemployment. This latter assessment (using total unemployment as the base) sheds some light concerning the likelihood of individuals leaving their current state of unemployment and finding employment, remaining unemployed, or leaving the labor force. (See chart 6.)

As might be expected, unemployed individuals were less likely to find employment (UE) and more likely to stay unemployed (UU) in each of the last two recessions than during the intervening period of economic expansion. In the aftermath of the most recent recession, the likelihood of remaining unemployed was slightly lower (better) than during the deeper recessionary period of the early 1990s, although the prospect for finding employment (UE) was about the same. There was a greater likelihood that the unemployed would exit the labor force (UN) altogether in recent years compared with the early 1990s.

IN SUM, gross-flow data can provide additional insight into changes in stock labor force estimates. During the last two recessionary periods, employment declines were linked to increased flows out of employment, rather than reduced flows into employment. In addition, the jobless rate appears to be more sensitive to the pace of rising or declining flows into unemployment, rather than exits from unemployment. Finally, in the aftermath of the recent recession, there was a relatively high degree of "churning" as employed persons exited the labor market and new individuals entered. At the same time, an increasing number of unemployed individuals opted out of the labor force.

Table 1. Monthly flows to and from unemployment and average flows for selected months in 2003, seasonally adjusted

[Numbers in thousands]

Month	Flows into unemployment		Flows out of unemployment	
	Employed to unemployed (EU)	Not in the labor force to unemployed (NU)	Unemployed to employed (UE)	Unemployed to not in the labor force (UN)
February	1,902	2,003	1,970	1,795
March	1,933	1,950	2,033	2,016
April	2,003	2,120	2,067	1,744
May	2,022	2,031	2,059	1,901
June	1,973	2,262	2,115	1,847
July	1,910	1,942	2,095	1,983
August	2,046	1,994	2,150	2,015
September	1,952	2,035	2,036	1,920
October	1,764	2,123	2,120	1,991
November	1,808	2,039	2,123	1,847
December	2,011	1,933	2,306	1,913
February-June average	1,967	2,073	2,049	1,861
July-December average	1,915	2,011	2,138	1,945

NOTE: Flows of unemployment are based on the current month. Thus, the flows from employment to unemployment shown in column 2, for example, reflect a portion of the stock change in unemployment due to transitions from employment over the January-February period.

Chart 6. Likelihood of the unemployed finding employment, remaining unemployed, or leaving the labor force, May 1990–December 2004, seasonally-adjusted 3-month-moving averages

NOTE: Shaded areas represent recessions.

Whether these trends reflect the changing labor market conditions, individual preferences, or both cannot be determined from the gross-flow data but certainly warrants further research.

By itself, the unemployment rate has proven to be a historically good indicator of slack in the labor market. As a single measure, however, the unemployment rate does not provide a complete picture of general labor market conditions. For many years, BLS researchers have strived to produce other tools, including a set of alternative measures of labor underutilization. The new seasonally adjusted gross-flow series presented in this article offer one more tool in an ongoing endeavor to provide useful information to data users and policymakers. □

Notes

ACKNOWLEDGMENT: The author would like to thank Anne Polivka, Harley Frazis, James Spletzer, and Fran Horvath for their contributions.

[1] See Harley J. Frazis, Edwin L. Robison, Thomas D. Evans, and Martha A. Duff, "Estimating gross flows consistent with stocks in the CPS," pp. 3–9, for additional information on methodology, measurement concepts, limitations, and seasonal adjustment.

[2] For example, data collected in the Bureau's Business Employment Dynamics (BED) program showed that substantial increases in gross job losses were accompanied by declining gross job gains during the recent recession.

[3] The Current Population Survey (CPS) is a scientifically-selected sample survey of about 60,000 households conducted each month by the Bureau of the Census. For an explanation of the survey's coverage and concepts, see "Explanatory Notes and Estimates of Error," *Employment and Earnings*, January 2005, pp. 267–86.

[4] Part of the CPS sample is changed each month. Each monthly sample is divided into eight representative subsamples or rotation groups. A given rotation group is interviewed for a total of 8 months, divided into two equal periods. It is in the sample for 4 consecutive months, leaves the sample during the following 8 months, and then returns for another 4 consecutive months. In each monthly sample, one of the eight rotation groups is in the first month of enumeration, another rotation group is in the second month, and so on. Under this system, 75 percent of the sample is common from month to month, and 50 percent is common from year to year for the same month. This procedure provides a substantial amount of month-to-month and year-to-year overlap in the sample.

[5] Gross flow data have been tabulated and used on occasion by BLS analysts who were knowledgeable about the data's limitations. For example, see "Gross Flow Data From the Current Population Survey, 1970-80," U.S. Department of Labor, Bureau of Labor Statistics, March 1982.

[6] For example, see Anthony J. Barkume and Francis W. Horvath, "Using gross flows to explore movements in the labor force," *Monthly Labor Review*, April 1995, pp. 28–35.

[7] See Frazis et al, "Estimating gross flows…"

[8] In the CPS, discouraged workers are individuals who want and are available for a job and who have looked for work sometime in the past 12 months, but who are not currently looking for work specifically because they believe that no jobs are available for them.

[9] The adjustments account for persons who just turned 16, for persons who immigrated, and for standardized death rates. The sum of the control totals for the prior month will then equal the sum of the control totals for the current month. This article essentially ignores these in-scope and out-of-scope flows because of their marginal contribution. For more information on these adjustments, see Frazis et al, "Estimating gross flows..."

[10] Population adjustments to the household survey had some impact on employment estimates. The comparability of historical employment estimates has been affected at various times by methodological changes in the Current Population Survey. For an explanation, see the Explanatory Notes and Estimates of Error section of *Employment and Earnings*, a monthly BLS periodical.

[11] *Ibid*.

[12] To help discern the overall trends, the data presented in the charts were smoothed using 3-month-moving averages. Note that the titles of the charts reference May 1990 because 3-month moving averages are used—the underlying data series begin in March 1990, and so each of these moving-average series begin in May 1990. Series data from March 1990 forward are available upon request. Separate series for men and women also are available; diagnostics for other demographic groups did not meet the criteria for seasonal adjustment.

[13] Official CPS series on unemployment can be accessed on the Internet at **http://www.bls.gov/cps/cpsatabs.htm**.

Nonprofit organizations: new insights from QCEW data

The BLS Quarterly Census of Employment and Wages data set has enormous promise as a source of timely information on the private, nonprofit sector; new discoveries challenge a variety of conventional theories about these organizations

Lester M. Salamon
and
S. Wojciech Sokolowski

Interest in the broad array of social institutions, which make up the U.S. private, nonprofit sector, has grown substantially in recent years. These institutions, which blend private structure with public purpose, perform various services in American society. Included within this sector are more than half of the Nation's general hospitals; nearly half of its higher education institutions; most of its family service agencies; almost all of its symphonies; substantial proportions of its nursing homes; and most of its homeless shelters, soup kitchens, community development agencies, and hospices—to name just a few. This set of organizations also has nurtured virtually every social movement that has animated American political life and has constantly provided ways to express the diverse array of ethnic, religious, cultural, artistic, professional, and social values that give special vitality to community life.

Information about nonprofit institutions remains surprisingly sparse, despite concerted efforts of a growing band of researchers over the past several years. One reason for this is the limited data available on nonprofit institutions in existing data sources. Estimates of key dimensions of this sector therefore remain dependent on highly imperfect projections from dated information or on data sources whose accuracy and reliability remain highly suspect. In some respects, in fact, the data sources have deteriorated in recent years. For example, the quintennial Census Bureau Survey of Service Industries, which formerly provided one of the few systematic, albeit delayed, pictures of nonprofit activity as reflected in employment data, has progressively narrowed its focus, with the deletion of coverage of education institutions.[1] Although other data sources, such as the Internal Revenue Service 990 forms, which nonprofit organizations are required to file annually, have recently become more accessible, these data sources often suffer from other limitations that make them difficult to use for analytical purposes.[2]

However, a partnership between the Bureau of Labor Statistics and the Johns Hopkins Center for Civil Society Studies[3] created a way to use an existing source of data for tracking employment in the nonprofit sector: the Quarterly Census of Employment and Wages program (QCEW).[4] Data from the QCEW are regularly collected by State workforce agencies as part of the Federal-State cooperative statistical system.

Managed by State Labor Market Information offices under the watchful eye of BLS, the QCEW offers enormous advantages for analysts and others who need to gauge the economic status and evolution of the nonprofit sector. One advantage of this arrangement is that data are timely: reports are collected on a monthly basis from employers and published quarterly, usually within 6 to 7 months of their collection. Beyond this, data are collected at the establishment level and available, except for disclosure limitations, at a fine-grained geographic level, making it possible to track geographic shifts. Another advantage is that the QCEW covers the bulk of nonprofit employment and does so within a data system that also covers for-profit and government employment, facilitating cross-sector comparisons.[5]

Despite its considerable advantages, however, the QCEW data source has long had a major

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limitation as a source of insight into nonprofit employment: it does not routinely carry an identifier that would make it possible to determine which establishments are tax-exempt, nonprofit organizations. Nonprofit employment is therefore reported as part of a larger aggregate category, total nonfarm private sector employment.

The purpose of this article is to describe an effort, which is under way with the assistance of BLS, to separate out the nonprofit employment within the QCEW data and analyze it. Specifically, the article first explains why employment is such a useful prism through which to view the nonprofit sector, then describes the procedure being used to identify the nonprofit firms in the QCEW data, and finally reports on some of the principal findings that have emerged so far from the application of this procedure.

Why focus on nonprofit employment?

Employment is, in many respects, a curious dimension of nonprofit operations on which to focus. After all, one of the distinguishing features of nonprofit institutions is their reliance on voluntary, as opposed to paid, employment. Indeed, in some parts of the world, nonprofit organizations are referred to as "voluntary organizations" to emphasize this facet of their operations.[6]

Despite this, employment turns out to be one of the most reliable and useful facets to capture nonprofit operations in empirical terms. This is so for two basic reasons. First, employment measures are more readily available, and typically more reliable, than most other measures of nonprofit activity. Data on the number of nonprofit organizations, for example, are notoriously imprecise because registration systems are grossly imperfect and rarely updated to reflect organizational births and deaths. By contrast, employment data are collected regularly as part of basic government economic data-gathering and are used for administrative purposes as well as for monitoring general economic trends. Considerable investment is therefore put into ensuring their timeliness and accuracy. What is more, employment data sources typically cover more than nonprofit establishments, making it possible to draw useful comparisons across sectors and gauge patterns of nonprofit/for-profit competition, both overall and by field.

The second reason that employment data are preferable is that despite the voluntary character of much nonprofit action, employment is a particularly suitable indicator of nonprofit activity. For one thing, nonprofit organizations tend to concentrate in labor-intensive, rather than capital-intensive, fields—for example social services, day care, nursing home care, education, the arts, and health care. The amount of labor utilized is thus a particularly good indicator of the scope of nonprofit activity. In addition, the value of labor inputs is a good proxy for the "value added" by nonprofit organizations and an important variable in economic analysis. This is so because nonprofits do not earn a profit. Consequently, there is no need to net out "intermediate consumption" and derive separate estimates of profit and labor inputs when computing the value added by nonprofit organizations. To be sure, the fact that nonprofit workers may accept below-market earnings and that nonprofit firms make use of volunteer labor, which may not show up in employment data, makes it likely that labor costs by themselves may understate the value added by nonprofit organizations. However, there are ways to correct for these underestimates (for example, by using industrywide averages to compute the real value of nonprofit employment, and by making separate estimates of the quantity and value of volunteer labor that these organizations utilize). Finally, employment data have considerable utility in building up estimates of other dimensions of nonprofit activity. Thus, by computing average industrywide ratios of total expenditures to labor inputs for the industries in which nonprofits are engaged, it is possible to estimate the expenditures of nonprofits from the available information on nonprofit employment. In this way, employment estimates can be used to derive expenditure estimates.

Untapping the potential of QCEW

Although employment data offer enormous advantages for understanding the scope, structure, and dynamics of the nonprofit sector, the available sources of such data have significant limitations.[7] Few of these sources separate nonprofit places of employment from other private establishments. This is the case, for example, with the Census Bureau's annual County Business Patterns surveys. The Census Bureau's economic census and its population census do differentiate nonprofit from for-profit employment, but both of these sources have other limitations. The economic census is conducted only every 5 years, and it takes the Census Bureau 2 or 3 years to process the data, limiting the timeliness of this source. What is more, as noted earlier, the coverage of this census has been narrowed in recent years, so that significant portions of the nonprofit sector are no longer covered. The population census and the Current Population Survey have slightly different drawbacks: both of them depend on worker self-identification of the profit or nonprofit character of their workplaces, and experience shows that these self-identifications are questionable.[8]

Researchers at the Johns Hopkins Center for Civil Society Studies discovered a way out of this dilemma. In cooperation with the Bureau of Labor Statistics, the Johns Hopkins Center applied a methodology that used QCEW data as a source to identify nonprofit employment statistics. The initial breakthrough resulted from examining nonprofit employment patterns in Maryland. Conversations with officials in the Maryland Labor Market Information Office revealed that Maryland had been assigning a discrete set of internal identification numbers to

tax-exempt establishments on its QCEW register for years, and that these identification numbers were geared to the Internal Revenue Code section under which the organizations secured their Federal tax exemption. It was thus relatively easy for Maryland labor market officials to generate a separate report on the tax-exempt establishments in the State, covering all the variables in the QCEW system—number of establishments, number of employees, total wages, principal activity, and geographic location—and to do so within months of the collection of the data, rather than the years required to access data from the economic census. Within the constraints of the disclosure limitations that apply to the QCEW system, this opened the door to an enormous treasure trove of insights into nonprofit employment trends, spatial changes in nonprofit activity, nonprofit/for-profit competition, and relative nonprofit/for-profit wage patterns in the State of Maryland.

Subsequent investigation revealed that few other States had adopted the system of discrete identifiers for tax-exempt firms utilized by Maryland, but once the lid had been opened on the QCEW data as a source of rich and timely insights into nonprofit employment dynamics, we were able to formulate several other methods for "flagging" tax-exempt firms, or subsets of them, in the QCEW data sets—first at the State level in a targeted set of States, and ultimately at the national level through a cooperative agreement with BLS and the concurrence of the State Labor Market Information offices. The most comprehensive of these methods has involved matching employer identification numbers on the QCEW files with those on the exempt organization master file, maintained by the Internal Revenue Service. Though not without its limitations, this method has made it possible to identify tax-exempt firms in the QCEW data sets supplied to BLS by individual States and to generate aggregate data on them over time. The result is an enormous breakthrough in the availability of timely data on the economic activity of nonprofit organizations and some important new discoveries that challenge a variety of conventional beliefs about this set of organizations. With the help of BLS, the Johns Hopkins Nonprofit Employment Data Project has been taking advantage of this breakthrough to examine these data. In the balance of this article, we report some of our early discoveries.

Initial findings

Scope. To date, work on the QCEW data source by the Johns Hopkins project at BLS has focused on generating national estimates of employment and average wages of nonprofit 501(c)(3) charitable organizations, overall and by field of activity, as of 2002; and on tracing changes in nonprofit employment between 1995 and 2003, overall and by field, for an initial subset of States.[9] Because data were not made available on five States (New York, Massachusetts, Colorado, Nebraska, and Wyoming), the national figures reported here are based on estimates for these States.[10]

Industry and location. Perhaps the central conclusion to emerge from the QCEW data is the sheer scale of the nonprofit sector in the United States, even when measured solely in terms of paid employment. The 195,145 charitable nonprofit organizations identified in the QCEW data files employed 8,789,300 people as of 2002, or 8.2 percent of the country's private employment. As shown in chart 1, this means that nonprofit organizations (at 8.8 million employees) employ nearly three times as many workers as the country's entire agriculture sector, twice as many workers as the country's transportation industry, 60 percent more workers than the Nation's wholesale trade industry and its finance and insurance industry, and nearly as many workers as are those employed in durable goods manufacturing.

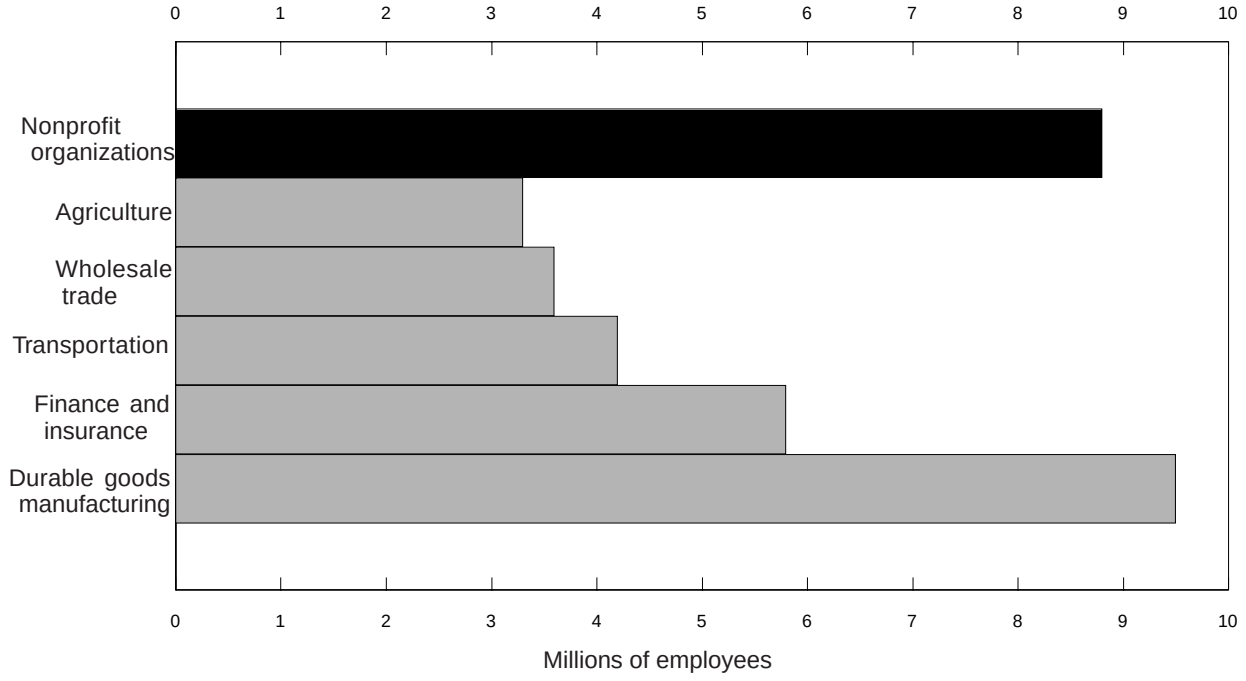
Nonprofit employment is particularly dense in the northeastern part of the country, reaching 13 percent of all private employment in the New England States and 12.2 percent in the mid-Atlantic region. (See chart 2.) By contrast, nonprofit employment accounts for 5.4 percent of total private employment in the West South Central region, 6.2 percent in the Pacific region, and 6.3 percent in both the East South Central region and the Mountain region.

Not only is the nonprofit sector a major employer in many different States, but nonprofit employment is also present in virtually all parts of these States. In California, for example, nonprofit employment is relatively more extensive in the rural areas than it is in the metropolitan ones (6.6 percent of total private employment in rural, versus 5.4 percent in metropolitan areas). In Maryland, nonprofits account for 28 percent of total private employment in Baltimore City, but also account for 8.5 percent in the Baltimore suburbs and 10 percent in the rural Eastern Shore.

Occupational composition. More than half (52.4 percent) of nonprofit employment is in the health field; of that, 38 percent is in hospitals and the balance is in nursing homes, residential care, and clinics. Another 20 percent of nonprofit employment is in social services (for example, individual and family services, child day care, and job training). Of the remainder, 15 percent is in education, and the balance is split among membership organizations, culture and recreation, and assorted other activities. (See chart 3.)

Job growth. Not only is the nonprofit sector a sizable presence in the Nation's economy, but also it appears to be a growing presence, both absolutely and relatively. As shown in table 1, between 1995 and 2003, nonprofit employment increased by an average of nearly 30 percent in the five jurisdictions for which we currently have time-series data (Maryland, the District of Columbia, North Carolina, Pennsylvania, and Virginia). By comparison, total private employment in these same areas increased by 11 percent, or slightly more than one-third as

Chart 1. Employment in nonprofit organizations and selected industries, 2002



NOTE: The nonprofit labor force is employed in 501(c)(3) organizations.

SOURCE: Statistical Abstracts of the United States, 2002.

Chart 2. Nonprofit share of private employment by census region, 2002

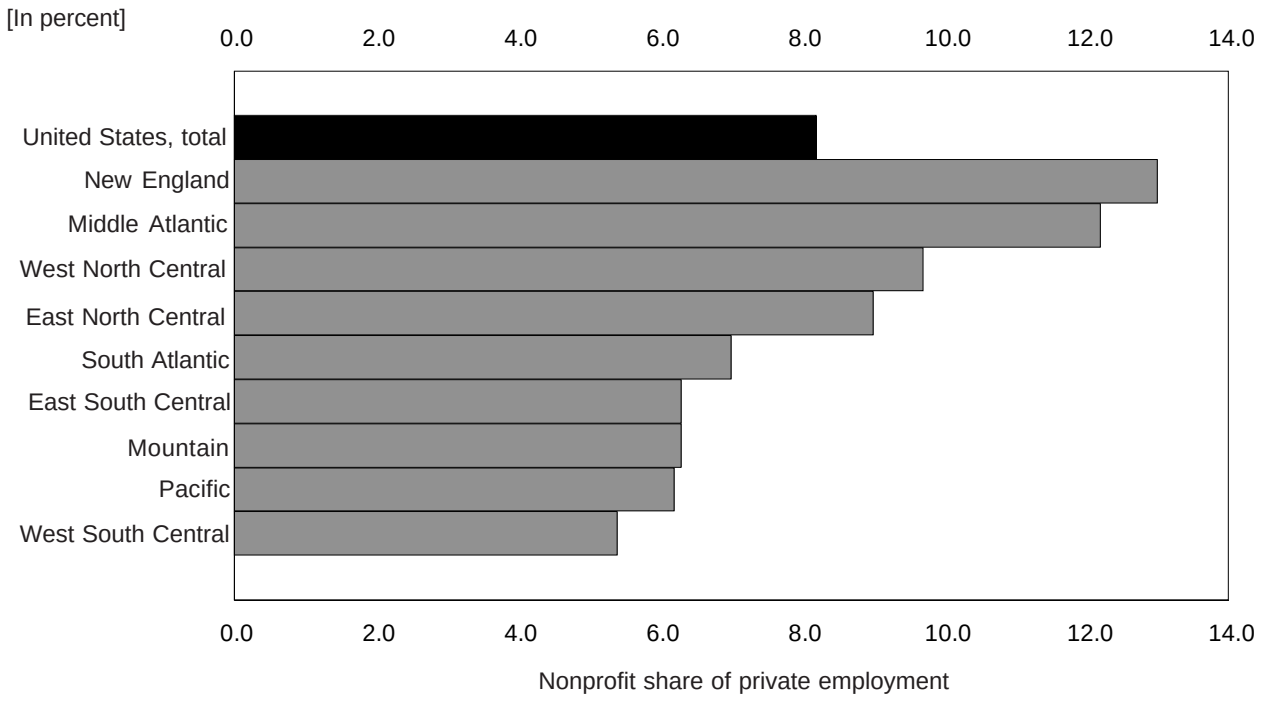
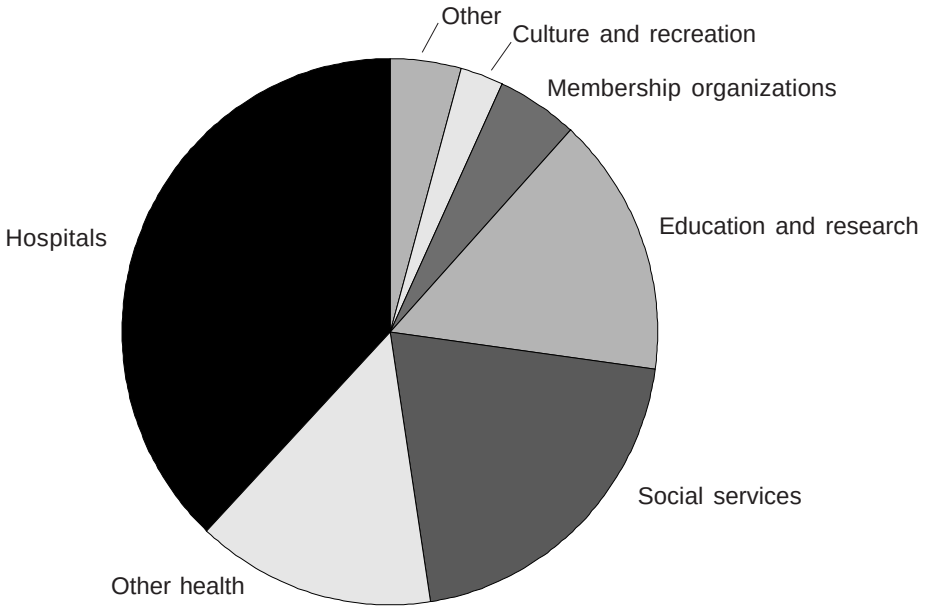


Chart 3. Distribution of nonprofit employment by field, 2002



much. Put somewhat differently, although nonprofit organizations started the 1995–2003 period with only 11 percent of total private employment on average in these five jurisdictions, they accounted for a disproportionate average of 29 percent of the net job growth.

Suburbanization. As a general rule, nonprofit employment has tended to be concentrated in urban areas. Thirty-eight percent of nonprofit employment in the State of Maryland was located in Baltimore City as of 1995, where it accounted for 22 percent of total private employment. Similarly, 40 percent of nonprofit employment in Pennsylvania as of 1995 was in the two major urban areas, Pittsburgh and Philadelphia, where nonprofits accounted for 13 percent of total private employment in Pittsburgh and 23 percent of total employment in Philadelphia.

But the concentration of nonprofit employment in urban centers is changing. Like the population generally, nonprofit employment is growing rapidly in suburban areas. As shown in table 2, nonprofit employment grew at a much more rapid rate in the suburban jurisdictions (for which we have time-series data) than it did in the urban core. For example, in Maryland, nonprofit employment grew by 21 percent in Baltimore City between 1995 and 2003, but it grew by nearly 37 percent in the outlying suburbs. As a consequence, Baltimore City's share of total nonprofit employment in the State declined from 38 percent in 1995 to 36 percent in 2003.

A similar phenomenon is apparent in Pennsylvania, Virginia, and the Washington, DC area. For example, nonprofit employment grew by 17 percent in the city of Philadelphia, compared with 35 percent in the Philadelphia suburbs. In Richmond, VA, nonprofit employment declined by 11 percent between 1995 and 2003, but in the surrounding counties it grew by 85 percent. The case of Pittsburgh appears to deviate from this general pattern, but this is probably because the central city county contains a significant portion of the city's suburban ring.

What these data might suggest is that the nonprofit sector is hardly immune to the pressures of the market. With public sector spending under tight conditions and charitable giving unable to fill the gap, nonprofit institutions have turned increasingly to fees and charges to finance their activities. This requires, however, that they market their services, at least in part, to paying customers, and these customers have moved increasingly to the suburbs. Hence, nonprofits have had no choice but to follow the money.

The dynamics of nonprofit employment shifts are thrown into even sharper relief when we compare them with overall private employment, as is done in table 3. Two key conclusions

Table 1. Changes in nonprofit and private employment in selected jurisdictions, 1995–2003

[In percent]

Jurisdiction	Employment growth, 1995–2003		Nonprofits as percent of—	
	Nonprofit	All private	Total private employment, 1995	Private growth, 1995–2003
Five-region average	29.7	11.2	10.9	29.2
District of Columbia	28.0	11.0	21.2	53.8
Maryland	29.5	14.1	9.8	20.4
North Carolina	35.4	7.5	5.4	25.8
Pennsylvania	24.9	8.9	11.6	32.4
Virginia	30.5	14.5	6.4	13.6

NOTE: The nonprofit labor force is employed in 501(c) (3) organizations.

flow from this table. First, nonprofit job growth in the suburbs has not only been faster than that in the cities, but it has also been faster than private job growth generally in the suburbs. In the five urban areas for which we have data, overall private job growth averaged 19 percent between 1995 and 2003, but nonprofit job growth was more than twice as great (42.7), and this basic relationship held for all five jurisdictions.

Although nonprofit job growth was faster in the suburbs, it also continued in the cities. In fact, the nonprofit sector was virtually the only source of net employment growth in these core cities between 1995 and 2003, boosting its employment by 16 percent on average, compared with virtually no growth in overall private employment. Despite its shift to the suburbs, therefore, the nonprofit sector has thus remained one of the few reliable lifelines for central city job markets.

Nonprofit versus for-profit wage rates

A final revealing finding to emerge from our scrutiny of the QCEW data is that nonprofit wages, although generally lower than those of for-profit enterprises or government, actually equal or exceed for-profit wage rates in the industries in which both sectors are involved. This runs counter to conventional wisdom in the nonprofit field, which has suggested that nonprofits pay lower wages than for-profit establishments. The conventional wisdom has focused, however, on sectoral aggregates rather than on the particular industries in which nonprofits are most heavily involved.

Across the country, weekly wages for nonprofit establishments averaged $603 as of 2002. (See chart 4.) By comparison, the average weekly wages of for-profit firms were $670, or 11 percent higher; the average for Federal Government employees was $996, or 65 percent higher; the average for State government employees was $736, or 22 percent higher; and the average for local government employees was $668, or more than 10 percent higher.

Thanks to the detail available through the QCEW data set, however, it is possible to drill deeper and look at comparative wages in the actual industries in which both nonprofits and for-profits are actively engaged. When this is done, a far different picture emerges: nonprofit wages are often on a par with, or significantly ahead of, the wages of for-profit firms. Thus, for hospitals and nursing homes, average nonprofit weekly wages are virtually identical with the average wages of for-profit hospitals and nursing homes. And for education, social services, residential care, and day care, nonprofit wages actually exceed the for-profit wages of their counterparts, often by a substantial margin (for example, by 30 percent in the case of day care and 18 percent in the case of residential care). What this suggests is that the apparent disadvantage of nonprofit wages is more an industry phenomenon, reflecting the fields in which nonprofits are active, than it is a sector phenomenon, reflecting the human resource policies of nonprofit agencies. To the contrary, it

Table 2. Changes in nonprofit employment, urban versus suburban areas in selected jurisdictions, 1995–2003

Area	Percent of total 1995	Percent change 1995–2003	Percent of total 2003
Maryland			
Baltimore city	38.4	21.1	35.9
Baltimore suburbs	23.2	36.5	24.5
Washington, D.C. area	...	33.2	...
District of Columbia	48.7	28.0	46.8
Maryland suburbs	26.3	32.0	26.1
Virginia suburbs	25.1	44.4	27.2
Pennsylvania			
Philadelphia	24.2	16.9	22.6
Philadelphia suburbs	14.8	34.7	16.0
Pittsburgh (Allegheny)	15.5	27.0	15.8
Pittsburgh suburbs	5.7	23.7	5.7
Virginia			
Richmond	7.2	–11.4	4.9
Richmond suburbs	4.2	85.0	5.9

NOTE: The nonprofit labor force is employed in 501(c) (3) organizations.

Table 3. Change in nonprofit and total private employment, urban versus surburban areas in selected jurisdictions, 1995–2003

Area	Percent change 1995–2003	
	Nonprofit	All private
All city average	16.3	.4
All suburb average	42.7	19.9
Maryland	29.5	14.1
Baltimore city	21.1	–4.0
Baltimore suburbs	36.5	19.7
Washington, D.C. area	31.3	17.3
District of Columbia	28.0	11.0
Maryland suburbs	32.0	18.1
Virginia suburbs	44.4	28.0
Pennsylvania	24.9	8.9
Philadelphia	16.9	1.5
Philadelphia suburbs	34.7	14.3
Pittsburgh (Allegheny)	27.0	3.3
Pittsburgh suburbs	23.7	10.0
Virginia	30.5	14.5
Richmond	–11.4	–9.6
Richmond suburbs	85.0	23.0

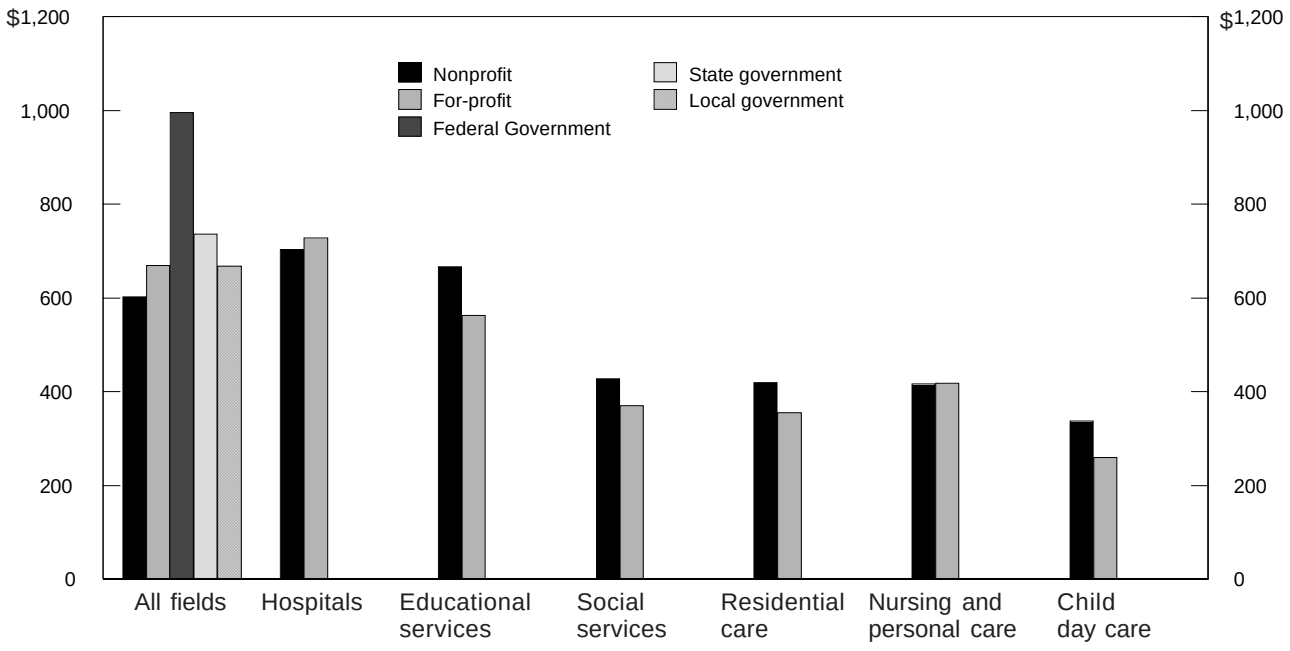
NOTE: The nonprofit labor force is employed in 501(c) (3) organizations.

appears that nonprofits are more generous employers in the fields in which they operate and one of the reasons for-profit establishments may be able to operate at a profit in these fields is that compensation levels are below the already low nonprofit levels.

THE QCEW DATA SET holds enormous promise as a source of timely information about the private, nonprofit sector, which plays such a vital role in the United States.[11] It is imperative to have such a data source through which to systematically monitor developing trends and spot emerging challenges.

The findings reported here hardly exhaust the potentials of the QCEW to monitor the economic health and changing fortunes of nonprofit organizations. But they do suggest the potentials that are available. QCEW data could be the vehicle through which to monitor the changing economic position of the Nation's nonprofit organizations in a timely and systematic fashion. In addition, collaboration between BLS and the State Labor Market Information Offices has facilitated access to the QCEW, and results from this relationship could provide vital resources for policymakers and nonprofit managers alike. Perhaps, this resource can become even more readily and regularly available in the years ahead. □

Chart 4. Nonprofit versus for-profit and government average weekly wages, overall and in major fields of nonprofit activity, 2002



Notes

ACKNOWLEDGMENT: This research was conducted onsite at the Bureau of Labor Statistics, with restricted access to its data. The views expressed in this article are those of the authors and do not necessarily reflect the views of BLS.

[1] U.S. Census Bureau, 2002 Economic Census, "Educational Services," on the Internet at **http://www.census.gov/econ/census02/guide**.

[2] One limitation of the Form 990 data, for example, is that they are organization-based rather than establishment-based. This means that all the economic activity of the organization is assigned to the headquarters location, even though nonprofit organizations often maintain numerous establishments spread across States, regions, and metropolitan areas.

[3] Authors, Lester M. Salamon is director, and S. Wojciech Sokolowski is the principal research analyst of the Johns Hopkins Nonprofit Employment Data Project.

[4] The QCEW data series is the most complete universe of monthly employment and quarterly wage information by industry, county, and State. The series have broad economic significance in evaluating labor trends and major industry developments in time series analyses and industry comparisons, and in special studies such as analyses of wages by size of establishment. For more information about the QCEW data series, access the BLS Web page on the Internet: **http://www.bls.gov/opub/hom/homch5_e.htm**.

[5] As with other official data sources, religious congregations are not required to participate in the QCEW system and States are not obliged to cover nonprofit firms with four or fewer employees, though a significant number of States have extended coverage to nonprofit organizations with at least one employee, which is the cut-off for for-profit businesses; and many religious congregations choose to participate in the QCEW process.

[6] J. Kendall and M. Knapp, "The Voluntary Sector in the U.K.," in Lester M. Salamon and Helmut K. Anheier, eds., *Johns Hopkins Comparative Nonprofit Sector Series* (Manchester, U.K., Manchester University Press, 1996).

[7] See Lester M. Salamon and S. Dewees, "In Search of the Nonprofit Sector: Improving the State of the Art," *American Behavioral Scientist*, July 2002, pp. 1724–34.

[8] In 1998, for example, the Current Population Survey reported 6,856,290 workers employed in tax-exempt organizations in the United States, compared with 8,563,199 reported in the 1997 Economic Census, even though the economic census excluded institutions of higher education and places of religious worship.

[9] Organizations that are exempt from taxation under Section 501(c)(3) of the Internal Revenue Code form the core of the charitable portion of the nonprofit sector. These organizations are not only tax-exempt, but also are the only ones eligible to receive tax deductible gifts from citizens, corporations, and foundations. Included are hospitals, schools, social service agencies, cultural institutions, civic organizations, and many more.

[10] Nonprofit employment estimates were derived for the States with unavailable data by applying to total private employment an estimate of the nonprofit share of private employment. For Colorado, Nebraska, and Wyoming, the national average nonprofit share of private employment was used. Because of the distinct pattern of nonprofit activity in the northeast, the ratio applied to New York and Massachusetts was that for the Northeast States on which data were available. Given New York's reputation as a center for nonprofit activity, this technique probably yields a conservative estimate of the scale of national nonprofit employment.

[11] For a discussion of the extraordinary pressures under which nonprofit organizations are having to operate, see Lester M. Salamon, *The Resilient Sector: The State of Nonprofit America* (Washington, DC, The Brookings Institution Press, 2003).

Model-based seasonally adjusted estimates and sampling error

Estimating certain CPS series with a model that filters out sampling error may reduce volatility in the time series, facilitating more meaningful trend analysis

Richard Tiller
and
Marisa Di Natale

The Current Population Survey (CPS) is the source of the Nation's official estimates of total employment and unemployment. The CPS is a nationally representative, scientifically selected monthly sample survey of approximately 60,000 households. The survey yields data that are rich in demographic detail, including such characteristics as age, sex, race, and Hispanic or Latino ethnicity. Estimates from the survey are published monthly in the BLS news release *Employment Situation* and in the BLS publication *Employment and Earnings*.

In order to make the time-series data collected from the CPS more useful to analysts and policymakers, the monthly data from the survey are adjusted for seasonal fluctuations. As is well known, the purpose of seasonally adjusting a series is to remove seasonal fluctuations in the data so that users can more easily observe fundamental changes in the level or trend of the series that are associated with business cycle contractions and expansions. Approximately 116 time series from the CPS are directly seasonally adjusted, and many more are indirectly seasonally adjusted, as sums or ratios of the original 116.

There is, however, a source of spurious random fluctuations in the CPS data that arises because the CPS samples only a fraction—1 in 2,200, on average, of the working-age population each month: *sampling error*—the difference between the survey estimates and the values that would be produced by a complete census of the population.

Simultaneously removing both seasonality in the data and noise due to sampling error can prove quite challenging. The monthly estimates produced for the national aggregated series, such as total employment and total unemployment, are highly reliable relative to smaller, disaggregated series. Many of the more detailed demographic series, such as employment and unemployment for blacks, are based on relatively small sample sizes, so that survey error dominates movements in the underlying level of the series. The standard error for a (not seasonally adjusted) month-to-month change based on the CPS can be quite high for some of these series. For example, the standard error for a change in the unemployment rate of adult black males can be as large as 0.8 to 0.9 percentage point, compared with 0.2 percentage point for the unemployment rate for all persons aged 16 years and older. As a result, drawing meaningful conclusions about trends or month-to-month changes is difficult, even after the data have been adjusted for seasonal movements.

As an alternative to conventional seasonal adjustment, the study reported in this article applies an experimental model-based method to selected CPS demographic series. The method is designed to remove the effects of sampling error, as well as those of seasonality, from the series, thereby making it easier to discern underlying trends in the data.

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Approaches to seasonal adjustment

The presence of large survey errors in the detailed CPS series represents a major challenge to conventional methods of seasonal adjustment. Currently,

the Bureau of Labor Statistics uses a seasonal adjustment program called X-12-ARIMA to seasonally adjust its CPS series. This program is based on the empirical moving-average approach to seasonal adjustment.

An alternative that is gaining increasing attention is the *model-based* approach to seasonal adjustment. A comparison of the two approaches suggests that the model-based approach provides much-needed flexibility in controlling for the effects of sampling error. Such flexibility is not possible with the conventional moving-average approach.

Conventional approaches to seasonal adjustment are based on the classical decomposition of a time series, which assumes that the series is composed of trend (or trend-cycle), seasonal, and irregular components, in either an additive or a multiplicative relationship. The first two components respectively account for the long- and short-run systematic variation in the series. The irregular component is a residual, usually assumed to be purely random variation with a fixed variance.

Because the three components of the classical decomposition are not directly observable, they must be estimated in order to perform seasonal adjustment. The moving-average method uses weighted moving averages of the original data over a period of many years to produce a smooth trend and a seasonal pattern. The estimated trend and seasonal components are removed from the series, and the residual is the irregular component. This approach makes no attempt to define, in any formal statistical way, what is being estimated, but rather applies a series of moving averages directly to a series. While some of the moving averages are chosen to satisfy a mathematical smoothness criterion, the method was derived largely from empirical work with a wide range of series.

By far the most successful application based on the moving-average approach is the X-11 program,[1] which has gone through several major revisions. The latest, enhanced version is X-12-ARIMA.[2] The original X-11 program, however, remains at the core of X-12.

As an alternative to the moving-average approach, model-based seasonal adjustment has been gaining increased attention. The model-based approach specifies explicit statistical models of the trend, seasonal, and irregular components of the classical decomposition.[3] To seasonally adjust the data, weighted moving averages of the observed data actually are used in the model-based approach, but with the important difference that they are derived directly from the model. An essential characteristic of the approach is its use of standard statistical procedures to estimate the unobserved components of the time series and to provide associated statistical measures such as confidence intervals and significance tests.

There is a large body of literature on the comparative properties of the two approaches.[4] Each has its supporters and critics. The major concerns with the model-based approach are that it may be difficult to develop good models for some series and that the model may fail occasionally when new data become available. These concerns raise issues about the robustness of the adjustment and the associated statistical measures.

One major criticism of the moving-average approach is that it lacks standard statistical measures. The absence of standard errors for published seasonally adjusted data tends to promote the mistaken impression that the final seasonally adjusted values are exact rather than estimates. Moreover, the lack of confidence intervals makes analysis of change in the estimates and the location of turning points more difficult. Still, supporters of the method argue that it is robust and nonparametric; thus, its lack of an explicit statistical model is viewed as an advantage. Even so, the absence of statistical measures of reliability remains a major shortcoming.[5]

The model-based approach makes (testable) assumptions about the underlying probability distribution generating the data. Along with estimates of the model parameters, these assumptions provide the means for constructing confidence intervals and other statistical measures to quantify the uncertainty in the estimates. Non-model-based estimates do not, in general, afford a basis for producing measures of uncertainty in the estimates.

Another criticism of the moving-average approach is that it is not tailored to the specific properties of the series being adjusted.[6] In contrast, the model-based approach develops a model on the basis of goodness-of-fit diagnostics. The resulting seasonal adjustment is based on the properties of the series as represented by the model. In theory, under the assumptions of the model, the seasonal adjustment is "optimal" for the specific series. While the moving-average method can make no such theoretical claim, its moving averages were originally selected because they work well for a very large number of series. This more generic approach continues to work well in practice and may have an advantage over the model-based approach when good models for seasonal adjustment cannot be developed.

Clearly, both approaches to seasonal adjustment have their merits and limitations. Indeed, there have been a number of studies of the relative performance of the two approaches, but no general agreement as to how to interpret the results. Perhaps a more balanced approach is to treat them as complementary tools for performing seasonal adjustment.[7]

Dealing with "noisy" CPS data series

The types of data series that are the focus of the study discussed in this article—survey series with large sampling errors—represent a class of series that presents special problems for the moving-average approach to seasonal

adjustment. For these series, that approach (specifically, the X-12 program) performs poorly, not because it has trouble removing seasonality from the series, but because it cannot adequately remove the effects of sampling error. The result is a seasonally adjusted series that often is dominated by sampling error, masking the underlying trend in the series. This occurs because the moving averages are not tailored to the specific properties of survey series with sampling errors. What is implicitly assumed in applying these moving averages to survey data is that sampling error can be adequately treated as part of the conventional irregular component, which, conceptually, is a purely random series with a fixed variance. The design of the survey, however, determines the properties of the sampling errors, which may deviate in important ways from typical irregular behavior. Moreover, for well-designed probability samples, the characteristics of the sampling errors are known, or at least, good estimates of them can be obtained.

For the CPS, the standard errors provided along with the point estimates from the survey routinely yield information on the magnitude of the sampling errors. These standard errors, however, are not constant and vary substantially over time for some series, due to fluctuations in labor force levels, redesigns of the survey, and changes in the sample size. Another important characteristic of the CPS that is relevant to seasonal adjustment is its panel structure, which generates strong correlations of the sampling errors with their past values. The CPS has a rotating panel whereby three-fourths of the households are carried over from the previous sample each month and one-half are carried over from the previous year.[8]

These characteristics represent a serious challenge to conventional approaches to seasonal adjustment. First, the relatively large and changing magnitude of the survey error will directly distort estimates of the trend and seasonal components. In addition, because the survey error is correlated, the moving-average approach treats the induced correlations as if they were related to the trend. Consequently, too much of the sampling error is absorbed into the estimated trend and, to some extent, into the estimated seasonal component, and not enough goes to the irregular component.

The standard model-based approach will do no better than the moving-average approach, because it also is based on the classical time-series decomposition, which ignores survey error as an important source of variation. The model-based approach, however, has flexibility, which is not available with the moving-average approach. As mentioned earlier, the latter, by virtue of its nonparametric structure, is a more generic approach to seasonal adjustment, whereas the model-based approach can be tailored to the idiosyncratic properties of a particular series. From the model-based perspective, survey error is just another unobserved component of the time series for which a separate model can be specified, as is done with the trend, seasonal, and irregular components of the series. Then there is the further advantage, in modeling survey error, of having external information from the survey on the standard errors and correlations. This information can be directly used to specify the parameters of the model. Of course, measures of the survey error characteristics, such as standard errors and autocorrelations, are estimates which are themselves subject to errors that can adversely affect the decomposition. For example, overestimates of the variances could lead to "oversmoothing" the series. Still, given good estimates of the survey error properties, a rather precise and objective identification of the effects of survey error is possible, resulting in a much cleaner separation of the estimated trend and seasonal components from the survey series than can be achieved by the moving-average approach.

As described in the appendix to this article, research has been conducted that uses a time-series model to seasonally adjust some of the more volatile CPS series. For example, model estimates have been produced for blacks 16 years and older, for adult black men and women, and for black male and female teens. The model producing these estimates has two submodels as components: a "signal" model, which models the true value of the specific demographic group; and a "noise" model, which models the survey error associated with that series. This model-based approach filters out the survey error and the seasonal component of the series, allowing the trend to be more cleanly separated from the error. Using estimates from the model instead of from X-12 results in smaller standard errors of the estimates and smoother seasonally adjusted series. This type of model estimation has been widely investigated in the context of "small-area" estimation and has been used in the BLS Local Area Unemployment Statistics program for more than 15 years to estimate employment and unemployment for States and selected metropolitan areas.[9]

Historical model-based estimates

There are two ways of processing time-series data to produce model-based estimates. One, called the "forward filter," processes each observation as it first becomes available in real time. Filtering is similar to the "concurrent" seasonal adjustment method used to seasonally adjust new CPS data series as they become available each month.[10] The most recent value of the time series is "filtered" by using all the available data up to and including the latest month. Prior months' estimates are not revised as new data become available.

The second approach to processing the data, called "smoothing," incorporates data before and after a particular

observation. All the data are processed in batch mode, rather than one observation at a time. During the smoothing process, estimates derived from filtering at each point in time are revised to reflect information in all of the data. This approach creates a much smoother seasonally adjusted series than does filtering, although it does require revision of the entire time series. (See the appendix for further discussion of smoothing and filtering.)

Counterparts of smoothing and filtering also exist within the conventional moving-average approach. For X-12, the smoothest estimates are produced by symmetric moving averages, which use an equal number of observations before and after the time point being adjusted. Toward the end of the series, where there are fewer observations after that point, less desirable asymmetric moving averages must be used. When the X-12 program is executed to seasonally adjust the most recent observation, the result is referred to as the *concurrent estimate*, which is the counterpart of the model's filtered estimate.

Charts 1 and 2 compare smoothed model-based and X-12 seasonally adjusted unemployment rates and employment levels from January 1999 through December 2003 for blacks aged 16 and older.[11] Chart 2 also includes the X-12 trend series, discussed later. The X-12 seasonally adjusted series are published each month in the BLS *Employment Situation* news release. The graphs show that the model estimates create smoother seasonally adjusted lines or trend lines for both series than do the corresponding X-12 seasonally adjusted series.

The conventional time-series decomposition represents the observed series as being composed of trend, seasonal, and irregular components. The seasonally adjusted series consists of the trend and irregular components and thus is generally less smooth than the trend. For the series modeled, the distinction between the seasonally adjusted series and the trend series is not important: once the estimated survey error is removed from the series, very little residual irregular component is left. The model-based seasonally adjusted series, therefore, is virtually identical to the trend component. For X-12, the irregular component is relatively large; thus, its seasonally adjusted series is noticeably less smooth than its trend.

One advantage of the modeled estimates is evident from the graphs: peaks and troughs in these series are more easily identifiable, which is not the case with the X-12 seasonally adjusted series. This makes identifying labor market turning points for specific demographic groups easier. For instance, in the black employment- and unemployment-rate series in charts 1 and 2, the turning point clearly occurred in mid-2000.

X-12's trend estimates, shown in chart 2, clearly involve

Chart 1. Unemployment rates, blacks aged 16 years and older, seasonally adjusted, 1999–2003

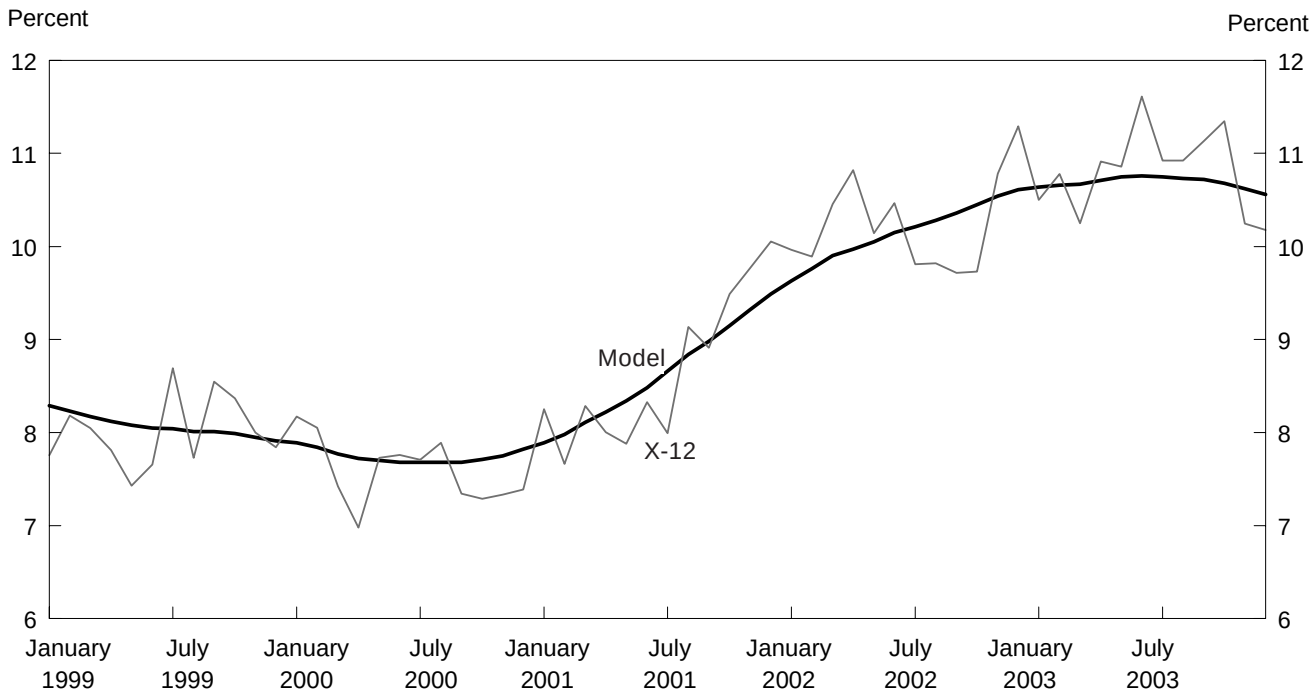


Chart 2. Employment levels, blacks aged 16 years and older, seasonally adjusted, 1999–2003

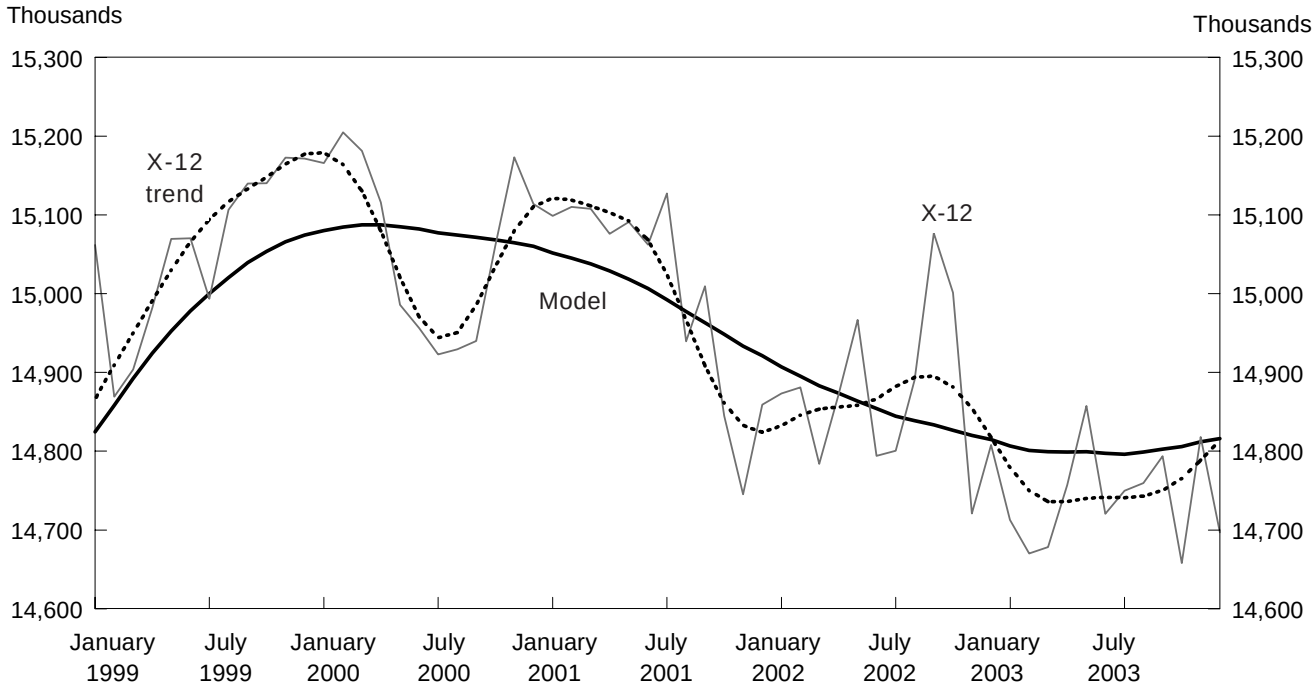
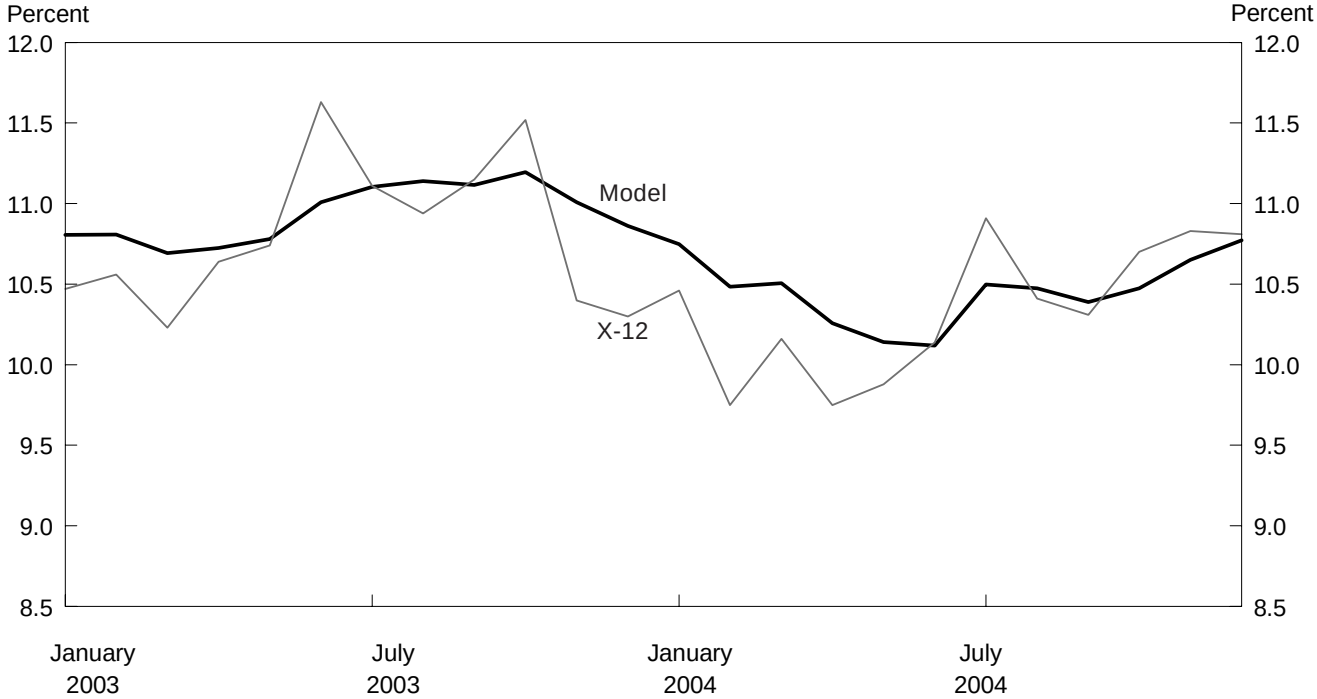


Chart 3. Unemployment rates, blacks aged 16 years and older, concurrent, seasonally adjusted, 2003–04



further smoothing of the seasonally adjusted series, but this does not help identify real turning points. Due to the effects of the survey, the X-12 trend series displays spurious oscillations around the model-based trend series. These oscillations could be misinterpreted as real turning points.

Real-time current-year estimates

Because the smoothed estimates use data from the entire sample (January 1976–December 2004), they do not correspond to the estimates that would have been available in 2004 to data users in real time. As mentioned in the previous section, the latest monthly estimate in a modeled series is a filtered estimate that incorporates prior months' data, as well as data for the current month. Filtered estimates are not as smooth as the "smoothed" series, because filtering cannot incorporate data from the future, nor does it incorporate the latest information into past months' estimates. As a result, the month-to-month changes in the filtered estimates are much more volatile than the smoothed estimates, but still are smoother than the X-12 estimates.

Charts 3 through 5 show forward-filter estimates of the black unemployment rate and employment level, and of the unemployment level for adult black women, for January 2003 through December 2004. In chart 3, it is clear why the modeled data may be preferable to the X-12 estimates. The X-12 series shows two rather large spikes in black unemployment in June and October 2003. The June spike appears to be the larger of the two. In contrast, the model series shows, not the June spike, but rather a small, statistically insignificant rise, followed by a flattening out of the rate and a slower decline from October 2003. The model suggests that the rate peaked at around 11.0 percentage points during the summer and early fall of 2003, whereas X-12 gives a more confusing picture. The employment level for blacks is shown in chart 4. The modeled data indicate that the employment level bottomed out around August 2003, whereas the X-12 series depicts the lowest level of employment for this group during the first quarter of the year. In chart 5, the unemployment level of adult black women is shown. Although in both the modeled series and the X-12 series, the unemployment levels wind up being roughly the same at the beginning and end of the period shown, the modeled series is clearly less volatile over the year.

An important feature of the model-based approach, as emphasized in the previous section, is that it provides estimates of the standard errors for the point estimates,

Chart 4. Employment levels, blacks aged 16 years and older, concurrent, seasonally adjusted, 2003–04

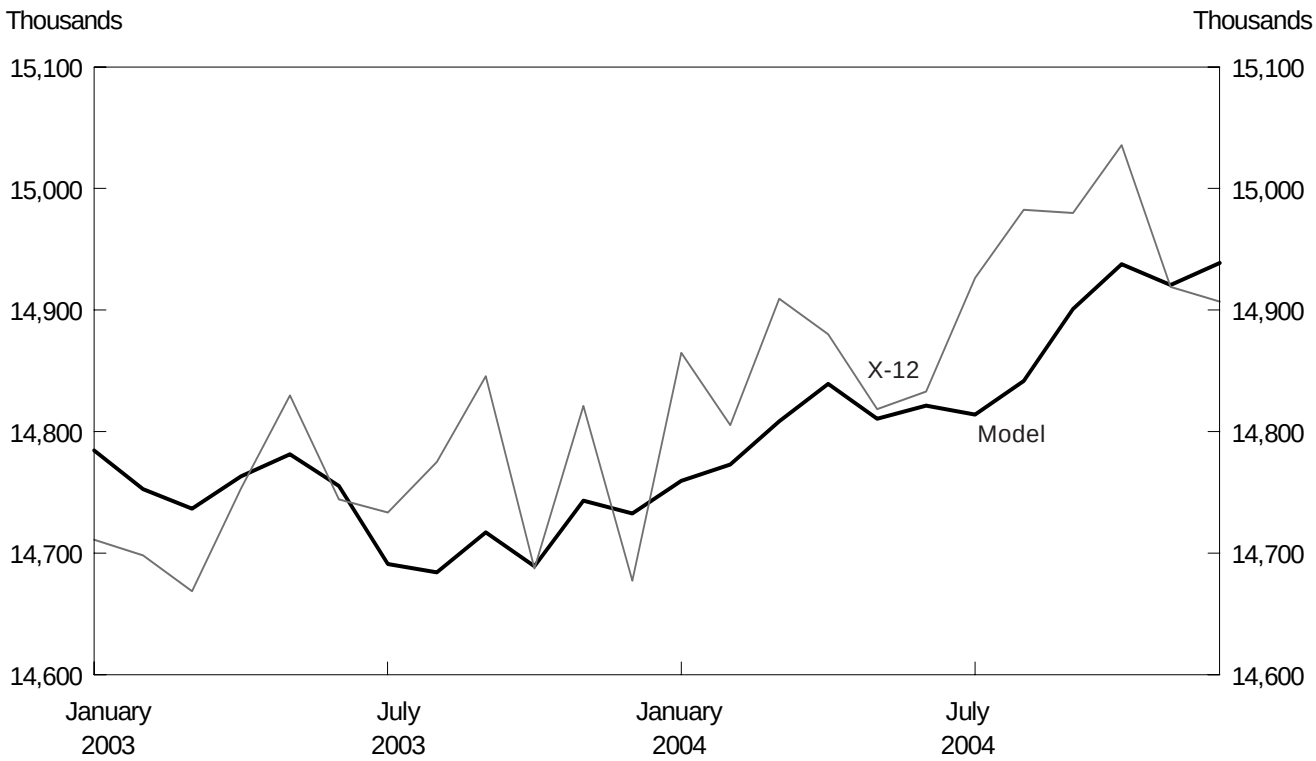
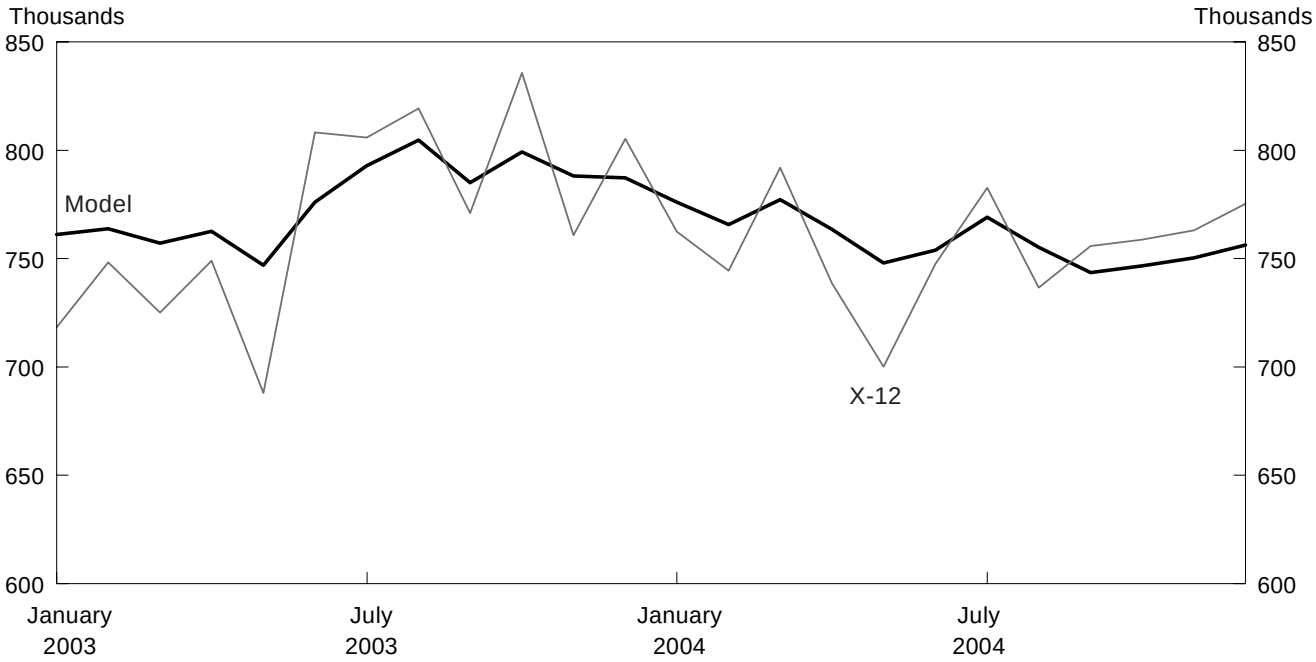


Chart 5. Unemployment levels, adult black women, concurrent, seasonally adjusted, 2003–04



whereas X-12 does not. It is common practice for analysts to use the standard errors for the not-seasonally-adjusted CPS estimates as a proxy measure of error for the X-12 estimates. While this practice is not strictly correct, recent research suggests that these standard errors may be a reasonable approximation (an overestimate of around 10 percent to 15 percent, sometimes less) for detailed series in which sampling error is an important source of variation.[12] The following tabulation compares the model-based standard errors of monthly change from the forward filter with the CPS proxy measures and computes the minimum magnitude of monthly change in the respective estimates required to achieve significance at the 90-percent level for the period from January 2000 to July 2004 (the figures shown are all mean values):

Source and measure	*Unemployment rate, blacks*	*Employment level, blacks*	*Unemployment, black adult women*
Standard error:			
CPS	0.51	101,271	49,261
Model	.21	41,580	14,047
Minimum change required for significance:			
CPS	±.84	±166,591	±81,034
Model	±.35	±68,399	±23,107

For the total black employment level, the minimum magnitude of monthly change required for significance has to be at least 167,000 with the CPS proxy measure—almost two-and-a-half times the magnitude required for the model estimates. For unemployed black adult women, the CPS proxy measure requires a change of at least 81,000 in the X-12 seasonally adjusted estimates, or 3.5 times the change required in the model estimates. For the total black unemployment rate, the CPS proxy requires a change of more than 0.8 percentage point, compared with less than 0.4 percentage point for the model. Thus, even though the CPS proxy may overestimate the required monthly change in X-12 by up to 15 percent in relative terms, that still leaves major gains from using the model estimates.

Research to this point suggests that the model-based approach to seasonal adjustment is a useful tool for helping to discern trends in data series with large variances due to relatively small sample sizes. The approach, however, is not necessarily superior to the moving-average approach currently used by the Bureau of Labor Statistics for adjusting aggregate series such as total employment and unemployment when sampling error is a much less important source of variation than it is for the detailed demographic series. Research into the merits and limitations of the model-based approach to smoothing time series and creating estimates of variance is ongoing in order to evaluate possible extensions of the method to other series. □

Notes

[1] Julius Shiskin, Alan H. Young, and John C. Musgrave, *The X-11 variant of the census method II seasonal adjustment program*, technical paper 15 (Bureau of Economic Analysis, 1967).

[2] David B. Findley, Brian C. Monsell, William R. Bell, Mark C. Otto, and Bor-Chung Chen, "New Capabilities and Methods of the X-12-ARIMA Seasonal-Adjustment Program," *Journal of Business and Economic Statistics*, April 1998, pp. 127–77 (with discussion).

[3] Examples are TRAMO-SEATS (see Victor Gomez and Agustin Maravall, "Programs Seats and Tramo: Instructions for the User," Working Paper No. 9628 (Madrid, Bank of Spain, 1996)); and STAMP (see Siem J. Koopman, Andrew C. Harvey, Jurgen A. Doornik, and Neil Shephard, *STAMP : Structural Time Series Analyser Modeller and Predictor* (London, Timberlake Consultants, 2000)).

[4] See, for example, William R. Bell and Steve C. Hillmer, "Issues Involved with the Seasonal Adjustment of Economic Time Series," *Journal of Business and Economic Statistics*, October 1984, pp. 291–320; Agustin Maravall, "Unobserved Components in Economic Time Series," *Handbook of Applied Econometrics*, ed. M. Hashem Pesaran, and Mike Wickens (Oxford, U.K., Basil Blackwell, 1993), pp. 12–72; and Findley, Monsell, Bell, Otto, and Chen, "New Capabilities and Methods."

[5] Recent research suggests that the absence of explicit statistical models in X-11 may not prevent statistical inference from being carried out after all. Stuart Scott and Danny Pfeffermann have experimented with a promising approach to the development of standard error measures for X-11 estimators. (See Stuart Scott and Danny Pfeffermann, "Evaluation of Two Variance Methods for X-11 Seasonally Adjusted Series," *ASA Proceedings of the Joint Statistical Meetings* (Alexandria, VA, American Statistical Association, 2003), pp. 3760–67.)

[6] X-12 allows for some flexibility by automatically varying the length of its filters on the basis of series properties.

[7] This view appears to be gaining momentum with the effort to have X-12 and model-based seasonal adjustment as alternative options in a single software program called X-12-ARIMA/SEATS. (See Brian C. Monsell, John A. D. Aston, and Siem J. Koopman, "Toward X-13?" *ASA Proceedings of the Joint Statistical Meetings* (Alexandria, VA, American Statistical Association, 2003), pp. 1459–66.)

[8] As a result, if the sample, say, overestimated the true value in the previous month, it is likely to continue overestimating in the current and successive months. In other words, the behavior of the survey errors is more similar to a trend with cumulative up-and-down movements than to one with purely random irregular variation.

[9] For a discussion of these models, see R. Tiller, "Time series modeling of sample survey data from the U.S. Current Population Survey," *Journal of Official Statistics*, June 1992, pp. 149–66.

[10] For more on the switch to concurrent seasonal adjustment in the CPS, see Richard B. Tiller and Thomas Evans, "Revision of Seasonally Adjusted Labor Force Series in 2004," *Employment and Earnings*, January 2004, pp. 3–9; on the Internet at **http://www.bls.gov/cps/cpsrs2004.pdf**.

[11] Both the model-based and the X-12 series are based on data extending back to January 1976. In chart 2, the estimates have been adjusted to smooth out the effect of the introduction of new population controls from Census 2000 in January of that year.

[12] Stuart Scott, Michail Sverchkov, and Danny Pfeffermann, "Variance Measures for Seasonally Adjusted Employment and Employment Change," *ASA Proceedings of the Joint Statistical Meetings* (Alexandria, VA, American Statistical Association, 2004), pp. 1328–35.

APPENDIX: Methodology

To account for the special properties of the CPS series, a signal-plus-noise model is developed that combines a time-series model of the "true" values and its unobserved components (trend, seasonal, and irregular) with a model of the sampling errors. The latter is treated as an additional unobserved component of the time series, with the special advantage that its variance-covariance structure is objectively identified by design information.

This appendix discusses, in general terms, how the components of the CPS are modeled, briefly considers the series that is directly modeled in the text of this article, and examines the use of the Kalman filter and smoother algorithms in the text to produce seasonally adjusted estimates in both real and historical time.[1]

Component models of the CPS

For labor force series, seasonality is an important source of variation. The nonseasonal, or trend, part of the series cannot be observed directly; instead, trend values must be inferred solely from observations of the aggregate series. Seasonal adjustment is a special case of the more general "signal-plus-noise" formulation of an observed series as being composed of a number of unobserved components, where the components of interest are referred to as the signal and all other components are considered to be noise.

The goal is to "filter out" the signal from the noise when all that can directly be observed is the data corrupted by noise. The solution to this problem requires a model that specifies, either implicitly or explicitly, the properties of each of the underlying components. In the conventional seasonal adjustment problem, the observed series, Y_t, is assumed to be measured without error and to be composed of trend, T_t, seasonal, S_t, and irregular, I_t, components in additive form:

$$Y_t = T_t + S_t + I_t.$$

Multiplicative seasonality is handled by taking logarithms of the data, fitting the model to the data, and then taking the antilogarithm of the component estimates back to the original scale.

The signal is the nonseasonal component (trend plus irregular

component), and the noise includes the seasonal component (when irregular fluctuations are relatively large, it may be more appropriate to define the signal as just the trend and treat the irregular component as part of the noise):

$$\text{Signal: } \text{Sig}_t = T_t + I_t;$$

$$\text{Noise: } N_t = S_t.$$

Following Andrew C. Harvey, the trend, seasonal, and irregular components are specified as structural time-series models.[2] Each component has an associated variance that determines its properties. The trend takes a local linear form, with its level and slope varying randomly. A wide variety of patterns is a possibility, depending on the relative magnitudes of the variances of the level and slope. When the two variances are both zero, we have the smoothest possible trend, which assumes a fixed linear form over the entire observation period. A rapidly fluctuating trend results when the variance of the level shift is much larger than the variance of the slope.

The seasonal component also evolves over time according to its variance. A seasonal pattern that is fixed from year to year implies a zero variance, while patterns that change gradually imply a small positive variance. Finally, the magnitude of the irregular component depends directly on the size of its variance. A zero variance implies the absence of irregular variation in the series. The four variances of the structural model presented in the text of this article are unknown parameters that will be estimated from the data once a complete model is set up as described herein.

In the case of CPS data, there is a fourth component: the sampling error e_t, which arises because only a fraction of the total population is sampled each month. This means that the true values Y_t are no longer directly observed, but instead, the survey estimates,

$$y_t = Y_t + e_t,$$

are what is observed. The definition of the signal is unchanged, but now the noise includes survey error as well as seasonality; that is,

$$N_t = S_t + e_t.$$

Since the presence of sampling error in the data can radically alter the results of seasonal adjustment, a model is required that takes the sampling error into account when it is an important source of variation in the data. Unlike the situation with the other components, the properties of this component do not have to be estimated from just the time series itself. Rather, direct information from the survey microdata may be used to estimate the sampling error model independently of the structural time-series model.

The Census Bureau routinely produces data to assess the reliability of national CPS statistics on an ongoing basis. The process involves drawing a set of random subsamples, or replicates, from the full sample surveyed each month, using the same principles of selection as are used for the full sample, and applying the regular CPS estimation procedures to the replicates that are drawn. Each month, 160 replicates are produced for a large number of characteristics. The variability in the replicates provides the basis for computing empirical variances and autocorrelations for the sampling error. Variances are computed by fitting generalized variance functions to the monthly replicate variances to smooth out volatility in the latter. Lag covariances are computed by averaging each replicate lag covariance over time and normalizing for changes in variance.

The empirical sampling-error variances and autocorrelation estimates are then used to directly derive the parameters of the survey error model, which is specified as an autoregression that relates the current value of the survey error to its past values. Note that the coefficients are determined from the sampling-error autocorrelations, and the variances are adjusted to conform to the survey variances. In this way, both the effect of the rotating panel design and the magnitude of the sampling error are taken into account.

The sampling-error model is combined with the time-series model of the trend, seasonal, and irregular components, with the latter variances estimated directly from the historical CPS series. Thus, the basic properties of the overall model are tailored to the empirical behavior of the CPS series.

Model fitting to CPS series

Black employment- and unemployment-level series for the following four age-gender groups are directly seasonally adjusted, and variance estimates are produced, with the models presented in the text of the article:

- black male youths aged 16–19 years
- black female youths aged 16–19 years
- black men aged 20 years and older
- black women aged 20 years and older.

Seasonally adjusted total black employment and unemployment levels are obtained indirectly by summing the appropriate model estimates, and the unemployment rate is derived from the estimates of these levels. Although seasonal adjustment of the totals is done indirectly, the variances are produced by directly fitting the models to the aggregate data.

The observation period of the study begins in January 1976 and ends in December 2004. For each series directly modeled, a preliminary model consists of the trend level, together with the slope, seasonal, irregular, and survey error components. The model is fine-tuned through diagnostic testing. Evaluating the test results leads to decisions regarding (1) the need for a logarithmic transformation, (2) the presence of a trend slope, an irregular component, and outliers of various forms, and (3) the composition of the seasonal component. If necessary, impulse or step dummies can be incorporated into the model to allow for exceptional temporary shocks or even more permanent shifts in the series.

For all models, the estimated variance of the irregular component was very close to zero. Therefore, the seasonally adjusted series (trend plus irregular component) is virtually identical to the trend. Thus, although there may be irregular variation in the true series, it is empirically difficult to detect in the presence of the large sampling-error variation.[3]

Real-time and historical estimates

Given estimates of the unknown parameters of the model presented in this article, seasonal adjustment of the data may commence. Because CPS data are generated each month, there are two ways to approach estimation. One way is to make an estimate each time new CPS data become available; the other way is to wait until data

accumulate and then produce all the estimates at once. The first approach occurs in real time when seasonal adjustment is performed immediately after the latest data are available. (This approach is sometimes referred to as *concurrent seasonal adjustment*.) The second approach corresponds to the usual practice of revising the entire series of seasonally adjusted estimates at the end of the year once the latest data for the entire year become available. In the time-series literature, the first approach is called *filtering*, the second *smoothing*.

To produce seasonally adjusted estimates, the model is first cast into the so-called state-space form, which allows the use of the Kalman filter, a powerful algorithm for computing the estimates in real time.

A state vector includes the values of all the components of the model at a specific point in time. Two equations define the state-space form. First, there is the transition equation that specifies how the state vector, Z_t, behaves over time. This equation takes a simple form, with the current value of the state vector depending only on its value in the previous period, plus V_t, a vector containing the random disturbances representing uncertainties in the dynamics of the system. (The vector V_t is assumed to be normal and independently distributed.) Mathematically,

$$Z_t = F_t Z_{t-1} + V_t,$$

where F_t is a known transition matrix. This simple autoregressive structure may appear to be very limiting, but in fact it encompasses a wide variety of models by introducing artificial state variables.

The state variables, which are the signal and noise components, are not directly observable. Instead, the information on the state of the system is conveyed by the sample data y_t, which is related to the state vector via the observation equation

$$y_t = H_t Z_t = \mathrm{Sig}_t + N_t.$$

This is the second of the two equations. Here, H_t, which has known values, is called the *observation matrix* and sums up the components of the state vector such that the observed datum is equal to the sum of the signal (trend plus irregular component) and the noise (seasonal plus sampling error components).

The task is to find the expected values of the state vector and its variance, given the observed sample values. These are the "best" estimates of the state vector, in the sense of minimizing the mean square error (or, more precisely, the best linear unbiased predictors of the state variables). The expected value is

$$E\left(Z_t \mid y_t, \ldots, y_1\right) = \hat{Z}_{t|t},$$

and the variance is

$$\mathrm{Var}\left(Z_t \mid y_t, \ldots, y_1\right) = \hat{P}_{t|t},$$

where $\hat{Z}_{t|t}$ is the expected value of the state vector at time t, based on all of the observed data up to time t.

The solution to finding a "best" estimate from noisy data as they come in each period is given by the celebrated Kalman filter,[4] which needs only the previous period's estimates $\hat{Z}_{t-1|t-1}$ and $\hat{P}_{t-1|t-1}$ (which are based on all of the data up to time $t-1$) and the current observation y_t to compute the "best" current-period estimates $\hat{Z}_{t|t}$ and $\hat{P}_{t|t}$. This is done in two steps: a prediction step followed by an update step. First, the state vector is predicted for time t by projecting forward its previous period's estimate by means of the aforementioned transition equation, where the disturbance terms, V_t, are set to their expected values of zero.

In fact, however, the disturbances are never exactly zero, and the previous period's estimates contain errors. Accordingly, in the update step, the predictions are improved with the use of information from the current sample values. The observation equation provides the means for getting feedback from the sample by forming a prediction of the new data value as the sum of the signal and noise predictions, $\hat{y}_{t|t-1}$, and comparing it with the actual value y_t:

$$\hat{y}_{t|t-1} = H_t \hat{Z}_{t|t-1} = \hat{\mathrm{Sig}}_{t|t-1} + \hat{N}_{t|t-1}.$$

In this equation, the subscript $t|t-1$ indicates that the prediction is for time t, using data up to time $t-1$ only.

Next, an overall prediction error

$$y_t - \hat{y}_{t|t-1} = \left(\mathrm{Sig}_t - \hat{\mathrm{Sig}}_{t|t-1}\right) + \left(N_t - \hat{N}_{t|t-1}\right)$$

is computed. The error in predicting the latest y_t value using data only up to the previous period is the sum of the unobserved prediction errors for the signal and noise. In the update step, the signal and noise estimates are corrected in proportion to their expected contribution to the total prediction error:

$$\hat{\mathrm{Sig}}_{t|t} = \hat{\mathrm{Sig}}_{t|t-1} + g_t\left[y_t - \hat{y}_{t|t-1}\right];$$
$$\hat{N}_{t|t} = \hat{N}_{t|t-1} + \left(1 - g_t\right)\left[y_t - \hat{y}_{t|t-1}\right].$$

The subscript $t|t$ indicates that information from time t has been added to the estimate.

The weight g_t, which varies between zero and unity, determines how much of the prediction error is allocated to the signal and how much to the noise. It is a function of the ratio of the variance in the signal to the variance in the noise. As the noise variance gets larger, g_t gets smaller, and more weight is given to the previous period's prediction of the signal, because now the observed data at time t are less reliable and therefore the sampling error for this observation is more likely to account for the largest share of the overall prediction error. The signal and noise weights on the prediction error add to unity, ensuring that the updated estimated signal and noise add to the observed sample value.

Each period, the Kalman filter makes a prediction $\hat{y}_{t|t-1}$ of the next observed value y_t, using only the most recent estimates of the signal and noise. The filter calculates corrected estimates of these components from the prediction error, which incorporates information from the latest available data at time t. Because the predicted values are based on all the data available up to time $t-1$, the corrected estimates for time t reflect all the available information from both the historical and current values of the series. After each prediction and update step, the prediction correction process is repeated. This recursive nature is one of the appealing features of the Kalman filter. A simple illustration follows.

Filtering is tailored to real-time processing of one observation at a time as it first becomes available. Conceptually, this is analogous to updating a running average $\overline{x}_t$ of numbers $x_1, x_2, \ldots, x_t$ by the recursive formula

$$\overline{x}_t = \left(\frac{t-1}{t}\right)\overline{x}_{t-1} + \left(\frac{1}{t}\right)x_t,$$

which requires only the previous period's estimate plus the current observation, rather than by starting over each time with the formula

$$\bar{x}_t = \frac{1}{t}\left(x_1 + \cdots + x_t\right),$$

which requires all of the data. The significant point is that the Kalman filter does no more work to process the last observation than it does the first. The net result is an algorithm tailored to real-time applications, whereby data keep coming in and information about the current value of the signal is needed immediately.

The Kalman filter, however, is not well suited to producing historical estimates for a fixed set of data observations, because it is designed to produce an estimate for the current period only and not to revise any earlier estimates. Nonetheless, it is standard practice to revise a seasonally adjusted estimate made at time t by using information that had arisen subsequently, for the succeeding observations $y_{t+1}, y_{t+2}, \ldots, y_n$ up to the last observation at $t = n$ are bound to convey information about the trend and other components that can supplement the information $y_1, \ldots, y_t$ that was available at time t. Clearly, the Kalman filter estimates for the observations at the beginning of the time series will be extremely weak.

The retrospective improvement of the estimates by using ex post information is achieved by a process conveniently described as "smoothing." This is a matter of revising each of the filter estimates for a period running from $t = 1$ to $t = n$ once the full set of observations $y_1, \ldots, y_n$ has become available. These "retrospective" estimates are obtained from the "Kalman smoother," which runs the Kalman filter recursion backwards from $t = n$ to $t = 1$ through the earlier data, revising the estimates produced by filtering at each time point. Smoothing is batch processing in the sense that it operates on all of the data at once, in contrast to the Kalman filter real-time processing of one observation at a time.

Not surprisingly, the estimates from the smoother typically look "smoother" than those from the filter. For historical analysis, the smoothed estimates are superior (they have a smaller error variance) to the filtered estimates. But it is important to note that, because these smoothed estimates use data from the entire sample, they do not correspond to estimates that would have been available to data users in real time. In reality, smoothing would be done once a year, in accordance with the BLS policy of revising official seasonally adjusted estimates. Smoothing could be performed each month, but there is an obvious disadvantage to publishing the results, because all of the previous month's estimates would be revised each month, a practice that could be confusing to data users.

Notes to the appendix

[1] A more technical discussion is given in R. Tiller, "Seasonal Adjustment of CPS Time Series with Large Survey Errors," paper presented at the Federal Economic Statistics Advisory Committee Meeting, Washington, DC, December 13–14, 2001.

[2] Andrew C. Harvey, *Forecasting, Structural Time Series, Models and the Kalman Filter* (Cambridge, U.K., Cambridge University Press, 1990).

[3] Tiller, "Seasonal Adjustment."

[4] Harvey, *Forecasting*.

Variations in time use at stages of the life cycle

This visual essay focuses on students, the employed, parents, and older individuals—persons at different stages in the life cycle. The essay includes snapshots of how these groups of individuals, on average, allot their time. It illustrates how a few, select differences—such as employment status, school enrollment status, or the presence of children in the household—can impact a group's average division of time across various activities. To control for multiple variables that can affect time-use allocation, many charts focus on a specific group of individuals. The essay also includes charts that provide information about when and how long select groups of individuals reported working, as well as information about who worked at home. Data are from the 2003 American Time Use Survey (ATUS), and they refer to activities that respondents identified as primary; except for secondary childcare, activities done simultaneously with these primary activities are not included in the survey. For information about the ATUS activity categories, see the American Time Use Survey Activity Lexicon for 2003, available on the Internet at **http://www.bls.gov/tus/home.htm**. This essay was prepared by Rachel Krantz-Kent, an economist in the Division of Labor Force Statistics, Bureau of Labor Statistics.

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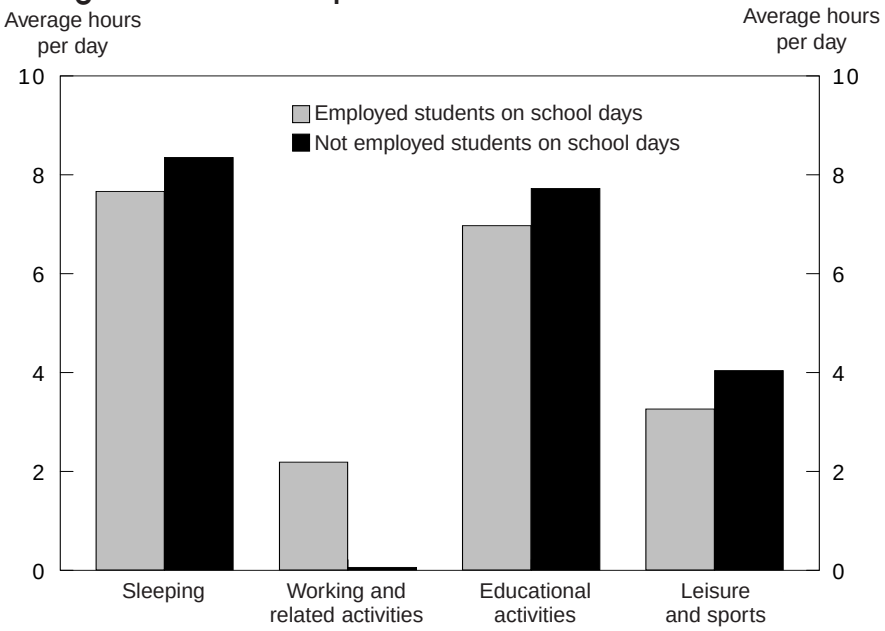
Students

- Employed students must balance the demands of work and school. Thirty-four percent of U.S. high school students reported that they were employed during the school year.

- On school days, employed high school students spent less time, on average, doing leisure and sports activities (42 minutes), sleeping (36 minutes), and doing educational activities (42 minutes) than their nonworking peers. Employed and not employed high school students spent essentially the same amount of time doing other activities.

1. Average hours per school day employed and not employed high school students spent on selected activities

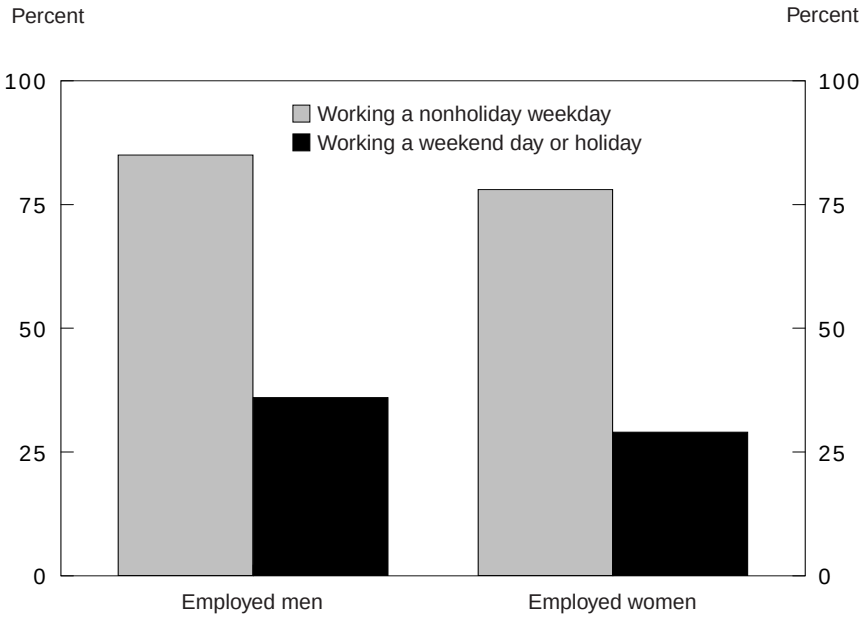


NOTE: Data are for individuals, ages 15–19, who were enrolled in high school and on days they attended class. School days refers to days the students attended class.
SOURCE: ATUS 2003 annual averages.

The employed

- On weekend days and weekdays, employed men were more likely to report working than employed women.

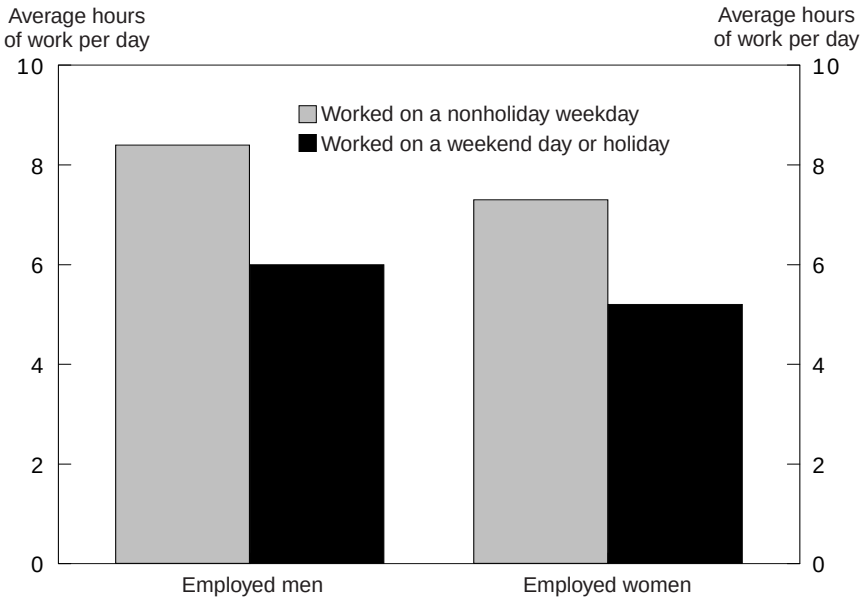
2. Percent of employed men and women working on a nonholiday weekday and weekend day or holiday



NOTE: Data are for employed individuals, ages 15 and older. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- On days that they worked, employed men averaged about an hour more of work per day than employed women; this is partly explained by women's greater likelihood of working part time.

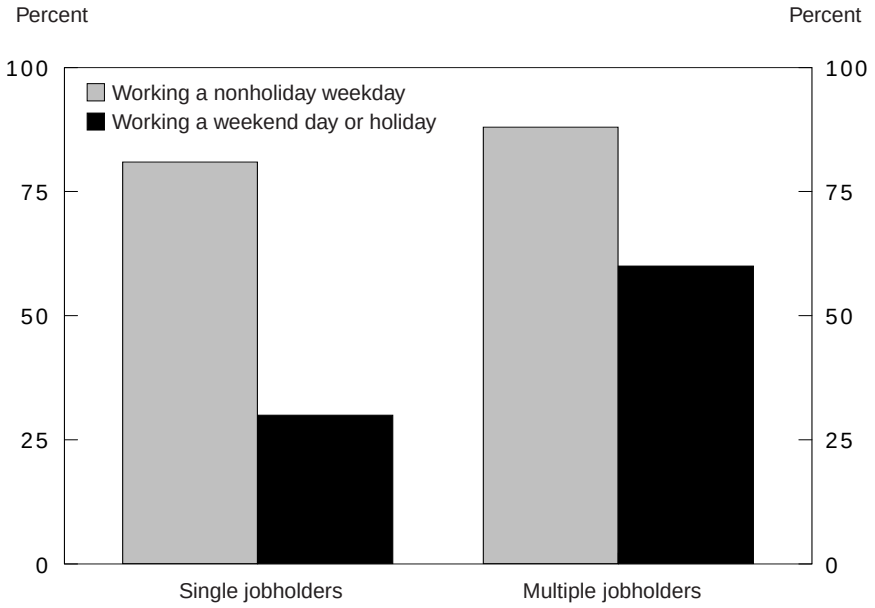
3. Average hours employed men and women worked per nonholiday weekday and weekend day or holiday on days they worked



NOTE: Data are for employed individuals, ages 15 and older. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- Multiple jobholders were twice as likely as single jobholders to work on a weekend day or holiday and slightly more likely to work on a nonholiday weekday.

4. Percent of single and multiple jobholders working on a nonholiday weekday and weekend day or holiday



NOTE: Data are for employed individuals, ages 15 and older. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- On days that they worked, multiple jobholders averaged more work time than single jobholders; multiple jobholders worked 24 minutes more on nonholiday weekdays and 42 minutes more on weekend days and holidays.

5. Average hours single and multiple jobholders worked per nonholiday weekday and weekend day or holiday on days they worked

NOTE: Data are for employed individuals, ages 15 and older. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- The self-employed were about 1.5 times more likely than wage and salary workers to work on a weekend day or holiday. However, on the average nonholiday weekday in 2003, an equal proportion (82 percent) of self-employed and wage and salary workers reported working.

6. Percent of self-employed and wage and salary workers working on a nonholiday weekday and weekend day or holiday

NOTE: Data are for employed individuals, ages 15 and older. Class of worker status is determined based on one's primary job. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- On nonholiday weekdays that they worked, wage and salary workers worked 54 minutes more per day than the self-employed. Self-employed and wage and salary workers who worked on a weekend day or holiday averaged work days of similar length.

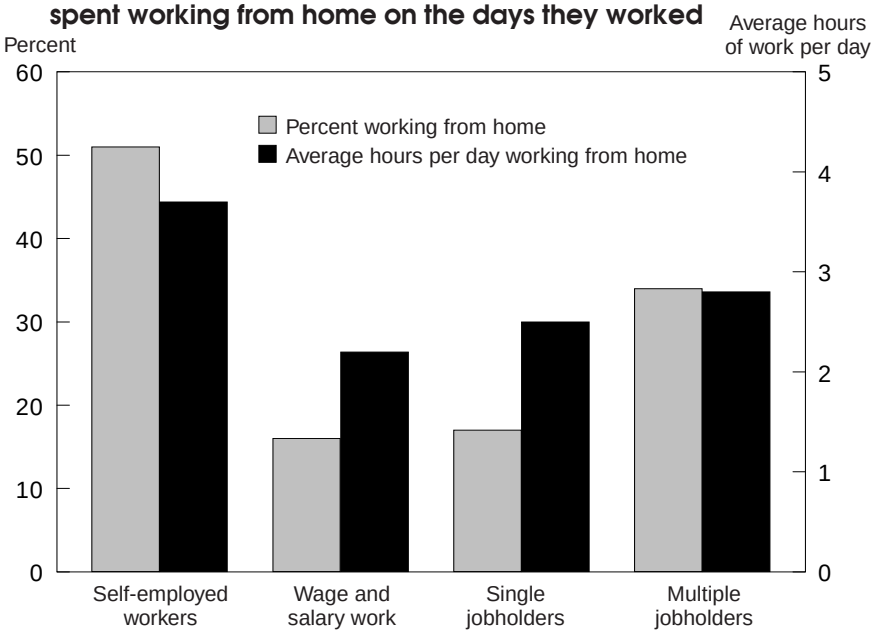
7. Average hours self-employed and wage and salary workers worked per nonholiday weekday and weekend day or holiday on days they worked

NOTE: Data are for employed individuals, ages 15 and older. Class of worker status is determined based on one's primary job. Also, includes work for main and other jobs.
SOURCE: ATUS 2003 annual averages.

- Self-employed workers were three times more likely than wage and salary workers to report working from home. Multiple jobholders were twice as likely as single jobholders to report working from home. On the days they worked, about one-half of the self employed and one-third of multiple jobholders reported doing some or all work at home.

- On the days that they worked at home, the self employed averaged 1.5 hours more work per day than wage and salary workers.

8. Percent of self-employed, wage and salary workers, single jobholders, and multiple jobholders and average hours per day spent working from home on the days they worked



NOTE: Data are for employed individuals, ages 15 and older, who reported working from home on their diary day. That is, they reported doing activities that were identified as "part of one's job"; this is not restricted to persons whose usual workplace is their home. Also, includes work for main and other jobs.

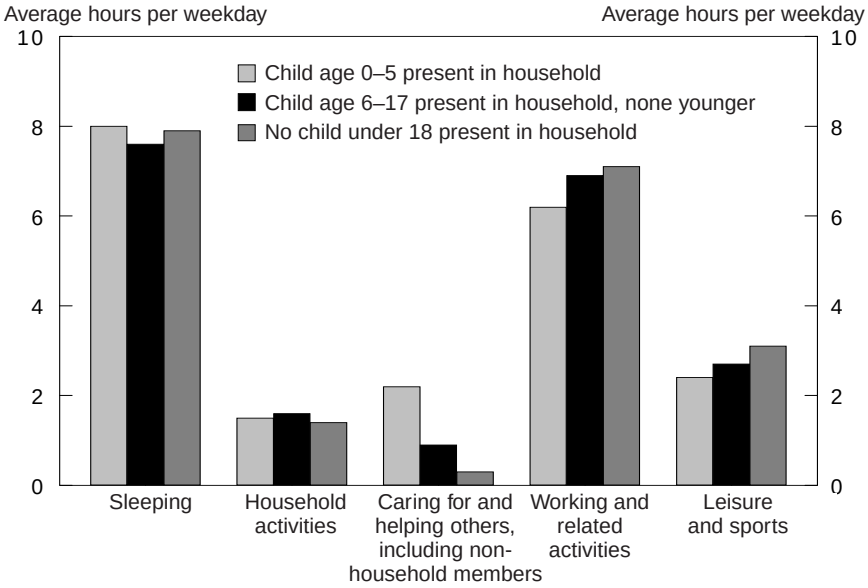
SOURCE: ATUS 2003 annual averages.

Parents

- Mothers of young children (ages 0–5 years) who were employed full time had 42 fewer minutes of leisure and sports time on an average weekday than employed women with no children. Mothers of young children also worked 54 fewer minutes per weekday than women with no children.

- Mothers of older children (ages 6–17) spent relatively more time working than those with younger children. Employed mothers of older children averaged 42 minutes more work per weekday and spent 1.3 fewer hours per weekday caring for and helping others.

9. Hours per weekday spent on selected activities by mothers of young children, mothers of older children, and women with no children



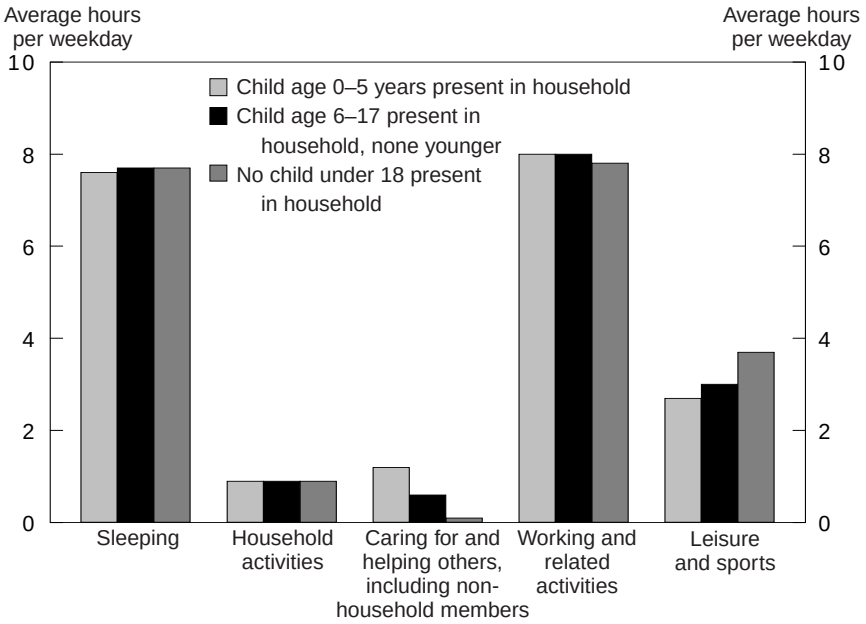
NOTE: Data are for women, ages 15 and older, and employed full time. A mother is defined as a woman with her own household children under 18.

SOURCE: ATUS 2003 annual averages.

- Employed fathers of young children (ages 0–5 years) averaged 1 fewer hour per weekday doing leisure and sports activities and about 1 additional hour per weekday caring for and helping others than men with no children. Fathers of older children (ages 6–17) also had less leisure time than men with no children. Fathers of older children engaged in 42 fewer minutes of leisure and sports activities on an average weekday than men with no children; they also spent 30 more minutes per weekday caring for and helping others.

- On average, fathers worked about the same time per weekday as men with no children. This contrasts with the pattern for mothers: mothers of young children worked 42 fewer minutes per weekday than women with no children.

10. Hours per weekday spent on selected activities by fathers of young children, fathers of older children, and men with no children

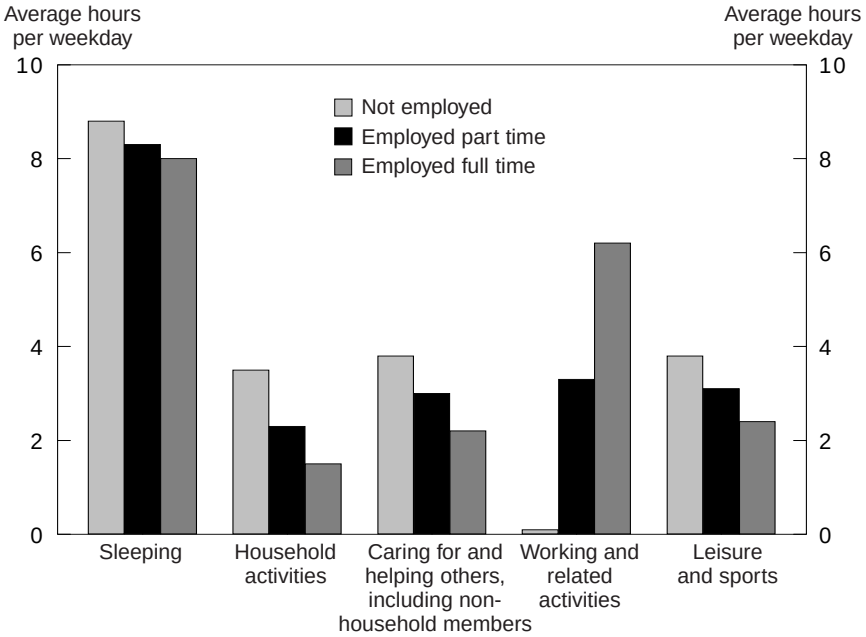


NOTE: Data are for males, ages 15 and older, and employed full time. A father is defined as a man with his own household children under 18.
SOURCE: ATUS 2003 annual averages.

- On weekdays, employed mothers of young children (ages 0–5 years) spent less time doing leisure and sports activities, caring for and helping others, doing household activities, and sleeping than mothers who were not employed.

- Mothers of young children who were employed full time had 1.4 fewer hours of leisure and sports time on an average weekday than those who were not employed, while part-time workers had 42 fewer minutes of leisure and sports time. Independent of their employment status, mothers of young children spent the majority of their leisure and sports time simultaneously providing secondary childcare.

11. Hours per weekday spent on selected activities by part-time, full-time, and not employed mothers of young children

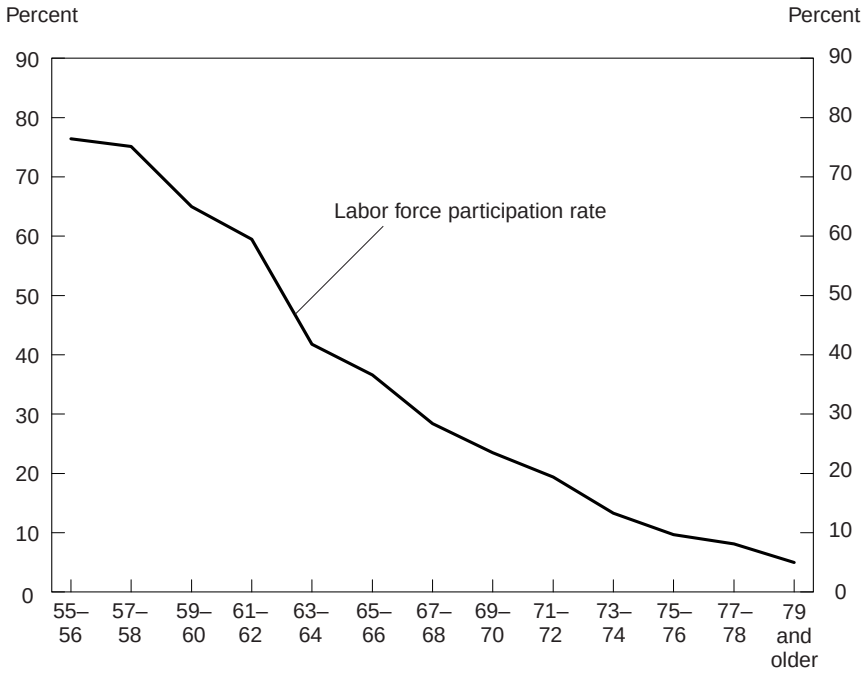


NOTE: Data are for mothers, ages 15 and older. A mother is defined as a woman with her own household children under 6.
SOURCE: ATUS 2003 annual averages.

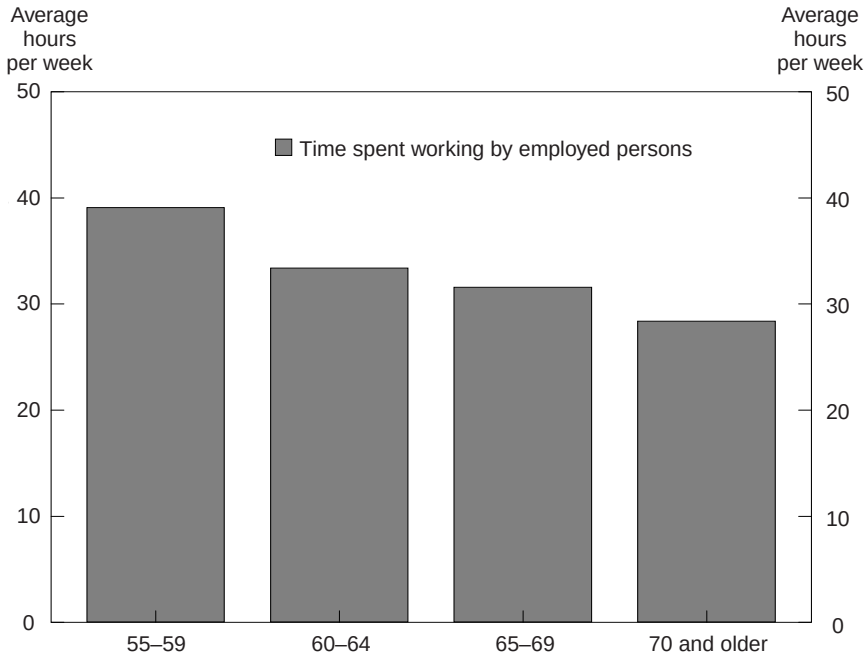
Older individuals

- Older individuals often exit the labor force when they are in their late fifties or older. The labor force participation rate illustrates this movement out of the labor force, as it drops from 76 percent for individuals ages 55–56 to 5 percent for those ages 79 and older.

12. Percent participating in the labor force and hours per week spent working by individuals, ages 55 and older



- On average, older, employed individuals also worked fewer hours per week than the young-old: employed persons ages 70 and older worked 10.7 fewer hours per week and employed persons ages 65–69 worked 7.5 fewer hours than employed persons ages 55–59.



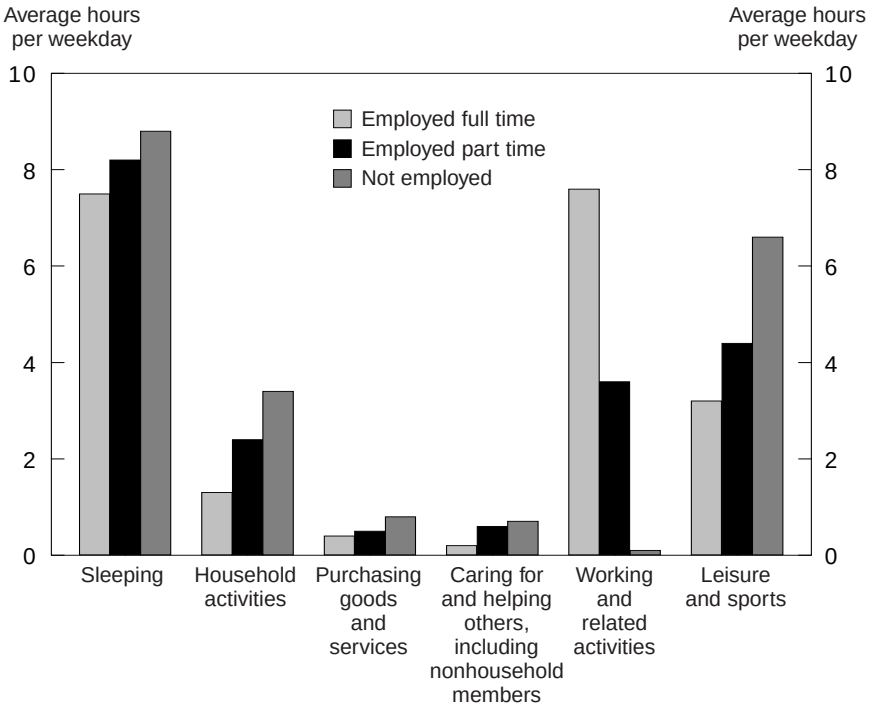
NOTE: Labor force participation rates from the Current Population Survey (CPS) are somewhat different than those from the ATUS. However, both labor force participation rates show similar trends of participation falling with age.

SOURCE: ATUS 2003 annual averages.

- Individuals nearing or of "retirement age" who were not employed spent more time per weekday sleeping (1.3 hours), doing household activities (2.1 hours), and engaged in leisure and sports activities (3.4 hours) than individuals employed full time.

- Individuals ages 55–64 and employed part time had 38 percent (1.2 hours) more leisure and sports time on an average weekday and those not employed had more than twice as much (3.4 hours) leisure and sports time on an average weekday than those who were employed full time.

13. Hours per weekday spent on selected activities by full-time, part-time, and not employed individuals, ages 55–64

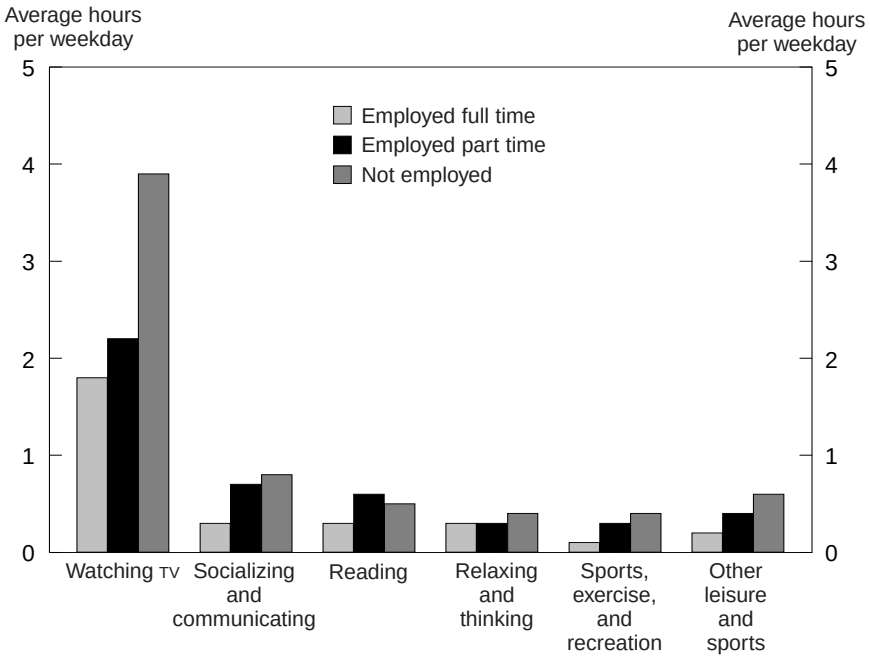


SOURCE: ATUS 2003 annual averages.

- Compared with individuals ages 55–64 who were employed full time, part-time workers and those who were not employed averaged more time per weekday in a variety of leisure and sporting activities.

- Individuals ages 55–64 who were not employed watched TV an average of nearly 4 hours per weekday. This amounted to 59 percent of their leisure and sports time and about twice as much TV watching time per weekday as their peers who were employed full time. Although individuals ages 55–64 who were employed full time watched TV for less time than their non-employed counterparts, TV-watching still accounted for well over half (56 percent) of their total weekday leisure and sports time.

14. Hours per weekday spent on leisure and sporting activities by full-time, part-time, and not employed individuals, ages 55–64



SOURCE: ATUS 2003 annual averages.

Slow employment recoveries

The last two business cycles were characterized by an unusual pattern: employment recovered more slowly following the 1990–91 and 2001 recessions than after the other recessions of the post-World War II era. Paul Gomme, an economic advisor at the Federal Reserve Bank of Cleveland, tries to understand why in a new study published in the bank's newsletter, *Economic Commentary*. Gomme calculates "job-finding" and "job-separation" probabilities for each of the business cycles that occurred during the period; he then tests the hypothesis that the probabilities of the two most recent cycles differed from those of the earlier ones. He finds that both measures behaved differently during the recent cycles. But the *job-finding* probabilities remained low long after the two recoveries had begun and thus were the primary factors driving the slow employment growth in both cases.

Economists call flows into employment *job finding*, and they call flows out of employment *job separations*. Gomme defines his job-finding probability as the number of job finders in a given month divided by the number of unemployed persons. Similarly, he computes the job-separation probability as the aggregate number of separations divided by the total number of persons employed. Using unemployment data from the Bureau of Labor Statistics, Gomme infers the number of "job finders" by calculating the change in the number of unemployed persons from one month to the next and subtracting the "newly unemployed"—those who have been unemployed for 1 month or less. Ignoring flows into and out of the labor force, Gomme reasons that the resulting figure roughly approximates the number of people who found jobs in a given month. Gomme infers the total number of job separations by examining changes in BLS employment data over time.

Over the course of the typical postwar business cycle, the job-finding probability begins to fall several months prior to the business cycle peak and continues falling for about a year afterward; the job-separation probability begins to rise shortly after the peak and continues rising for up to a year. After about 12 months, the job-finding probability starts to increase and the job-separation probability starts to decline, which leads to increased employment. The two most recent recessions, however, exhibited a different pattern. Gomme writes, "During the 1990–91 recession, both probabilities followed the typical experience, except that the job-finding probability remained low for at least 36 months after the business cycle peak." The job-finding probability behaved similarly during the 2001 recession. Thus, Gomme concludes, the relatively low job-finding probabilities were the driving forces behind the so-called jobless recoveries following the two most recent recessions.

Bargaining and the Fed

The Federal Reserve System, from chairman to chimney sweep, has a well-earned reputation as a glutton for information. In particular, the Federal Open Market Committee comprising the Board of Governors, the President of the Federal Reserve Bank of New York, and a rotating panel of presidents of other Federal Reserve Banks, devours reams of data—statistical, financial, domestic, foreign, survey, anecdotal—as part of its deliberations on the direction of monetary policy. In a forthcoming article in *Industrial Relations*, Daniel J. B. Mitchell and Christopher L. Erickson examine the ways in which the Committee used data to understand and characterize the labor markets.

For the long period from the end of World War II to the 1980s, according to Mitchell and Erickson, both academic economists and policymakers were generally concerned with the possibility of "wage-push" inflation or "wage-price spirals" in prices. In these discussions, analysts concentrated on the data on wage bargains in union contracts as the "active agent in wage determination." Led by this background, Mitchell and Erickson "investigate how the Federal Reserve's discussions of union bargaining activity—and the notion of worker bargaining power more generally—evolved over the Reagan, Bush (Sr.), and Clinton presidential administrations."

Over that time span, union membership data show that the U.S. economy was becoming less and less unionized. Mitchell and Erickson state that "the private unionization rate dropped from roughly one-fifth to about one-tenth of wage earners." [Ed. note: In 2004, about 8 percent of private wage and salary workers were members of unions.] Although the amount of discussion of union wage settlements also declined somewhat, Mitchell and Erickson were surprised at how persistent the wage-price-spiral story was as "policymakers continued to see union wage setting as important in the old wage-push sense."

In their concluding paragraphs, Mitchell and Erickson wonder "whether the Fed's discussion of labor markets remained rooted in the concept of workers exercising bargaining power, which is most likely when unions are strong." The persistence of bargaining power in the rhetoric of economic discourse at the highest level led Mitchell and Erickson to suggest reconsidering the way economists think about unions as an economic institution—or at least to be careful about the language we use to talk about unions, workers, bargaining, and the macroeconomy. □

Coping with globalization

Active Labor Market Policies around the World: Coping with the Consequences of Globalization. By Peter Auer, Umit Efendioglu, and Janine Leschke. Geneva, International Labor Organization, 2005, 90 pp., $19.95/paperback.

In early November 1993, the United States Congress enacted and the President signed into law a measure that required States to participate in a system of profiling unemployment insurance (UI) recipients. Based upon the profiling methodology, UI recipients who are identified as likely to exhaust benefits are required to receive immediate reemployment services to speed their return to work. By mid-December of that year, Federal Labor Department analysts developed operating procedures for States to implement worker profiling and reemployment services systems.

Those Federal-mandated State procedures, still in force, helped amalgamate some U.S. passive and active workforce policies. This book—by Peter Auer, Omit Efendioglu, and Janine Leschke of the International Labor Organization (ILO)—describes active labor market experiences of the United States and other nations; examines what is known about the effectiveness of active labor market policy measures; and argues the merits of such policies in industrial, transition, and developing countries.

According to the authors, the chief economic function of labor market policy (LMP) is to match labor demand and supply, and it is the interaction of passive and active measures that facilitate this matching. While passive measures that deliver replacement income—such as UI and early retirement benefit payments—are discussed, the centerpiece of the authors' analysis lies in their scrutiny of active measures that enhance labor market reintegration: job search assistance and job training; and job creation through hiring subsides, enterprise promotion, and public works.

In 1964, the ILO recommended an active labor market policy to promote "full, productive and freely chosen employment." However, not until the 1990s did the policy momentum for countries to adopt active measures intensify. The Organization for Economic Cooperation and Development (OECD), of which the United States and other industrial nations are members, adopted an active labor market policy in its Jobs Strategy of 1994. The European Commission followed suit with its European Employment Strategy of 1997. Today, in many of the 30 OECD countries and the 25 European Union (EU) Member States, active labor market policy has become a permanent fixture, and is used in some form in almost every nation, although the measures differ in abundance, design, and implementation.

The authors synthesize an enormous amount of research in their concise manuscript. As a consequence, readers are supplied with a comprehensive portrait of global labor market policies aimed to promote income replacement and labor market integration without getting knee-deep into program minutia. The authors survey five methods of intervention: job matching (for example, public and private employment services); enhancing supply (for example, training); reducing supply (for example, early retirement); creating demand (for example, public works); and changing the structure of demand (for example, employment subsidies).

The authors discuss recent policy trends in OECD countries. These workforce policies include establishing one-stop centers, which pool related public and private workforce and social services to aid job matching, and "welfare-to-work" or "work-first" programs (for example, in Denmark and the United Kingdom), which give priority to active over passive measures. The authors report that several transition countries (such as Hungary) still in the throes of economic conversion have instituted employment service models based upon recent OECD workforce policies. Despite this, they cite a 2001 OECD study that depicts some of the lowest public expenditures on passive and active measures in Japan, the United Kingdom, and the United States when compared to the then-15 EU countries. Further, they note that while direct-job creation is in present disfavor by most OECD countries, public works projects may be of value in countries with scarce aggregate demand and high long-term unemployment.

A chapter devoted exclusively to program evaluation contains an easily understood chart in which the authors summarize research from more than 200 active labor market policy studies. These studies, mainly from industrialized nations, seem to show that not all active measures efficiently reach their target groups; not all enhance the prospects of participants to access jobs; and not all are cost-effective in reaching their goals. From this, the authors suggest four policy lessons: targeted measures achieve better results than broad measures; measures that are closer to real-work situations achieve better results; decentralized delivery of services seems to yield better results, provided there is monitoring to curb policy deviation; and integrated service delivery tends to be allied with administrative decentralization.

The authors are expert synthesizers of complicated labor market policies. They provide a cogent description of the role played by active policies in four areas: job creation directly through subsides, enterprise creations, and public works, and indirectly by improving employability through job training and ensuring efficient labor exchanges; economic security by addressing the adverse effects of structural change and insufficient labor demand; equity by ensuring the participation of specified

target groups, such as disadvantaged workers and youth; and poverty reduction through measures that provide decent work, training, and income.

The authors suggest that if government measures in these areas are instituted as bridges to employment and not as traps to dependence, then they may yet be placed in the catalog of workforce security improvements. They contend that countries open to the global economy have put in place active labor market policies to protect their workers from the ill effects of globalization and technological change; their analysis shows that workers' perception of security increases along with spending on these policies. On balance, they are adherents of active policy measures as a means to prevent joblessness and reduce poverty. The authors conclude that active labor market policies may be indispensable political countermeasures to the great difficulties that globalization may pose for some workers.

—David E. Balducchi

Employment and Training Administration,
U.S. Department of Labor

Current Labor Statistics
Monthly Labor Review
September 2005

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

Current Labor Statistics

Notes on labor statistics 50

Comparative indicators

1. Labor market indicators 63
2. Annual and quarterly percent changes in compensation, prices, and productivity 64
3. Alternative measures of wages and compensation changes 64

Labor force data

4. Employment status of the population, seasonally adjusted 65
5. Selected employment indicators, seasonally adjusted 66
6. Selected unemployment indicators, seasonally adjusted 67
7. Duration of unemployment, seasonally adjusted 67
8. Unemployed persons by reason for unemployment, seasonally adjusted 68
9. Unemployment rates by sex and age, seasonally adjusted 69
10. Unemployment rates by State, seasonally adjusted 70
11. Employment of workers by State, seasonally adjusted 71
12. Employment of workers by industry, seasonally adjusted 72
13. Average weekly hours by industry, seasonally adjusted 75
14. Average hourly earnings by industry, seasonally adjusted 76
15. Average hourly earnings by industry 77
16. Average weekly earnings by industry 78
17. Diffusion indexes of employment change, seasonally adjusted 79
18. Job openings levels and rates, by industry and regions, seasonally adjusted..... 80
19. Hires levels and rates by industry and region, seasonally adjusted..... 80
20. Separations levels and rates by industry and region, seasonally adjusted..... 81
21. Quits levels and rates by industry and region, seasonally adjusted..... 81
22. Quarterly Census of Employment and Wages, 10 largest counties 82
23. Quarterly Census of Employment and Wages, by State.. 84
24. Annual data: Quarterly Census of Employment and Wages, by ownership 85
25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, by supersector ... 86
26. Annual data: Quarterly Census of Employment and Wages, by metropolitan area 87
27. Annual data: Employment status of the population 93
28. Annual data: Employment levels by industry 93
29. Annual data: Average hours and earnings level, by industry..... 94

Labor compensation and collective bargaining data

30. Employment Cost Index, compensation..... 95
31. Employment Cost Index, wages and salaries..... 97
32. Employment Cost Index, benefits, private industry 99
33. Employment Cost Index, private nonfarm workers, by bargaining status, region, and area size 100
34. Participants in benefit plans, medium and large firms 101
35. Participants in benefits plans, small firms and government 102
36. Work stoppages involving 1,000 workers or more 103

Price data

37. Consumer Price Index: U.S. city average, by expenditure category and commodity and service groups 104
38. Consumer Price Index: U.S. city average and local data, all items 107
39. Annual data: Consumer Price Index, all items and major groups 108
40. Producer Price Indexes by stage of processing 109
41. Producer Price Indexes for the net output of major industry groups 110
42. Annual data: Producer Price Indexes by stage of processing 111
43. U.S. export price indexes by Standard International Trade Classification 112
44. U.S. import price indexes by Standard International Trade Classification 113
45. U.S. export price indexes by end-use category 114
46. U.S. import price indexes by end-use category 114
47. U.S. international price indexes for selected categories of services 114

Productivity data

48. Indexes of productivity, hourly compensation, and unit costs, data seasonally adjusted 115
49. Annual indexes of multifactor productivity 116
50. Annual indexes of productivity, hourly compensation, unit costs, and prices 117
51. Annual indexes of output per hour for select industries 118

International comparisons data

52. Unemployment rates in nine countries, seasonally adjusted..... 121
53. Annual data: Employment status of the civilian working-age population, 10 countries..... 122
54. Annual indexes of productivity and related measures, 15 economies..... 123

Injury and Illness data

55. Annual data: Occupational injury and illness..... 125
56. Fatal occupational injuries by event or exposure..... 127

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 were revised in the February 2005 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 were revised in the March 2005 *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 sub-

ject 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** information 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 supplemental 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; 30–36)

Compensation and waged data are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

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 uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation

costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, 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 bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation 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 Employment Cost Index 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 (June 1981=100) are available on the Internet:

www.bls.gov/ect/

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 34 for medium and large private establishments and in table 35 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

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 and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

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

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employ-

ees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet:

www.bls.gov/ebs/

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 36.

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 estimated 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.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

www.bls.gov/cba/

Price Data

(Tables 2; 37–47)

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 38. 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, allowances, 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; 48–51)

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 48–51 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 Website at: **www.bls.gov/lpc/home.htm**

International Comparisons

(Tables 52–54)

Labor force and unemployment

Description of the series

Tables 52 and 53 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 labor force statistics published by other industrial countries are not, in most cases, comparable to U.S. concepts. Therefore, the Bureau adjusts the figures for 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 BLS Web site 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

The foreign country data are adjusted as closely as possible to U.S. concepts, with the exception of lower age limits and the treatment of layoffs. These adjustments include, but are not limited to: including older persons in the labor force by imposing no upper age limit, adding unemployed students to the unemployed, excluding the military and family workers working fewer than 15 hours from the employed, and excluding persons engaged in passive job search from the unemployed.

Data for the United States relate to the population 16 years of age and older. The U.S. concept of the working age population has no upper age limit. The adjusted to U.S. concepts statistics have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country, and the Swedish statistics have been adjusted to include persons older than the Swedish upper age limit of 64 years. The adjusted statistics presented here relate to the population 16 years of age and older in France, Sweden, and the United Kingdom; 15 years of age and older in Australia, Japan, Germany, Italy, and the Netherlands. An exception to this rule is that the Canadian statistics are adjusted to cover the population 16 years of age and older, whereas the age at which compulsory schooling ends remains at 15 years. In the labor force participation rates and employment-population ratios, the denominator is the civilian noninstitutionalized working age population, except that the institutionalized working age population is included in Japan and Germany.

In the United States, the unemployed include persons who are not employed and who were actively seeking work during the reference period, as well as persons on layoff. Persons waiting to start a new job who were actively seeking work during the reference period are counted as unemployed under U.S. concepts; if they were not actively seeking work, they are not counted in the labor force. In some countries, persons on layoff are classified as employed due to their strong job attachment. No adjustment is made for the countries that classify those on layoff as employed. In the United States, as in Australia and Japan, passive job seekers are not in the labor force; job search must be active, such as placing or answering advertisements, contacting employers directly,or registering with an employment agency (simply reading ads is not enough to qualify as active search). Canada and the European countries classify passive jobseekers as unemployed. An adjustment is made to exclude them in Canada, but not in the European countries where the phenomenon is less prevalent. Persons waiting to start a new job are counted among the unemployed for all other countries, whether or not they were actively seeking work.

The figures for one or more recent years for France, Germany, and the Netherlands are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent year measures for these countries are therefore subject to revision whenever more current labor force surveys become available.

There are breaks in series for the United States (1994, 1997, 1998, 1999, 2000, 2003), Australia (2001), and Germany (1999).

For the United States, beginning in 1994, data are not strictly comparable for prior years because of the introduction of a major redesign of the labor force survey questionnaire and collection methodology. The redesign effect has been estimated to increase the overall unemployment rate by 0.1 percentage point. Other breaks noted relate to changes in population controls that had virtually no effect on unemployment rates.

For a description of all the changes in the U.S. labor force survey over time and their impact, see Historical Comparability in the "Household Data" section of the BLS publication *Employment and Earnings* (available on the BLS Web site at **www.bls.gov/cps/eetech_methods.pdf**).

For Australia, the 2001 break reflects the introduction in April 2001 of a redesigned labor force survey that allowed for a closer application of International Labor Office guidelines for the definitions of labor force statistics. The Australian Bureau of Statistics revised their data so there is no break in the employment series. However, the reclassification of persons who had not actively looked for work because they were waiting to begin a new job from "not in the labor force" to "unemployed" could only be incorporated for April 2001 forward. This reclassification diverges from the U.S. definition where persons waiting to start a new job but not actively seeking work are not counted in the labor force. The impact of the reclassification was an increase in the unemployment rate by 0.1 percentage point in 2001.

For Germany, the 1999 break reflects the incorporation of an improved method of data calculation and a change in coverage to persons living in private households only.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries*, on the BLS Web site at **www.bls.gov/fls/flslforc.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 54 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Australia, Canada, Japan, Korea, Taiwan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among economies.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) with the exception of Belguim and Taiwan, where only employees (wage and salary earners) are counted.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. data from 1998 forward are based on the 1997 North American Industry Classification System (NAICS). Output is in real value-added terms using a chain-type annual-weighted method for price deflation. (For more information on the U.S. measure, see "Improved Estimates of Gross Product by Industry for 1947–98," *Survey of Current Business*, June 2000, and "Improved Annual Industry Accounts for 1998–2003," *Survey of Current Business*, June 2004). Most of the other economies now also use annual moving price weights, but earlier years were estimated using fixed price

weights, with the weights typically updated every 5 or 10 years.

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of 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 labor hours refers to hours worked in all economies. The measures are developed from statistics of manufacturing employment and average hours. The series used for Australia, Canada, Demark, France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the United Kingdom from 1992, an official annual index of total manufacturing hours is used. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked.

Total compensation (labor cost) 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. The measures are from the national accounts of each economy, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Australia, Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France include parts of mining as well.

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.

Official published data for Australia are in fiscal years that begin on July 1. The Australian Bureau of Statistics has finished calendar-year data for recent years for output and hours. For earlier years and for compensation, data are BLS estimates using 2-year moving averages of fiscal year data.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Occupational Injury and Illness Data

(Tables 55–56)

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 recog-

nized 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: **http://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	2003	2004	2003			2004				2005	
			II	III	IV	I	II	III	IV	I	II
Employment data											
Employment status of the civilian noninstitutional population (household survey):[1]											
Labor force participation rate	66.2	66.0	66.4	66.2	66.1	66.0	66.0	66.0	66.0	65.8	66.0
Employment-population ratio	62.3	62.3	62.3	62.1	62.2	62.2	62.3	62.4	62.4	62.3	62.7
Unemployment rate	6.0	5.5	6.1	6.1	5.9	5.6	5.6	5.5	5.4	5.3	5.1
Men	6.3	5.6	6.5	6.4	6.1	5.7	5.7	5.6	5.6	5.4	5.1
16 to 24 years	13.4	12.6	13.9	13.7	13.0	12.6	12.9	12.5	12.6	13.2	12.6
25 years and older	5.0	4.4	5.2	5.1	4.9	4.5	4.5	4.4	4.3	4.1	3.8
Women	5.7	5.4	5.7	5.8	5.6	5.6	5.4	5.3	5.2	5.1	5.1
16 to 24 years	11.4	11.0	11.8	11.5	10.9	11.1	10.9	10.9	10.9	10.4	10.5
25 years and older	4.6	4.4	4.6	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.2
Employment, nonfarm (payroll data), in thousands:[1]											
Total nonfarm	129,931	131,480	129,845	129,890	130,168	130,541	131,125	131,731	132,302	132,814	133,405
Total private	108,356	109,862	108,253	108,320	108,614	108,986	109,737	110,095	110,600	111,089	111,655
Goods-producing	21,817	21,884	21,828	21,700	21,684	21,725	21,868	21,932	22,000	22,054	22,134
Manufacturing	14,525	14,329	14,555	14,377	14,313	14,285	14,338	14,353	14,338	14,314	14,288
Service-providing	108,114	109,596	108,017	108,190	108,483	108,816	109,457	109,799	110,302	110,759	111,271
Average hours:											
Total private	33.7	33.7	33.6	33.6	33.7	33.8	33.7	33.7	33.7	33.7	33.7
Manufacturing	40.4	40.8	40.2	40.3	40.7	41.0	40.8	40.8	40.6	40.6	40.4
Overtime	4.2	4.6	4.0	4.1	4.4	4.5	4.5	4.6	4.5	4.5	4.4
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	3.8	3.7	.8	1.1	.5	1.4	.9	1.0	.5	1.1	.6
Private industry workers	4.0	3.8	.8	1.0	.4	1.5	.9	.8	.5	1.1	.7
Goods-producing[3]	4.0	4.7	.9	.7	.5	2.3	.9	.9	.6	1.5	.9
Service-providing[3]	4.0	3.3	.8	1.1	.5	1.1	1.0	.8	.3	1.0	.6
State and local government workers	3.3	3.5	.4	1.7	.5	.7	.4	1.7	.6	.9	.3
Workers by bargaining status (private industry):											
Union	4.6	5.6	1.2	1.0	.7	2.8	1.5	.8	.5	.7	.8
Nonunion	3.9	3.4	.8	1.0	.4	1.3	.8	.9	.4	1.3	.7

[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] 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	2003	2004	2003			2004				2005	
			II	III	IV	I	II	III	IV	I	II
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	3.8	3.7	0.8	1.1	0.5	1.4	0.9	1.0	0.5	1.1	0.6
Private nonfarm	4.0	3.8	.8	1.0	.4	1.5	.9	.8	.5	1.1	.7
Employment Cost Index—wages and salaries:											
Civilian nonfarm	2.9	2.4	.6	.9	.3	.6	.6	.9	.3	.7	.5
Private nonfarm	3.0	2.4	.7	.8	.4	.7	.7	.9	.2	.7	.6
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	2.3	3.3	–.3	–.2	–.2	1.2	1.2	.2	.2	1.0	.5
Producer Price Index:											
Finished goods	3.2	4.1	–.8	.3	.0	1.2	1.2	.0	1.1	2.0	.3
Finished consumer goods	4.2	4.6	1.8	.3	.0	1.5	1.4	–1.7	.9	–2.6	1.4
Capital equipment	.4	2.4	–.6	–.1	.0	.6	.5	.4	1.6	2.1	–.2
Intermediate materials, supplies, and components	4.6	9.1	–2.1	–.1	.0	2.5	3.0	1.9	.9	3.5	.8
Crude materials	25.2	18.0	–10.6	3.4	14.4	6.0	7.6	–5.1	8.3	9.7	–2.5
Productivity data[3]											
Output per hour of all persons:											
Business sector	3.9	3.4	7.6	8.4	.3	3.4	3.4	1.4	3.1	2.9	1.2
Nonfarm business sector	3.8	3.4	6.6	9.6	.8	2.1	4.5	1.3	2.5	3.2	2.2
Nonfinancial corporations[4]	4.1	3.9	7.3	7.3	2.4	.8	2.3	7.4	8.5	3.6	–

[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] 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.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly change					Four quarters ending—				
	2004			2005		2004			2005	
	II	III	IV	I	II	II	III	IV	I	II
Average hourly compensation:[1]										
All persons, business sector	3.3	6.5	11.3	6.2	2.5	3.6	4.3	4.8	6.8	6.6
All persons, nonfarm business sector	3.7	6.1	10.2	6.9	3.5	3.7	4.0	5.8	6.7	6.7
Employment Cost Index—compensation:										
Civilian nonfarm[2]	.9	1.0	.5	1.1	.6	3.9	3.8	3.7	3.5	3.2
Private nonfarm	.9	.8	.5	1.1	.7	4.0	3.7	3.8	3.4	3.2
Union	1.5	.8	.5	.7	.8	6.0	5.8	5.6	3.6	2.9
Nonunion	.8	.9	.4	1.3	.7	3.5	3.4	3.4	3.4	3.2
State and local governments	.4	1.7	.6	.9	.3	3.4	3.4	3.5	3.6	3.6
Employment Cost Index—wages and salaries:										
Civilian nonfarm[2]	.6	.9	.3	.7	.5	2.5	2.4	2.4	2.4	2.4
Private nonfarm	.7	.9	.2	.7	.6	2.6	2.6	2.4	2.4	2.4
Union	1.0	.8	.4	.1	.8	2.9	3.0	2.8	2.3	2.1
Nonunion	.6	.8	.2	.8	.6	2.5	2.5	2.4	2.4	2.4
State and local governments	.2	1.0	.5	.6	.2	1.9	2.0	2.1	2.3	2.4

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

[2] Excludes Federal and 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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
TOTAL															
Civilian noninstitutional population[1]	221,168	223,357	223,422	223,677	223,941	224,192	224,422	224,640	224,837	225,041	225,236	225,441	225,670	225,911	226,421
Civilian labor force	146,510	147,401	147,823	147,676	147,531	147,893	148,313	148,203	147,979	148,132	148,157	148,762	149,122	149,123	149,573
Participation rate	66.2	66.0	66.2	66.0	65.9	66.0	66.1	66.0	65.8	65.8	65.8	66.0	66.1	66.0	66.1
Employed	137,736	139,252	139,639	139,658	139,527	139,827	140,293	140,156	140,241	140,144	140,501	141,099	141,475	141,638	142,076
Employment-population ratio[2]	62.3	62.3	62.5	62.4	62.3	62.4	62.5	62.4	62.4	62.3	62.4	62.6	62.7	62.7	62.8
Unemployed	8,774	8,149	8,184	8,018	8,005	8,066	8,020	8,047	7,737	7,988	7,656	7,663	7,647	7,486	7,497
Unemployment rate	6.0	5.5	5.5	5.4	5.5	5.4	5.5	5.4	5.2	5.4	5.2	5.2	5.1	5.0	5.0
Not in the labor force	74,658	75,956	75,599	76,001	76,410	76,299	76,109	76,437	76,858	76,909	77,079	76,679	76,547	76,787	76,580
Men, 20 years and over															
Civilian noninstitutional population[1]	98,272	99,476	99,512	99,642	99,776	99,904	100,017	99,476	100,219	100,321	100,419	100,520	100,634	100,754	100,874
Civilian labor force	74,623	75,364	75,567	75,615	75,462	75,632	75,866	75,754	75,594	75,816	75,921	76,173	76,439	76,462	76,624
Participation rate	75.9	75.8	75.9	75.9	75.6	75.7	75.9	75.7	75.4	75.6	75.6	75.8	76.0	75.9	76.0
Employed	70,415	71,572	71,830	71,847	71,701	71,895	71,134	72,020	72,029	72,131	72,429	72,817	73,100	73,174	73,363
Employment-population ratio[2]	71.7	71.9	72.2	72.1	71.9	72.0	72.1	71.9	71.9	71.9	72.1	72.4	72.6	72.6	72.7
Unemployed	4,209	3,791	3,737	3,768	3,761	3,736	3,733	3,733	3,565	3,685	3,492	3,356	3,339	3,288	3,261
Unemployment rate	5.6	5.0	4.9	5.0	5.0	4.9	4.9	4.9	4.7	4.9	4.6	4.4	4.4	4.3	4.3
Not in the labor force	23,649	24,113	23,945	24,026	24,314	24,272	24,151	24,372	24,625	24,505	24,498	24,347	24,195	24,292	24,250
Women, 20 years and over															
Civilian noninstitutional population[1]	106,800	107,658	107,687	107,801	107,920	108,032	108,129	107,658	108,316	108,403	108,486	108,573	108,672	108,776	108,880
Civilian labor force	64,716	64,923	65,085	64,909	65,008	65,126	65,244	65,260	65,318	65,270	65,051	65,420	65,479	65,470	65,768
Participation rate	60.6	60.3	60.4	60.2	60.2	60.3	60.3	60.3	60.3	60.2	60.0	60.3	60.3	60.2	60.4
Employed	61,402	61,773	61,902	61,877	61,939	62,024	62,145	62,208	62,295	62,202	62,099	62,384	62,464	62,451	62,690
Employment-population ratio[2]	57.5	57.4	57.5	57.4	57.4	57.4	57.5	57.5	57.5	57.4	57.2	57.5	57.5	57.4	57.6
Unemployed	3,314	3,150	3,183	3,032	3,069	3,102	3,099	3,051	3,023	3,068	2,952	3,036	3,015	3,019	3,078
Unemployment rate	5.1	4.9	4.9	4.7	4.7	4.8	4.7	4.7	4.6	4.7	4.5	4.6	4.6	4.6	4.7
Not in the labor force	42,083	42,735	42,603	42,892	42,912	42,906	42,885	42,961	42,998	43,133	43,435	43,153	43,192	43,306	43,113
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	16,096	16,222	16,222	16,234	16,246	16,257	16,293	16,222	16,302	16,317	16,332	16,347	16,364	16,381	16,399
Civilian labor force	7,170	7,114	7,172	7,152	7,062	7,165	7,202	7,189	7,066	7,046	7,185	7,168	7,204	7,192	7,182
Participation rate	44.5	43.9	44.2	44.1	43.5	43.9	44.2	44.1	43.3	43.2	44.0	43.9	44.0	43.9	43.8
Employed	5,919	5,907	5,907	5,934	5,887	5,908	6,014	5,927	5,917	5,811	5,973	5,897	5,911	6,013	6,024
Employment-population ratio[2]	36.8	36.4	36.4	36.6	36.2	36.3	36.9	36.4	36.3	35.6	36.6	36.1	36.1	36.7	36.7
Unemployed	1,251	1,208	1,265	1,217	1,175	1,227	1,188	1,262	1,150	1,235	1,212	1,271	1,293	1,178	1,158
Unemployment rate	17.5	17.0	17.6	17.0	16.6	17.2	16.5	17.6	16.3	17.5	16.9	17.7	17.9	16.4	16.1
Not in the labor force	8,926	9,108	9,051	9,082	9,184	9,122	9,074	9,104	9,235	9,271	9,147	9,179	9,160	9,190	9,217
White[3]															
Civilian noninstitutional population[1]	181,292	182,643	182,676	182,846	183,022	183,188	183,340	183,483	183,640	183,767	183,888	184,015	184,167	184,328	184,490
Civilian labor force	120,546	121,686	121,383	121,278	120,995	121,273	121,606	121,509	121,553	121,621	121,484	121,961	122,177	121,985	122,383
Participation rate	66.5	66.3	66.4	66.3	66.1	66.2	66.3	66.2	66.2	66.2	66.1	66.3	66.3	66.2	66.3
Employed	114,235	115,239	115,610	115,526	115,318	115,618	115,966	115,910	116,158	116,022	116,135	116,574	116,791	116,778	117,149
Employment-population ratio[2]	63.0	63.1	63.3	63.2	63.0	63.1	63.3	63.2	63.3	63.1	63.2	63.4	63.4	63.4	63.5
Unemployed	6,311	5,847	5,773	5,752	5,677	5,655	5,640	5,600	5,395	5,598	5,349	5,387	5,386	5,206	5,234
Unemployment rate	5.2	4.8	4.8	4.7	4.7	4.7	4.6	4.6	4.4	4.6	4.4	4.4	4.4	4.3	4.3
Not in the labor force	60,746	61,558	61,293	61,568	62,027	61,915	61,735	61,973	62,088	62,146	62,403	62,054	61,989	62,343	62,107
Black or African American[3]															
Civilian noninstitutional population[1]	25,686	26,065	26,078	26,120	26,163	26,204	26,239	26,273	26,306	26,342	26,377	26,413	26,450	26,448	26,526
Civilian labor force	16,526	16,638	16,775	16,721	16,711	16,820	16,728	16,713	16,721	16,708	16,741	16,940	17,050	17,147	17,190
Participation rate	64.3	63.8	64.3	64.0	63.9	62.4	63.8	63.6	63.6	63.4	63.5	64.1	64.5	64.7	64.8
Employed	14,739	14,909	14,937	14,972	14,981	15,012	14,913	14,907	14,946	14,890	15,025	15,184	15,329	15,378	15,561
Employment-population ratio[2]	57.4	57.2	57.3	57.3	57.3	57.3	56.8	56.7	56.8	56.5	57.0	57.5	58.0	58.1	58.7
Unemployed	1,787	1,729	1,838	1,749	1,730	1,808	1,814	1,806	1,775	1,818	1,716	1,756	1,721	1,769	1,628
Unemployment rate	10.8	10.4	11.0	10.5	10.4	10.7	10.8	10.8	10.6	10.9	10.3	10.4	10.1	10.3	9.5
Not in the labor force	9,161	9,428	9,303	9,399	9,452	9,384	9,512	9,559	9,585	9,634	9,636	9,473	9,400	9,341	9,336

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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	27,551	28,109	28,150	28,243	28,338	28,431	28,520	28,608	28,642	28,729	28,815	28,902	28,989	29,079	29,168
Civilian labor force	18,813	19,272	19,432	19,463	19,444	19,524	19,552	19,544	19,379	19,458	19,541	19,665	19,761	19,777	19,794
Participation rate	68.3	68.6	69.0	68.9	68.6	68.7	68.6	68.3	67.7	67.7	67.8	68.0	68.2	68.0	67.9
Employed	17,372	17,930	18,102	18,128	18,079	18,213	18,238	18,252	18,198	18,211	18,425	18,412	18,578	18,623	18,698
Employment-population ratio[2]	63.1	63.8	64.3	64.2	63.8	64.1	63.9	63.8	63.5	63.4	63.9	63.7	64.1	64.0	64.1
Unemployed	1,441	1,342	1,330	1,335	1,366	1,311	1,313	1,292	1,181	1,248	1,117	1,252	1,183	1,154	1,096
Unemployment rate	7.7	7.0	6.8	6.9	7.0	6.7	6.7	6.6	6.1	6.4	5.7	6.4	6.0	5.8	5.5
Not in the labor force	8,738	8,837	8,717	8,780	8,894	8,907	8,968	9,064	9,263	9,270	9,273	9,237	9,228	9,302	9,374

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Characteristic															
Employed, 16 years and older	137,736	139,252	139,639	139,658	139,527	139,827	140,293	140,156	140,241	140,144	140,501	141,099	141,475	141,638	142,076
Men	73,332	74,524	74,811	74,824	74,629	74,852	75,188	74,938	74,934	74,964	75,375	75,735	75,985	76,092	76,272
Women	64,404	64,728	64,828	64,834	64,898	64,975	65,104	65,218	65,307	65,180	65,127	65,364	65,490	65,545	65,804
Married men, spouse present	44,653	45,084	44,948	45,099	45,093	45,127	45,462	45,315	45,171	45,351	45,382	45,482	45,725	45,357	45,486
Married women, spouse present	34,695	34,600	34,607	34,494	34,704	34,808	34,961	34,878	34,739	34,601	34,307	34,539	34,747	34,622	34,965
Persons at work part time[1]															
All industries:															
Part time for economic reasons	4,701	4,567	4,488	4,509	4,476	4,762	4,533	4,474	4,395	4,269	4,344	4,293	4,361	4,465	4,427
Slack work or business conditions	3,118	2,841	2,642	2,816	2,805	3,052	2,761	2,735	2,768	2,629	2,643	2,613	2,741	2,668	2,723
Could only find part-time work	1,279	1,409	1,472	1,403	1,312	1,385	1,420	1,440	1,329	1,296	1,419	1,363	1,346	1,420	1,368
Part time for noneconomic noneconomic reasons	19,014	19,380	19,737	19,657	19,410	19,704	19,499	19,502	19,089	19,555	19,458	19,584	19,435	19,021	19,528
Nonagricultural industries:															
Part time for economic reasons	4,596	4,469	4,390	4,408	4,400	4,656	4,404	4,382	4,303	4,153	4,268	4,186	4,280	4,386	4,369
Slack work or business conditions	3,052	2,773	2,580	2,722	2,750	2,971	2,685	2,682	2,702	2,572	2,592	2,540	2,705	2,616	2,673
Could only find part-time work	1,264	1,399	1,484	1,388	1,320	1,363	1,396	1,397	1,309	1,268	1,411	1,351	1,331	1,416	1,369
Part time for noneconomic reasons	18,658	19,026	19,327	19,204	19,061	19,288	19,141	19,176	18,765	19,254	19,182	19,226	19,160	18,633	19,084

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Characteristic															
Total, 16 years and older	6.0	5.5	5.5	5.4	5.4	5.5	5.4	5.4	5.2	5.4	5.2	5.2	5.1	5.0	5.0
Both sexes, 16 to 19 years	17.5	17.0	17.6	17.0	16.6	17.2	16.5	17.6	16.3	17.5	16.9	17.7	17.9	16.4	16.1
Men, 20 years and older	5.6	5.0	4.9	5.0	5.0	4.9	4.9	4.9	4.7	4.9	4.6	4.4	4.4	4.3	4.3
Women, 20 years and older	5.1	4.9	4.9	4.7	4.7	4.8	4.7	4.7	4.6	4.7	4.5	4.6	4.6	4.6	4.7
White, total[1]	5.2	4.8	4.8	4.7	4.7	4.7	4.6	4.6	4.4	4.6	4.4	4.4	4.4	4.3	4.3
Both sexes, 16 to 19 years	15.2	15.0	14.9	15.4	14.7	15.1	14.4	15.7	14.0	15.5	14.5	15.3	15.4	14.2	13.6
Men, 16 to 19 years	17.1	16.3	15.5	15.8	15.9	17.4	15.5	17.9	16.3	18.1	17.7	17.8	17.8	16.0	15.6
Women, 16 to 19 years	13.3	13.6	14.2	15.0	13.5	12.6	13.2	13.4	11.8	12.9	11.0	12.8	13.0	12.3	11.6
Men, 20 years and older	5.0	4.4	4.3	4.4	4.3	4.2	4.2	4.2	4.0	4.1	4.0	3.8	3.8	3.6	3.7
Women, 20 years and older	4.4	4.2	4.2	4.0	4.0	4.0	4.1	3.9	3.9	3.9	3.8	4.0	3.9	3.9	3.9
Black or African American, total[1]	10.8	10.4	11.0	10.5	10.4	10.7	10.8	10.8	10.6	10.9	10.3	10.4	10.1	10.3	9.5
Both sexes, 16 to 19 years	33.0	31.7	37.2	29.4	28.6	34.7	32.7	30.8	30.2	31.5	32.6	35.5	35.8	32.4	33.1
Men, 16 to 19 years	36.0	35.6	37.9	34.9	35.9	37.1	38.1	37.7	30.0	34.1	35.8	37.8	36.3	37.6	39.8
Women, 16 to 19 years	30.3	28.2	36.6	24.2	21.1	32.4	27.0	24.0	30.5	28.6	29.2	32.8	35.3	26.9	27.4
Men, 20 years and older	10.3	9.9	10.3	10.4	10.2	10.2	10.5	10.7	10.4	10.9	9.2	9.3	9.2	9.6	8.4
Women, 20 years and older	9.2	8.9	9.1	8.7	8.9	8.9	9.0	9.1	8.9	9.1	8.9	8.8	8.4	8.8	8.2
Hispanic or Latino ethnicity	7.7	7.0	6.8	6.9	7.0	6.7	6.7	6.6	6.1	6.4	5.7	6.4	6.0	5.8	5.5
Married men, spouse present	3.8	3.1	3.2	3.1	3.0	3.0	3.1	3.1	3.1	3.0	3.0	2.7	2.7	2.6	2.6
Married women, spouse present	3.7	3.5	3.5	3.5	3.1	3.1	3.4	3.4	3.2	3.2	3.0	3.3	3.1	3.3	3.4
Full-time workers	6.1	5.6	5.6	5.5	5.5	5.4	5.4	5.4	5.2	5.4	5.1	5.1	5.0	4.9	4.9
Part-time workers	5.5	5.3	5.2	5.2	5.0	5.5	5.4	5.4	5.3	5.4	5.4	5.3	5.6	5.4	5.5
Educational attainment[2]															
Less than a high school diploma	8.8	8.5	8.3	8.2	8.9	8.2	8.0	8.3	7.5	7.8	7.8	8.4	7.8	7.0	7.6
High school graduates, no college[3]	5.5	5.0	5.0	4.9	4.8	4.9	4.9	4.9	4.7	4.9	4.7	4.4	4.5	4.7	4.8
Some college or associate degree	4.8	4.2	4.2	4.1	4.0	4.2	4.3	4.3	4.1	4.2	4.0	3.9	3.9	3.9	3.7
Bachelor's degree and higher[4]	3.1	2.7	2.7	2.7	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.5	2.4	2.3	2.4

[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.

[3] Includes high school diploma or equivalent.

[4] Includes persons with bachelor's, master's, professional, and doctoral degrees.

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

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Less than 5 weeks	2,785	2,696	2,803	2,605	2,796	2,753	2,611	2,865	2,599	2,755	2,531	2,666	2,699	2,666	2,571
5 to 14 weeks	2,612	2,382	2,458	2,521	2,251	2,290	2,361	2,264	2,343	2,317	2,319	2,268	2,262	2,342	2,430
15 weeks and over	3,378	3,072	2,885	2,924	2,971	3,032	3,012	2,961	2,824	2,888	2,817	2,698	2,667	2,350	2,437
15 to 26 weeks	1,442	1,293	1,198	1,243	1,227	1,261	1,294	1,325	1,201	1,255	1,165	1,093	1,133	1,041	1,047
27 weeks and over	1,936	1,779	1,686	1,681	1,744	1,771	1,718	1,636	1,623	1,633	1,652	1,615	1,534	1,310	1,389
Mean duration, in weeks	19.2	19.6	18.5	19.2	19.6	19.7	19.8	19.3	19.3	19.1	19.5	19.6	18.8	17.1	17.6
Median duration, in weeks	10.1	9.8	8.9	9.5	9.5	9.5	9.8	9.5	9.4	9.3	9.3	8.9	9.1	9.1	9.0

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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Job losers[1]	4,838	4,197	4,228	3,978	4,014	4,074	4,066	4,108	4,048	3,980	3,784	3,675	3,646	3,680	3,633
On temporary layoff	1,121	998	1,068	971	919	947	941	965	966	965	961	838	864	975	959
Not on temporary layoff	3,717	3,199	3,160	3,007	3,094	3,127	3,124	3,144	3,082	3,015	2,823	2,837	2,782	2,705	2,674
Job leavers	818	858	896	885	830	829	880	898	819	965	855	897	942	844	839
Reentrants	2,477	2,408	2,333	2,440	2,417	2,411	2,388	2,361	2,324	2,405	2,364	2,356	2,353	2,219	2,394
New entrants	641	686	686	699	697	747	723	709	624	745	711	747	728	661	628
Percent of unemployed															
Job losers[1]	55.1	51.5	51.9	49.7	50.4	50.5	5.1	50.9	51.8	49.2	49.1	47.9	47.5	49.7	48.6
On temporary layoff	12.8	12.2	13.1	12.1	11.6	11.8	11.7	11.9	12.4	11.9	12.5	10.9	11.3	13.2	12.8
Not on temporary layoff	42.4	39.3	38.8	37.6	38.9	38.8	38.8	38.9	39.4	37.2	36.6	37.0	36.3	36.5	35.7
Job leavers	9.3	10.5	11.0	11.1	10.4	10.3	10.9	11.1	10.5	11.9	11.1	11.7	12.3	11.4	11.0
Reentrants	28.2	29.5	28.6	30.5	30.4	29.9	29.6	29.2	29.7	29.7	30.6	30.7	30.7	30.0	32.0
New entrants	7.3	8.4	8.4	8.7	8.8	9.3	9.0	8.8	8.0	9.2	9.2	9.7	9.5	8.9	8.4
Percent of civilian labor force															
Job losers[1]	3.3	2.8	2.9	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.6	2.5	2.4	2.5	2.4
Job leavers	.6	.6	.6	.6	.6	.6	.6	.6	.6	.7	.6	.6	.6	.6	.6
Reentrants	1.7	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6
New entrants	.4	.5	.5	.5	.5	.5	.5	.5	.4	.5	.5	.5	.5	.4	.4

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and older	6.0	5.5	5.5	5.4	5.4	5.5	5.4	5.4	5.2	5.4	5.2	5.2	5.1	5.0	5.0
16 to 24 years	12.4	11.8	11.9	11.6	11.8	12.2	11.5	11.7	11.7	12.4	11.6	11.8	11.8	11.2	10.8
16 to 19 years	17.5	17.0	17.6	17.0	16.6	17.2	16.5	17.6	16.3	17.5	16.9	17.7	17.9	16.4	16.1
16 to 17 years	19.1	20.2	20.3	20.7	19.6	20.6	21.2	20.6	19.3	20.6	19.4	19.9	20.0	18.3	18.7
18 to 19 years	16.4	15.0	16.1	14.9	14.9	15.2	13.5	15.4	14.4	15.5	15.0	16.9	16.3	15.2	14.4
20 to 24 years	10.0	9.4	9.2	9.0	9.5	9.8	9.2	8.9	9.5	10.0	9.0	8.9	8.8	8.8	8.3
25 years and older	4.8	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.1	4.2	4.0	4.0	4.0	3.9	4.0
25 to 54 years	5.0	4.6	4.6	4.4	4.4	4.4	4.4	4.5	4.2	4.3	4.2	4.1	4.2	4.1	4.2
55 years and older	4.1	3.7	3.7	3.7	3.7	3.8	3.7	3.5	3.5	3.6	3.5	3.5	3.2	3.1	3.5
Men, 16 years and older	6.3	5.6	5.5	5.6	5.6	5.6	5.5	5.6	5.3	5.6	5.3	5.1	5.1	5.0	4.9
16 to 24 years	13.4	12.6	12.2	12.5	12.9	13.0	12.4	12.5	12.7	14.1	12.9	13.0	12.5	12.3	11.7
16 to 19 years	19.3	18.4	17.8	18.1	18.2	19.2	18.2	20.3	18.2	20.4	19.9	20.4	20.0	19.0	18.6
16 to 17 years	20.7	22.0	21.2	21.9	20.6	22.1	23.0	24.3	22.0	25.0	22.9	22.2	22.5	21.7	23.2
18 to 19 years	18.4	16.3	15.9	16.1	16.8	17.7	14.8	17.8	16.1	17.7	17.5	19.9	18.4	17.5	15.5
20 to 24 years	10.6	10.1	9.7	10.0	10.5	10.2	9.8	9.0	10.2	11.3	9.7	9.5	9.2	9.3	8.7
25 years and older	5.0	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.0	4.1	4.0	3.8	3.8	3.7	3.7
25 to 54 years	5.2	4.6	4.5	4.5	4.4	4.4	4.4	4.6	4.1	4.2	4.1	3.9	4.0	3.9	3.9
55 years and older	4.4	3.9	3.8	4.0	3.9	4.1	3.7	3.5	3.9	3.7	3.6	3.5	3.0	3.1	3.2
Women, 16 years and older	5.7	5.4	5.5	5.2	5.2	5.3	5.2	5.2	5.1	5.2	5.0	5.2	5.2	5.1	5.1
16 to 24 years	11.4	11.0	11.6	10.6	10.6	11.3	10.5	10.8	10.5	10.6	10.1	10.4	10.9	10.0	9.7
16 to 19 years	15.6	15.5	17.5	15.9	15.0	15.1	14.6	14.8	14.3	14.6	13.7	14.9	15.8	13.8	13.6
16 to 17 years	17.5	18.5	19.5	19.7	18.6	19.0	19.3	17.2	16.8	16.5	15.8	17.5	17.7	15.1	14.5
18 t0 19 years	14.2	13.5	16.4	13.5	12.8	12.5	12.1	12.9	12.7	13.2	12.2	13.9	14.2	12.8	13.2
20 to 24 years	9.3	8.7	8.7	7.9	8.4	9.4	8.5	8.9	8.7	8.6	8.3	8.2	8.4	8.1	7.7
25 years and older	4.6	4.4	4.4	4.3	4.3	4.2	4.3	4.2	4.1	4.2	4.0	4.2	4.1	4.2	4.3
25 to 54 years	4.8	4.6	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.2	4.4	4.3	4.4	4.5
55 years and older[1]	3.7	3.6	3.8	3.9	3.5	3.3	3.6	3.2	3.3	3.5	3.2	3.2	3.2	3.3	4.1

[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	June 2004	May 2005	June 2005[p]	State	June 2004	May 2005	June 2005[p]
Alabama	5.5	4.4	4.4	Missouri	5.7	5.6	5.4
Alaska	7.4	6.4	6.3	Montana	4.4	4.5	4.4
Arizona	5.0	4.8	4.4	Nebraska	3.7	4.0	3.8
Arkansas	5.8	5.0	4.8	Nevada	4.4	4.0	4.0
California	6.3	5.3	5.4	New Hampshire	3.8	3.6	3.5
Colorado	5.5	5.3	5.0	New Jersey	4.8	3.9	4.0
Connecticut	4.8	5.3	5.1	New Mexico	5.7	6.0	5.7
Delaware	4.1	4.1	4.1	New York	5.9	5.0	4.9
District of Columbia	8.1	7.9	7.5	North Carolina	5.6	5.1	5.3
Florida	4.8	4.1	4.0	North Dakota	3.4	3.5	3.4
Georgia	4.7	5.2	5.2	Ohio	6.2	6.1	6.2
Hawaii	3.2	2.7	2.7	Oklahoma	5.1	4.5	4.3
Idaho	4.8	3.9	3.9	Oregon	7.5	6.4	6.5
Illinois	6.1	5.8	6.0	Pennsylvania	5.5	4.8	5.0
Indiana	5.1	4.8	5.1	Rhode Island	5.2	4.5	4.8
Iowa	4.8	4.8	4.6	South Carolina	6.9	6.3	6.3
Kansas	5.5	5.3	5.2	South Dakota	3.5	4.0	3.8
Kentucky	5.4	5.7	5.7	Tennessee	5.3	6.2	6.0
Louisiana	5.8	5.4	5.4	Texas	6.1	5.5	5.1
Maine	4.5	5.0	4.7	Utah	5.3	4.9	4.6
Maryland	4.2	4.3	4.2	Vermont	3.5	3.1	3.4
Massachusetts	5.1	4.8	4.7	Virginia	3.8	3.6	3.7
Michigan	7.0	7.1	6.8	Washington	6.2	5.6	5.5
Minnesota	4.6	4.3	3.7	West Virginia	5.4	4.5	4.8
Mississippi	6.1	7.1	7.1	Wisconsin	4.9	4.7	4.6
				Wyoming	4.0	4.1	3.7

[p] = preliminary

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

State	June 2004	May 2005	June 2005[p]	State	June 2004	May 2005	June 2005[p]
Alabama	2,146,821	2,143,048	2,131,507	Missouri	3,034,351	3,031,278	3,017,322
Alaska	332,371	338,854	340,414	Montana	484,077	491,261	492,877
Arizona	2,771,394	2,816,286	2,821,889	Nebraska	986,656	986,876	981,972
Arkansas	1,303,506	1,345,629	1,343,529	Nevada	1,177,083	1,212,923	1,216,105
California	17,540,837	17,783,775	17,811,180	New Hampshire	723,136	734,690	733,710
Colorado	2,520,012	2,560,398	2,549,407	New Jersey	4,387,727	4,406,372	4,415,302
Connecticut	1,796,807	1,812,919	1,800,528	New Mexico	911,002	940,008	939,812
Delaware	422,867	432,201	431,530	New York	9,357,079	9,423,714	9,366,710
District of Columbia	297,431	298,768	298,441	North Carolina	4,251,146	4,308,337	4,308,482
Florida	8,396,013	8,653,301	8,643,791	North Dakota	353,982	355,364	354,175
Georgia	4,392,187	4,487,063	4,481,159	Ohio	5,888,274	5,930,253	5,898,782
Hawaii	614,963	625,173	630,284	Oklahoma	1,713,780	1,722,874	1,721,865
Idaho	703,382	728,370	734,574	Oregon	1,856,978	1,865,148	1,864,098
Illinois	6,381,886	6,479,643	6,442,871	Pennsylvania	6,258,273	6,350,018	6,286,681
Indiana	3,168,487	3,200,411	3,187,407	Rhode Island	562,934	570,690	569,017
Iowa	1,623,290	1,639,877	1,638,335	South Carolina	2,046,322	2,068,652	2,061,954
Kansas	1,463,823	1,472,267	1,463,104	South Dakota	427,934	428,280	429,072
Kentucky	1,976,897	1,991,855	1,989,121	Tennessee	2,907,505	2,907,197	2,878,388
Louisiana	2,057,005	2,110,625	2,113,445	Texas	11,027,739	11,216,988	11,165,666
Maine	698,993	708,850	706,974	Utah	1,203,775	1,235,731	1,236,299
Maryland	2,881,637	2,935,738	2,932,110	Vermont	353,001	351,495	351,937
Massachusetts	3,394,094	3,373,772	3,367,420	Virginia	3,816,561	3,907,947	3,911,184
Michigan	5,075,132	5,129,447	5,087,061	Washington	3,234,408	3,269,472	3,281,594
Minnesota	2,959,676	2,975,345	2,957,065	West Virginia	789,313	791,437	788,945
Mississippi	1,329,001	1,349,625	1,343,638	Wisconsin	3,069,479	3,049,673	3,038,202
				Wyoming	281,811	285,537	286,109

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

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

[In thousands]

Industry	Annual average		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	Mar.	Apr.	May	June[p]	July[p]
TOTAL NONFARM	129,999	131,480	131,562	131,750	131,880	132,162	132,294	132,449	132,573	132,873	132,995	133,287	133,413	133,588	133,830
TOTAL PRIVATE	108,416	109,862	109,976	110,105	110,203	110,462	110,588	110,749	110,863	111,140	111,264	111,542	111,659	111,828	112,028
GOODS-PRODUCING	21,816	21,884	21,902	21,946	21,947	21,982	21,996	22,022	22,004	22,066	22,093	22,130	22,138	22,134	22,136
Natural resources and mining	572	591	596	595	597	595	599	602	607	602	619	623	624	628	629
Logging	69.4	67.8	67.4	67.5	68.0	67.0	66.9	67.9	68.0	67.3	68.7	65.2	64.9	64.8	65.2
Mining	502.7	523.2	528.9	527.8	528.5	527.7	532.5	534.4	538.7	545.0	549.8	558.0	559.5	563.1	563.7
Oil and gas extraction	120.2	123.1	123.2	123.8	124.0	123.6	124.4	124.1	123.4	122.5	124.0	124.3	125.2	125.4	126.5
Mining, except oil and gas[1]	202.7	207.1	211.8	209.1	208.5	208.4	210.7	211.3	212.9	215.5	215.7	218.5	219.4	221.2	220.1
Coal mining	70.0	71.7	73.5	73.1	72.9	72.7	73.7	73.9	75.4	76.1	76.1	76.9	76.6	77.2	77.7
Support activities for mining	179.8	193.1	193.9	194.9	196.0	195.7	197.4	199.0	202.4	207.0	210.1	215.2	214.9	216.5	217.1
Construction	6,735	6,964	6,965	6,985	6,998	7,043	7,060	7,086	7,090	7,133	7,159	7,207	7,213	7,230	7,237
Construction of buildings	1,575.8	1,632.2	1,632.2	1,636.3	1,647.8	1,663.0	1,668.3	1,678.9	1,682.4	1,689.2	1,692.5	1,693.4	1,693.9	1,696.2	1,699.4
Heavy and civil engineering	903.1	902.5	899.7	901.1	902.1	904.1	906.4	907.8	908.2	911.7	915.7	926.6	925.8	937.4	940.5
Specialty trade contractors	4,255.7	4,429.7	4,433.1	4,447.6	4,447.8	4,476.1	4,484.8	4,499.2	4,499.6	4,531.8	4,550.9	4,586.5	4,593.7	4,596.4	4,597.3
Manufacturing	14,510	14,329	14,341	14,366	14,352	14,344	14,337	14,334	14,307	14,321	14,315	14,300	14,301	14,276	14,270
Production workers	10,190	10,083	10,102	10,131	10,117	10,111	10,104	10,097	10,082	10,085	10,091	10,086	10,092	10,080	10,073
Durable goods	8,963	8,923	8,926	8,965	8,957	8,960	8,954	8,957	8,942	8,962	8,957	8,954	8,961	8,947	8,939
Production workers	6,152	6,137	6,144	6,180	6,172	6,172	6,166	6,170	6,166	6,178	6,182	6,188	6,198	6,197	6,190
Wood products	537.6	548.4	550	551.7	550.1	554.5	553.3	555.2	554.7	553.6	555.2	551.8	548.4	550.7	548.7
Nonmetallic mineral products	494.2	504.8	507.9	507.6	508.8	509.1	507.9	506.5	504.5	504.0	502.0	504.7	501.6	501.3	498.9
Primary metals	477.4	465.9	468.4	467.4	466.4	466.0	465.8	465.2	465.5	466.9	466.6	466.0	466.2	465.3	464.6
Fabricated metal products	1,506.8	1,470.3	1,502.6	1,506.8	1,508.5	1,511.5	1,510.9	1,512.8	1,514.3	1,514.1	1,517.3	1,517.5	1,520.7	1,521.0	1,522.9
Machinery	1,149.4	1,141.5	1,146.8	1,151.5	1,148.7	1,147.3	1,147.4	1,146.0	1,145.9	1,148.0	1,151.7	1,153.7	1,156.2	1,156.2	1,160.5
Computer and electronic products[1]	1,355.2	1,326.2	1,332.8	1,334.0	1,332.5	1,329.8	1,327.1	1,325.8	1,327.0	1,327.5	1,326.0	1,329.0	1,329.5	1,333.4	1,335.1
Computer and peripheral equipment	224.0	212.1	211.4	212.4	211.9	209.7	209.3	210.4	210.2	211.2	211.3	212.5	213.3	214.8	214.5
Communications equipment	154.9	150.5	151.3	151.6	151.0	150.7	152.7	153.7	155.1	154.5	153.7	153.9	154.2	154.3	154.3
Semiconductors and electronic components	461.1	452.8	457.9	457.4	457.0	454.9	451.9	448.0	447.4	447.1	446.7	446.7	446.5	447.3	448.0
Electronic instruments	429.7	431.8	433.9	434.2	434.6	437.0	435.6	435.7	436.4	436.4	436.2	437.5	437.2	439.2	440.8
Electrical equipment and appliances	459.6	446.8	447.3	447.7	447.0	445.1	447.4	445.8	445.1	445.3	444.5	442.8	443.6	440.1	439.7
Transportation equipment	1,774.1	1,763.5	1,739.1	1,769.5	1,768.5	1,771.0	1,767.2	1,771.9	1,760.1	1,781.8	1,776.7	1,775.7	1,779.5	1,764.3	1,750.5
Furniture and related products	572.9	572.7	574.0	573.3	572.1	571.3	572.2	571.7	570.3	567.5	565.9	562.8	561.8	561.0	560.8
Miscellaneous manufacturing	663.3	655.5	656.8	655.2	654.5	654.1	654.7	656.4	654.3	653.5	651.3	650.3	653.0	653.7	657.0
Nondurable goods	5,547	5,406	5,415	5,401	5,395	5,384	5,383	5,377	5,365	5,359	5,358	5,346	5,340	5,329	5,331
Production workers	4,038	3,945	3,958	3,951	3,945	3,939	3,938	3,927	3,916	3,907	3,909	3,898	3,894	3,883	3,883
Food manufacturing	1,517.5	1,497.4	1,504.6	1,497.0	1,494.3	1,493.5	1,493.6	1,498.8	1,494.3	1,493.2	1,495.2	1,489.6	1,490.7	1,488.4	1,489.8
Beverages and tobacco products	199.6	194.3	194.2	193.4	194.9	192.9	195.1	193.0	192.2	192.5	191.6	191.1	191.3	190.4	190.4
Textile mills	261.3	238.5	238.8	238.1	237.3	236.5	235.0	233.2	231.5	230.1	228.7	225.5	225.1	223.9	222.3
Textile product mills	179.3	177.7	178.2	177.6	177.8	178.1	178.4	178.0	178.1	177.9	177.9	177.7	178.4	176.9	177.4
Apparel	312.3	284.8	283.2	282.6	281.0	276.1	273.4	271.9	269.3	267.2	262.8	262.2	259.2	257.0	258.1
Leather and allied products	44.5	42.9	42.5	42.5	42.7	42.8	43.4	43.1	43.1	43.2	42.9	42.8	42.8	42.8	43.6
Paper and paper products	516.2	499.1	499.2	500.6	499.3	499.4	498.1	497.9	499.9	500.2	502.0	499.3	498.3	496.4	496.4
Printing and related support activities	680.5	665.0	665.2	663.9	661.6	661.0	661.3	660.8	659.6	659.2	658.8	658.7	656.5	655.6	653.3
Petroleum and coal products	114.3	112.8	112.8	113.2	113.2	113.3	113.6	113.8	114.5	115.1	115.0	116.4	117.1	116.9	116.9
Chemicals	906.1	887.0	887.7	885.8	885.5	884.5	882.4	880.5	877.1	876.4	877.5	878.4	877.8	878.4	879.4
Plastics and rubber products	815.4	806.6	808.9	806.6	807.1	806.3	808.6	806.2	804.9	804.1	805.8	804.3	803.0	802.3	803.5
SERVICE-PROVIDING	108,182	109,596	109,660	109,804	109,933	110,180	110,298	110,427	110,569	110,807	110,902	111,157	111,275	111,454	111,694
PRIVATE SERVICE-PROVIDING	86,599	87,978	88,074	88,159	88,256	88,480	88,592	88,727	88,859	89,074	89,171	89,412	89,521	89,694	89,892
Trade, transportation, and utilities	25,287	25,510	25,536	25,537	25,555	25,581	25,621	25,620	25,652	25,714	25,743	25,797	25,842	25,854	25,927
Wholesale trade	5,607.5	5,654.9	5,660.2	5,662.9	5,672.4	5,674.7	5,680.0	5,683.6	5,679.9	5,688.7	5,702.2	5,707.7	5,719.0	5,722.3	5,730.5
Durable goods	2,940.6	2,949.1	2,955.3	2,957.8	2,960.2	2,962.3	2,960.4	2,964.5	2,965.6	2,968.7	2,975.6	2,976.8	2,983.0	2,986.1	2,990.0
Nondurable goods	2,004.6	2,007.1	2004.0	2004.0	2008.1	2009.1	2012.6	2009.9	2,005.4	2,006.9	2,011.2	2,012.6	2,014.0	2,013.7	2,014.7
Electronic markets and agents and brokers	662.2	698.8	700.9	701.1	704.1	703.3	707.0	709.2	708.9	713.1	715.4	718.3	722.0	722.5	725.8
Retail trade	14,917.3	15,034.7	15,048.2	15,043.3	15,037.7	15,056.5	15,081.4	15,077.0	15,081.2	15,125.4	15,128.7	15,157.5	15,185.8	15,197.1	15,255.1
Motor vehicles and parts dealers[1]	1,882.9	1,901.2	1,904.4	1,899.8	1,898.4	1,896.4	1,901.2	1,905.9	1,907.4	1,911.2	1,912.6	1,914.2	1,917.3	1,916.4	1,925.0
Automobile dealers	1,254.4	1,254.2	1254.1	1251.2	1247.3	1245.0	1247.6	1249.1	1247.9	1248.8	1250.2	1252.2	1254.7	1252.6	1257.3
Furniture and home furnishings stores	547.3	560.2	559.8	561.6	561.9	562.3	565.6	563.7	562.1	562.6	562.3	565.5	569.1	566.1	569.1
Electronics and appliance stores	512.2	514.4	513.4	512.0	513.6	520.2	520.3	516.5	516.1	515.1	518.4	518.4	521.9	524.5	527.2

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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
Building material and garden supply stores	1,185.0	1,226.0	1,224.7	1,228.1	1,232.5	1,236.3	1,240.4	1,243.5	1,248.0	1,264.8	1,263.7	1,264.5	1,267.6	1,272.8	1,280.5
Food and beverage stores	2,383.4	2,826.3	2,828.5	2,826.2	2,827.1	2,830.2	2,822.7	2,819.8	2,826.0	2,826.6	2,826.8	2,834.9	2,838.5	2,840.2	2,842.9
Health and personal care stores	938.1	941.7	941.0	941.0	942.1	941.6	944.5	946.6	944.8	949.7	949.2	955.0	958.0	956.7	956.6
Gasoline stations	882.0	877.1	876.6	876.5	878.0	877.0	873.7	871.3	872.9	874.6	874.5	875.0	876.6	874.0	879.1
Clothing and clothing accessories stores	1,304.5	1,361.8	1,369.5	1,374.4	1,371.9	1,376.0	1,377.9	1,381.3	1,375.5	1,380.5	1,384.0	1,387.0	1,394.5	1,406.1	1,426.9
Sporting goods, hobby, book, and music stores	646.5	639.2	638.9	639.0	638.7	638.0	639.0	635.8	637.7	636.2	638.3	638.0	637.2	636.3	635.7
General merchandise stores[1]	2,822.4	2,843.5	2,848.0	2,842.5	2,832.9	2,835.2	2,854.9	2,852.9	2,853.5	2,864.1	2,862.0	2,864.7	2,866.0	2,861.6	2,871.0
Department stores	1,620.6	1,612.5	1,616.1	1,611.4	1,603.3	1,604.2	1,619.1	1,619.3	1,619.1	1,625.7	1,624.2	1,625.3	1,629.5	1,628.7	1,638.5
Miscellaneous store retailers	930.7	918.6	918.8	918.9	917.0	920.5	917.4	918.2	918.7	919.9	919.4	921.6	921.1	924.0	921.9
Nonstore retailers	427.3	424.8	424.6	423.3	423.6	422.8	423.8	421.5	418.5	420.1	417.5	418.7	418.0	418.4	419.2
Transportation and warehousing	4,185.4	4,250.0	4,257.0	4,260.4	4,274.1	4,279.6	4,289.6	4,288.0	4,316.0	4,324.1	4,336.6	4,355.8	4,361.4	4,359.9	4,366.1
Air transportation	528.3	514.8	516.3	515.0	513.8	514.2	514.6	512.3	509.4	507.9	508.0	508.8	508.1	507.8	506.3
Rail transportation	217.7	224.1	225.0	224.6	225.5	225.4	224.6	224.0	224.4	223.9	223.7	223.7	224.3	223.9	223.8
Water transportation	54.5	57.2	58.1	56.7	57.2	57.7	57.8	58.6	59.8	60.0	61.6	61.3	61.5	62.2	62.2
Truck transportation	1,325.6	1,350.7	1,352.5	1,352.5	1,358.5	1,356.0	1,358.9	1,366.5	1,372.6	1,378.0	1,383.2	1,389.8	1,392.9	1,396.3	1,394.9
Transit and ground passenger transportation	382.2	385.5	383.2	386.2	388.3	389.3	389.4	391.0	391.7	391.0	388.7	393.3	389.8	381.9	390.7
Pipeline transportation	40.2	38.8	39.0	38.9	39.0	38.9	39.0	38.7	39.3	39.4	39.3	39.5	39.3	39.3	39.2
Scenic and sightseeing transportation	26.6	26.7	26.3	27.7	27.8	25.6	26.1	26.6	24.2	24.9	26.7	27.2	28.3	28.4	28.6
Support activities for transportation	520.3	535.6	535.5	536.9	537.7	539.9	544.6	547.0	549.3	551.5	553.4	554.2	557.2	554.5	554.8
Couriers and messengers	561.7	560.5	563.1	562.6	563.8	564.4	568.7	556.4	577.5	577.6	579.3	581.8	582.4	582.3	582.9
Warehousing and storage	528.3	556.0	558.0	559.3	562.5	568.2	565.9	566.9	567.8	569.9	572.7	576.2	577.6	583.3	582.7
Utilities	577.0	570.2	570.9	570.1	571.1	570.3	570.2	571.3	574.7	576.0	575.2	575.6	575.4	575.1	575.1
Information	3,188	3,138	3,144	3,135	3,127	3,131	3,133	3,127	3,123	3,127	3,134	3,152	3,146	3,146	3,145
Publishing industries, except Internet	924.8	909.8	909.6	909.3	909.2	908.1	908.9	905.7	905.0	905.6	906.8	905.7	905.7	907.0	909.6
Motion picture and sound recording industries	376.2	389.0	394.4	389.3	389.7	395.3	390.6	384.8	380.3	380.9	386.9	399.3	394.2	393.1	392.3
Broadcasting, except Internet	324.3	326.6	327.2	327.8	328.1	329.5	329.7	329.7	331.3	330.4	330.7	330.7	330.8	331.6	333.3
Internet publishing and broadcasting	29.2	31.3	31.4	31.7	32.0	33.0	33.6	34.0	34.8	34.6	35.0	35.3	35.2	35.6	35.0
Telecommunications	1,082.3	1,042.5	1,041.9	1,037.1	1,028.4	1,024.8	1,030.0	1,031.5	1,030.8	1,032.2	1,029.9	1,037.3	1,036.2	1,034.8	1,033.2
ISPs, search portals, and data processing	402.4	388.1	388.6	387.6	387.6	389.2	389.5	390.4	389.9	392.6	393.7	393.9	393.5	393.4	391.0
Other information services	48.7	50.9	51.3	51.7	51.5	50.9	50.7	50.7	51.0	50.9	50.7	50.1	50.2	50.6	50.9
Financial activities	7,977	8,052	8,043	8,058	8,083	8,093	8,107	8,128	8,150	8,165	8,167	8,182	8,189	8,208	8,227
Finance and insurance	5,922.6	5,965.6	5,958.6	5,970.2	5,982.1	5,994.1	6,001.3	6,014.5	6,030.9	6,037.6	6,039.8	6,048.0	6,052.9	6,062.5	6,071.9
Monetary authorities—central bank	22.6	21.6	21.5	21.6	21.5	21.3	20.9	20.6	20.5	20.4	20.4	20.3	20.4	20.4	20.4
Credit intermediation and related activities[1]	2,792.4	2,832.3	2,829.2	2,833.4	2,841.0	2,847.9	2,859.2	2,871.9	2,882.7	2,891.0	2,896.8	2,902.6	2,906.7	2,915.4	2,921.5
Depository credit intermediation[1]	1,748.5	1,761.2	1,760.6	1,763.0	1,765.1	1,768.1	1,773.3	1,778.8	1,785.6	1,790.3	1,794.0	1,795.9	1,797.8	1,802.1	1,803.9
Commercial banking	1,280.1	1,285.3	1,283.9	1,283.5	1,286.4	1,288.3	1,293.1	1,296.8	1,301.6	1,305.5	1,308.0	1,308.3	1,308.8	1,311.0	1,311.5
Securities, commodity contracts, investments	757.7	766.8	766.3	769.9	772.3	777.3	776.9	779.7	782.5	784.8	786.9	787.6	787.6	786.5	788.0
Insurance carriers and related activities	2,266.0	2,260.3	2,257.0	2,261.0	2,263.3	2,264.1	2,260.4	2,258.1	2,259.6	2,256.7	2,250.9	2,253.9	2,253.6	2,254.6	2,256.4
Funds, trusts, and other financial vehicles	83.9	84.7	84.6	84.3	84.0	83.5	83.9	84.2	85.6	84.7	84.8	83.6	84.6	85.6	85.6
Real estate and rental and leasing	2,053.9	2,086.2	2,084.6	2,088.2	2,101.3	2,099.2	2,105.5	2,113.6	2,119.0	2,127.2	2,126.8	2,134.3	2,136.4	2,145.0	2,154.8
Real estate	1,383.6	1,417.0	1,416.7	1,420.0	1,429.1	1,428.6	1,434.7	1,437.8	1,439.7	1,443.8	1,444.0	1,449.7	1,454.6	1,461.4	1,469.7
Rental and leasing services	643.1	643.9	643.0	643.3	647.6	646.3	646.0	650.9	654.1	658.3	657.8	659.0	655.8	658.1	659.4
Lessors of nonfinancial intangible assets	27.3	25.4	24.9	24.9	24.6	24.3	24.8	24.9	25.2	25.1	25.0	25.6	26.0	25.5	25.7
Professional and business services	15,987	16,414	16,453	16,470	16,514	16,614	16,611	16,674	16,694	16,775	16,796	16,843	16,851	16,906	16,948
Professional and technical services[1]	6,629.5	6,762.0	6,765.1	6,779.7	6,805.4	6,835.3	6,834.4	6,869.9	6,882.1	6,902.7	6,907.3	6,928.5	6,929.1	6,950.9	6,973.1
Legal services	1,142.1	1,161.8	1,165.0	1,163.6	1,166.8	1,167.4	1,163.1	1,164.4	1,160.8	1,161.2	1,161.5	1,161.8	1,163.3	1,163.0	1,164.8
Accounting and bookkeeping services	815.3	816.0	813.9	814.2	816.1	821.5	816.6	840.8	858.1	858.1	856.6	862.7	851.4	858.5	859.6
Architectural and engineering services	1,226.9	1,260.8	1,262.0	1,264.4	1,270.5	1,280.5	1,284.9	1,289.5	1,286.9	1,292.0	1,295.7	1,300.8	1,303.9	1,310.8	1,315.7

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		2004						2005						
	2003	2004	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
Computer systems design and related services	1,116.6	1,147.4	1,145.9	1,155.0	1,161.1	1,167.3	1,174.1	1,174.3	1,171.8	1,174.2	1,175.5	1,178.5	1,178.2	1,182.4	1,184.2
Management and technical consulting services	744.9	779.0	784.7	786.9	787.9	790.5	787.8	789.9	789.3	793.7	795.5	798.8	801.9	806.3	812.3
Management of companies and enterprises	1,687.2	1,718.0	1,723.7	1,720.7	1,715.0	1,715.3	1,722.5	1,725.6	1,730.7	1,731.3	1,731.5	1,733.4	1,734.1	1,735.7	1,735.5
Administrative and waste services	7,669.8	7,934.0	7,964.0	7,969.7	7,993.2	8,063.1	8,054.3	8,078.0	8,081.6	8,140.9	8,156.7	8,181.1	8,187.9	8,219.5	8,239.6
Administrative and support services[1]	7,347.7	7,608.7	7,637.2	7,643.1	7,667.3	7,736.4	7,728.2	7,751.4	7,755.2	7,813.6	7,831.8	7,858.1	7,866.8	7,897.7	7,911.9
Employment services[1]	3,299.5	3,470.3	3,477.5	3,480.0	3,513.5	3,572.9	3,570.5	3,584.5	3,595.9	3,633.8	3,645.7	3,666.0	3,667.9	3,688.0	3,691.0
Temporary help services	2,224.2	2,393.2	2,398.6	2,411.8	2,438.7	2,486.5	2,484.7	2,479.4	2,479.1	2,508.0	2,506.1	2,520.7	2,517.7	2,529.6	2,532.4
Business support services	749.7	754.5	758.1	757.9	752.6	755.9	754.6	757.0	752.8	755.7	754.1	754.9	753.3	751.4	750.2
Services to buildings and dwellings	1,636.1	1,694.2	1,705.2	1,706.6	1,706.4	1,708.6	1,707.2	1,706.1	1,701.4	1,711.2	1,712.6	1,715.9	1,722.4	1,729.0	1,740.9
Waste management and remediation services	322.1	325.3	326.8	326.6	325.9	326.7	326.1	326.6	326.4	327.1	324.9	323.0	321.1	323.8	327.7
Educational and health services	16,588	16,954	16,963	17,010	17,019	17,081	17,108	17,142	17,178	17,186	17,210	17,243	17,289	17,336	17,364
Educational services	2,695.1	2,766.4	2,765.6	2,772.3	2,773.2	2,794.0	2,797.2	2,805.5	2,825.0	2,810.3	2,814.0	2,814.0	2,822.2	2,835.5	2,832.6
Health care and social assistance	13,892.6	14,187.3	14,197.8	14,237.8	14,246.1	14,287.2	14,310.7	14,336.1	14,353.2	14,375.4	14,396.0	14,429.1	14,467.2	14,500.5	14,531.2
Ambulatory health care services[1]	4,786.4	4,946.4	4,956.2	4,969.2	4,975.0	4,996.9	5,006.7	5,017.0	5,027.0	5,035.0	5,041.6	5,054.2	5,069.7	5,084.6	5,101.3
Offices of physicians	2,002.5	2,053.9	2,054.5	2,059.1	2,064.5	2,074.2	2,077.7	2,084.3	2,085.3	2,090.9	2,093.2	2,103.6	2,114.4	2,119.5	2,124.9
Outpatient care centers	426.8	446.2	448.4	449.7	448.7	449.5	449.8	450.3	451.5	451.1	452.6	453.6	455.3	456.7	459.9
Home health care services	732.6	773.2	775.4	778.0	779.5	782.7	789.2	790.7	796.6	796.8	798.8	797.9	798.8	804.1	806.5
Hospitals	4,244.6	4,293.6	4,296.2	4,305.0	4,306.0	4,311.2	4,319.7	4,323.5	4,329.6	4,337.8	4,344.6	4,354.2	4,362.6	4,374.5	4,384.2
Nursing and residential care facilities[1]	2,786.2	2,814.8	2,818.0	2,819.8	2,825.0	2,827.2	2,827.2	2,827.9	2,827.0	2,830.0	2,830.0	2,832.5	2,839.8	2,841.2	2,845.9
Nursing care facilities	1,579.8	1,575.3	1,576.9	1,576.7	1,576.6	1,576.8	1,576.4	1,574.5	1,571.5	1,571.6	1,572.3	1,571.4	1,572.7	1,573.2	1,574.1
Social assistance[1]	2,075.4	2,132.5	2,127.4	2,143.8	2,140.1	2,151.9	2,157.1	2,167.7	2,169.6	2,172.6	2,179.8	2,188.2	2,195.1	2,200.2	2,199.8
Child day care services	755.3	767.1	770.4	776.1	767.9	772.8	775.3	780.4	780.5	782.5	785.1	788.6	788.0	793.2	790.3
Leisure and hospitality	12,173	12,479	12,497	12,508	12,522	12,546	12,571	12,589	12,611	12,650	12,662	12,723	12,736	12,765	12,802
Arts, entertainment, and recreation	1,812.9	1,833.0	1,830.9	1,831.0	1,836.2	1,834.4	1,826.4	1,811.0	1,805.4	1,808.4	1,805.8	1,823.9	1,824.9	1,830.6	1,834.4
Performing arts and spectator sports	371.7	364.8	359.2	358.4	363.6	364.4	362.5	357.9	355.6	357.0	357.8	361.1	361.7	364.1	365.9
Museums, historical sites, zoos, and parks	114.7	117.1	118.6	118.8	118.3	118.2	116.9	114.8	114.5	113.6	115.8	116.8	117.3	117.5	117.2
Amusements, gambling, and recreation	1,326.5	1,351.1	1,353.1	1,353.8	1,354.3	1,351.8	1,347.0	1,338.3	1,335.3	1,337.8	1,332.2	1,346.0	1,345.9	1,349.0	1,351.3
Accommodations and food services	10,359.8	10,646.0	10,666.1	10,676.5	10,685.3	10,712.0	10,744.1	10,778.4	10,805.1	10,841.1	10,856.0	10,899.0	10,911.1	10,934.2	10,967.7
Accommodations	1,775.4	1,795.9	1,797.3	1,801.3	1,801.5	1,800.6	1,814.7	1,824.6	1,825.9	1,830.3	1,826.6	1,830.1	1,830.3	1,830.0	1,830.5
Food services and drinking places	8,584.4	8,850.1	8,868.8	8,875.2	8,883.8	8,911.4	8,929.4	8,953.8	8,979.2	9,010.8	9,029.4	9,068.9	9,080.8	9,104.2	9,137.2
Other services	5,401	5,431	5,438	5,441	5,436	5,434	5,441	5,447	5,451	5,457	5,459	5,472	5,468	5,479	5,479
Repair and maintenance	1,233.6	1,227.6	1,227.4	1,225.9	1,226.9	1,227.9	1,227.1	1,229.9	1,229.4	1,233.7	1,235.6	1,239.9	1,241.4	1,244.1	1,245.7
Personal and laundry services	1,263.5	1,274.1	1,278.0	1,276.9	1,271.5	1,267.8	1,271.6	1,276.8	1,280.4	1,280.5	1,282.2	1,286.9	1,284.4	1,283.2	1,280.2
Membership associations and organizations	2,903.6	2,929.1	2,932.8	2,937.9	2,937.9	2,938.1	2,942.3	2,940.6	2,941.4	2,942.9	2,940.8	2,945.6	2,942.4	2,951.7	2,953.2
Government	21,583	21,618	21,586	21,645	21,677	21,700	21,706	21,700	21,710	21,733	21,731	21,745	21,754	21,760	21,802
Federal	2,761	2,728	2,726	2,730	2,730	2,723	2,728	2,706	2,717	2,720	2,724	2,718	2,722	2,719	2,719
Federal, except U.S. Postal Service	1,952.4	1,943.4	1,939.2	1,945.5	1,946.8	1,940.1	1,946.4	1,939.5	1,937.2	1,939.8	1,943.2	1,937.1	1,940.8	1,937.6	1,937.7
U.S. Postal Service	808.6	784.1	786.4	784.3	783.4	782.5	781.4	766.4	780.2	780.1	780.8	780.7	781.2	781.2	781.0
State	5,002	4,985	4,976	4,987	5,000	5,007	5,015	5,020	5,025	5,027	5,024	5,026	5,023	5,026	5,031
Education	2,254.7	2,249.2	2,241.4	2,249.4	2,263.7	2,268.4	2,271.3	2,277.9	2,280.4	2,283.0	2,280.8	2,281.2	2,277.6	2,278.2	2,281.0
Other State government	2,747.6	2,736.2	2,734.4	2,737.8	2,736.4	2,738.2	2,743.4	2,741.9	2,744.4	2,744.4	2,743.2	2,745.1	2,745.5	2,747.6	2,750.0
Local	13,820	13,905	13,884	13,928	13,947	13,970	13,963	13,974	13,968	13,986	13,983	14,001	14,009	14,015	14,052
Education	7,709.4	7,762.5	7,757.8	7,785.7	7,793.2	7,810.8	7,806.3	7,810.8	7,808.8	7,820.7	7,813.5	7,823.9	7,823.5	7,830.3	7,866.9
Other local government	6,110.2	6,143.0	6,126.6	6,142.2	6,153.4	6,159.3	6,156.7	6,163.1	6,159.2	6,165.1	6,169.0	`6177.4	6,185.9	6,184.9	6,185.5

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	33.7	33.7	33.7	33.7	33.8	33.8	33.7	33.7	33.7	33.7	33.7	33.8	33.7	33.7	33.7
GOODS-PRODUCING	39.8	40.0	40.1	40.0	40.1	39.9	39.9	40.0	39.8	39.9	39.8	40.1	39.9	39.9	39.9
Natural resources and mining	43.6	44.5	44.2	44.4	44.5	44.8	45.0	45.4	45.5	45.1	45.3	45.7	45.8	45.6	45.9
Construction	38.4	38.3	38.3	38.1	38.1	38.2	38.3	38.4	37.6	38.2	38.3	39.0	38.5	38.5	38.2
Manufacturing	40.4	40.8	40.8	40.9	40.8	40.7	40.5	40.5	40.7	40.6	40.4	40.5	40.4	40.4	40.5
Overtime hours	4.2	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.6	4.5	4.4	4.4	4.4	4.5
Durable goods	40.8	41.3	41.3	41.3	41.2	41.2	40.9	41.1	41.1	41.0	40.8	40.9	40.8	40.9	41.0
Overtime hours	4.3	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.7	4.5	4.5	4.4	4.4	4.6
Wood products	40.4	40.6	40.7	40.8	40.4	40.3	40.0	40.3	40.6	39.9	39.5	39.5	39.6	39.5	39.6
Nonmetallic mineral products	42.2	42.3	42.2	42.3	42.4	42.4	42.1	42.3	41.9	42.1	41.7	41.9	41.8	41.7	41.6
Primary metals	42.3	43.1	43.2	43.2	43.1	43.0	42.9	42.8	43.1	43.0	42.9	42.6	42.5	42.7	43.0
Fabricated metal products	40.7	41.1	41.2	41.2	41.2	41.1	40.9	40.9	40.9	40.8	40.7	40.8	40.7	40.7	40.8
Machinery	40.8	41.9	42.1	42.1	42.3	42.2	42.0	42.0	42.0	42.0	42.0	42.0	41.9	41.9	42.1
Computer and electronic products	40.4	40.4	40.7	40.4	40.3	40.1	39.6	39.8	40.0	39.6	39.5	39.8	39.9	39.8	40.1
Electrical equipment and appliances	40.6	40.7	40.8	40.9	40.6	40.6	40.1	40.0	40.1	40.0	40.0	40.1	40.2	40.2	40.9
Transportation equipment	41.9	42.5	42.4	42.5	42.4	42.3	42.2	42.4	42.4	42.4	42.0	42.1	41.8	42.2	42.3
Furniture and related products	38.9	39.5	39.3	39.3	39.3	39.2	39.2	39.5	39.5	39.4	39.4	39.2	39.1	39.3	39.2
Miscellaneous manufacturing	38.4	38.5	38.6	38.5	38.4	38.4	38.2	38.3	38.5	38.6	38.7	38.8	38.6	38.7	38.3
Nondurable goods	39.8	40.0	40.1	40.2	40.1	39.9	39.8	39.8	40.0	40.0	39.7	39.8	39.7	39.7	39.7
Overtime hours	4.1	4.4	4.4	4.5	4.4	4.3	4.3	4.3	4.4	4.5	4.4	4.3	4.3	4.3	4.3
Food manufacturing	39.3	39.3	39.3	39.3	39.3	39.0	39.1	38.8	39.0	39.3	38.8	39.0	38.9	38.8	38.9
Beverage and tobacco products	39.1	39.2	38.9	39.4	39.2	38.6	39.0	39.6	40.5	40.2	40.1	40.4	39.0	40.0	40.0
Textile mills	39.1	40.1	40.5	40.5	40.2	40.1	40.0	39.8	40.2	39.7	40.0	40.2	40.4	40.3	40.1
Textile product mills	39.6	38.9	38.6	38.8	39.1	39.1	39.1	39.0	39.5	39.5	39.4	38.8	38.7	38.1	38.3
Apparel	35.6	36.0	36.0	36.2	36.2	36.0	35.7	35.9	35.9	35.9	35.9	35.7	35.1	35.4	35.5
Leather and allied products	39.3	38.4	37.8	38.1	38.2	38.4	38.2	37.6	37.1	37.2	37.3	37.8	38.5	38.6	39.4
Paper and paper products	41.5	42.1	42.4	42.5	42.2	42.1	42.1	42.0	42.5	42.1	41.9	42.2	42.3	42.2	42.1
Printing and related support activities	38.2	38.4	38.6	38.5	38.3	38.3	38.3	38.5	38.6	38.5	38.3	38.3	38.4	38.2	38.3
Petroleum and coal products	44.5	44.9	45.0	45.9	46.0	45.0	45.5	44.6	44.5	44.7	45.1	46.0	45.6	45.6	45.3
Chemicals	42.4	42.8	42.8	42.9	42.8	42.7	42.4	42.6	42.8	42.3	42.2	42.4	42.3	42.1	41.9
Plastics and rubber products	40.4	40.4	40.5	40.5	40.3	40.1	39.4	39.8	40.0	40.1	39.8	39.7	39.6	39.6	39.5
PRIVATE SERVICE-PROVIDING	32.4	32.3	32.4	32.4	32.5	32.4	32.3	32.4	32.4	32.4	32.4	32.5	32.4	32.4	32.4
Trade, transportation, and utilities	33.6	33.5	33.4	33.5	33.6	33.6	33.5	33.6	33.6	33.6	33.5	33.5	33.4	33.3	33.3
Wholesale trade	37.9	37.8	37.8	37.7	37.8	37.7	37.7	37.6	37.7	37.8	37.7	37.7	37.6	37.6	37.6
Retail trade	30.9	30.7	30.6	30.7	30.8	30.8	30.6	30.8	30.7	30.8	30.7	30.7	30.6	30.5	30.4
Transportation and warehousing	36.8	37.2	37.2	37.2	37.5	37.5	37.5	37.4	37.5	37.3	37.2	37.3	37.1	37.0	37.1
Utilities	41.1	40.9	40.9	40.9	41.4	40.8	40.4	40.7	41.0	40.5	40.3	41.1	40.9	41.2	41.1
Information	36.2	36.3	36.3	36.4	36.3	36.3	36.2	36.4	36.3	36.4	36.5	36.5	36.6	36.4	36.5
Financial activities	35.5	35.5	35.6	35.5	35.5	35.7	35.6	35.7	35.9	35.8	35.9	36.0	36.0	36.0	36.1
Professional and business services	34.1	34.2	34.2	34.3	34.7	34.3	34.2	34.2	34.1	34.0	34.0	34.2	34.1	34.1	34.2
Education and health services	32.3	32.4	32.6	32.5	32.5	32.5	32.4	32.5	32.6	32.6	32.6	32.6	32.6	32.6	32.7
Leisure and hospitality	25.6	25.7	25.6	25.6	25.6	25.7	25.6	25.7	25.6	25.7	25.7	25.8	25.8	25.8	25.8
Other services	31.4	31.0	31.0	31.0	31.0	30.9	30.9	30.8	30.9	30.9	30.9	31.1	30.9	31.0	31.0

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE															
Current dollars	$15.35	$15.67	$15.70	$15.74	$15.77	$15.81	$15.82	$15.85	$15.90	$15.91	$15.95	$16.00	$16.03	$16.07	$16.14
Constant (1982) dollars	8.27	8.23	8.23	8.25	8.25	8.22	8.21	8.23	8.24	8.22	8.19	8.16	8.16	8.19	8.21
GOODS-PRODUCING	16.80	17.19	17.19	17.24	17.30	17.32	17.33	17.36	17.35	17.43	17.45	17.51	17.54	17.58	17.62
Natural resources and mining	17.56	18.08	18.08	18.05	18.06	18.10	18.22	18.37	18.43	18.40	18.27	18.55	18.59	18.66	18.75
Construction	18.95	19.23	19.21	19.25	19.27	19.34	19.31	19.29	19.24	19.31	19.34	19.38	19.36	19.43	19.52
Manufacturing	15.74	16.14	16.16	16.22	16.29	16.27	16.29	16.34	16.37	16.42	16.43	16.47	16.53	16.55	16.57
Excluding overtime	14.96	15.29	15.30	15.36	15.42	15.42	15.43	15.48	15.51	15.54	15.56	15.62	15.68	15.70	15.70
Durable goods	16.45	16.82	16.83	16.90	16.98	16.97	16.99	17.06	17.10	17.18	17.17	17.23	17.28	17.32	17.36
Nondurable goods	14.63	15.05	15.09	15.14	15.18	15.15	15.16	15.16	15.18	15.19	15.23	15.23	15.31	15.29	15.28
PRIVATE SERVICE-PROVIDING	14.96	15.26	15.30	15.34	15.36	15.40	15.42	15.45	15.51	15.51	15.56	15.60	15.63	15.67	15.75
Trade,transportation, and utilities	14.34	14.59	14.63	14.65	14.66	14.69	14.70	14.72	14.82	14.79	14.83	14.88	14.91	14.91	15.03
Wholesale trade	17.36	17.66	17.71	17.69	17.73	17.78	17.80	17.87	17.91	17.95	17.97	18.05	18.04	18.11	18.24
Retail trade	11.90	12.08	12.10	12.13	12.16	12.16	12.20	12.21	12.32	12.29	12.31	12.35	12.38	12.35	12.45
Transportation and warehousing	16.25	16.53	16.58	16.65	16.53	16.61	16.54	16.54	16.58	16.52	16.62	16.62	16.67	16.69	16.79
Utilities	24.77	25.62	25.60	25.66	25.82	26.00	25.77	26.11	26.23	26.04	26.32	26.38	26.49	26.37	27.02
Information	21.01	21.42	21.42	21.52	21.62	21.59	21.58	21.70	21.80	21.67	21.79	21.98	21.97	22.08	22.16
Financial activities	17.14	17.53	17.55	17.57	17.64	17.71	17.65	17.71	17.71	17.74	17.78	17.85	17.82	17.90	18.00
Professional and business services	17.21	17.46	17.48	17.59	17.54	17.63	17.66	17.69	17.79	17.80	17.82	17.89	17.94	17.98	18.06
Education and health services	15.64	16.16	16.24	16.24	16.28	16.31	16.34	16.37	16.40	16.45	16.53	16.55	16.60	16.67	16.74
Leisure and hospitality	8.76	8.91	8.89	8.91	8.95	8.99	9.02	9.01	9.03	9.05	9.05	9.08	9.09	9.10	9.11
Other services	13.84	13.98	13.98	14.00	14.05	14.08	14.12	14.13	14.15	14.17	14.18	14.16	14.20	14.22	14.26

[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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	$15.35	$15.67	$15.59	$15.66	$15.79	$15.82	$15.84	$15.88	$16.00	$15.96	$15.95	$16.01	$16.03	$15.97	$16.05
Seasonally adjusted	15.47	–	15.70	15.74	15.77	15.81	15.82	15.85	15.90	15.91	15.95	16.00	16.03	16.07	16.14
GOODS-PRODUCING	16.80	17.19	17.18	17.28	17.40	17.39	17.37	17.43	17.31	17.34	17.37	17.48	17.51	17.56	17.64
Natural resources and mining	17.56	18.08	18.02	17.95	17.97	18.07	18.21	18.46	18.53	18.45	18.36	18.67	18.58	18.59	18.72
Construction	18.95	19.23	19.24	19.33	19.42	19.47	19.35	19.31	19.12	19.20	19.25	19.35	19.30	19.37	19.56
Manufacturing	15.74	16.14	16.03	16.16	16.35	16.26	16.32	16.46	16.42	16.43	16.41	16.45	16.50	16.52	16.50
Durable goods	16.45	16.82	16.60	16.84	17.06	16.98	17.04	17.22	17.15	17.20	17.16	17.20	17.24	17.27	17.22
Wood products	12.71	13.03	13.04	1302.00	13.14	13.03	13.13	13.17	13.13	13.04	13.11	13.13	13.20	13.06	13.18
Nonmetallic mineral products	15.76	16.25	16.37	16.28	16.51	16.38	16.45	16.36	16.27	16.20	16.28	16.68	16.58	16.78	16.91
Primary metals	18.13	18.57	18.65	18.57	18.89	18.73	18.66	18.75	18.84	18.78	18.76	18.80	18.82	18.76	18.95
Fabricated metal products	15.01	15.31	15.27	15.27	15.43	15.38	15.43	15.59	15.55	15.67	15.62	15.62	15.66	15.73	15.85
Machinery	16.30	16.68	16.68	16.72	16.85	16.84	16.85	16.99	17.03	17.02	17.02	16.98	16.91	17.03	17.10
Computer and electronic products	16.69	17.28	17.30	17.38	17.48	17.52	17.65	17.92	18.04	18.04	18.00	18.26	18.45	18.40	18.62
Electrical equipment and appliances	14.36	14.90	14.92	15.04	15.08	15.05	15.10	15.12	15.07	15.15	15.10	15.07	15.04	15.10	15.27
Transportation equipment	21.23	21.49	20.73	21.49	21.91	21.78	21.91	22.17	21.90	21.97	21.84	21.78	21.88	21.97	21.50
Furniture and related products	12.98	13.16	13.12	13.28	13.39	13.27	13.29	13.46	13.42	13.34	13.37	13.46	13.44	13.48	13.44
Miscellaneous manufacturing	13.30	13.85	13.90	13.88	13.97	13.92	13.96	14.05	14.07	14.04	14.05	14.02	14.06	14.03	14.25
Nondurable goods	14.63	15.05	15.13	15.08	15.23	15.11	15.16	15.21	15.24	15.17	15.19	15.22	15.28	15.27	15.35
Food manufacturing	12.80	12.98	13.07	13.00	13.09	12.94	12.99	13.03	13.07	13.07	13.02	12.98	13.04	13.04	13.04
Beverages and tobacco products	17.96	19.12	19.26	19.08	19.17	19.18	18.80	18.82	18.44	18.65	18.94	19.32	19.14	18.69	19.03
Textile mills	11.99	12.13	12.06	12.08	12.25	12.11	12.09	12.25	12.33	12.25	12.26	12.35	12.41	12.45	12.43
Textile product mills	11.23	11.39	11.45	11.43	11.49	11.42	11.44	11.43	11.31	11.48	11.56	11.70	11.54	11.65	11.80
Apparel	9.56	9.75	9.73	9.72	9.93	9.97	10.00	10.00	10.15	10.19	10.05	10.08	10.12	10.17	10.27
Leather and allied products	11.66	11.63	11.67	11.67	11.56	11.58	11.62	11.51	11.60	11.42	11.48	11.43	11.42	11.51	11.54
Paper and paper products	17.33	17.90	17.96	17.89	18.21	17.93	18.09	18.07	18.00	17.86	17.93	17.91	18.01	18.05	18.27
Printing and related support activities	15.37	15.72	15.73	15.88	15.96	15.95	15.93	15.80	15.77	15.79	15.70	15.62	15.57	15.66	15.78
Petroleum and coal products	23.63	24.38	24.32	24.05	24.44	24.33	24.71	24.48	24.75	24.74	24.78	24.06	24.56	24.47	24.56
Chemicals	18.50	19.16	19.31	19.24	19.44	19.42	19.44	19.59	19.52	19.32	19.47	19.61	19.71	19.60	19.71
Plastics and rubber products	14.18	14.58	14.69	14.66	14.75	14.55	14.58	14.76	14.81	14.65	14.70	14.75	14.88	14.87	14.94
PRIVATE SERVICE-PROVIDING	14.96	15.26	15.16	15.22	15.35	15.40	15.43	15.46	15.66	15.60	15.59	15.62	15.64	15.54	15.63
Trade, transportation, and utilities	14.34	14.59	14.56	14.58	14.69	14.69	14.67	14.61	14.88	14.86	14.86	14.94	14.93	14.87	14.99
Wholesale trade	17.36	17.66	17.65	17.68	17.71	17.75	17.82	17.87	18.03	17.99	17.91	18.06	18.06	18.01	18.19
Retail trade	11.90	12.08	12.05	12.07	12.21	12.17	12.16	12.10	12.34	12.35	12.35	12.42	12.40	12.33	12.41
Transportation and warehousing	16.25	16.53	16.58	16.62	16.51	16.59	16.56	16.59	16.59	16.57	16.60	16.60	16.60	16.66	16.83
Utilities	24.77	25.62	25.45	25.36	25.89	26.02	26.01	26.00	26.14	25.98	26.34	26.52	26.54	26.24	26.87
	21.01	21.42	21.29	21.43	21.73	21.69	21.70	21.74	21.83	21.67	21.68	21.92	21.93	21.83	22.02
Financial activities	17.14	17.53	17.46	17.59	17.62	17.68	17.61	17.67	17.83	17.73	17.76	17.86	17.95	17.80	17.94
Professional and business services	17.21	17.46	17.35	17.50	17.47	17.54	17.62	17.73	18.06	17.91	17.83	17.86	18.02	17.84	17.94
Education and health services	15.64	16.16	16.23	16.20	16.30	16.30	16.33	16.44	16.47	16.46	16.51	16.53	16.55	16.59	16.78
Leisure and hospitality	8.76	8.91	8.79	8.81	8.94	9.02	9.06	9.11	9.11	9.09	9.07	9.07	9.08	9.02	8.99
Other services	13.84	13.98	13.88	13.93	14.06	14.06	14.12	14.17	14.23	14.23	14.18	14.19	14.25	14.15	14.15

[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.

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

Industry	Annual average		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]
TOTAL PRIVATE	$517.30	$528.56	$528.50	$535.57	$530.54	$534.72	$532.22	$536.74	$537.60	$534.66	$534.33	$537.94	$543.42	$539.79	$542.49
Seasonally adjusted	–	–	529.09	530.44	533.03	534.38	533.13	534.15	535.83	536.17	537.52	540.80	540.21	541.56	543.92
GOODS-PRODUCING	669.13	688.03	687.20	696.38	690.78	697.34	694.80	702.43	683.75	683.20	689.59	697.45	702.15	705.91	700.31
Natural resources and mining	765.94	804.03	801.89	804.16	796.07	820.38	824.91	836.24	833.85	822.87	826.20	847.62	854.68	849.56	851.76
Construction	726.83	735.70	752.28	755.80	730.19	753.49	739.17	737.64	703.62	712.32	727.65	748.85	750.77	759.30	758.93
Manufacturing	635.99	658.53	646.01	660.94	663.81	661.78	665.86	678.15	666.65	663.77	662.96	662.94	666.60	669.06	658.35
Durable goods	671.21	694.16	673.96	695.49	697.75	699.58	702.05	718.07	703.15	703.48	701.84	700.04	705.12	708.07	693.97
Wood products	514.10	529.46	532.03	539.03	521.66	526.41	526.51	532.07	527.83	511.17	512.60	516.01	528.00	525.01	521.93
Nonmetallic mineral products	664.92	688.05	694.09	700.04	709.93	701.06	694.19	688.76	665.44	667.44	669.11	697.22	698.02	708.12	703.46
Primary metals	767.60	799.77	788.90	796.65	808.49	801.64	802.38	813.75	815.77	807.54	806.68	799.00	799.85	801.05	801.59
Fabricated metal products	610.37	628.80	621.49	627.60	628.00	633.66	634.17	648.54	637.55	637.77	634.17	634.17	638.93	640.21	638.76
Machinery	664.79	699.51	692.22	697.22	699.28	707.28	711.07	727.17	718.67	716.54	718.24	713.16	710.22	713.56	711.36
Computer and electronic products	674.72	698.28	695.46	700.41	700.95	704.30	706.00	723.97	716.19	712.58	711.00	719.44	734.31	728.64	739.21
Electrical equipment and appliances	583.23	606.64	602.77	613.63	603.20	614.04	613.06	616.90	605.81	601.46	602.49	599.79	601.60	605.51	613.85
Transportation equipment	889.48	912.97	839.57	909.03	926.79	923.47	926.79	962.18	926.37	933.73	921.65	914.76	918.96	931.53	870.75
Furniture and related products	505.30	519.78	515.62	529.87	519.53	516.20	523.63	546.48	528.75	522.93	526.78	526.29	520.13	532.46	525.50
Miscellaneous manufacturing	510.82	533.47	528.20	534.38	530.86	534.53	536.06	545.14	543.10	543.35	547.95	543.98	545.53	544.36	537.23
Nondurable goods	582.61	602.48	602.17	606.22	610.72	602.89	607.92	612.96	608.08	600.73	601.52	601.19	606.62	606.22	603.26
Food manufacturing	502.92	509.66	513.65	514.80	520.98	508.54	515.70	513.38	505.81	505.81	497.36	497.13	505.95	508.56	504.65
Beverages and tobacco products	702.45	750.51	758.84	761.29	762.97	734.59	731.32	737.74	735.76	738.54	757.60	792.12	750.29	755.08	761.20
Textile mills	469.33	486.69	481.19	489.24	488.78	481.98	483.60	491.23	498.13	485.10	494.08	495.24	502.61	501.74	488.50
Textile product mills	444.70	443.01	433.96	442.34	444.66	447.66	448.45	451.49	445.61	450.02	457.78	451.62	444.29	445.03	446.04
Apparel	340.12	351.28	348.33	352.84	352.52	357.92	360.00	364.00	361.34	363.78	363.81	361.87	355.21	359.00	358.42
Leather and allied products	457.83	446.73	422.45	441.13	430.03	445.83	445.05	437.38	429.20	425.97	431.65	436.63	439.67	446.59	443.14
Paper and paper products	719.73	753.89	752.52	756.75	772.10	756.65	768.83	775.20	768.60	744.76	745.89	750.43	760.02	763.52	763.69
Printing and related support activities	587.58	604.32	600.89	611.38	612.86	614.08	618.08	616.20	607.15	604.76	604.45	593.56	593.22	593.51	599.64
Petroleum and coal products	1,052.32	1,094.83	1,118.72	1,096.68	1,119.35	1,097.28	1,131.72	1,099.15	1,096.43	1,100.93	1,105.19	1,085.11	1,119.94	1,115.83	1,117.48
Chemicals	783.95	819.59	814.88	821.55	830.09	825.35	830.09	844.33	835.46	817.24	821.63	827.54	831.76	825.16	815.99
Plastics and rubber products	872.26	589.70	583.19	590.80	591.48	583.46	578.83	596.30	592.40	586.00	585.06	585.58	590.74	591.83	578.18
PRIVATE SERVICE-PROVIDING	483.89	493.67	492.70	499.22	495.81	498.96	496.85	500.90	507.38	502.32	500.44	504.53	509.86	503.50	509.54
Trade, transportation, and utilities	481.14	488.58	492.13	495.72	493.58	492.12	488.51	490.90	494.02	493.35	493.35	497.50	501.65	498.15	503.66
Wholesale trade	657.29	666.93	665.41	673.61	665.90	669.18	671.81	670.13	681.53	674.25	671.63	679.06	686.28	677.18	682.13
Retail trade	367.15	371.15	375.96	377.79	377.29	373.62	368.45	375.10	372.67	374.21	374.21	377.57	380.68	379.76	383.47
Transportation and warehousing	598.41	614.90	616.78	628.24	617.47	622.13	622.66	625.44	620.47	608.12	610.88	612.54	617.52	616.42	624.39
Utilities	1,017.27	1,048.82	1,033.27	1,032.15	1,074.44	1,066.82	1,061.21	1,053.00	1,066.51	1,052.19	1,056.23	1,087.32	1,088.14	1,083.71	1,104.36
Information	760.81	777.42	772.83	788.62	786.63	787.35	787.71	791.34	798.98	786.62	782.65	793.50	804.83	794.61	803.73
Financial activities	609.08	622.99	618.08	635.00	620.22	627.64	625.16	627.29	649.01	632.96	632.26	637.60	655.18	639.02	645.84
Professional and business services	587.02	596.96	591.64	607.25	593.98	599.87	602.60	604.59	614.04	607.15	604.44	609.03	621.69	610.13	613.55
Education and health services	505.69	523.83	529.10	531.36	528.12	528.12	529.09	534.30	541.86	534.95	534.92	535.57	541.19	539.18	548.71
Leisure and hospitality	224.30	228.63	231.18	234.35	226.18	230.91	229.22	231.39	230.48	231.80	230.38	231.29	236.08	235.42	238.24
Other services	434.41	433.04	431.67	436.01	433.05	434.45	434.90	436.44	439.71	438.28	435.33	438.47	441.75	438.65	440.07

[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:												
2001	49.5	47.7	48.6	32.7	42.4	40.8	36.7	39.0	37.6	33.6	36.9	37.1
2002	41.0	35.6	39.7	39.2	40.5	47.7	42.8	43.0	42.1	39.0	41.5	35.1
2003	44.4	38.7	35.3	41.4	39.4	39.9	42.1	39.4	50.4	48.9	50.0	50.5
2004	50.9	53.4	66.0	67.3	64.6	59.7	55.4	53.8	57.6	58.6	54.7	54.3
2005	54.1	61.2	53.1	61.7	57.4	54.7	61.5					
Over 3-month span:												
2001	53.2	49.8	49.8	42.3	38.1	34.2	37.8	37.6	34.7	35.4	30.8	32.0
2002	35.3	37.9	36.5	34.2	34.4	39.4	40.6	44.1	37.8	37.1	35.8	36.7
2003	38.3	35.4	33.3	33.5	36.5	41.7	37.8	37.4	43.2	46.4	48.6	50.2
2004	52.5	53.8	56.7	69.4	75.4	71.2	63.5	56.8	57.4	59.9	59.7	56.3
2005	58.5	60.3	63.7	62.4	59.4	64.2	61.3					
Over 6-month span:												
2001	53.1	50.9	52.0	45.5	43.0	39.7	38.5	33.6	33.5	34.2	33.6	30.9
2002	29.5	29.9	32.0	31.7	30.9	37.4	37.1	38.7	35.3	36.0	37.9	35.1
2003	32.7	32.2	31.3	31.3	33.1	37.6	33.6	32.2	40.3	43.7	46.4	49.3
2004	47.3	50.4	54.9	62.6	64.4	69.6	67.3	68.9	64.6	62.2	59.7	55.9
2005	60.3	62.8	63.7	62.2	62.6	63.1	64.0					
Over 12-month span:												
2001	59.5	59.5	53.4	49.3	48.6	45.0	43.3	43.9	39.9	37.8	37.1	34.9
2002	33.6	31.7	30.2	30.4	30.2	29.1	32.0	31.3	30.0	29.5	32.9	34.7
2003	34.5	31.5	32.9	33.5	34.2	35.1	32.7	33.1	37.1	36.7	37.2	39.2
2004	40.3	42.1	44.8	48.7	52.0	56.7	57.4	57.6	60.3	62.1	64.6	64.0
2005	61.2	64.7	64.2	65.8	63.8	60.4	62.8					
	Manufacturing payrolls, 84 industries											
Over 1-month span:												
2001	22.0	17.3	22.0	17.9	16.1	22.6	13.1	15.5	18.5	17.3	14.9	11.9
2002	19.0	19.6	22.0	32.1	26.2	31.0	35.7	23.2	28.6	15.5	18.5	16.7
2003	35.1	19.0	19.0	11.9	19.6	20.8	22.6	24.4	32.7	35.1	39.9	42.9
2004	39.3	49.4	50.0	65.5	60.1	51.8	60.7	48.8	42.9	42.3	46.4	44.6
2005	42.3	44.6	41.1	47.6	44.0	33.9	52.4					
Over 3-month span:												
2001	32.7	20.8	16.7	14.3	14.3	11.9	11.9	9.5	7.7	12.5	11.3	9.5
2002	10.7	11.9	11.3	17.9	14.9	20.2	25.6	23.8	20.2	13.7	8.9	9.5
2003	16.1	14.3	12.5	8.9	10.7	10.7	14.3	15.5	18.5	27.4	31.5	35.1
2004	42.3	43.5	42.9	58.3	69.0	69.6	62.5	53.6	52.4	44.6	45.2	35.7
2005	45.2	42.9	52.4	46.4	41.7	38.7	42.3					
Over 6-month span:												
2001	22.6	24.4	21.4	19.6	14.3	11.9	13.1	11.3	10.7	7.1	7.7	5.4
2002	6.0	8.3	8.3	9.5	7.1	13.1	12.5	11.3	14.3	8.3	8.3	7.7
2003	12.5	10.1	7.1	8.3	11.3	10.7	4.8	10.1	13.1	16.7	19.6	26.8
2004	27.4	29.8	33.3	47.0	52.4	57.1	60.1	58.9	58.9	50.6	45.2	42.9
2005	43.5	44.0	42.3	39.3	38.7	36.9	36.9					
Over 12-month span:												
2001	29.8	32.1	20.8	19.0	13.1	12.5	10.7	11.9	11.9	10.1	8.3	6.0
2002	7.1	6.0	6.0	6.5	7.1	3.6	4.8	6.0	4.8	7.1	4.8	8.3
2003	10.7	6.0	6.5	6.0	8.3	7.1	7.1	8.3	10.7	10.7	9.5	10.7
2004	13.1	14.3	13.1	19.0	25.6	34.5	43.5	40.5	45.8	48.2	49.4	46.4
2005	45.2	45.8	47.6	44.6	42.3	39.3	39.3					

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						
	2005							2005						
	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	3,385	3,569	3,598	3,576	3,416	3,647	3,545	2.5	2.6	2.6	2.6	2.5	2.7	2.6
Industry														
Total private[2]	3,020	3,160	3,212	3,178	3,050	3,239	3,167	2.7	2.8	2.8	2.8	2.7	2.8	2.7
Construction	127	133	170	113	107	104	112	1.8	1.8	2.3	1.5	1.5	1.4	1.5
Manufacturing	252	252	258	259	240	269	293	1.7	1.7	1.8	1.8	1.6	1.8	2.0
Trade, transportation, and utilities	564	668	624	627	597	624	607	2.2	2.5	2.4	2.4	2.3	2.4	2.3
Professional and business services	682	607	646	691	659	686	682	3.9	3.5	3.7	3.9	3.8	3.9	3.9
Education and health services	560	602	616	608	611	609	605	3.2	3.4	3.5	3.4	3.4	3.4	3.4
Leisure and hospitality	434	447	440	457	440	517	424	3.3	3.4	3.4	3.5	3.3	3.9	3.2
Government	346	404	383	396	378	394	380	1.6	1.8	1.7	1.8	1.7	1.8	1.7
Region[3]														
Northeast	602	606	615	602	563	634	582	2.3	2.3	2.4	2.3	2.2	2.4	2.2
South	1,342	1,399	1,447	1,414	1,303	1,333	1,331	2.8	2.9	3.0	2.9	2.7	2.7	2.7
Midwest	716	745	737	742	786	781	775	2.2	2.3	2.3	2.3	2.4	2.4	2.4
West	718	823	806	818	799	869	821	2.4	2.8	2.7	2.7	2.7	2.9	2.7

[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						
	2005							2005						
	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	4,709	4,760	4,841	4,538	4,740	4,694	4,545	3.6	3.6	3.6	3.4	3.6	3.5	3.4
Industry														
Total private[2]	4,374	4,430	4,497	4,212	4,398	4,365	4,237	3.9	4.0	4.0	3.8	3.9	3.9	3.8
Construction	339	430	414	412	420	393	384	4.8	6.0	5.8	5.7	5.8	5.4	5.3
Manufacturing	307	336	334	319	342	347	344	2.1	2.3	2.3	2.2	2.4	2.4	2.4
Trade, transportation, and utilities	1,056	1,055	1,047	1,042	1,030	1,045	977	4.1	4.1	4.1	4.0	4.0	4.0	3.8
Professional and business services	882	853	895	792	887	835	795	5.3	5.1	5.3	4.7	5.3	4.9	4.7
Education and health services	445	500	472	487	466	457	440	2.6	2.9	2.7	2.8	2.7	2.6	2.5
Leisure and hospitality	826	771	798	742	750	877	819	6.6	6.1	6.3	5.8	5.9	6.9	6.4
Government	341	329	336	329	339	337	327	1.6	1.5	1.5	1.5	1.6	1.6	1.5
Region[3]														
Northeast	762	820	856	825	764	794	767	3.0	3.2	3.4	3.3	3.0	3.1	3.0
South	1,880	1,867	1,922	1,701	1,816	1,786	1,673	4.0	4.0	4.1	3.6	3.8	3.8	3.5
Midwest	1,092	1,081	1,034	1,020	1,129	1,054	1,018	3.5	3.5	3.3	3.3	3.6	3.4	3.2
West	959	1,069	1,036	1,037	1,048	1,070	1,036	3.3	3.7	3.6	3.6	3.6	3.7	3.5

[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 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						
	2005							2005						
	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	4,352	4,295	4,502	4,562	4,504	4,477	4,132	3.3	3.2	3.4	3.4	3.4	3.4	3.1
Industry														
Total private[2]	4,091	4,035	4,237	4,306	4,256	4,223	3,864	3.7	3.6	3.8	3.9	3.8	3.8	3.5
Construction	417	3	303	421	408	380	373	5.9	5.7	4.2	5.8	5.6	5.3	5.2
Manufacturing	361	341	360	369	369	350	362	2.5	2.4	2.5	2.6	2.6	2.4	2.5
Trade, transportation, and utilities	882	940	980	1,018	989	980	953	3.4	3.7	3.8	3.9	3.8	3.8	3.7
Professional and business services	836	772	924	869	851	818	669	5.0	4.6	5.5	5.2	5.1	4.8	4.0
Education and health services	356	389	445	433	405	401	396	2.1	2.3	2.6	2.5	2.3	2.3	2.3
Leisure and hospitality	832	790	743	709	750	803	720	6.6	6.3	5.9	5.6	5.9	6.3	5.6
Government	258	260	267	256	254	254	261	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Region[3]														
Northeast	773	732	802	807	714	761	709	3.1	2.9	3.2	3.2	2.8	3.0	2.8
South	1,747	1,647	1,763	1,766	1,743	1,653	1,500	3.7	3.5	3.7	3.7	3.7	3.5	3.2
Midwest	981	937	1,051	982	976	946	982	3.1	3.0	3.4	3.1	3.1	3.0	3.1
West	964	961	926	1,006	1,034	1,062	976	3.3	3.3	3.2	3.4	3.5	3.6	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 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						
	2005							2005						
	Jan.	Feb.	Mar.	Apr.	May	June[p]	July[p]	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Total[2]	2,530	2,307	2,516	2,520	2,514	2,575	2,404	1.9	1.7	1.9	1.9	1.9	1.9	1.8
Industry														
Total private[2]	2,412	2,192	2,383	2,395	2,391	2,348	2,278	2.2	2.0	2.1	2.1	2.1	2.1	2.0
Construction	171	139	150	146	168	139	144	2.4	2.0	2.1	2.0	2.3	1.9	2.0
Manufacturing	185	181	186	178	183	190	191	1.3	1.3	1.3	1.2	1.3	1.3	1.3
Trade, transportation, and utilities	563	512	583	577	589	588	567	2.2	2.0	2.3	2.2	2.3	2.3	2.2
Professional and business services	417	410	424	417	420	386	314	2.5	2.4	2.5	2.5	2.5	2.3	1.9
Education and health services	230	259	280	277	249	256	276	1.3	1.5	1.6	1.6	1.4	1.5	1.6
Leisure and hospitality	516	474	458	506	488	510	505	4.1	3.8	3.6	4.0	3.8	4.0	3.9
Government	124	117	124	125	123	124	127	.6	.5	.6	.6	.6	.6	.6
Region[3]														
Northeast	424	340	410	446	373	350	368	1.7	1.3	1.6	1.8	1.5	1.4	1.4
South	1,053	914	1,003	992	1,020	960	929	2.2	1.9	2.1	2.1	2.2	2.0	2.0
Midwest	539	509	561	540	554	542	529	1.7	1.6	1.8	1.7	1.8	1.7	1.7
West	530	550	562	573	562	653	581	1.8	1.9	1.9	2.0	1.9	2.2	2.0

[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, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
United States[3]	8,314.1	129,341.5	0.0	$767	3.6
Private industry	8,048.7	108,215.1	.0	769	3.9
Natural resources and mining	123.7	1,557.8	.1	703	4.9
Construction	804.9	6,689.5	1.2	837	2.3
Manufacturing	376.8	14,307.8	-4.2	943	6.7
Trade, transportation, and utilities	1,853.6	25,957.3	-.3	665	3.4
Information	145.2	3,165.9	-4.0	1,139	3.9
Financial activities	767.0	7,874.7	1.2	1,138	5.9
Professional and business services	1,329.4	16,113.2	.6	945	3.8
Education and health services	732.2	15,974.0	2.1	731	3.8
Leisure and hospitality	669.9	12,042.8	1.7	335	3.4
Other services	1,080.6	4,274.1	-.1	494	3.1
Government	265.3	21,126.3	-.2	757	2.4
Los Angeles, CA	356.0	4,075.3	-.5	903	4.2
Private industry	352.2	3,486.3	-.2	898	4.2
Natural resources and mining	.6	11.0	.7	955	16.9
Construction	12.9	133.9	-1.1	883	1.7
Manufacturing	17.8	485.2	-7.1	900	6.5
Trade, transportation, and utilities	53.9	794.6	-1.2	735	2.7
Information	9.2	194.9	-2.0	1,627	5.2
Financial activities	23.0	237.9	.9	1,258	7.0
Professional and business services	40.1	575.0	1.6	1,043	3.7
Education and health services	26.6	456.5	1.9	820	3.9
Leisure and hospitality	25.6	375.9	5.6	766	6.5
Other services	142.1	220.7	3.5	422	5.0
Government	3.8	589.0	-2.3	930	3.3
Cook, IL	126.7	2,539.8	-1.2	922	3.0
Private industry	125.5	2,221.9	-.9	929	3.2
Natural resources and mining	.1	1.3	-3.6	1,037	3.2
Construction	10.5	96.7	.0	1,169	-.8
Manufacturing	7.9	265.7	-5.1	975	6.3
Trade, transportation, and utilities	26.7	499.4	-.8	753	.4
Information	2.5	66.1	-4.1	1,164	.1
Financial activities	13.8	219.4	-.8	1,471	8.1
Professional and business services	26.1	405.5	-1.3	1,206	4.1
Education and health services	12.3	350.8	1.0	791	3.7
Leisure and hospitality	10.5	217.7	2.8	375	-.3
Other services	12.6	95.1	-2.0	655	3.0
Government	1.2	317.9	-3.1	871	.9
New York, NY	111.9	2,253.6	-1.0	1,480	7.2
Private industry	111.7	1,800.4	-.6	1,623	8.1
Natural resources and mining	.0	.1	.0	1,197	-6.5
Construction	2.2	30.0	-4.5	1,567	3.4
Manufacturing	3.5	46.6	-4.9	1,290	6.4
Trade, transportation, and utilities	22.1	247.6	-1.2	1,164	5.5
Information	4.3	130.6	-5.1	1,751	7.9
Financial activities	16.7	352.0	-2.0	3,034	16.1
Professional and business services	22.6	439.7	.5	1,702	2.6
Education and health services	7.8	273.8	2.4	918	7.6
Leisure and hospitality	10.1	188.2	.4	787	6.1
Other services	16.0	82.9	-1.1	871	6.1
Government	.2	453.2	-2.2	912	.1
Harris, TX	89.4	1,841.5	-.9	906	2.1
Private industry	89.0	1,595.2	-1.2	929	2.1
Natural resources and mining	1.2	62.5	8.7	2,185	-.9
Construction	6.3	135.5	-5.0	919	2.6
Manufacturing	4.7	164.0	-4.9	1,106	2.3
Trade, transportation, and utilities	21.1	403.2	-2.1	821	1.0
Information	1.4	33.8	-3.9	1,098	.4
Financial activities	9.7	113.1	1.7	1,181	4.9
Professional and business services	17.0	279.0	-1.7	1,073	3.2
Education and health services	8.8	188.3	1.5	812	1.8
Leisure and hospitality	6.5	155.2	.7	335	-.9
Other services	10.3	56.3	-3.1	539	.4
Government	.4	246.3	1.1	759	3.1
Maricopa, AZ	80.9	1,621.2	([4])	757	4.0
Private industry	80.5	1,401.8	2.2	755	3.9
Natural resources and mining	.5	9.8	-2.6	545	4.4
Construction	8.4	131.7	5.9	779	2.1
Manufacturing	3.3	128.0	-2.5	1,050	8.2
Trade, transportation, and utilities	18.6	336.4	1.5	712	3.2
Information	1.6	36.6	-4.1	872	.5
Financial activities	9.5	133.3	1.5	933	3.7
Professional and business services	18.1	261.5	4.2	776	3.5
Education and health services	7.6	160.5	5.6	842	5.0
Leisure and hospitality	5.6	155.8	.8	364	2.8
Other services	5.7	44.7	-2.6	500	2.2
Government	.5	219.4	1.6	766	3.7

See footnotes at end of table.

22. ContinuedQuarterly Census of Employment and Wages: 10 largest counties, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
Dallas, TX	68.6	1,450.8	-1.4	$952	4.3
Private industry	68.2	1,294.6	-1.4	970	4.8
Natural resources and mining	.5	6.8	-20.5	2,680	22.7
Construction	4.5	73.0	-2.2	909	5.5
Manufacturing	3.5	144.9	-3.1	1,075	6.8
Trade, transportation, and utilities	15.8	326.1	-3.3	898	5.2
Information	1.9	64.0	-5.1	1,272	8.7
Financial activities	8.6	140.0	1.2	1,215	2.9
Professional and business services	14.0	237.7	.0	1,152	4.2
Education and health services	6.3	131.4	2.4	887	2.7
Leisure and hospitality	5.2	127.5	.0	432	4.3
Other services	6.7	40.5	-3.4	587	2.8
Government	.4	156.2	-1.8	800	-.1
Orange, CA	88.8	1,436.6	1.3	874	5.3
Private industry	87.4	1,305.5	2.1	875	5.2
Natural resources and mining	.3	6.1	8.3	579	.2
Construction	6.4	85.5	4.4	969	5.9
Manufacturing	6.1	179.9	-3.0	1,036	11.4
Trade, transportation, and utilities	17.3	278.8	.6	802	2.7
Information	1.5	33.8	-4.4	1,152	5.3
Financial activities	9.7	127.8	9.9	1,354	6.2
Professional and business services	17.4	261.0	1.0	942	2.8
Education and health services	9.1	126.6	6.1	849	3.7
Leisure and hospitality	6.6	159.9	2.5	358	3.8
Other services	12.9	46.0	6.3	518	3.0
Government	1.4	131.1	-5.7	859	6.0
San Diego, CA	85.3	1,278.2	1.3	815	2.6
Private industry	83.9	1,060.2	1.5	809	2.5
Natural resources and mining	.9	11.0	-5.4	491	1.0
Construction	6.4	81.1	4.7	869	.7
Manufacturing	3.6	105.4	-4.2	1,129	11.5
Trade, transportation, and utilities	14.2	220.4	2.2	655	.9
Information	1.4	36.7	-4.5	1,582	-2.0
Financial activities	8.8	81.6	4.8	1,058	.4
Professional and business services	14.9	208.1	1.5	989	2.8
Education and health services	7.6	122.6	1.6	778	5.7
Leisure and hospitality	6.5	141.5	3.5	346	2.4
Other services	19.5	51.6	1.8	449	2.7
Government	1.3	218.0	.1	843	2.9
King, WA	81.6	1,100.6	.2	935	.2
Private industry	81.0	945.5	.1	944	-.3
Natural resources and mining	.4	2.8	-11.3	1,109	.8
Construction	6.2	53.4	-.4	921	1.4
Manufacturing	2.7	101.9	-8.2	1,176	-2.1
Trade, transportation, and utilities	14.8	225.5	1.1	804	2.6
Information	1.5	69.2	.8	1,829	-15.7
Financial activities	6.1	77.5	2.4	1,114	3.5
Professional and business services	11.7	158.3	.7	1,160	8.4
Education and health services	5.9	108.3	1.5	746	4.8
Leisure and hospitality	5.4	100.5	2.9	390	3.7
Other services	26.4	48.1	1.2	463	.4
Government	.6	155.1	1.0	882	3.6
Miami-Dade, FL	80.2	980.8	-.5	765	3.5
Private industry	79.9	827.5	-.7	742	3.6
Natural resources and mining	.5	9.9	-1.8	421	4.0
Construction	4.9	40.7	.3	788	2.7
Manufacturing	2.8	49.4	-9.8	695	5.8
Trade, transportation, and utilities	23.2	247.2	-1.7	689	4.2
Information	1.7	28.5	-3.2	990	1.7
Financial activities	8.2	65.5	.7	1,062	-1.1
Professional and business services	15.9	132.0	-.2	948	5.2
Education and health services	7.8	123.4	1.4	748	2.3
Leisure and hospitality	5.3	92.8	2.1	432	9.9
Other services	7.5	34.5	-1.8	450	3.0
Government	.3	153.3	.5	886	2.8

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

[2] Percent changes were computed from quarterly employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.

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

[4] Data do not meet BLS or State agency disclosure standards.

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

23. Quarterly Census of Employment and Wages: by State, fourth quarter 2003.

State	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03	Fourth quarter 2003	Percent change, fourth quarter 2002-03
United States[2]	8,314.1	129,341.5	0.0	$767	3.6
Alabama	111.8	1,838.1	-.1	657	4.0
Alaska	20.0	282.7	1.1	746	1.1
Arizona	126.9	2,352.1	2.2	710	3.8
Arkansas	75.2	1,133.6	.5	587	4.1
California	1,190.8	14,922.3	.0	869	3.8
Colorado	160.0	2,134.6	-1.1	784	2.0
Connecticut	109.1	1,648.9	-.7	992	3.8
Delaware	27.1	408.4	.5	825	5.0
District of Columbia	30.0	654.8	-.4	1,238	3.9
Florida	504.1	7,424.5	.8	685	3.8
Georgia	245.6	3,845.6	.2	734	2.8
Hawaii	37.4	583.0	1.3	678	3.7
Idaho	48.5	577.5	.6	579	1.8
Illinois	325.7	5,738.7	-1.2	827	3.2
Indiana	152.1	2,852.2	-.3	675	3.5
Iowa	90.6	1,418.5	.0	626	4.7
Kansas	82.2	1,298.3	-.9	631	2.8
Kentucky	105.7	1,740.6	.3	645	3.5
Louisiana	114.0	1,870.9	.5	628	2.4
Maine	47.4	595.8	.7	631	4.6
Maryland	150.4	2,466.4	.7	831	3.6
Massachusetts	206.6	3,154.6	-1.9	954	5.2
Michigan	251.3	4,365.8	-1.1	806	3.9
Minnesota	159.0	2,591.9	-.5	777	3.2
Mississippi	65.6	1,108.1	.4	559	3.7
Missouri	165.4	2,633.6	-.7	676	2.4
Montana	42.0	396.6	1.1	549	4.0
Nebraska	55.3	884.4	.6	613	3.2
Nevada	60.3	1,111.2	4.4	721	5.1
New Hampshire	47.0	614.9	.6	788	4.0
New Jersey	268.1	3,912.8	.1	945	3.4
New Mexico	50.4	757.1	1.4	612	4.1
New York	550.3	8,379.2	-.4	959	5.2
North Carolina	227.8	3,759.6	-.1	679	4.5
North Dakota	24.0	317.6	.9	563	4.3
Ohio	294.2	5,322.4	-.7	713	3.8
Oklahoma	91.6	1,423.4	-1.3	597	4.2
Oregon	118.8	1,579.8	.2	694	3.3
Pennsylvania	326.9	5,524.5	-.2	750	4.7
Rhode Island	34.7	480.5	1.2	738	5.1
South Carolina	108.4	1,781.0	.3	623	3.1
South Dakota	28.1	365.4	.3	559	4.1
Tennessee	128.4	2,648.0	.4	689	4.2
Texas	505.3	9,300.1	-.3	754	3.1
Utah	73.9	1,066.2	1.2	630	2.3
Vermont	24.1	300.7	.3	661	5.1
Virginia	202.6	3,477.5	1.2	786	5.2
Washington	222.7	2,654.7	1.0	759	1.3
West Virginia	47.2	685.2	.1	587	2.1
Wisconsin	157.6	2,715.4	.0	683	4.1
Wyoming	22.0	241.6	1.7	616	4.1
Puerto Rico	50.2	1,074.1	3.5	450	4.7
Virgin Islands	3.2	42.5	-.2	629	2.4

[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)				
1993	6,679,934	109,422,571	$2,884,472,282	$26,361	$507
1994	6,826,677	112,611,287	3,033,676,678	26,939	518
1995	7,040,677	115,487,841	3,215,921,236	27,846	536
1996	7,189,168	117,963,132	3,414,514,808	28,946	557
1997	7,369,473	121,044,432	3,674,031,718	30,353	584
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
	UI covered				
1993	6,632,221	106,351,431	$2,771,023,411	$26,055	$501
1994	6,778,300	109,588,189	2,918,684,128	26,633	512
1995	6,990,594	112,539,795	3,102,353,355	27,567	530
1996	7,137,644	115,081,246	3,298,045,286	28,658	551
1997	7,317,363	118,233,942	3,553,933,885	30,058	578
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
	Private industry covered				
1993	6,454,381	91,202,971	$2,365,301,493	$25,934	$499
1994	6,596,158	94,146,344	2,494,458,555	26,496	510
1995	6,803,454	96,894,844	2,658,927,216	27,441	528
1996	6,946,858	99,268,446	2,837,334,217	28,582	550
1997	7,121,182	102,175,161	3,071,807,287	30,064	578
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
	State government covered				
1993	59,185	4,088,075	$117,095,062	$28,643	$551
1994	60,686	4,162,944	122,879,977	29,518	568
1995	60,763	4,201,836	128,143,491	30,497	586
1996	62,146	4,191,726	131,605,800	31,397	604
1997	65,352	4,214,451	137,057,432	32,521	625
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
	Local government covered				
1993	118,626	11,059,500	$288,594,697	$26,095	$502
1994	121,425	11,278,080	301,315,857	26,717	514
1995	126,342	11,442,238	315,252,346	27,552	530
1996	128,640	11,621,074	329,105,269	28,320	545
1997	130,829	11,844,330	345,069,166	29,134	560
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
	Federal Government covered (UCFE)				
1993	47,714	3,071,140	$113,448,871	$36,940	$710
1994	48,377	3,023,098	114,992,550	38,038	731
1995	50,083	2,948,046	113,567,881	38,523	741
1996	51,524	2,881,887	116,469,523	40,414	777
1997	52,110	2,810,489	120,097,833	42,732	822
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

NOTE: Detail may not add to totals due to rounding. Data reflect the movement of Indian Tribal Council establishments from private industry to the public sector. See Notes on Current Labor Statistics.

25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, private ownership, by supersector, first quarter 2003

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	7,933,974	4,768,812	1,331,834	872,241	597,662	203,030	115,598	28,856	10,454	5,487
Employment, March	105,583,548	7,095,128	8,810,097	11,763,253	18,025,655	13,970,194	17,299,058	9,864,934	7,090,739	11,664,490
Natural resources and mining										
Establishments, first quarter	124,527	72,088	23,248	14,773	9,226	2,893	1,593	501	161	44
Employment, March	1,526,176	110,155	153,629	198,895	275,811	198,122	241,559	171,063	108,563	68,379
Construction										
Establishments, first quarter	795,029	523,747	129,201	76,215	46,096	12,837	5,604	1,006	262	61
Employment, March	6,285,841	746,296	846,521	1,021,722	1,371,071	872,274	823,846	338,107	172,944	93,060
Manufacturing										
Establishments, first quarter	381,159	148,469	65,027	57,354	54,261	25,927	19,813	6,506	2,565	1,237
Employment, March	14,606,928	252,443	436,028	788,581	1,685,563	1,815,385	3,043,444	2,245,183	1,732,368	2,607,933
Trade, transportation, and utilities										
Establishments, first quarter	1,851,662	992,180	378,157	239,637	149,960	51,507	31,351	6,681	1,619	570
Employment, March	24,683,356	1,646,304	2,514,548	3,204,840	4,527,709	3,564,316	4,661,898	2,277,121	1,070,141	1,216,479
Information										
Establishments, first quarter	147,062	84,906	20,744	16,130	13,539	5,920	3,773	1,223	575	252
Employment, March	3,208,667	112,409	138,076	220,618	416,670	410,513	576,674	418,113	399,366	516,228
Financial activities										
Establishments, first quarter	753,064	480,485	135,759	76,733	39,003	11,743	6,195	1,794	883	469
Employment, March	7,753,717	788,607	892,451	1,017,662	1,162,498	801,140	934,618	620,183	601,549	935,009
Professional and business services										
Establishments, first quarter	1,307,697	887,875	180,458	111,532	73,599	28,471	17,856	5,153	1,919	834
Employment, March	15,648,435	1,230,208	1,184,745	1,501,470	2,232,506	1,969,466	2,707,203	1,762,251	1,307,870	1,752,716
Education and health services										
Establishments, first quarter	720,207	338,139	164,622	103,683	65,173	24,086	17,122	3,929	1,761	1,692
Employment, March	15,680,834	629,968	1,092,329	1,392,099	1,955,861	1,679,708	2,558,300	1,337,188	1,220,921	3,814,460
Leisure and hospitality										
Establishments, first quarter	657,359	260,149	110,499	118,140	122,168	34,166	9,718	1,609	599	311
Employment, March	11,731,379	411,192	744,144	1,653,470	3,683,448	2,285,550	1,372,780	545,304	404,831	630,660
Other services										
Establishments, first quarter	1,057,236	851,231	116,940	56,238	24,235	5,451	2,561	454	109	17
Employment, March	4,243,633	1,037,360	761,518	740,752	703,957	371,774	376,832	150,421	71,453	29,566

[1] Includes establishments that reported no workers in March 2003.

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

NOTE: Details may not add to totals due to rounding. Data are only produced for first quarter. Data are preliminary.

26. Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Metropolitan areas[3]	$37,908	$38,423	1.4
Abilene, TX	25,141	25,517	1.5
Akron, OH	32,930	34,037	3.4
Albany, GA	28,877	29,913	3.6
Albany-Schenectady-Troy, NY	35,355	35,994	1.8
Albuquerque, NM	31,667	32,475	2.6
Alexandria, LA	26,296	27,300	3.8
Allentown-Bethlehem-Easton, PA	33,569	34,789	3.6
Altoona, PA	26,869	27,360	1.8
Amarillo, TX	27,422	28,274	3.1
Anchorage, AK	37,998	39,112	2.9
Ann Arbor, MI	37,582	39,220	4.4
Anniston, AL	26,486	27,547	4.0
Appleton-Oshkosh-Neenah, WI	32,652	33,020	1.1
Asheville, NC	28,511	28,771	.9
Athens, GA	28,966	29,942	3.4
Atlanta, GA	40,559	41,123	1.4
Atlantic-Cape May, NJ	31,268	32,201	3.0
Auburn-Opelika, AL	25,753	26,405	2.5
Augusta-Aiken, GA-SC	30,626	31,743	3.6
Austin-San Marcos, TX	40,831	39,540	-3.2
Bakersfield, CA	30,106	31,192	3.6
Baltimore, MD	37,495	38,718	3.3
Bangor, ME	27,850	28,446	2.1
Barnstable-Yarmouth, MA	31,025	32,028	3.2
Baton Rouge, LA	30,321	31,366	3.4
Beaumont-Port Arthur, TX	31,798	32,577	2.4
Bellingham, WA	27,724	28,284	2.0
Benton Harbor, MI	31,140	32,627	4.8
Bergen-Passaic, NJ	44,701	45,185	1.1
Billings, MT	27,889	28,553	2.4
Biloxi-Gulfport-Pascagoula, MS	28,351	28,515	.6
Binghamton, NY	31,187	31,832	2.1
Birmingham, AL	34,519	35,940	4.1
Bismarck, ND	27,116	27,993	3.2
Bloomington, IN	28,013	28,855	3.0
Bloomington-Normal, IL	35,111	36,133	2.9
Boise City, ID	31,624	31,955	1.0
Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH	45,766	45,685	-.2
Boulder-Longmont, CO	44,310	44,037	-.6
Brazoria, TX	35,655	36,253	1.7
Bremerton, WA	31,525	33,775	7.1
Brownsville-Harlingen-San Benito, TX	22,142	22,892	3.4
Bryan-College Station, TX	25,755	26,051	1.1
Buffalo-Niagara Falls, NY	32,054	32,777	2.3
Burlington, VT	34,363	35,169	2.3
Canton-Massillon, OH	29,020	29,689	2.3
Casper, WY	28,264	28,886	2.2
Cedar Rapids, IA	34,649	34,730	.2
Champaign-Urbana, IL	30,488	31,995	4.9
Charleston-North Charleston, SC	28,887	29,993	3.8
Charleston, WV	31,530	32,136	1.9
Charlotte-Gastonia-Rock Hill, NC-SC	37,267	38,413	3.1
Charlottesville, VA	32,427	33,328	2.8
Chattanooga, TN-GA	29,981	30,631	2.2
Cheyenne, WY	27,579	28,827	4.5
Chicago, IL	42,685	43,239	1.3
Chico-Paradise, CA	26,499	27,190	2.6
Cincinnati, OH-KY-IN	36,050	37,168	3.1
Clarksville-Hopkinsville, TN-KY	25,567	26,940	5.4
Cleveland-Lorain-Elyria, OH	35,514	36,102	1.7
Colorado Springs, CO	34,391	34,681	.8
Columbia, MO	28,490	29,135	2.3
Columbia, SC	29,904	30,721	2.7
Columbus, GA-AL	28,412	29,207	2.8
Columbus, OH	35,028	36,144	3.2
Corpus Christi, TX	29,361	30,168	2.7
Corvallis, OR	35,525	36,766	3.5
Cumberland, MD-WV	25,504	26,704	4.7
Dallas, TX	42,706	43,000	.7
Danville, VA	25,465	26,116	2.6

See footnotes at end of table.

26. ContinuedAnnual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Davenport-Moline-Rock Island, IA-IL	$31,275	$32,118	2.7
Dayton-Springfield, OH	33,619	34,327	2.1
Daytona Beach, FL	25,953	26,898	3.6
Decatur, AL	30,891	30,370	-1.7
Decatur, IL	33,354	33,215	-.4
Denver, CO	42,351	42,133	-.5
Des Moines, IA	34,303	35,641	3.9
Detroit, MI	42,704	43,224	1.2
Dothan, AL	28,026	29,270	4.4
Dover, DE	27,754	29,818	7.4
Dubuque, IA	28,402	29,208	2.8
Duluth-Superior, MN-WI	29,415	30,581	4.0
Dutchess County, NY	38,748	38,221	-1.4
Eau Claire, WI	27,680	28,760	3.9
El Paso, TX	25,847	26,604	2.9
Elkhart-Goshen, IN	30,797	32,427	5.3
Elmira, NY	28,669	29,151	1.7
Enid, OK	24,836	25,507	2.7
Erie, PA	29,293	29,780	1.7
Eugene-Springfield, OR	28,983	29,427	1.5
Evansville-Henderson, IN-KY	31,042	31,977	3.0
Fargo-Moorhead, ND-MN	27,899	29,053	4.1
Fayetteville, NC	26,981	28,298	4.9
Fayetteville-Springdale-Rogers, AR	29,940	31,090	3.8
Flagstaff, AZ-UT	25,890	26,846	3.7
Flint, MI	35,995	36,507	1.4
Florence, AL	25,639	26,591	3.7
Florence, SC	28,800	29,563	2.6
Fort Collins-Loveland, CO	33,248	34,215	2.9
Fort Lauderdale, FL	33,966	34,475	1.5
Fort Myers-Cape Coral, FL	29,432	30,324	3.0
Fort Pierce-Port St. Lucie, FL	27,742	29,152	5.1
Fort Smith, AR-OK	26,755	27,075	1.2
Fort Walton Beach, FL	26,151	27,242	4.2
Fort Wayne, IN	31,400	32,053	2.1
Fort Worth-Arlington, TX	36,379	37,195	2.2
Fresno, CA	27,647	28,814	4.2
Gadsden, AL	25,760	26,214	1.8
Gainesville, FL	26,917	27,648	2.7
Galveston-Texas City, TX	31,067	31,920	2.7
Gary, IN	31,948	32,432	1.5
Glens Falls, NY	27,885	28,931	3.8
Goldsboro, NC	25,398	25,821	1.7
Grand Forks, ND-MN	24,959	25,710	3.0
Grand Junction, CO	27,426	28,331	3.3
Grand Rapids-Muskegon-Holland, MI	33,431	34,214	2.3
Great Falls, MT	24,211	25,035	3.4
Greeley, CO	30,066	31,104	3.5
Green Bay, WI	32,631	33,698	3.3
Greensboro--Winston-Salem--High Point, NC	31,730	32,369	2.0
Greenville, NC	28,289	29,055	2.7
Greenville-Spartanburg-Anderson, SC	30,940	31,726	2.5
Hagerstown, MD	29,020	30,034	3.5
Hamilton-Middletown, OH	32,325	32,985	2.0
Harrisburg-Lebanon-Carlisle, PA	33,408	34,497	3.3
Hartford, CT	43,880	44,387	1.2
Hattiesburg, MS	25,145	26,051	3.6
Hickory-Morganton-Lenoir, NC	27,305	27,996	2.5
Honolulu, HI	32,531	33,978	4.4
Houma, LA	30,343	30,758	1.4
Houston, TX	42,784	42,712	-.2
Huntington-Ashland, WV-KY-OH	27,478	28,321	3.1
Huntsville, AL	36,727	38,571	5.0
Indianapolis, IN	35,989	36,608	1.7
Iowa City, IA	31,663	32,567	2.9
Jackson, MI	32,454	33,251	2.5
Jackson, MS	29,813	30,537	2.4
Jackson, TN	29,414	30,443	3.5
Jacksonville, FL	32,367	33,722	4.2
Jacksonville, NC	21,395	22,269	4.1

See footnotes at end of table.

26. ContinuedAnnual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Davenport-Moline-Rock Island, IA-IL	$31,275	$32,118	2.7
Dayton-Springfield, OH	33,619	34,327	2.1
Daytona Beach, FL	25,953	26,898	3.6
Decatur, AL	30,891	30,370	-1.7
Decatur, IL	33,354	33,215	-.4
Denver, CO	42,351	42,133	-.5
Des Moines, IA	34,303	35,641	3.9
Detroit, MI	42,704	43,224	1.2
Dothan, AL	28,026	29,270	4.4
Dover, DE	27,754	29,818	7.4
Dubuque, IA	28,402	29,208	2.8
Duluth-Superior, MN-WI	29,415	30,581	4.0
Dutchess County, NY	38,748	38,221	-1.4
Eau Claire, WI	27,680	28,760	3.9
El Paso, TX	25,847	26,604	2.9
Elkhart-Goshen, IN	30,797	32,427	5.3
Elmira, NY	28,669	29,151	1.7
Enid, OK	24,836	25,507	2.7
Erie, PA	29,293	29,780	1.7
Eugene-Springfield, OR	28,983	29,427	1.5
Evansville-Henderson, IN-KY	31,042	31,977	3.0
Fargo-Moorhead, ND-MN	27,899	29,053	4.1
Fayetteville, NC	26,981	28,298	4.9
Fayetteville-Springdale-Rogers, AR	29,940	31,090	3.8
Flagstaff, AZ-UT	25,890	26,846	3.7
Flint, MI	35,995	36,507	1.4
Florence, AL	25,639	26,591	3.7
Florence, SC	28,800	29,563	2.6
Fort Collins-Loveland, CO	33,248	34,215	2.9
Fort Lauderdale, FL	33,966	34,475	1.5
Fort Myers-Cape Coral, FL	29,432	30,324	3.0
Fort Pierce-Port St. Lucie, FL	27,742	29,152	5.1
Fort Smith, AR-OK	26,755	27,075	1.2
Fort Walton Beach, FL	26,151	27,242	4.2
Fort Wayne, IN	31,400	32,053	2.1
Fort Worth-Arlington, TX	36,379	37,195	2.2
Fresno, CA	27,647	28,814	4.2
Gadsden, AL	25,760	26,214	1.8
Gainesville, FL	26,917	27,648	2.7
Galveston-Texas City, TX	31,067	31,920	2.7
Gary, IN	31,948	32,432	1.5
Glens Falls, NY	27,885	28,931	3.8
Goldsboro, NC	25,398	25,821	1.7
Grand Forks, ND-MN	24,959	25,710	3.0
Grand Junction, CO	27,426	28,331	3.3
Grand Rapids-Muskegon-Holland, MI	33,431	34,214	2.3
Great Falls, MT	24,211	25,035	3.4
Greeley, CO	30,066	31,104	3.5
Green Bay, WI	32,631	33,698	3.3
Greensboro--Winston-Salem--High Point, NC	31,730	32,369	2.0
Greenville, NC	28,289	29,055	2.7
Greenville-Spartanburg-Anderson, SC	30,940	31,726	2.5
Hagerstown, MD	29,020	30,034	3.5
Hamilton-Middletown, OH	32,325	32,985	2.0
Harrisburg-Lebanon-Carlisle, PA	33,408	34,497	3.3
Hartford, CT	43,880	44,387	1.2
Hattiesburg, MS	25,145	26,051	3.6
Hickory-Morganton-Lenoir, NC	27,305	27,996	2.5
Honolulu, HI	32,531	33,978	4.4
Houma, LA	30,343	30,758	1.4
Houston, TX	42,784	42,712	-.2
Huntington-Ashland, WV-KY-OH	27,478	28,321	3.1
Huntsville, AL	36,727	38,571	5.0
Indianapolis, IN	35,989	36,608	1.7
Iowa City, IA	31,663	32,567	2.9
Jackson, MI	32,454	33,251	2.5
Jackson, MS	29,813	30,537	2.4
Jackson, TN	29,414	30,443	3.5
Jacksonville, FL	32,367	33,722	4.2
Jacksonville, NC	21,395	22,269	4.1

See footnotes at end of table.

26. ContinuedAnnual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Jamestown, NY	$25,913	$26,430	2.0
Janesville-Beloit, WI	31,482	32,837	4.3
Jersey City, NJ	47,638	49,562	4.0
Johnson City-Kingsport-Bristol, TN-VA	28,543	29,076	1.9
Johnstown, PA	25,569	26,161	2.3
Jonesboro, AR	25,337	26,165	3.3
Joplin, MO	26,011	26,594	2.2
Kalamazoo-Battle Creek, MI	32,905	34,237	4.0
Kankakee, IL	29,104	30,015	3.1
Kansas City, MO-KS	35,794	36,731	2.6
Kenosha, WI	31,562	32,473	2.9
Killeen-Temple, TX	26,193	27,299	4.2
Knoxville, TN	30,422	31,338	3.0
Kokomo, IN	39,599	40,778	3.0
La Crosse, WI-MN	27,774	28,719	3.4
Lafayette, LA	29,693	30,104	1.4
Lafayette, IN	31,484	31,700	.7
Lake Charles, LA	29,782	30,346	1.9
Lakeland-Winter Haven, FL	28,890	29,505	2.1
Lancaster, PA	31,493	32,197	2.2
Lansing-East Lansing, MI	34,724	35,785	3.1
Laredo, TX	24,128	24,739	2.5
Las Cruces, NM	24,310	25,256	3.9
Las Vegas, NV-AZ	32,239	33,280	3.2
Lawrence, KS	25,923	26,621	2.7
Lawton, OK	24,812	25,392	2.3
Lewiston-Auburn, ME	27,092	28,435	5.0
Lexington, KY	31,593	32,776	3.7
Lima, OH	29,644	30,379	2.5
Lincoln, NE	29,352	30,614	4.3
Little Rock-North Little Rock, AR	30,858	31,634	2.5
Longview-Marshall, TX	28,029	28,172	.5
Los Angeles-Long Beach, CA	40,891	41,709	2.0
Louisville, KY-IN	33,058	33,901	2.6
Lubbock, TX	26,577	27,625	3.9
Lynchburg, VA	28,859	29,444	2.0
Macon, GA	30,595	31,884	4.2
Madison, WI	34,097	35,410	3.9
Mansfield, OH	28,808	30,104	4.5
McAllen-Edinburg-Mission, TX	22,313	23,179	3.9
Medford-Ashland, OR	27,224	28,098	3.2
Melbourne-Titusville-Palm Bay, FL	32,798	33,913	3.4
Memphis, TN-AR-MS	34,603	35,922	3.8
Merced, CA	25,479	26,771	5.1
Miami, FL	34,524	35,694	3.4
Middlesex-Somerset-Hunterdon, NJ	49,950	50,457	1.0
Milwaukee-Waukesha, WI	35,617	36,523	2.5
Minneapolis-St. Paul, MN-WI	40,868	41,722	2.1
Missoula, MT	26,181	27,249	4.1
Mobile, AL	28,129	28,742	2.2
Modesto, CA	29,591	30,769	4.0
Monmouth-Ocean, NJ	37,056	37,710	1.8
Monroe, LA	26,578	27,614	3.9
Montgomery, AL	29,150	30,525	4.7
Muncie, IN	28,374	29,017	2.3
Myrtle Beach, SC	24,029	24,672	2.7
Naples, FL	30,839	31,507	2.2
Nashville, TN	33,989	35,036	3.1
Nassau-Suffolk, NY	39,662	40,396	1.9
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	52,198	51,170	-2.0
New London-Norwich, CT	38,505	38,650	.4
New Orleans, LA	31,089	32,407	4.2
New York, NY	59,097	57,708	-2.4
Newark, NJ	47,715	48,781	2.2
Newburgh, NY-PA	29,827	30,920	3.7
Norfolk-Virginia Beach-Newport News, VA-NC	29,875	30,823	3.2
Oakland, CA	45,920	46,877	2.1
Ocala, FL	26,012	26,628	2.4
Odessa-Midland, TX	31,278	31,295	.1
Oklahoma City, OK	28,915	29,850	3.2

See footnotes at end of table.

26. ContinuedAnnual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Olympia, WA	$32,772	$33,765	3.0
Omaha, NE-IA	31,856	33,107	3.9
Orange County, CA	40,252	41,219	2.4
Orlando, FL	31,276	32,461	3.8
Owensboro, KY	27,306	28,196	3.3
Panama City, FL	26,433	27,448	3.8
Parkersburg-Marietta, WV-OH	27,920	29,529	5.8
Pensacola, FL	28,059	28,189	.5
Peoria-Pekin, IL	33,293	34,261	2.9
Philadelphia, PA-NJ	40,231	41,121	2.2
Phoenix-Mesa, AZ	35,514	36,045	1.5
Pine Bluff, AR	27,561	28,698	4.1
Pittsburgh, PA	35,024	35,625	1.7
Pittsfield, MA	31,561	32,707	3.6
Pocatello, ID	24,621	25,219	2.4
Portland, ME	32,327	33,309	3.0
Portland-Vancouver, OR-WA	37,285	37,650	1.0
Providence-Warwick-Pawtucket, RI	33,403	34,610	3.6
Provo-Orem, UT	28,266	28,416	.5
Pueblo, CO	27,097	27,763	2.5
Punta Gorda, FL	25,404	26,119	2.8
Racine, WI	33,319	34,368	3.1
Raleigh-Durham-Chapel Hill, NC	38,691	39,056	.9
Rapid City, SD	25,508	26,434	3.6
Reading, PA	32,807	33,912	3.4
Redding, CA	28,129	28,961	3.0
Reno, NV	34,231	34,744	1.5
Richland-Kennewick-Pasco, WA	33,370	35,174	5.4
Richmond-Petersburg, VA	35,879	36,751	2.4
Riverside-San Bernardino, CA	30,510	31,591	3.5
Roanoke, VA	30,330	31,775	4.8
Rochester, MN	37,753	39,036	3.4
Rochester, NY	34,327	34,827	1.5
Rockford, IL	32,104	32,827	2.3
Rocky Mount, NC	28,770	28,893	.4
Sacramento, CA	38,016	39,354	3.5
Saginaw-Bay City-Midland, MI	35,429	35,444	.0
St. Cloud, MN	28,263	29,535	4.5
St. Joseph, MO	27,734	28,507	2.8
St. Louis, MO-IL	35,928	36,712	2.2
Salem, OR	28,336	29,210	3.1
Salinas, CA	31,735	32,463	2.3
Salt Lake City-Ogden, UT	31,965	32,600	2.0
San Angelo, TX	26,147	26,321	.7
San Antonio, TX	30,650	31,336	2.2
San Diego, CA	38,418	39,305	2.3
San Francisco, CA	59,654	56,602	-5.1
San Jose, CA	65,931	63,056	-4.4
San Luis Obispo-Atascadero-Paso Robles, CA	29,092	29,981	3.1
Santa Barbara-Santa Maria-Lompoc, CA	33,626	34,382	2.2
Santa Cruz-Watsonville, CA	35,022	35,721	2.0
Santa Fe, NM	30,671	32,269	5.2
Santa Rosa, CA	36,145	36,494	1.0
Sarasota-Bradenton, FL	27,958	28,950	3.5
Savannah, GA	30,176	30,796	2.1
Scranton--Wilkes-Barre--Hazleton, PA	28,642	29,336	2.4
Seattle-Bellevue-Everett, WA	45,299	46,093	1.8
Sharon, PA	26,707	27,872	4.4
Sheboygan, WI	30,840	32,148	4.2
Sherman-Denison, TX	30,397	30,085	-1.0
Shreveport-Bossier City, LA	27,856	28,769	3.3
Sioux City, IA-NE	26,755	27,543	2.9
Sioux Falls, SD	28,962	29,975	3.5
South Bend, IN	30,769	31,821	3.4
Spokane, WA	29,310	30,037	2.5
Springfield, IL	36,061	37,336	3.5
Springfield, MO	27,338	27,987	2.4
Springfield, MA	32,801	33,972	3.6
State College, PA	29,939	30,910	3.2
Steubenville-Weirton, OH-WV	28,483	29,129	2.3

See footnotes at end of table.

26. ContinuedAnnual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Stockton-Lodi, CA	$30,818	$31,958	3.7
Sumter, SC	24,450	24,982	2.2
Syracuse, NY	32,254	33,752	4.6
Tacoma, WA	31,261	32,507	4.0
Tallahassee, FL	29,708	30,895	4.0
Tampa-St. Petersburg-Clearwater, FL	31,678	32,458	2.5
Terre Haute, IN	27,334	28,415	4.0
Texarkana, TX-Texarkana, AR	26,492	27,717	4.6
Toledo, OH	32,299	33,513	3.8
Topeka, KS	30,513	31,707	3.9
Trenton, NJ	46,831	47,969	2.4
Tucson, AZ	30,690	31,673	3.2
Tulsa, OK	31,904	32,241	1.1
Tuscaloosa, AL	29,972	30,745	2.6
Tyler, TX	30,551	31,050	1.6
Utica-Rome, NY	27,777	28,500	2.6
Vallejo-Fairfield-Napa, CA	33,903	34,543	1.9
Ventura, CA	37,783	38,195	1.1
Victoria, TX	29,068	29,168	.3
Vineland-Millville-Bridgeton, NJ	32,571	33,625	3.2
Visalia-Tulare-Porterville, CA	24,732	25,650	3.7
Waco, TX	28,245	28,885	2.3
Washington, DC-MD-VA-WV	47,589	48,430	1.8
Waterloo-Cedar Falls, IA	29,119	29,916	2.7
Wausau, WI	29,402	30,292	3.0
West Palm Beach-Boca Raton, FL	35,957	36,550	1.6
Wheeling, WV-OH	26,282	26,693	1.6
Wichita, KS	32,983	33,429	1.4
Wichita Falls, TX	25,557	26,387	3.2
Williamsport, PA	27,801	27,988	.7
Wilmington-Newark, DE-MD	42,177	43,401	2.9
Wilmington, NC	29,287	29,157	-.4
Yakima, WA	24,204	24,934	3.0
Yolo, CA	35,352	35,591	.7
York, PA	31,936	32,609	2.1
Youngstown-Warren, OH	28,789	29,799	3.5
Yuba City, CA	27,781	28,967	4.3
Yuma, AZ	22,415	23,429	4.5
Aguadilla, PR	18,061	19,283	6.8
Arecibo, PR	16,600	18,063	8.8
Caguas, PR	18,655	19,706	5.6
Mayaguez, PR	17,101	17,500	2.3
Ponce, PR	17,397	18,187	4.5
San Juan-Bayamon, PR	20,948	21,930	4.7

[1] Includes data for Metropolitan Statistical Areas (MSA) and Primary Metropolitan Statistical Areas (PMSA) as defined by OMB Bulletin No. 99-04. In the New England areas, the New England County Metropolitan Area (NECMA) definitions were used.

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

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

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

27. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1994[1]	1995	1996	1997[1]	1998[1]	1999[1]	2000[1]	2001	2002	2003	2004
Civilian noninstitutional population	196,814	198,584	200,591	203,133	205,220	207,753	212,577	215,092	217,570	221,168	223,357
Civilian labor force	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510	147,401
Labor force participation rate	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2	66.0
Employed	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736	139,252
Employment-population ratio	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3	62.3
Unemployed	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774	8,149
Unemployment rate	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0	5.5
Not in the labor force	65,758	66,280	66,647	66,836	67,547	68,385	69,994	71,359	72,707	74,658	75,956

[1] Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

Industry	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total private employment	95,016	97,866	100,169	103,113	106,021	108,686	110,996	110,707	108,828	108,416	109,862
Total nonfarm employment	114,291	117,298	119,708	122,770	125,930	128,993	131,785	131,826	130,341	129,999	131,480
Goods-producing	22,774	23,156	23,410	23,886	24,354	24,465	24,649	23,873	22,557	21,816	21,884
Natural resources and mining	659	641	637	654	645	598	599	606	583	572	591
Construction	5,095	5,274	5,536	5,813	6,149	6,545	6,787	6,826	6,716	6,735	6,964
Manufacturing	17,021	17,241	17,237	17,419	17,560	17,322	17,263	16,441	15,259	14,510	14,329
Private service-providing	72,242	74,710	76,759	79,227	81,667	84,221	86,346	86,834	86,271	86,599	87,978
Trade, transportation, and utilities	23,128	23,834	24,239	24,700	25,186	25,771	26,225	25,983	25,497	25,287	25,510
Wholesale trade	5,247.3	5,433.1	5,522.0	5,663.9	5,795.2	5,892.5	5,933.2	5,772.7	5,652.3	5,607.5	5,654.9
Retail trade	13,490.8	13,896.7	14,142.5	14,388.9	14,609.3	14,970.1	15,279.8	15,238.6	15,025.1	14,917.3	15,034.7
Transportation and warehousing	3,701.0	3,837.8	3,935.3	4,026.5	4,168.0	4,300.3	4,410.3	4,372.0	4,223.6	4,185.4	4,250.0
Utilities	689.3	666.2	639.6	620.9	613.4	608.5	601.3	599.4	596.2	577.0	570.2
Information	2,738	2,843	2,940	3,084	3,218	3,419	3,631	3,629	3,395	3,188	3,138
Financial activities	6,867	6,827	6,969	7,178	7,462	7,648	7,687	7,807	7,847	7,977	8,052
Professional and business services	12,174	12,844	13,462	14,335	15,147	15,957	16,666	16,476	15,976	15,987	16,414
Education and health services	12,807	13,289	13,683	14,087	14,446	14,798	15,109	15,645	16,199	16,588	16,954
Leisure and hospitality	10,100	10,501	10,777	11,018	11,232	11,543	11,862	12,036	11,986	12,173	12,479
Other services	4,428	4,572	4,690	4,825	4,976	5,087	5,168	5,258	5,372	5,401	5,431
Government	19,275	19,432	19,539	19,664	19,909	20,307	20,790	21,118	21,513	21,583	21,618

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

Industry	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Private sector:											
Average weekly hours	34.5	34.3	34.3	34.5	34.5	34.3	34.3	34.0	33.9	33.7	33.7
Average hourly earnings (in dollars)	11.32	11.64	12.03	12.49	13.00	13.47	14.00	14.53	14.95	15.35	15.67
Average weekly earnings (in dollars)	390.73	399.53	412.74	431.25	448.04	462.49	480.41	493.20	506.07	517.30	528.56
Goods-producing:											
Average weekly hours	41.1	40.8	40.8	41.1	40.8	40.8	40.7	39.9	39.9	39.8	40.0
Average hourly earnings (in dollars)	12.63	12.96	13.38	13.82	14.23	14.71	15.27	15.78	16.33	16.80	17.19
Average weekly earnings (in dollars)	519.58	528.62	546.48	568.43	580.99	599.99	621.86	630.04	651.61	669.13	688.03
Natural resources and mining											
Average weekly hours	45.3	45.3	46.0	46.2	44.9	44.2	44.4	44.6	43.2	43.6	44.5
Average hourly earnings (in dollars)	14.41	14.78	15.10	15.57	16.20	16.33	16.55	17.00	17.19	17.56	18.08
Average weekly earnings (in dollars)	653.14	670.32	695.07	720.11	727.28	721.74	734.92	757.92	741.97	765.94	804.03
Construction:											
Average weekly hours	38.8	38.8	38.9	38.9	38.8	39.0	39.2	38.7	38.4	38.4	38.3
Average hourly earnings (in dollars)	14.38	14.73	15.11	15.67	16.23	16.80	17.48	18.00	18.52	18.95	19.23
Average weekly earnings (in dollars)	558.53	571.57	588.48	609.48	629.75	655.11	685.78	695.89	711.82	726.83	735.70
Manufacturing:											
Average weekly hours	41.7	41.3	41.3	41.7	41.4	41.4	41.3	40.3	40.5	40.4	40.8
Average hourly earnings (in dollars)	12.04	12.34	12.75	13.14	13.45	13.85	14.32	14.76	15.29	15.74	16.14
Average weekly earnings (in dollars)	502.12	509.26	526.55	548.22	557.12	573.17	590.65	595.19	618.75	635.99	658.53
Private service-providing:											
Average weekly hours	32.7	32.6	32.6	32.8	32.8	32.7	32.7	32.5	32.5	32.4	32.3
Average hourly earnings (in dollars)	10.87	11.19	11.57	12.05	12.59	13.07	13.60	14.16	14.56	14.96	15.26
Average weekly earnings (in dollars)	354.97	364.14	376.72	394.77	412.78	427.30	445.00	460.32	472.88	483.89	493.67
Trade, transportation, and utilities:											
Average weekly hours	34.3	34.1	34.1	34.3	34.2	33.9	33.8	33.5	33.6	33.6	33.5
Average hourly earnings (in dollars)	10.80	11.10	11.46	11.90	12.39	12.82	13.31	13.70	14.02	14.34	14.59
Average weekly earnings (in dollars)	370.38	378.79	390.64	407.57	423.30	434.31	449.88	459.53	471.27	481.14	488.58
Wholesale trade:											
Average weekly hours	38.8	38.6	38.6	38.8	38.6	38.6	38.8	38.4	38.0	37.9	37.8
Average hourly earnings (in dollars)	12.93	13.34	13.80	14.41	15.07	15.62	16.28	16.77	16.98	17.36	17.66
Average weekly earnings (in dollars)	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.29	666.93
Retail trade:											
Average weekly hours	30.9	30.8	30.7	30.9	30.9	30.8	30.7	30.7	30.9	30.9	30.7
Average hourly earnings (in dollars)	8.61	8.85	9.21	9.59	10.05	10.45	10.86	11.29	11.67	11.90	12.08
Average weekly earnings (in dollars)	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.29	666.93
Transportation and warehousing:											
Average weekly hours	39.5	38.9	39.1	39.4	38.7	37.6	37.4	36.7	36.8	36.8	37.2
Average hourly earnings (in dollars)	12.84	13.18	13.45	13.78	14.12	14.55	15.05	15.33	15.76	16.25	16.53
Average weekly earnings (in dollars)	507.27	513.37	525.60	542.55	546.86	547.97	562.31	562.70	579.75	598.41	614.90
Utilities:											
Average weekly hours	42.3	42.3	42.0	42.0	42.0	42.0	42.0	41.4	40.9	41.1	40.9
Average hourly earnings (in dollars)	18.66	19.19	19.78	20.59	21.48	22.03	22.75	23.58	23.96	24.77	25.62
Average weekly earnings (in dollars)	789.98	811.52	830.74	865.26	902.94	924.59	955.66	977.18	979.09	1,017.27	1,048.82
Information:											
Average weekly hours	36.0	36.0	36.4	36.3	36.6	36.7	36.8	36.9	36.5	36.2	36.3
Average hourly earnings (in dollars)	15.32	15.68	16.30	17.14	17.67	18.40	19.07	19.80	20.20	21.01	21.42
Average weekly earnings (in dollars)	551.28	564.98	592.68	622.40	646.52	675.32	700.89	731.11	738.17	760.81	777.42
Financial activities:											
Average weekly hours	35.5	35.5	35.5	35.7	36.0	35.8	35.9	35.8	35.6	35.5	35.5
Average hourly earnings (in dollars)	11.82	12.28	12.71	13.22	13.93	14.47	14.98	15.59	16.17	17.14	17.53
Average weekly earnings (in dollars)	419.20	436.12	451.49	472.37	500.95	517.57	537.37	558.02	575.51	609.08	622.99
Professional and business services:											
Average weekly hours	34.1	34.0	34.1	34.3	34.3	34.4	34.5	34.2	34.2	34.1	34.2
Average hourly earnings (in dollars)	12.15	12.53	13.00	13.57	14.27	14.85	15.52	16.33	16.81	17.21	17.46
Average weekly earnings (in dollars)	414.16	426.44	442.81	465.51	490.00	510.99	535.07	557.84	574.66	587.02	596.96
Education and health services:											
Average weekly hours	32.0	32.0	31.9	32.2	32.2	32.1	32.2	32.3	32.4	32.3	32.4
Average hourly earnings (in dollars)	11.50	11.80	12.17	12.56	13.00	13.44	13.95	14.64	15.21	15.64	16.16
Average weekly earnings (in dollars)	368.14	377.73	388.27	404.65	418.82	431.35	449.29	473.39	492.74	505.69	523.83
Leisure and hospitality:											
Average weekly hours	26.0	25.9	25.9	26.0	26.2	26.1	26.1	25.8	25.8	25.6	25.7
Average hourly earnings (in dollars)	6.46	6.62	6.82	7.13	7.48	7.76	8.11	8.35	8.58	8.76	8.91
Average weekly earnings (in dollars)	168.00	171.43	176.48	185.81	195.82	202.87	211.79	215.19	221.26	224.30	228.63
Other services:											
Average weekly hours	32.7	32.6	32.5	32.7	32.6	32.5	32.5	32.3	32.0	31.4	31.0
Average hourly earnings (in dollars)	10.18	10.51	10.85	11.29	11.79	12.26	12.73	13.27	13.72	13.84	13.98
Average weekly earnings (in dollars)	332.44	342.36	352.62	368.63	384.25	398.77	413.41	428.64	439.76	434.41	433.04

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
Civilian workers[2]	165.8	167.6	168.4	170.7	172.2	173.9	174.7	176.6	177.7	0.6	3.2
Workers, by occupational group:											
White-collar workers	167.9	169.9	170.7	172.7	174.0	175.8	176.6	178.8	179.9	.6	3.4
Professional specialty and technical	165.0	167.0	168.0	170.2	171.2	173.6	174.7	176.8	177.6	.5	3.7
Executive, adminitrative, and managerial	172.0	174.0	174.9	175.8	177.1	178.2	179.4	182.0	183.1	.6	3.4
Administrative support, including clerical	170.0	171.7	172.5	175.3	177.2	178.7	180.0	182.0	183.3	.7	3.4
Blue-collar workers	161.4	162.9	163.7	166.9	168.8	170.1	170.9	172.4	173.8	.8	3.0
Service occupations	165.0	166.8	167.9	169.7	170.9	172.7	173.6	174.9	175.9	.6	2.9
Workers, by industry division:											
Goods-producing	164.6	165.8	166.8	170.4	171.9	173.4	174.4	177.0	178.5	.8	3.8
Manufacturing	165.4	166.5	167.1	171.7	173.2	174.9	175.4	178.2	179.6	.8	3.7
Service-producing	166.2	168.2	169.1	170.8	172.3	174.0	174.7	176.5	177.4	.5	3.0
Services	166.3	168.5	169.5	171.2	172.3	174.5	175.5	177.0	177.8	.5	3.2
Health services	167.6	169.3	170.7	173.0	174.4	176.7	177.7	179.9	181.1	.7	3.8
Hospitals	170.8	173.1	174.8	176.8	178.2	180.5	181.8	184.3	185.5	.7	4.1
Educational services	164.2	166.9	167.6	168.5	168.9	171.8	172.9	173.9	174.5	.3	3.3
Public administration[3]	164.3	167.3	168.1	170.1	171.4	174.1	175.4	177.6	178.3	.4	4.0
Nonmanufacturing	165.8	167.8	168.6	170.4	171.8	173.5	174.4	176.1	177.1	.6	3.1
Private industry workers	166.4	168.1	168.8	171.4	173.0	174.4	175.2	177.2	178.5	.7	3.2
Excluding sales occupations	166.6	168.1	169.0	171.6	173.2	174.6	175.6	177.7	178.9	.7	3.3
Workers, by occupational group:											
White-collar workers	169.4	171.2	172.0	174.2	175.7	177.3	178.1	180.4	181.6	.7	3.4
Excluding sales occupations	170.4	172.1	173.0	175.3	176.7	178.3	179.5	182.0	183.2	.7	3.7
Professional specialty and technical occupations	167.7	169.4	170.5	173.4	174.7	176.8	178.1	180.8	181.6	.4	3.9
Executive, adminitrative, and managerial occupations	173.1	175.0	175.9	176.8	178.1	179.2	180.2	183.0	184.2	.7	3.4
Sales occupations	165.1	167.2	167.1	169.2	171.2	173.1	171.4	173.1	174.4	.8	1.9
Administrative support occupations, including clerical	170.9	172.3	173.2	176.1	178.1	179.4	180.7	182.8	184.3	.8	3.5
Blue-collar workers	161.4	162.8	163.6	166.9	168.8	170.1	170.8	172.3	173.7	.8	2.9
Precision production, craft, and repair occupations	162.0	163.1	164.2	167.1	169.1	170.2	171.2	173.1	174.9	1.0	3.4
Machine operators, assemblers, and inspectors	161.1	162.6	163.2	168.7	170.5	172.2	172.5	173.3	173.8	.3	1.9
Transportation and material moving occupations	155.1	156.7	156.9	158.5	160.6	161.8	162.3	163.7	165.7	1.2	3.2
Handlers, equipment cleaners, helpers, and laborers	166.8	168.6	169.5	171.7	173.2	174.3	175.3	176.9	177.9	.6	2.7
Service occupations	162.6	163.8	164.3	166.9	168.2	168.9	169.7	170.9	171.9	.6	2.2
Production and nonsupervisory occupations[4]	164.1	165.7	166.6	169.3	171.0	172.4	173.0	174.6	175.8	.7	2.8
Workers, by industry division:											
Goods-producing	164.5	165.7	166.5	170.3	171.8	173.3	174.3	176.9	178.5	.9	3.9
Excluding sales occupations	163.8	165.0	165.9	169.8	171.2	172.5	173.7	176.3	177.9	.9	3.9
White-collar occupations	169.2	170.1	170.5	173.5	174.7	176.4	177.8	182.2	184.2	1.1	5.4
Excluding sales occupations	167.5	168.5	169.2	172.2	173.3	174.5	176.4	180.9	183.0	1.2	5.6
Blue-collar occupations	161.5	162.9	163.9	168.1	169.8	171.3	172.0	173.4	174.7	.7	2.9
Construction	161.1	162.3	163.3	164.6	165.9	167.0	167.3	169.1	171.0	1.1	3.1
Manufacturing	165.4	166.5	167.1	171.7	173.2	174.9	175.4	178.2	179.6	.8	3.7
White-collar occupations	168.7	169.5	169.6	173.2	174.6	176.4	176.7	181.4	183.4	1.1	5.0
Excluding sales occupations	166.4	167.4	167.8	171.3	172.6	174.1	174.7	179.4	181.5	1.2	5.2
Blue-collar occupations	162.8	164.1	165.1	170.4	172.0	173.7	174.3	175.8	176.7	.5	2.7
Durables	165.5	166.6	167.3	172.4	174.0	175.8	176.3	179.5	181.2	.9	4.1
Nondurables	164.9	166.0	166.6	170.4	171.7	173.1	173.6	175.8	176.8	.6	3.0
Service-producing	167.0	168.8	169.7	171.6	173.3	174.7	175.3	177.1	178.1	.6	2.8
Excluding sales occupations	168.0	169.7	170.6	172.5	174.2	175.6	176.5	178.4	179.4	.6	3.0
White-collar occupations	169.2	171.2	172.0	174.1	175.7	177.3	177.8	179.7	180.7	.6	2.8
Excluding sales occupations	171.3	173.1	174.2	176.2	177.8	179.4	180.4	182.4	183.2	.4	3.0
Blue-collar occupations	160.8	162.2	162.6	164.1	166.4	167.4	168.1	169.9	171.5	.9	3.1
Service occupations	162.0	163.2	164.3	166.1	167.4	168.1	168.9	170.1	171.1	.6	2.2
Transportation and public utilities	165.4	166.5	167.0	169.8	172.5	173.6	173.5	174.5	175.8	.7	1.9
Transportation	158.9	159.4	159.6	162.0	164.7	166.2	166.2	165.5	166.1	.4	.9
Public utilities	174.2	176.4	177.0	180.4	183.1	183.6	183.4	186.9	189.2	1.2	3.3
Communications	175.5	178.4	179.0	182.2	183.6	183.6	183.5	186.0	188.4	1.3	2.6
Electric, gas, and sanitary services	172.6	173.8	174.6	178.2	182.4	183.3	183.3	188.0	190.2	1.2	4.3
Wholesale and retail trade	162.5	164.3	165.0	166.3	168.1	169.1	169.1	170.9	171.7	.5	2.1
Excluding sales occupations	162.7	165.0	165.9	167.4	168.6	169.6	170.4	172.3	173.1	.5	2.7
Wholesale trade	171.3	172.0	172.0	173.8	175.9	177.8	176.6	179.1	179.3	.1	1.9
Excluding sales occupations	169.9	171.2	171.3	173.7	174.0	175.3	176.3	179.2	179.5	.2	3.2
Retail trade	157.4	159.9	161.0	162.1	163.7	164.2	164.7	166.2	167.3	.7	2.2
General merchandise stores	159.2	161.2	165.6	165.8	166.2	168.8	169.5	172.3	172.1	–.1	3.5
Food stores	158.6	159.3	160.3	162.1	163.5	163.5	164.0	165.0	165.9	.5	1.5

See footnotes at end of table.

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
Finance, insurance, and real estate	178.3	180.2	180.9	182.5	183.6	184.8	186.0	188.9	190.9	1.1	4.0
Excluding sales occupations	184.0	1,853.0	186.1	186.6	188.7	190.9	191.2	194.3	196.1	.9	3.9
Banking, savings and loan, and other credit agencies	206.3	207.6	209.0	207.2	208.9	210.5	212.3	213.7	217.3	1.7	4.0
Insurance	173.9	175.1	176.2	177.8	180.5	182.1	183.6	186.3	188.8	1.3	4.6
Services	168.4	170.4	171.4	173.5	175.1	176.9	177.9	179.7	180.6	.5	3.1
Business services	169.2	171.9	172.6	174.8	176.9	178.5	179.1	180.1	181.0	.5	2.3
Health services	167.9	169.4	170.8	173.3	174.8	177.0	178.0	180.3	181.5	.7	3.8
Hospitals	171.9	173.9	175.9	178.1	179.7	181.8	183.2	185.8	187.3	.8	4.2
Educational services	177.1	180.2	181.3	183.1	184.2	187.0	188.5	190.0	190.9	.5	3.6
Colleges and universities	175.4	178.4	179.4	181.2	182.5	185.2	186.2	187.6	188.6	.5	3.3
Nonmanufacturing	166.4	168.1	169.0	170.9	172.5	173.9	174.7	176.5	177.6	.6	3.0
White-collar workers	169.3	171.2	172.1	174.1	175.7	177.2	178.0	180.0	181.0	.6	3.0
Excluding sales occupations	171.4	173.2	174.2	176.2	177.7	179.3	180.6	182.7	183.6	.5	3.3
Blue-collar occupations	159.7	161.1	161.7	163.4	165.5	166.4	167.3	168.8	170.6	1.1	3.1
Service occupations	162.0	163.2	162.4	166.0	167.3	168.0	168.9	170.1	171.0	.5	2.2
State and local government workers	163.2	165.9	166.8	168.0	168.7	171.5	172.6	174.1	174.7	.3	3.6
Workers, by occupational group:											
White-collar workers	162.2	164.9	165.7	166.8	167.5	170.0	171.2	172.6	173.1	.3	3.3
Professional specialty and technical	160.8	163.4	164.1	165.1	165.6	168.4	169.4	170.4	171.1	.4	3.3
Executive, administrative, and managerial	165.7	168.0	169.1	170.1	171.0	172.1	174.3	176.7	176.5	–.1	3.2
Administrative support, including clerical	164.4	167.9	168.5	170.4	171.8	174.3	175.5	177.2	177.7	.3	3.4
Blue-collar workers	161.7	163.6	165.2	166.7	167.5	169.9	171.0	172.6	173.8	.7	3.8
Workers, by industry division:											
Services	162.3	164.9	165.7	166.5	166.8	169.7	170.8	171.8	172.4	.3	3.4
Services excluding schools[5]	164.2	166.8	168.2	169.4	170.1	173.0	173.8	175.6	176.4	.5	3.7
Health services	166.7	169.5	171.0	172.2	172.9	175.7	176.8	178.9	179.6	.4	3.9
Hospitals	167.3	170.3	171.4	172.4	173.2	176.3	177.4	179.1	179.8	.4	3.8
Educational services	161.7	164.3	165.0	165.7	165.9	168.8	169.9	170.9	171.4	.3	3.3
Schools	162.0	164.7	165.3	166.0	166.3	169.2	170.3	171.2	171.7	.3	3.2
Elementary and secondary	160.0	163.0	163.7	164.4	164.6	168.0	169.2	169.8	170.3	.3	3.5
Colleges and universities	167.5	169.2	170.0	170.7	171.0	172.4	173.2	175.1	175.6	.3	2.7
Public administration[3]	164.3	167.3	168.1	170.1	171.4	174.1	175.4	177.6	178.3	.4	4.0

[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.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
Civilian workers[1]	160.3	161.8	162.3	163.3	164.3	165.7	166.2	167.3	168.2	0.5	2.4
Workers, by occupational group:											
White-collar workers	162.9	164.5	165.1	166.1	167.1	168.7	169.1	170.3	171.1	.5	2.4
Professional specialty and technical	160.1	161.8	162.5	163.8	164.4	166.5	167.0	168.1	168.7	.4	2.6
Executive, adminitrative, and managerial	169.0	170.5	171.2	171.4	172.4	173.4	174.4	175.9	176.9	.6	2.6
Administrative support, including clerical	163.1	164.3	164.9	166.3	167.5	168.8	169.7	170.9	172.0	.6	2.7
Blue-collar workers	154.8	155.8	156.3	157.3	158.4	159.7	160.0	161.0	162.2	.7	2.4
Service occupations	158.7	159.8	160.6	161.2	161.9	162.8	163.6	164.4	165.3	.5	2.1
Workers, by industry division:											
Goods-producing	157.5	158.3	160.6	159.9	161.0	162.3	162.4	163.8	164.9	.8	2.4
Manufacturing	159.0	159.7	160.1	161.3	162.4	163.8	164.0	165.3	166.4	.7	2.5
Service-producing	161.4	163.0	163.6	164.6	165.5	167.0	167.5	168.6	169.5	.5	2.4
Services	162.8	164.7	165.4	166.5	167.4	167.3	170.1	171.2	171.9	.4	2.7
Health services	163.2	164.7	165.9	167.7	168.6	170.8	171.7	173.2	174.3	.6	3.4
Hospitals	164.4	166.3	167.7	169.0	169.9	171.8	173.2	174.7	175.7	.6	3.4
Educational services	160.7	162.7	163.2	163.6	163.8	166.0	166.8	167.5	167.9	.2	2.5
Public administration[2]	158.0	159.4	160.0	161.1	161.4	162.6	163.5	165.0	165.6	.4	2.6
Nonmanufacturing	160.5	162.1	162.7	163.7	164.6	166.0	166.5	167.6	168.5	.5	2.4
Private industry workers	160.4	161.7	162.3	163.4	164.5	165.9	166.2	167.4	168.4	.6	2.4
Excluding sales occupations	160.5	161.7	162.4	163.5	164.5	165.8	166.5	167.6	168.7	.7	2.6
Workers, by occupational group:											
White-collar workers	163.8	165.3	165.9	167.1	168.2	169.7	170.0	171.3	172.3	.6	2.4
Excluding sales occupations	164.8	166.2	167.0	168.1	169.2	170.6	171.4	172.7	173.7	.6	2.7
Professional specialty and technical occupations	160.5	162.1	163.0	164.7	165.5	167.6	168.0	169.4	170.0	.4	2.7
Executive, adminitrative, and managerial occupations	170.3	171.8	172.5	172.7	173.9	174.9	175.7	177.2	178.4	.7	2.6
Sales occupations	159.3	161.6	161.1	162.6	163.9	165.9	164.0	164.9	166.0	.7	1.3
Administrative support occupations, including clerical	164.0	165.1	165.7	167.2	168.6	169.7	170.8	172.0	173.3	.8	2.8
Blue-collar workers	154.6	155.6	156.1	157.2	158.3	159.5	159.9	160.8	162.1	.8	2.4
Precision production, craft, and repair occupations	154.7	155.5	156.2	157.1	158.3	159.3	159.7	160.4	162.0	1.0	2.3
Machine operators, assemblers, and inspectors	155.3	156.8	156.9	158.6	159.8	161.6	161.6	162.6	163.7	.7	2.4
Transportation and material moving occupations	149.0	149.8	149.8	150.4	151.8	152.9	153.3	154.4	156.0	1.0	2.8
Handlers, equipment cleaners, helpers, and laborers	159.0	159.9	160.6	161.8	162.7	163.6	164.5	165.6	165.9	.2	2.0
Service occupations	156.1	157.1	157.8	158.4	159.3	159.8	160.6	161.4	162.3	.6	1.9
Production and nonsupervisory occupations[3]	157.4	158.8	159.4	160.7	161.7	163.1	163.4	164.5	165.5	.6	2.4
Workers, by industry division:											
Goods-producing	157.4	158.3	158.7	159.9	160.9	162.3	162.4	163.6	164.8	.7	2.4
Excluding sales occupations	156.5	157.4	158.0	159.2	160.2	161.2	161.6	162.8	164.0	.7	2.4
White-collar occupations	161.4	161.9	162.1	163.2	164.5	166.0	165.9	167.3	168.5	.7	2.4
Excluding sales occupations	159.2	159.9	160.4	161.5	162.7	163.6	164.1	165.3	166.7	.8	2.5
Blue-collar occupations	154.8	155.9	156.4	157.7	158.6	159.8	160.1	161.2	162.4	.7	2.4
Construction	152.4	153.6	154.0	155.1	155.9	157.1	157.0	157.7	159.2	1.0	2.1
Manufacturing	159.0	159.7	160.1	161.3	162.4	163.8	164.0	165.3	166.4	.7	2.5
White-collar occupations	161.6	162.0	162.1	163.3	164.7	166.1	166.1	167.6	168.7	.7	2.4
Excluding sales occupations	158.9	159.5	160.0	161.2	162.5	163.5	163.9	165.1	166.5	.8	2.5
Blue-collar occupations	156.9	157.9	158.5	159.8	160.6	162.1	162.4	163.6	164.7	.7	2.6
Durables	159.7	160.6	160.9	161.9	162.9	164.5	164.7	165.9	167.1	.7	2.6
Nondurables	157.8	158.3	158.7	160.4	161.6	162.8	162.9	164.5	165.3	.5	2.3
Service-producing	161.7	163.3	163.9	165.0	166.1	167.5	167.9	169.0	170.0	.6	2.3
Excluding sales occupations	162.8	164.2	165.0	166.0	167.1	168.5	169.3	170.4	171.4	.6	2.6
White-collar occupations	164.1	166.0	166.6	167.8	168.9	170.4	170.8	172.1	173.0	.5	2.4
Excluding sales occupations	166.5	168.2	169.0	170.2	171.2	172.8	173.6	175.0	175.9	.5	2.7
Blue-collar occupations	154.3	155.1	155.4	156.2	157.8	158.9	159.4	160.1	161.5	.9	2.3
Service occupations	155.6	156.6	157.4	158.0	158.8	159.4	160.2	160.9	161.8	.6	1.9
Transportation and public utilities	155.6	156.0	156.5	157.6	159.1	160.4	160.5	159.8	161.1	.8	1.3
Transportation	150.6	150.4	150.8	151.7	153.4	155.0	155.1	153.4	154.6	.8	.8
Public utilities	162.1	163.4	164.1	165.3	166.4	167.5	167.5	168.2	169.9	1.0	2.1
Communications	163.4	165.4	165.9	167.0	167.5	168.8	168.3	168.4	170.3	1.1	1.7
Electric, gas, and sanitary services	160.4	161.0	161.8	163.3	165.1	165.9	166.6	167.9	169.2	.8	2.5
Wholesale and retail trade	157.5	159.2	159.5	160.3	161.6	162.5	162.1	163.4	164.1	.4	1.5
Wholesale trade	164.7	164.8	165.3	166.2	167.8	169.7	167.5	169.5	169.4	–.1	1.0
Excluding sales occupations	165.2	165.7	166.3	167.8	167.6	168.6	168.9	171.5	171.5	.0	2.3
Retail trade	153.8	156.3	156.5	157.3	158.4	158.7	159.3	160.3	161.4	.7	1.9
General merchandise stores	152.0	153.1	153.6	154.1	154.9	157.5	158.1	159.3	159.0	–.2	2.6
Food stores	151.6	152.2	152.8	153.8	154.3	154.5	155.0	155.8	156.7	.6	1.6

See footnotes at end of table.

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
Finance, insurance, and real estate	172.4	174.1	174.5	175.2	175.3	176.5	177.7	179.2	181.2	1.1	3.4
Excluding sales occupations	178.5	179.2	210.2	179.2	180.5	181.8	182.9	184.6	186.5	1.0	3.3
Banking, savings and loan, and other credit agencies	208.7	209.1	164.5	206.7	207.6	209.5	211.3	210.7	215.4	2.2	3.8
Insurance	163.0	163.9	164.5	165.1	167.2	168.9	170.4	171.7	173.7	1.2	3.9
Services	164.0	165.9	166.7	168.1	169.3	171.1	172.0	173.4	174.2	.5	2.9
Business services	166.4	169.1	169.8	171.0	172.7	174.3	175.0	175.5	176.5	.6	2.2
Health services	163.2	164.6	135.8	167.8	168.8	170.9	171.9	173.4	174.6	.7	3.4
Hospitals	164.6	166.5	167.9	169.4	170.5	172.4	173.8	175.4	176.7	.7	3.6
Educational services	167.5	170.3	171.0	171.9	172.6	175.5	176.8	177.9	178.6	.4	3.5
Colleges and universities	165.1	167.6	168.4	169.5	170.0	172.9	173.6	174.6	175.5	.5	3.2
Nonmanufacturing	160.5	162.1	162.6	163.7	164.8	166.2	166.6	167.7	168.7	.6	2.4
White-collar workers	163.9	165.7	166.3	167.5	168.6	170.1	170.5	171.7	172.7	.6	2.4
Excluding sales occupations	166.1	167.7	168.5	169.7	170.7	172.3	173.1	174.4	175.4	.6	2.8
Blue-collar occupations	152.4	153.4	153.8	154.7	156.1	157.1	157.5	158.2	159.7	.9	2.3
Service occupations	155.5	156.5	157.3	157.9	158.7	159.2	160.1	160.8	161.7	.6	1.9
State and local government workers	163.2	165.9	166.8	168.0	168.7	171.5	172.6	174.1	174.7	.2	2.4
Workers, by occupational group:											
White-collar workers	159.2	161.0	161.5	162.1	162.4	164.1	164.9	165.9	166.2	.2	2.3
Professional specialty and technical	159.1	161.0	161.4	162.1	162.3	164.4	165.0	165.7	166.2	.3	2.4
Executive, administrative, and managerial	161.0	162.5	163.3	163.5	163.8	164.3	166.1	168.2	168.0	–.1	2.6
Administrative support, including clerical	157.2	159.1	159.5	160.4	160.8	162.6	163.0	163.9	164.0	.1	2.0
Blue-collar workers	156.5	157.6	158.3	158.9	159.2	160.7	161.4	162.4	163.2	.5	2.5
Workers, by industry division:											
Services	159.8	161.6	162.1	162.6	162.7	164.8	165.5	166.2	166.6	.2	2.4
Services excluding schools[4]	161.8	163.2	164.5	165.1	165.6	167.5	168.3	169.4	170.1	.4	2.7
Health services	163.5	165.1	166.7	167.4	167.8	169.6	170.7	171.9	172.6	.4	2.9
Hospitals	163.8	165.5	166.7	167.4	167.9	169.9	171.0	172.0	172.5	.3	2.7
Educational services	159.3	161.2	161.6	162.0	162.1	164.2	164.9	165.5	165.8	.2	2.3
Schools	159.5	161.4	161.8	162.1	162.3	164.3	165.0	165.6	166.0	.2	2.3
Elementary and secondary	158.5	160.6	160.9	161.3	161.5	163.8	164.5	164.8	165.1	.2	2.2
Colleges and universities	162.1	163.5	164.0	164.3	164.4	165.4	166.3	167.9	168.2	.2	2.3
Public administration[2]	158.0	159.4	160.0	161.1	161.4	162.6	163.5	165.0	165.6	.4	2.6

[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.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
Private industry workers	182.0	184.3	185.8	192.2	195.3	196.9	198.7	203.3	204.9	0.8	4.9
Workers, by occupational group:											
White-collar workers	185.5	187.7	189.2	194.4	197.4	199.1	201.1	206.8	208.5	.8	5.6
Blue-collar workers	176.1	178.4	179.9	188.3	191.8	193.3	194.9	197.8	199.4	.8	4.0
Workers, by industry division:											
Goods-producing	180.2	182.3	183.8	193.7	196.2	198.1	201.2	207.0	209.4	1.2	6.7
Service-producing	182.3	184.7	186.2	190.6	194.1	195.5	196.5	200.5	201.6	.5	3.9
Manufacturing	179.0	181.1	182.3	194.4	196.9	199.2	200.4	206.7	208.8	1.0	6.0
Nonmanufacturing	182.8	185.1	186.7	190.9	194.3	195.7	197.6	201.6	203.0	.7	4.5

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

[June 1989 = 100]

Series	2003			2004				2005		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2005	
COMPENSATION											
Workers, by bargaining status[1]											
Union	164.1	165.7	166.8	171.4	173.9	175.3	176.2	177.5	179.0	0.8	2.9
Goods-producing	163.4	164.7	165.9	172.3	174.6	176.0	176.7	178.2	179.8	.9	3.0
Service-producing	164.6	166.5	167.5	170.2	172.9	174.4	175.4	176.6	177.9	.7	2.9
Manufacturing	163.8	165.0	166.3	175.0	177.0	178.4	178.9	180.6	181.7	.6	2.7
Nonmanufacturing	163.7	165.5	166.5	168.8	171.6	173.0	174.1	175.2	176.9	1.0	3.1
Nonunion	166.8	168.4	169.1	171.3	172.7	174.2	174.9	177.1	178.3	.7	3.2
Goods-producing	164.9	166.1	166.7	169.7	170.9	172.4	173.5	176.5	178.0	.8	4.2
Service-producing	167.2	169.0	169.8	171.6	173.2	174.6	175.1	177.0	178.0	.6	2.8
Manufacturing	165.8	166.9	167.3	170.6	172.0	173.8	174.3	177.5	179.0	.8	4.1
Nonmanufacturing	166.7	168.5	139.3	171.1	172.6	174.0	174.7	176.6	177.7	.6	3.0
Workers, by region[1]											
Northeast	165.2	166.9	167.9	170.2	172.3	173.7	174.2	176.1	177.6	.9	3.1
South	161.6	163.2	163.9	166.4	167.9	169.5	170.6	172.5	173.4	.5	3.3
Midwest (formerly North Central)	170.4	171.7	172.5	174.7	176.2	177.6	177.9	180.0	180.9	.5	2.7
West	169.5	171.4	172.2	175.3	176.8	178.1	179.0	181.4	183.3	1.0	3.7
Workers, by area size[1]											
Metropolitan areas	166.6	168.3	169.1	171.5	173.1	174.6	175.3	177.4	178.6	.7	3.2
Other areas	165.0	166.1	166.9	170.2	172.1	173.3	174.3	176.4	177.3	.5	3.0
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	154.3	155.3	156.2	157.2	158.7	160.0	160.6	160.8	162.1	.8	2.1
Goods-producing	153.9	154.8	155.4	156.3	157.5	158.7	158.9	159.6	161.1	.9	2.3
Service-producing	155.1	156.3	157.3	158.5	160.3	161.7	162.6	162.3	163.6	.8	2.1
Manufacturing	155.9	156.7	157.1	158.1	159.2	160.5	160.7	161.5	162.8	.8	2.3
Nonmanufacturing	153.5	154.6	155.6	156.6	158.4	159.6	160.4	160.3	161.7	.9	2.1
Nonunion	161.5	163.0	163.4	164.6	165.6	167.0	167.3	168.6	169.6	.6	2.4
Goods-producing	158.9	159.7	160.1	161.4	162.4	163.8	163.9	165.2	166.4	.7	2.5
Service-producing	162.3	164.0	164.5	165.6	166.6	168.0	168.4	169.7	170.7	.6	2.5
Manufacturing	160.2	160.9	161.3	162.6	163.7	165.2	165.3	166.8	167.8	.6	2.5
Nonmanufacturing	161.5	163.1	163.7	164.7	165.7	167.1	167.5	168.7	169.7	.6	2.4
Workers, by region[1]											
Northeast	158.4	160.0	160.9	162.0	163.6	164.9	165.0	166.0	167.3	.8	2.3
South	156.1	157.4	157.9	159.1	160.1	161.6	162.3	163.6	164.4	.5	2.7
Midwest (formerly North Central)	165.0	166.1	166.5	166.9	167.7	169.2	169.2	170.6	171.3	.4	2.1
West	163.1	164.7	165.2	166.8	167.9	169.1	169.5	170.3	171.9	.9	2.4
Workers, by area size[1]											
Metropolitan areas	160.7	162.2	162.7	163.8	164.9	163.3	166.6	167.7	168.8	.7	2.4
Other areas	158.0	158.9	159.5	160.8	162.1	162.1	163.8	165.1	166.3	.7	2.6

[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.

34. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	–
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

35. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave [2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans [2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts [3]	8	14	19	12	5	31	50	64
Premium conversion plans	–	–	–	7	–	–	–	–

[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave.

Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

36. Work stoppages involving 1,000 workers or more

Measure	Annual totals		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]
Number of stoppages:															
Beginning in period	14	17	0	2	2	1	2	3	0	0	3	4	5	4	1
In effect during period	15	18	1	2	3	3	4	4	2	2	5	7	8	9	3
Workers involved:															
Beginning in period (in thousands)	129.2	170.7	.0	3.7	4.5	10.0	3.2	9.8	.0	.0	5.9	12.8	9.6	5.5	1.5
In effect during period (in thousands)	130.5	316.5	1.6	3.7	6.5	16.1	16.1	8.5	2.5	2.6	8.5	17.0	13.9	12.8	3.9
Days idle:															
Number (in thousands)	4,091.2	3,344.1	3.2	52.5	57.0	300.0	114.9	97.5	50.0	49.4	98.0	95.3	115.5	84.1	64.5
Percent of estimated working time[1]	.01	.01	([2])	([2])	([2])	.01	([2])	([2])	([2])	([2])	([2])	([2])	([2])	([2])	([2])

[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," M*onthly Labor Review*, October 1968, pp. 54–56.

[2] Less than 0.005.

NOTE: P = preliminary.

37. 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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	184.0	188.9	189.4	189.5	189.9	190.9	191.0	190.3	190.7	191.8	193.3	194.6	194.4	194.5	195.4
All items (1967 = 100)	551.1	565.8	567.5	567.6	568.7	571.9	572.2	570.1	571.2	574.5	579.0	582.9	582.4	582.6	585.2
Food and beverages	180.5	186.6	187.2	187.3	187.2	188.4	188.6	188.9	189.5	189.3	189.6	190.7	191.1	190.9	191.3
Food	180.0	186.2	186.8	186.8	186.7	187.9	188.2	188.5	189.1	188.8	189.1	190.2	190.6	190.4	190.8
Food at home	179.4	186.2	187.1	186.7	186.1	187.9	188.1	188.5	188.9	188.0	188.1	189.8	190.3	189.4	189.8
Cereals and bakery products	202.8	206.0	207.2	207.2	206.4	207.0	206.8	206.4	207.6	208.4	208.5	209.1	209.7	209.4	209.4
Meats, poultry, fish, and eggs	169.3	181.7	183.7	183.7	183.4	182.9	182.4	183.1	183.4	183.9	184.3	184.7	185.0	185.2	184.7
Dairy and related products[1]	167.9	180.2	187.7	184.9	181.6	182.1	180.9	180.1	183.3	181.8	181.4	182.2	183.3	181.0	181.6
Fruits and vegetables	225.9	232.7	224.5	224.0	226.0	240.0	248.3	250.8	242.9	234.8	233.7	240.1	244.7	238.4	240.3
Nonalcoholic beverages and beverage materials	139.8	140.4	140.5	140.3	140.3	140.6	139.6	140.4	142.2	142.5	143.6	144.8	144.3	144.0	144.8
Other foods at home	162.6	164.9	166.0	166.2	165.2	165.4	164.4	163.6	165.6	165.3	165.7	167.5	166.3	166.9	167.6
Sugar and sweets	162.0	163.2	163.8	164.4	163.5	162.6	163.1	161.3	163.0	164.2	162.6	164.9	163.3	165.7	167.1
Fats and oils	157.4	167.8	171.9	169.7	170.4	170.2	167.8	167.4	170.4	169.3	167.0	169.4	167.8	164.5	167.3
Other foods	178.8	179.7	180.3	180.9	179.4	180.1	178.9	178.3	180.3	179.7	181.3	183.0	182.0	182.9	183.0
Other miscellaneous foods[1,2]	110.3	110.4	109.4	111.5	110.5	109.9	110.5	110.8	110.1	110.3	111.9	110.8	110.8	110.2	111.5
Food away from home[1]	182.1	187.5	187.8	188.4	188.9	189.4	189.6	189.9	190.8	191.4	191.7	192.8	192.6	193.2	193.6
Other food away from home[1,2]	121.3	125.3	125.1	125.4	125.9	126.8	126.7	127.0	127.5	128.7	129.4	129.6	130.3	131.6	132.0
Alcoholic beverages	187.2	192.1	192.2	192.5	193.4	193.6	194.0	193.9	194.3	195.2	195.7	195.9	195.5	195.9	195.8
Housing	184.8	189.5	190.9	191.2	191.0	191.0	190.8	190.7	191.8	192.7	194.1	194.4	194.5	195.5	196.6
Shelter	213.1	218.8	220.0	220.3	220.2	220.6	219.9	219.8	221.0	222.5	224.4	224.4	224.0	224.5	225.6
Rent of primary residence	205.5	211.0	211.2	211.9	212.4	212.8	213.2	213.9	214.5	215.0	215.5	216.0	216.4	216.8	217.5
Lodging away from home	119.3	125.9	132.2	130.6	127.2	128.0	121.9	118.7	122.6	128.9	138.3	136.2	131.7	132.8	136.4
Owners' equivalent rent of primary residence[3]	219.9	224.9	225.1	225.7	226.1	226.5	226.8	227.2	227.8	228.4	228.7	229.0	229.4	229.7	230.2
Tenants' and household insurance[1,2]	114.8	116.2	116.1	116.3	116.6	116.3	117.7	118.7	118.5	118.7	119.0	118.2	118.0	118.0	118.1
Fuels and utilities	154.5	161.9	166.6	167.7	166.7	162.8	165.6	165.7	166.9	166.4	166.7	169.6	171.7	177.4	180.1
Fuels	138.2	144.4	149.5	150.5	149.3	144.9	147.8	148.0	149.0	148.1	148.4	151.5	153.7	159.9	162.6
Fuel oil and other fuels	139.5	160.5	151.1	157.4	161.6	177.3	186.6	183.7	181.2	188.5	195.5	199.5	193.9	195.0	202.9
Gas (piped) and electricity	145.0	150.6	156.9	157.6	156.0	150.0	152.7	153.0	154.3	152.9	152.7	155.9	158.7	165.6	168.1
Household furnishings and operations	126.1	125.5	125.2	124.8	125.0	126.1	125.8	125.5	126.1	126.1	126.1	126.3	126.7	126.0	125.9
Apparel	120.9	120.4	115.9	116.5	121.2	124.1	123.0	118.8	116.1	118.7	123.5	123.7	122.4	118.3	113.8
Men's and boys' apparel	118.0	117.5	115.2	113.8	116.2	118.3	118.9	116.3	115.0	116.3	119.6	120.4	119.7	115.3	111.6
Women's and girls' apparel	113.1	113.0	106.1	107.5	114.4	119.2	116.8	110.0	105.1	109.3	117.1	116.6	114.2	109.1	102.8
Infants' and toddlers' apparel[1]	122.1	118.5	114.5	115.0	119.5	120.6	120.3	118.6	117.5	118.1	119.0	121.3	119.8	116.4	112.8
Footwear	119.6	119.3	115.1	117.3	121.7	122.1	121.8	120.3	119.4	121.1	122.8	123.8	123.2	121.7	119.3
Transportation	157.6	163.1	164.0	162.9	162.9	166.4	167.2	164.8	164.0	166.1	168.8	173.2	172.1	171.8	174.4
Private transportation	153.6	159.4	160.0	159.1	159.4	162.9	163.6	161.3	160.5	162.6	165.2	169.6	168.3	167.7	170.3
New and used motor vehicles[2]	96.5	94.2	93.5	93.4	93.9	94.3	95.2	95.4	95.8	95.9	95.6	95.6	95.7	95.6	95.2
New vehicles	137.9	137.1	135.9	134.9	134.9	135.9	137.9	138.8	139.8	139.9	139.1	138.8	138.7	138.1	136.3
Used cars and trucks[1]	142.9	133.3	132.1	133.8	136.5	136.8	136.7	137.3	137.5	137.6	137.7	138.1	138.8	139.9	141.0
Motor fuel	135.8	160.4	165.2	162.0	161.2	173.1	171.9	161.2	156.4	164.3	175.9	193.9	188.2	185.5	197.5
Gasoline (all types)	135.1	159.7	164.5	161.2	160.5	172.2	171.0	160.4	155.6	163.4	175.0	193.9	187.3	184.6	196.5
Motor vehicle parts and equipment	107.8	108.7	108.8	109.0	109.3	109.5	109.9	109.9	110.6	110.9	110.9	110.8	111.0	111.2	111.9
Motor vehicle maintenance and repair	195.6	200.2	200.3	200.8	200.7	201.7	202.9	203.3	204.0	203.9	204.7	205.0	205.6	206.1	206.7
Public transportation	209.3	209.1	214.4	209.7	205.3	206.5	208.6	205.4	204.4	205.9	210.1	215.0	218.0	222.4	226.1
Medical care	297.1	310.1	311.0	311.6	312.3	313.3	314.1	314.9	316.8	319.3	320.7	321.5	322.2	322.9	324.1
Medical care commodities	262.8	269.3	269.9	270.0	270.9	271.7	271.2	270.8	271.6	272.8	273.2	273.5	274.6	275.6	276.3
Medical care services	306.0	321.3	322.3	323.1	323.7	324.8	326.0	327.3	329.5	332.5	334.3	335.2	335.9	336.3	337.8
Professional services	261.2	271.5	272.3	273.3	273.3	273.7	274.2	274.6	276.2	278.6	279.7	281.0	281.6	281.9	282.6
Hospital and related services	394.8	417.9	419.1	418.8	420.3	422.5	425.0	428.0	431.0	434.7	437.3	437.1	437.3	437.9	440.9
Recreation[2]	107.5	108.6	108.7	108.5	108.6	108.7	108.7	108.5	108.9	109.0	109.0	109.2	109.5	109.1	109.1
Video and audio[1,2]	103.6	104.2	104.4	104.1	104.0	104.2	104.0	103.9	104.2	104.3	104.6	104.8	104.6	103.1	103.1
Education and communication[2]	109.8	111.6	110.9	111.7	112.9	112.5	112.7	112.6	112.7	112.8	112.7	112.9	112.7	112.8	112.9
Education[2]	134.4	143.7	142.1	145.1	147.9	148.3	148.4	148.5	148.8	149.2	149.3	149.5	149.9	150.5	151.3
Educational books and supplies	335.4	351.0	349.5	353.3	352.8	353.8	354.4	355.9	357.4	359.9	360.6	361.3	362.3	363.4	364.0
Tuition, other school fees, and child care	362.1	414.3	409.4	418.3	427.4	428.2	428.7	428.9	429.7	430.6	430.9	431.4	432.7	434.4	436.6
Communication[1,2]	89.7	86.7	86.5	86.1	86.2	85.5	85.6	85.4	85.4	85.4	85.2	85.4	84.9	84.6	84.4
Information and information processing[1,2]	87.8	84.6	84.5	84.0	84.1	83.4	83.5	83.3	83.2	83.3	83.1	83.2	82.7	82.4	82.2
Telephone services[1,2]	98.3	95.8	95.6	95.0	95.3	94.6	94.5	94.8	94.8	95.1	95.0	95.3	94.8	94.6	94.4
Information and information processing other than telephone services[1,4]	16.1	14.8	14.8	14.7	14.7	14.5	14.3	14.2	14.2	14.0	14.0	13.9	13.8	13.6	13.6
Personal computers and peripheral equipment[1,2]	17.6	15.3	15.3	15.1	15.0	14.6	14.2	13.9	14.0	13.5	13.4	13.4	13.2	13.0	12.8
Other goods and services	298.7	304.7	305.1	305.5	306.3	306.8	307.0	307.8	309.3	310.8	311.2	311.5	312.5	312.5	314.1
Tobacco and smoking products	469.0	478.0	480.5	481.6	482.9	482.3	481.7	484.8	493.9	496.1	496.6	497.0	498.0	497.8	503.4
Personal care[1]	178.0	181.7	181.7	181.9	182.3	182.8	83.0	183.3	183.5	184.4	184.7	184.9	185.5	185.5	186.1
Personal care products[1]	153.5	153.9	153.4	152.8	153.5	154.0	153.8	153.4	153.1	153.9	153.0	153.4	154.4	154.3	155.0
Personal care services[1]	193.2	197.6	197.5	198.9	199.1	199.4	200.0	201.2	201.9	202.9	203.3	203.3	202.8	203.0	203.9

See footnotes at end of table.

37. 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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Miscellaneous personal services	283.5	293.9	294.4	295.2	295.9	296.3	296.9	297.7	298.5	299.8	300.8	301.4	302.8	302.9	303.9
Commodity and service group:															
Commodities	151.2	154.7	154.5	154.2	154.9	157.1	157.2	155.8	155.4	156.5	158.2	160.3	159.8	158.9	159.5
Food and beverages	180.5	186.6	187.2	187.3	187.2	188.4	188.6	188.9	189.5	189.3	189.6	190.7	191.1	190.9	191.3
Commodities less food and beverages	134.5	136.7	136.1	135.6	136.7	139.4	139.4	137.2	136.4	138.1	140.4	142.9	142.0	140.8	141.4
Nondurables less food and beverages	149.7	157.2	156.7	156.1	157.8	162.6	162.0	157.4	155.2	158.6	163.7	168.9	167.0	164.7	166.7
Apparel	120.9	120.4	115.9	116.5	121.2	124.1	123.0	118.8	116.1	118.7	123.5	123.7	122.4	118.3	113.8
Nondurables less food, beverages, and apparel	171.5	183.9	185.8	184.4	184.4	190.6	190.2	185.2	183.3	187.3	192.7	201.0	198.6	197.5	203.3
Durables	117.5	114.8	114.1	113.7	114.1	114.7	115.3	115.5	116.0	116.0	115.7	115.6	115.7	115.4	114.9
Services	216.5	222.8	224.1	224.5	224.5	224.5	224.6	224.6	225.6	226.8	228.0	228.6	228.8	229.8	230.9
Rent of shelter[3]	221.9	227.9	229.2	229.4	229.3	229.8	229.0	228.9	230.1	231.7	233.7	233.7	233.2	233.8	234.9
Transportation services	216.3	220.6	221.6	220.8	220.1	221.4	222.8	221.8	221.7	222.4	223.3	224.4	225.1	226.0	227.1
Other services	254.4	261.3	260.5	261.9	263.8	263.7	264.2	264.3	265.1	265.8	266.1	266.7	266.9	266.7	267.2
Special indexes:															
All items less food	184.7	189.4	189.9	189.9	190.4	191.4	191.5	190.6	190.9	192.3	194.0	195.3	195.1	195.2	196.1
All items less shelter	174.6	179.3	179.6	179.5	180.1	181.4	181.9	180.9	180.9	181.9	183.2	185.1	185.0	184.9	185.7
All items less medical care	178.1	182.7	183.2	183.2	183.6	184.6	184.7	183.9	184.2	185.3	186.8	188.1	187.9	187.9	188.8
Commodities less food	136.5	138.8	138.2	137.7	138.8	141.1	141.4	139.3	138.6	140.2	142.5	144.9	144.0	142.8	143.5
Nondurables less food	151.9	159.3	158.8	158.2	159.9	164.2	163.9	159.5	157.5	160.8	165.6	170.6	168.7	166.6	168.5
Nondurables less food and apparel	172.1	183.8	185.6	184.3	184.4	190.0	189.7	185.1	183.5	187.2	192.1	199.7	197.5	196.5	201.8
Nondurables	165.3	172.2	172.2	171.9	172.8	175.8	175.6	173.3	172.5	174.2	177.0	180.3	179.4	178.2	179.4
Services less rent of shelter[3]	226.4	233.5	235.0	235.6	235.9	235.1	236.4	236.5	237.4	238.0	238.5	239.8	240.7	242.4	243.6
Services less medical care services	208.7	214.5	215.8	216.2	216.1	216.0	216.1	216.0	217.0	218.0	219.2	219.7	219.9	220.9	222.0
Energy	136.5	151.4	156.3	155.3	154.3	157.7	158.6	153.7	151.9	155.2	160.8	170.9	169.4	171.4	178.5
All items less energy	190.6	194.4	194.5	194.7	195.2	196.0	1196.0	195.8	196.4	197.3	198.3	198.6	198.6	198.5	198.7
All items less food and energy	193.2	196.6	196.6	196.8	197.4	198.2	198.1	197.8	198.4	199.5	200.7	200.9	200.8	200.6	200.8
Commodities less food and energy	140.9	139.6	138.2	138.1	139.4	140.5	140.6	139.8	139.7	140.3	141.1	141.2	141.1	140.0	138.9
Energy commodities	136.7	161.2	165.1	162.5	162.0	174.2	173.6	163.4	158.7	166.6	178.0	195.2	189.4	187.0	198.8
Services less energy	223.8	230.2	231.0	231.4	231.6	232.1	231.9	231.9	232.9	234.3	235.7	236.0	235.9	236.4	237.4
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	179.8	184.5	184.9	185.0	185.4	186.5	186.8	186.0	186.3	187.3	188.6	190.2	190.0	190.1	191.0
All items (1967 = 100)	535.6	549.5	550.8	551.0	552.4	555.7	556.3	554.2	554.9	557.9	561.9	566.4	566.0	566.2	568.8
Food and beverages	179.9	186.2	186.8	186.9	186.8	187.9	188.1	188.4	189.0	188.8	189.1	190.1	190.4	190.3	190.6
Food	179.4	185.7	186.3	186.4	186.2	187.4	187.6	187.9	188.5	188.2	188.5	189.6	190.0	189.8	190.2
Food at home	178.5	185.4	186.3	186.1	185.5	187.1	187.3	187.6	188.0	187.2	187.4	188.9	189.4	188.6	188.9
Cereals and bakery products	202.8	206.0	207.2	207.0	206.3	206.9	206.8	206.3	207.6	208.5	208.5	209.0	209.7	209.5	209.2
Meats, poultry, fish, and eggs	169.2	181.8	183.7	183.7	183.4	183.0	182.4	183.2	183.4	183.9	184.3	184.5	184.9	185.2	184.6
Dairy and related products[1]	167.6	180.0	187.8	184.9	181.4	181.8	180.8	179.9	183.2	181.6	181.3	182.1	183.1	180.9	181.4
Fruits and vegetables	224.3	230.4	222.3	222.2	223.9	238.0	246.4	248.6	240.1	232.2	231.3	237.5	242.2	235.9	238.0
Nonalcoholic beverages and beverage materials	139.1	139.7	139.8	139.6	139.7	140.0	138.9	140.0	141.6	141.8	143.0	144.1	143.7	143.4	144.1
Other foods at home	162.2	164.5	165.6	165.8	164.8	165.0	163.8	163.2	165.3	165.0	165.3	167.0	165.8	166.3	167.0
Sugar and sweets	161.6	162.5	162.9	163.8	163.1	162.2	162.1	160.6	162.2	163.6	161.8	163.9	162.3	164.8	166.3
Fats and oils	157.4	167.8	172.0	169.9	170.3	170.0	167.7	167.3	170.4	169.1	167.2	169.4	168.0	164.5	167.4
Other foods	179.2	180.1	180.7	181.4	179.7	180.5	179.2	178.6	180.8	180.2	181.7	183.4	182.3	183.1	183.3
Other miscellaneous foods[1,2]	110.8	110.9	109.7	112.0	111.0	110.3	111.1	111.3	110.7	110.9	112.5	111.1	111.3	110.5	111.9
Food away from home[1]	182.0	187.4	187.6	188.2	188.8	189.3	189.5	189.7	190.6	191.2	191.6	192.0	192.4	193.0	193.4
Other food away from home[1,2]	121.5	125.1	124.9	125.2	125.8	126.8	126.8	127.0	127.3	128.4	129.1	129.2	129.6	131.5	131.8
Alcoholic beverages	187.1	192.4	192.2	192.8	194.0	193.9	194.2	194.2	194.4	195.2	196.0	196.2	195.3	195.7	195.6
Housing	180.4	185.0	186.2	186.6	186.5	186.2	186.4	186.4	187.3	188.1	188.9	189.4	189.7	190.9	191.9
Shelter	206.9	212.2	213.0	213.4	213.4	213.8	213.4	213.5	214.4	215.7	216.8	216.9	216.8	217.3	218.3
Rent of primary residence	204.7	210.2	210.3	211.0	211.6	212.0	212.4	213.0	213.7	214.2	214.6	215.2	215.5	215.9	216.6
Lodging away from home[2]	119.8	126.4	133.0	131.6	127.7	128.3	121.8	118.6	122.2	129.1	137.1	135.2	131.1	132.9	136.9
Owners' equivalent rent of primary residence[3]	199.7	204.1	204.2	204.7	205.1	205.5	205.8	206.1	206.6	207.2	207.4	207.7	208.0	208.4	208.8
Tenants' and household insurance[1,2]	114.7	116.4	116.3	116.5	116.8	116.5	118.1	118.9	118.8	118.9	119.4	118.5	118.3	118.3	118.4
Fuels and utilities	153.9	161.2	166.1	167.2	166.2	161.9	164.5	164.7	166.0	165.4	165.7	168.6	170.7	176.7	179.2
Fuels	137.0	143.2	148.4	149.3	148.2	143.5	146.2	146.4	147.4	146.6	146.8	149.8	152.1	158.5	161.0
Fuel oil and other fuels	138.7	160.0	150.2	156.8	161.1	177.2	186.5	183.4	180.9	187.7	195.3	199.2	193.6	194.8	201.8
Gas (piped) and electricity	144.1	149.8	156.2	156.8	155.3	149.1	151.7	152.0	153.3	152.0	151.8	155.0	157.7	164.8	167.2
Household furnishings and operations	121.9	121.1	120.7	120.4	120.6	121.7	121.5	121.3	121.9	121.9	121.9	122.1	122.5	121.9	121.5
Apparel	120.0	120.0	115.6	115.9	120.6	123.5	122.6	118.6	116.1	118.6	123.0	123.2	121.9	117.9	113.8
Men's and boys' apparel	117.5	117.3	115.2	113.3	115.6	117.8	118.6	115.7	114.6	116.1	119.6	119.9	119.2	114.9	111.2
Women's and girls' apparel	112.1	112.8	106.0	106.9	114.0	119.3	116.9	110.2	105.3	109.3	116.8	124.1	113.9	108.7	102.7
Infants' and toddlers' apparel[1]	124.1	121.3	117.0	117.6	122.3	123.3	123.1	121.4	120.5	121.0	121.9	122.7	122.5	118.9	115.2
Footwear	119.1	118.2	114.4	116.3	120.4	120.6	120.6	119.4	118.8	120.6	121.7	122.7	122.4	121.3	119.0
Transportation	156.3	161.5	162.2	161.4	161.6	165.3	165.8	163.4	1632.6	164.7	167.6	172.2	171.0	170.6	173.5
Private transportation	153.5	158.8	159.3	158.6	159.1	162.7	163.2	160.9	160.0	162.2	164.9	169.5	168.2	167.7	170.5
New and used motor vehicles[2]	96.0	92.8	92.1	92.2	92.3	93.3	94.0	94.3	94.6	94.7	94.5	94.5	94.7	94.8	94.5

See footnotes at end of table.

37. 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		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
New vehicles	139.0	138.1	137.0	136.0	136.0	136.9	138.9	139.8	140.7	140.7	140.0	139.7	139.6	139.0	137.2
Used cars and trucks[1]	143.7	134.1	133.0	134.6	137.3	137.6	137.5	138.1	138.3	138.4	138.5	138.9	139.6	140.7	141.9
Motor fuel	136.1	160.9	165.6	162.4	161.7	173.6	172.3	161.7	156.9	164.9	176.5	194.5	188.7	186.1	198.1
Gasoline (all types)	135.5	160.2	165.0	161.7	161.0	172.9	171.6	160.9	156.1	164.1	175.7	193.7	187.9	185.3	197.2
Motor vehicle parts and equipment	107.3	108.2	108.2	108.4	108.7	108.9	109.4	109.3	110.1	110.4	110.5	110.4	110.5	110.8	111.4
Motor vehicle maintenance and repair	197.3	202.0	202.1	202.7	202.7	203.8	204.9	205.3	206.0	206.1	206.9	207.2	207.9	208.4	209.1
Public transportation	206.0	207.1	212.1	208.0	203.1	204.2	207.1	204.2	203.4	204.9	209.0	213.3	215.8	219.8	223.3
Medical care	296.3	309.5	310.4	311.0	311.7	312.7	313.6	314.4	316.3	318.9	320.3	321.1	321.9	322.5	323.7
Medical care commodities	257.4	263.2	263.7	263.8	264.8	265.4	264.9	264.4	265.2	266.3	266.6	266.9	267.9	268.8	269.4
Medical care services	305.9	321.5	322.4	323.2	323.9	325.0	326.3	327.7	330.0	333.0	334.8	335.8	336.5	337.0	338.4
Professional services	263.4	274.0	274.8	275.8	275.9	276.3	276.9	277.2	278.9	281.2	282.3	283.6	284.3	284.6	285.3
Hospital and related services	391.2	414.0	415.2	414.9	416.4	418.5	421.0	424.2	427.4	430.9	433.6	433.4	433.7	434.3	436.9
Recreation[2]	105.5	106.3	106.3	106.1	106.2	106.2	106.3	106.1	106.5	106.5	106.5	106.8	107.0	106.6	106.5
Video and audio[1,2]	102.9	103.4	103.7	103.4	103.3	103.5	103.3	103.2	103.4	103.5	103.9	104.0	103.9	102.5	102.4
Education and communication[2]	109.0	110.0	109.4	109.9	110.8	110.5	110.6	110.5	110.6	110.7	110.7	110.8	110.6	110.7	110.7
Education[2]	133.8	142.5	141.0	143.6	146.3	146.7	146.8	147.0	147.3	147.7	147.8	148.0	148.5	149.1	149.7
Educational books and supplies	336.5	352.2	350.4	354.7	354.8	355.6	356.1	357.6	359.0	361.5	362.4	363.1	364.0	365.1	365.6
Tuition, other school fees, and child care	377.3	402.5	398.1	405.8	414.0	415.2	415.6	415.8	416.8	417.6	418.0	418.5	419.8	421.6	423.4
Communication[1,2]	91.2	88.3	88.1	87.6	87.8	87.1	87.2	87.0	87.0	87.0	86.8	87.0	86.5	86.3	86.0
Information and information processing[1,2]	89.9	86.8	86.7	86.2	86.3	85.6	85.7	85.5	85.5	85.5	85.3	85.5	85.0	84.8	84.5
Telephone services[1,2]	98.5	96.0	95.8	95.2	95.5	94.8	95.1	95.0	94.9	95.3	95.1	95.4	94.9	94.8	94.6
Information and information processing other than telephone services[1,4]	16.7	15.3	15.3	15.3	15.2	15.0	14.9	14.8	14.8	14.6	14.5	14.5	14.3	14.2	14.1
Personal computers and peripheral equipment[1,2]	17.3	15.0	15.0	14.9	14.8	14.3	13.9	13.7	13.7	13.3	13.2	13.2	13.0	12.7	12.5
Other goods and services	307.0	312.6	313.2	313.5	314.4	314.7	314.9	315.9	318.0	319.4	319.6	319.9	320.8	320.9	323.1
Tobacco and smoking products	470.5	478.8	481.6	482.6	483.9	483.0	482.5	485.7	494.9	496.9	497.4	497.8	498.7	498.9	505.2
Personal care[1]	177.0	180.4	180.3	180.5	180.9	181.4	181.7	181.9	182.1	182.9	183.0	183.2	183.8	183.8	184.6
Personal care products[1]	154.2	154.4	153.9	153.1	154.0	154.3	154.3	153.8	153.3	154.2	153.3	153.6	154.5	154.5	155.4
Personal care services[1]	193.9	198.2	198.1	199.5	199.7	199.9	200.6	201.8	202.4	203.3	203.6	203.6	203.1	203.3	204.1
Miscellaneous personal services	283.3	294.0	294.7	295.4	296.2	296.6	297.5	298.4	299.2	299.8	300.8	301.5	303.2	303.2	304.4
Commodity and service group:															
Commodities	151.8	155.4	155.2	154.9	155.7	158.0	158.1	156.6	156.3	157.4	159.2	161.5	160.9	160.1	160.8
Food and beverages	179.9	186.2	186.8	186.9	186.8	187.9	188.1	188.4	189.0	188.8	189.1	190.1	190.4	190.3	190.6
Commodities less food and beverages	135.8	138.1	137.5	137.1	138.2	141.0	141.0	138.8	138.0	139.8	142.2	145.0	144.0	142.8	143.8
Nondurables less food and beverages	152.1	160.6	160.4	159.5	161.2	166.5	165.9	160.9	158.8	162.5	167.8	173.6	171.5	169.2	171.7
Apparel	120.0	120.0	115.6	115.9	120.6	123.5	122.6	118.6	116.1	118.6	123.0	123.2	121.9	117.9	113.8
Nondurables less food, beverages, and apparel	175.6	189.6	191.8	190.2	190.1	196.9	196.5	190.8	188.8	193.3	199.4	208.9	206.0	204.7	211.3
Durables	117.4	114.0	113.2	113.1	113.7	114.3	114.8	115.1	115.5	115.5	115.3	115.3	115.5	115.3	114.9
Services	212.6	218.6	219.7	220.2	220.3	220.0	220.4	220.5	221.5	222.3	223.2	223.8	224.2	225.3	226.3
Rent of shelter[3]	199.2	204.3	205.1	205.5	205.5	205.9	205.5	205.6	206.5	207.7	208.8	208.9	208.8	209.3	210.2
Transporatation services	216.2	220.9	221.6	221.0	220.5	222.0	223.4	222.7	222.8	223.4	224.0	224.8	225.3	226.0	226.8
Other services	248.5	254.1	253.5	254.4	256.0	255.9	256.3	256.5	257.2	257.8	258.1	258.7	258.9	258.6	258.9
Special indexes:															
All items less food	179.7	184.1	184.5	184.5	185.1	186.2	186.4	185.5	185.7	187.0	188.5	190.1	189.9	190.0	190.9
All items less shelter	171.9	176.4	176.7	176.6	177.3	178.6	179.1	178.0	178.0	179.0	180.4	182.4	182.3	182.2	183.1
All items less medical care	174.8	179.1	179.6	179.6	180.0	181.1	181.3	180.6	180.8	181.7	183.1	184.6	184.4	184.5	185.3
Commodities less food	137.7	140.0	139.4	139.0	140.2	142.2	142.9	140.7	140.0	141.7	144.1	146.8	145.9	144.7	145.7
Nondurables less food	154.2	162.6	162.3	161.5	163.2	168.2	167.6	162.9	160.9	164.4	169.5	175.1	173.0	170.8	173.2
Nondurables less food and apparel	175.9	189.0	191.0	189.6	189.7	195.6	195.4	190.3	188.5	192.7	198.3	206.9	204.2	203.0	209.0
Nondurables	166.4	173.9	174.0	173.6	174.5	177.7	177.5	175.1	174.3	176.1	179.0	182.5	181.5	180.3	181.7
Services less rent of shelter[3]	201.3	207.4	208.9	209.3	209.5	208.6	209.8	209.9	210.8	211.2	211.6	212.7	213.6	215.3	216.3
Services less medical care services	205.2	210.6	211.8	212.2	212.3	212.0	212.3	212.4	213.2	214.0	214.7	215.4	215.7	216.8	217.8
Energy	135.9	151.3	156.2	155.1	154.2	157.8	158.5	153.3	151.4	155.0	160.9	171.4	169.6	171.5	178.7
All items less energy	186.1	189.5	189.3	189.5	190.2	191.0	191.1	191.0	191.5	192.2	192.9	193.3	193.4	193.2	193.3
All items less food and energy	187.9	190.6	190.3	190.5	191.4	192.1	192.2	192.0	192.4	193.4	194.2	194.5	194.5	194.3	194.3
Commodities less food and energy	141.1	139.4	138.0	138.0	139.5	140.5	140.6	139.9	139.9	140.5	141.3	141.4	141.3	140.4	139.3
Energy commodities	136.8	161.5	165.5	162.8	162.3	174.5	173.7	163.4	158.7	166.6	178.1	195.5	189.7	187.3	199.0
Services less energy	220.2	226.2	226.7	227.1	227.4	227.9	228.0	228.1	229.0	230.1	231.1	231.4	231.5	231.9	232.8

[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.

38. 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 2005						Urban Wage Earners 2005					
		Feb.	Mar.	Apr.	May	June	July	Feb.	Mar.	Apr.	May	June	July
U.S. city average	M	191.8	193.3	194.6	194.4	194.5	195.4	187.3	188.6	190.2	190.0	190.1	191.0
Region and area size[2]													
Northeast urban	M	203.6	206.0	206.9	206.2	206.2	207.9	200.0	201.8	202.9	202.5	202.5	204.0
Size A—More than 1,500,000	M	206.0	208.6	209.3	208.6	208.5	210.2	201.1	202.8	203.8	203.5	203.4	204.9
Size B/C—50,000 to 1,500,000[3]	M	120.1	121.3	122.0	121.6	121.8	123.0	120.1	121.2	122.1	121.6	121.8	122.8
Midwest urban[4]	M	185.2	186.3	187.7	187.4	187.8	188.4	180.2	181.2	182.8	182.4	182.9	183.6
Size A—More than 1,500,000	M	187.1	188.3	189.6	189.4	189.8	190.1	181.3	182.5	184.1	183.8	184.0	184.4
Size B/C—50,000 to 1,500,000[3]	M	118.1	118.7	119.6	119.3	119.6	120.2	117.2	117.8	118.8	118.5	119.0	119.8
Size D—Nonmetropolitan (less than 50,000)	M	179.2	179.9	181.7	181.6	182.3	182.9	176.5	177.3	179.1	178.8	179.6	180.4
South urban	M	184.7	185.9	187.3	187.3	187.8	188.5	181.5	182.7	184.3	184.2	184.7	185.5
Size A—More than 1,500,000	M	186.6	187.9	189.9	189.2	189.7	190.3	184.0	185.3	186.7	186.8	187.3	188.1
Size B/C—50,000 to 1,500,000[3]	M	117.7	118.4	119.3	119.4	119.7	120.2	116.3	117.0	117.9	117.9	118.2	118.7
Size D—Nonmetropolitan (less than 50,000)	M	183.1	184.5	187.2	186.6	186.9	187.5	182.7	184.1	186.7	186.2	186.7	187.3
West urban	M	195.7	197.1	198.6	198.8	198.0	198.6	190.5	192.0	193.7	193.9	193.1	193.7
Size A—More than 1,500,000	M	198.3	199.8	201.3	201.5	200.5	201.3	191.6	193.2	194.9	195.2	194.1	195.0
Size B/C—50,000 to 1,500,000[3]	M	119.6	120.4	121.4	121.3	121.1	121.3	119.0	119.8	120.8	120.8	120.6	120.9
Size classes:													
A[5]	M	175.5	177.0	178.1	178.0	177.9	178.6	173.7	175.0	176.3	176.3	176.2	177.0
B/C[3]	M	118.5	119.2	120.1	120.0	120.2	120.8	117.5	118.3	119.2	119.1	119.3	119.9
D	M	183.7	184.8	186.9	186.9	186.9	187.2	181.7	182.9	185.1	185.0	185.1	185.6
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	190.5	191.3	193.2	193.3	194.0	194.2	184.2	184.8	186.9	186.8	187.1	187.4
Los Angeles–Riverside–Orange County, CA	M	197.4	199.2	201.1	201.5	200.7	201.4	190.3	192.1	194.2	194.6	193.7	194.6
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	208.9	212.4	212.5	211.4	210.7	212.5	203.3	205.5	206.0	205.6	205.1	206.5
Boston–Brockton–Nashua, MA–NH–ME–CT	1	–	214.2	–	214.6	–	217.2	–	213.1	–	214.0	–	216.0
Cleveland–Akron, OH	1	–	186.3	–	186.8	–	187.8	–	177.2	–	177.9	–	178.8
Dallas–Ft Worth, TX	1	–	181.3	–	183.5	–	184.3	–	181.6	–	184.1	–	185.4
Washington–Baltimore, DC–MD–VA–WV[7]	1	–	122.7	–	123.6	–	125.0	–	122.3	–	123.2	–	124.5
Atlanta, GA	2	185.3	–	188.0	–	189.6	–	183.4	–	186.0	–	187.5	–
Detroit–Ann Arbor–Flint, MI	2	187.8	–	189.8	–	189.6	–	182.6	–	185.2	–	184.7	–
Houston–Galveston–Brazoria, TX	2	174.6	–	175.0	–	174.2	–	171.8	–	172.8	–	172.7	–
Miami–Ft. Lauderdale, FL	2	190.6	–	193.2	–	192.6	–	188.3	–	191.2	–	190.7	–
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	200.1	–	203.3	–	204.8	–	200.0	–	202.9	–	204.0	–
San Francisco–Oakland–San Jose, CA	2	201.2	–	202.5	–	201.2	–	197.3	–	199.3	–	197.5	–
Seattle–Tacoma–Bremerton, WA	2	197.6	–	201.3	–	199.8	–	192.4	–	196.2	–	194.8	–

[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.

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

[1982–84 = 100]

Series	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Consumer Price Index for All Urban Consumers:											
All items:											
Index	148.2	152.4	156.9	160.5	163.0	166.6	172.2	177.1	179.9	184.0	188.9
Percent change	2.6	2.8	3.0	2.3	1.6	2.2	3.4	2.8	1.6	2.3	2.7
Food and beverages:											
Index	144.9	148.9	153.7	157.7	161.1	164.6	168.4	173.6	176.8	180.5	186.6
Percent change	2.3	2.8	3.2	2.6	2.2	2.2	2.3	3.1	1.8	2.1	3.3
Housing:											
Index	144.8	148.5	152.8	156.8	160.4	163.9	169.6	176.4	180.3	184.8	189.5
Percent change	2.5	2.6	2.9	2.6	2.3	2.2	3.5	4.0	2.2	2.5	2.5
Apparel:											
Index	133.4	132.0	131.7	132.9	133.0	131.3	129.6	127.3	124.0	120.9	120.4
Percent change	–.2	–1.0	–.2	.9	.1	–1.3	–1.3	–1.8	–2.6	–2.5	–.4
Transportation:											
Index	134.3	139.1	143.0	144.3	141.6	144.4	153.3	154.3	152.9	157.6	163.1
Percent change	3.0	3.6	2.8	0.9	–1.9	2.0	6.2	0.7	–.9	3.1	3.5
Medical care:											
Index	211.0	220.5	228.2	234.6	242.1	250.6	260.8	272.8	285.6	297.1	310.1
Percent change	4.8	4.5	3.5	2.8	3.2	3.5	4.1	4.6	4.7	4.0	4.4
Other goods and services:											
Index	198.5	206.9	215.4	224.8	237.7	258.3	271.1	282.6	293.2	298.7	304.7
Percent change	2.9	4.2	4.1	4.4	5.7	8.7	5.0	4.2	3.8	1.9	2.0
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index	145.6	149.8	154.1	157.6	159.7	163.2	168.9	173.5	175.9	179.8	188.9
Percent change	2.5	2.9	2.9	2.3	1.3	2.2	3.5	2.7	1.4	2.2	5.1

40. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2004						2005						
	2003	2004	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	May[p]	June[p]	July[p]
Finished goods	143.3	148.5	148.5	148.5	148.7	152.0	151.7	150.6	151.4	152.1	153.6	154.4	154.1	154.0	155.4
Finished consumer goods	145.3	151.6	151.9	151.8	152.1	155.7	155.4	153.8	154.8	155.7	157.6	158.7	158.3	158.4	160.0
Finished consumer foods	145.9	152.6	152.3	152.2	152.7	155.1	154.7	154.9	154.2	155.4	156.3	156.5	156.8	155.1	154.4
Finshed consumer goods excluding foods	144.7	150.9	151.4	151.3	151.5	155.6	155.3	153.0	154.6	155.5	157.8	159.3	158.6	159.2	161.8
Nondurable goods less food	148.4	156.6	158.0	157.9	158.2	162.1	161.8	158.5	160.7	162.4	165.7	167.9	167.1	168.6	172.3
Durable goods	133.1	135.1	133.6	133.6	133.5	137.8	137.4	137.2	137.8	137.0	137.0	137.0	136.7	135.6	135.8
Capital equipment	139.5	141.5	140.7	141.2	141.2	143.4	143.4	143.6	144.1	143.9	144.2	144.5	144.4	144.0	144.4
Intermediate materials, supplies, and components	133.7	142.5	143.5	144.8	145.3	146.5	147.7	146.9	148.0	148.8	150.4	151.7	151.0	151.6	152.8
Materials and components for manufacturing	129.7	137.9	138.1	139.4	140.6	141.5	142.0	142.8	143.9	144.4	145.2	145.3	144.9	144.3	144.1
Materials for food manufacturing	134.4	145.0	147.3	144.9	144.3	144.2	143.9	145.2	145.7	145.6	146.6	146.6	147.6	145.0	145.1
Materials for nondurable manufacturing	137.2	147.6	147.3	149.8	152.6	154.4	155.5	156.8	157.9	158.1	160.4	160.4	160.4	159.8	159.8
Materials for durable manufacturing	127.9	146.6	147.2	150.3	152.1	153.0	153.6	155.2	157.3	159.1	159.1	158.9	156.7	155.8	154.3
Components for manufacturing	125.9	127.4	127.4	127.7	128.0	128.2	128.3	128.5	129.2	129.5	129.5	129.9	129.7	129.6	129.9
Materials and components for construction	153.6	166.4	167.5	169.8	170.9	170.8	170.7	171.3	173.1	174.7	175.1	175.3	174.9	175.4	175.1
Processed fuels and lubricants	112.6	124.1	126.4	128.5	126.9	130.8	134.0	128.9	129.5	130.9	136.0	141.1	139.3	142.5	148.9
Containers	153.7	159.2	159.7	162.0	162.5	164.6	164.9	165.2	165.5	166.1	166.9	167.0	167.1	167.7	167.2
Supplies	141.5	146.7	148.0	147.6	147.9	147.9	147.9	148.5	149.6	150.0	150.7	151.2	151.4	151.7	152.1
Crude materials for further processing	135.3	159.0	162.5	162.2	154.4	160.5	171.5	165.7	163.0	162.5	170.4	174.1	171.7	165.7	176.2
Foodstuffs and feedstuffs	113.5	126.9	130.9	124.8	122.0	120.1	119.5	121.5	123.8	121.5	127.7	125.0	126.2	122.1	120.9
Crude nonfood materials	148.2	179.2	182.2	186.6	174.9	187.3	207.1	195.3	188.7	189.7	198.7	207.3	202.1	194.8	214.3
Special groupings:															
Finished goods, excluding foods	142.4	147.2	147.2	147.3	147.5	150.9	150.7	149.2	150.5	151.0	152.6	153.7	153.2	153.5	155.3
Finished energy goods	102.0	113.0	115.4	115.0	115.1	121.1	120.1	114.5	116.4	118.6	123.8	126.9	125.2	127.3	132.9
Finished goods less energy	149.0	152.4	151.7	151.9	152.1	154.5	154.4	154.6	155.1	155.3	155.7	155.9	156.0	155.3	155.4
Finished consumer goods less energy	153.1	157.2	156.5	156.6	156.9	159.3	159.2	159.4	159.9	160.4	160.7	160.9	161.1	160.3	160.2
Finished goods less food and energy	150.5	152.7	151.9	152.2	152.3	154.7	154.7	154.9	155.8	155.7	155.9	156.1	156.1	155.7	156.1
Finished consumer goods less food and energy	157.9	160.3	159.4	159.6	159.7	162.2	162.3	162.5	163.8	163.7	163.7	164.0	164.1	163.7	164.0
Consumer nondurable goods less food and energy	177.9	180.7	180.3	180.8	181.2	181.7	182.2	182.8	184.8	185.4	185.6	186.1	186.6	187.0	187.3
Intermediate materials less foods and feeds	134.2	142.9	143.7	145.3	145.9	147.3	148.3	147.8	148.9	149.7	151.3	152.6	151.9	152.5	153.7
Intermediate foods and feeds	125.9	137.0	142.3	136.3	134.4	131.2	130.7	131.0	132.0	131.7	133.3	134.2	135.2	134.3	135.6
Intermediate energy goods	111.9	123.1	125.1	127.1	125.8	129.9	132.7	128.4	129.0	130.0	134.9	139.4	138.2	141.9	148.4
Intermediate goods less energy	137.7	145.8	146.4	147.5	148.5	149.0	149.4	149.9	151.1	151.8	152.5	152.9	152.4	152.1	152.0
Intermediate materials less foods and energy	138.5	146.5	146.8	148.3	149.5	150.1	150.6	151.1	152.3	153.1	153.8	154.1	153.6	153.3	153.1
Crude energy materials	147.2	174.7	177.9	181.9	166.6	181.8	208.3	192.7	183.9	186.6	199.7	210.6	206.7	200.2	225.8
Crude materials less energy	123.4	143.9	147.5	144.6	141.6	141.9	142.7	143.3	144.5	142.0	146.4	145.3	144.0	138.5	139.1
Crude nonfood materials less energy	152.5	192.8	195.4	200.8	197.4	203.5	207.9	204.9	203.3	200.2	199.9	203.1	194.7	185.5	191.2

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

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2004						2005						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	May[p]	June[p]	July[p]
	Total mining industries (December 1984=100)	155.6	159.3	149.6	160.6	179.1	169.2	163.3	166.2	176.0	183.0	179.1	175.8	194.1
211	Oil and gas extraction (December 1985=100)	196.6	202.7	184.0	203.0	234.8	214.7	202.5	205.3	221.3	234.0	227.0	219.7	248.9
212	Mining, except oil and gas	110.2	110.4	112.3	112.8	114.0	116.4	120.2	121.0	123.8	122.3	122.8	123.3	127.8
213	Mining support activities	103.7	105.3	106.4	109.2	111.4	114.9	115.5	122.2	124.4	126.9	126.9	131.4	135.1
	Total manufacturing industries (December 1984=100)	143.2	143.7	144.2	146.5	146.1	145.0	146.2	147.0	148.9	149.7	149.3	149.4	150.8
311	Food manufacturing (December 1984=100)	146.5	144.6	143.8	143.5	143.3	144.2	144.7	145.0	146.0	146.6	147.2	145.9	146.4
312	Beverage and tobacco manufacturing	100.6	101.1	100.6	101.2	101.2	101.5	104.1	104.0	104.2	104.4	104.6	105.0	104.8
313	Textile mills	101.5	101.2	101.4	101.6	101.7	101.5	102.3	102.4	102.7	103.2	103.7	103.4	103.1
315	Apparel manufacturing	99.7	99.7	100.2	100.3	100.4	100.5	100.4	100.2	99.9	100.2	99.9	99.9	99.7
316	Leather and allied product manufacturing (December 1984=100)	143.7	143.6	143.6	143.5	143.8	143.9	143.8	144.2	144.3	144.5	144.5	144.3	144.6
321	Wood products manufacturing	106.8	109.8	110.7	107.6	105.1	105.9	106.9	108.8	109.4	108.8	107.5	109.4	108.2
322	Paper manufacturing	103.2	104.4	105.0	105.5	105.7	105.8	106.1	106.5	106.9	107.1	107.1	107.1	106.8
323	Printing and related support activities	101.3	101.3	101.8	101.8	102.0	102.0	102.5	102.4	102.5	102.5	102.4	103.2	103.3
324	Petroleum and coal products manufacturing (December 1984=100)	152.3	155.6	158.9	176.7	170.4	150.3	155.9	163.6	182.8	189.3	183.3	189.1	204.9
325	Chemical manufacturing (December 1984=100)	172.2	173.8	175.5	177.2	179.3	180.5	182.7	183.4	184.7	186.5	186.4	185.4	185.3
326	Plastics and rubber products manufacturing (December 1984=100)	131.2	131.7	133.1	134.3	135.3	136.1	137.4	138.4	138.9	139.4	139.8	140.1	140.1
331	Primary metal manufacturing (December 1984=100)	144.7	148.3	150.8	152.9	154.2	155.5	158.6	159.5	158.5	157.9	156.0	153.6	151.2
332	Fabricated metal product manufacturing (December 1984=100)	142.5	143.4	144.2	144.9	145.4	145.7	146.9	148.2	148.6	148.9	149.0	149.4	149.5
333	Machinery manufacturing	102.1	102.3	102.5	102.9	103.2	103.4	104.1	104.5	104.9	105.2	105.6	105.6	105.6
334	Computer and electronic products manufacturing	98.9	98.9	98.7	98.6	98.4	98.5	98.3	98.2	98.0	97.9	97.4	97.5	97.6
335	Electrical equipment, appliance, and components manufacturing	103.6	103.8	104.2	104.7	104.6	104.9	106.0	106.6	107.0	107.5	107.4	107.5	107.6
336	Transportation equipment manufacturing	99.7	99.8	99.9	103.2	102.7	102.9	103.2	102.6	102.6	102.6	102.3	101.4	101.8
337	Furniture and related product manufacturing (December 1984=100)	152.0	152.7	152.8	153.4	154.6	155.1	155.5	156.2	156.2	156.8	157.1	157.4	158.1
339	Miscellaneous manufacturing	101.2	101.4	101.8	101.3	101.3	101.6	102.2	102.5	102.7	102.7	102.8	102.8	102.9
	Retail trade													
441	Motor vehicle and parts dealers	103.3	103.8	104.4	104.2	104.2	104.2	106.2	106.7	107.2	107.2	108.3	108.3	107.2
442	Furniture and home furnishings stores	102.6	102.8	103.4	103.8	103.7	104.6	105.6	106.6	106.4	107.0	108.2	109.7	108.9
443	Electronics and appliance stores	98.6	98.7	99.2	98.4	97.9	93.6	98.3	100.2	102.3	101.1	102.9	99.9	99.9
446	Health and personal care stores	101.3	105.6	105.1	104.1	106.8	107.2	106.5	105.6	107.8	106.2	107.6	107.4	102.7
447	Gasoline stations (June 2001=100)	48.3	48.6	46.3	43.1	53.3	59.8	49.0	49.8	48.3	49.5	51.9	38.9	48.8
454	Nonstore retailers	103.6	102.0	105.6	104.7	111.5	117.4	117.5	122.6	117.7	121.6	123.2	120.2	123.4
	Transportation and warehousing													
481	Air transportation (December 1992=100)	163.9	163.4	159.8	160.9	162.2	161.4	164.9	164.5	169.5	169.6	167.0	173.6	176.4
483	Water transportation	101.5	102.1	103.2	103.8	103.7	103.5	104.0	104.3	105.0	105.0	105.7	105.1	105.6
491	Postal service (June 1989=100)	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0
	Utilities													
221	Utilities	107.1	107.4	105.2	104.3	108.8	108.9	108.3	107.5	108.7	110.2	111.1	111.3	113.9
	Health care and social assistance													
6211	Office of physicians (December 1996=100)	114.3	114.3	114.4	114.4	114.4	114.5	115.7	115.9	116.3	115.2	115.6	115.8	116.2
6215	Medical and diagnostic laboratories	100.0	100.1	100.1	100.1	100.1	100.1	102.4	104.2	104.2	104.3	104.3	104.2	104.2
6216	Home health care services (December 1996=100)	119.7	119.7	119.8	120.1	120.2	120.3	120.9	121.0	120.9	120.9	120.9	120.9	120.8
622	Hospitals (December 1992=100)	141.6	141.6	141.7	143.3	143.5	143.8	144.8	145.6	145.6	145.5	145.8	145.9	146.3
6231	Nursing care facilities	102.9	103.0	103.2	103.7	103.9	103.9	105.3	105.4	105.4	105.8	105.7	105.7	105.9
62321	Residential mental retardation facilities	102.1	102.1	102.5	102.5	102.5	102.5	103.8	103.7	104.4	103.7	103.8	103.7	104.4
	Other services industries													
511	Publishing industries, except Internet	101.5	101.5	101.4	101.8	102.1	101.9	103.0	103.4	103.3	103.6	103.7	104.1	104.2
515	Broadcasting, except Internet	99.6	100.9	100.8	104.3	103.2	100.8	100.2	100.5	101.5	102.4	104.2	104.3	100.7
517	Telecommunications	99.8	99.9	99.6	99.4	99.2	99.9	99.0	98.1	98.2	98.4	98.4	98.1	98.3
5182	Data processing and related services	99.0	99.0	98.7	98.7	98.6	98.6	98.7	98.8	98.7	98.7	98.6	99.0	98.9
523	Security, commodity contracts, and like activity	103.2	104.1	104.5	104.3	105.8	106.0	108.0	109.8	108.5	110.1	111.4	112.0	112.2
53112	Lessors or nonresidental buildings (except miniwarehouse)	103.5	104.0	103.9	104.6	103.0	104.2	104.2	103.5	102.6	105.2	104.2	103.6	103.1
5312	Offices of real estate agents and brokers	101.0	101.0	104.0	103.1	103.1	105.9	106.0	106.0	105.9	106.0	105.9	105.6	105.8
5313	Real estate support activities	101.4	101.0	99.8	101.5	101.2	102.3	103.2	102.0	102.0	102.6	101.6	103.9	101.9
5321	Automotive equipment rental and leasing (June 2001=100)	110.0	110.8	108.0	107.8	107.7	108.1	105.2	106.9	108.1	104.8	106.0	108.4	109.4
5411	Legal services (December 1996=100)	131.6	131.5	131.8	132.0	132.0	132.0	136.8	137.1	137.2	137.3	137.7	138.9	138.7
541211	Offices of certified public accountants	101.3	101.4	101.4	101.6	101.7	101.3	101.8	102.8	102.9	101.9	104.3	104.1	101.6
5413	Architectural, engineering, and related services (December 1996=100)	127.0	127.0	127.3	127.3	127.3	127.7	128.2	128.6	128.5	129.2	129.2	129.4	129.1
54181	Advertising agencies	100.0	100.3	100.4	100.3	100.5	100.5	100.8	101.0	100.9	101.1	101.0	101.9	101.3
5613	Employment services (December 1996=100)	114.6	114.6	114.2	115.2	115.2	114.4	115.1	115.7	115.4	114.9	115.6	115.8	116.3
56151	Travel agencies	95.1	94.7	94.5	95.8	95.2	96.1	94.5	93.7	95.1	97.1	95.9	95.3	96.7
56172	Janitorial services	101.0	101.1	100.9	101.4	101.4	101.4	101.7	101.8	101.8	102.0	102.1	101.9	102.0
5621	Waste collection	101.4	101.4	101.4	101.5	101.5	101.5	101.5	101.5	101.5	103.8	103.1	102.7	102.6
721	Accommodation (December 1996=100)	126.6	127.0	127.2	127.0	125.1	123.8	125.7	129.1	130.7	127.8	129.1	133.7	135.4

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

[1982 = 100]

Index	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Finished goods											
Total	125.5	127.9	131.3	131.8	130.7	133.0	138.0	140.7	138.9	143.3	148.5
Foods	126.8	129.0	133.6	134.5	134.3	135.1	137.2	141.3	140.1	145.9	152.6
Energy	77.0	78.1	83.2	83.4	75.1	78.8	94.1	96.8	88.8	102.0	113.0
Other	137.1	140.0	142.0	142.4	143.7	146.1	148.0	150.0	150.2	150.5	152.7
Intermediate materials, supplies, and components											
Total	118.5	124.9	125.7	125.6	123.0	123.2	129.2	129.7	127.8	133.7	142.5
Foods	118.5	119.5	125.3	123.2	123.2	120.8	119.2	124.3	123.3	134.4	145.0
Energy	83.0	84.1	89.8	89.0	80.8	84.3	101.7	104.1	95.9	111.9	123.1
Other	127.1	135.2	134.0	134.2	133.5	133.1	136.6	136.4	135.8	138.5	146.5
Crude materials for further processing											
Total	101.8	102.7	113.8	111.1	96.8	98.2	120.6	121.3	108.1	135.3	159.0
Foods	106.5	105.8	121.5	112.2	103.9	98.7	100.2	106.2	99.5	113.5	126.9
Energy	72.1	69.4	85.0	87.3	68.6	78.5	122.1	122.8	102.0	147.5	174.7
Other	97.0	105.8	105.7	103.5	84.5	91.1	118.0	101.8	101.0	116.8	149.0

43. U.S. export price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2004						2005						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
0	**Food and live animals**	119.8	116.4	117.6	118.3	118.7	118.1	118.2	118.3	120.1	121.2	123.9	124.2	124.2
01	Meat and meat preparations	123.0	126.1	124.8	126.9	125.4	124.6	121.3	125.1	128.5	132.9	140.1	140.0	137.0
04	Cereals and cereal preparations	128.0	120.6	122.0	115.6	113.1	116.4	119.2	116.2	121.4	116.9	116.1	118.7	120.5
05	Vegetables, fruit, and nuts, prepared fresh or dry	110.0	113.2	119.8	130.6	137.2	129.9	127.4	128.1	125.1	130.4	137.4	133.6	132.1
2	**Crude materials, inedible, except fuels**	132.1	118.0	119.4	118.2	119.5	119.4	123.1	122.1	127.5	129.3	128.5	130.4	130.3
22	Oilseeds and oleaginous fruits	184.5	117.4	125.1	109.1	110.3	111.1	115.2	109.7	128.9	124.6	127.7	136.5	137.1
24	Cork and wood	98.9	98.8	99.1	99.1	98.4	98.8	98.7	98.9	98.9	98.4	97.8	97.6	96.5
25	Pulp and waste paper	100.1	99.5	98.7	98.1	98.2	98.8	100.0	100.7	103.0	101.8	101.8	101.6	99.9
26	Textile fibers and their waste	102.9	101.1	102.1	100.2	97.5	96.4	98.4	98.7	104.1	105.6	105.0	103.1	104.3
28	Metalliferous ores and metal scrap	190.2	183.6	178.5	190.4	197.0	195.0	205.8	206.0	206.4	222.3	212.3	212.9	214.2
3	**Mineral fuels, lubricants, and related products**	137.5	139.6	141.2	156.0	151.1	146.5	148.5	154.2	169.3	182.1	174.1	179.5	191.9
33	Petroleum, petroleum products, and related materials	134.5	136.2	138.0	156.4	151.0	144.6	147.3	155.7	174.9	190.6	178.3	186.6	198.1
5	**Chemicals and related products, n.e.s.**	107.0	108.6	109.7	111.6	112.9	114.0	116.1	116.3	117.0	117.8	116.8	115.5	115.7
54	Medicinal and pharmaceutical products	107.9	108.1	108.0	106.7	106.9	107.2	108.3	107.9	107.9	108.2	107.9	107.5	106.8
55	Essential oils; polishing and cleaning preparations	104.1	105.1	105.6	106.6	107.5	109.1	109.8	111.1	111.3	112.4	112.4	112.4	112.4
57	Plastics in primary forms	104.8	107.3	109.9	113.2	117.2	118.9	126.6	127.5	128.3	128.4	124.8	122.2	121.9
58	Plastics in nonprimary forms	97.2	97.1	97.4	98.1	98.7	99.9	101.5	102.1	103.2	103.4	103.3	103.2	103.6
59	Chemical materials and products, n.e.s.	104.6	106.2	105.5	105.2	105.3	105.8	106.5	106.4	106.0	106.7	106.6	106.1	105.9
6	**Manufactured goods classified chiefly by materials**	108.5	109.6	110.5	111.3	111.8	112.2	113.0	113.5	113.7	114.3	114.3	113.9	113.6
62	Rubber manufactures, n.e.s.	111.8	112.0	111.4	111.6	112.4	112.9	113.8	114.2	114.4	115.0	115.4	115.5	116.8
64	Paper, paperboard, and articles of paper, pulp, and paperboard	101.2	101.9	102.7	104.0	103.7	104.2	104.1	104.1	103.8	103.6	103.6	103.8	103.3
66	Nonmetallic mineral manufactures, n.e.s.	99.9	100.2	100.4	101.1	101.3	101.6	101.9	102.0	102.2	102.5	102.5	103.5	104.0
68	Nonferrous metals	95.4	96.5	99.0	99.1	100.6	101.5	103.4	105.6	107.2	109.3	108.5	106.1	106.5
7	**Machinery and transport equipment**	98.2	98.2	98.2	98.4	98.4	98.5	98.7	98.7	98.7	98.6	98.6	98.7	98.4
71	Power generating machinery and equipment	108.9	109.0	109.0	109.4	110.3	110.4	111.4	111.4	111.5	111.3	111.3	111.3	111.1
72	Machinery specialized for particular industries	105.7	105.9	106.1	107.3	107.6	108.0	109.3	109.2	109.4	110.7	110.7	110.8	111.4
74	General industrial machines and parts, n.e.s., and machine parts	105.2	105.3	105.3	106.2	106.4	106.6	107.6	108.2	108.3	108.9	109.1	109.3	109.4
75	Computer equipment and office machines	86.6	86.4	86.0	85.1	84.4	83.8	83.0	82.9	82.3	81.5	81.2	80.8	79.2
76	Telecommunications and sound recording and reproducing apparatus and equipment	91.5	90.7	90.7	90.5	90.5	90.4	90.5	90.5	90.5	89.9	89.8	89.7	89.5
77	Electrical machinery and equipment	88.3	88.2	88.1	87.9	87.7	87.9	87.8	87.6	87.7	87.5	87.3	87.5	87.0
78	Road vehicles	102.5	102.5	102.4	102.8	102.8	103.0	103.0	103.0	103.0	102.9	103.1	103.0	103.2
87	**Professional, scientific, and controlling instruments and apparatus**	101.7	101.9	101.8	102.2	102.3	102.6	103.4	103.4	103.4	103.5	103.1	103.1	103.6

44. U.S. import price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2004						2005						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
0	**Food and live animals**	107.4	107.4	109.2	111.1	111.0	111.9	110.9	112.6	117.5	116.4	116.0	113.9	112.9
01	Meat and meat preparations	133.7	134.2	134.9	134.2	131.8	133.0	134.5	134.8	135.9	136.5	138.6	138.7	138.9
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	86.1	86.9	86.0	85.6	84.7	85.0	86.0	87.0	88.5	88.3	87.8	87.6	89.0
05	Vegetables, fruit, and nuts, prepared fresh or dry	102.1	100.6	109.2	114.5	116.3	112.2	107.0	107.5	121.6	117.6	117.2	109.0	106.6
07	Coffee, tea, cocoa, spices, and manufactures thereof	102.7	103.4	105.6	104.5	108.9	114.4	118.9	122.8	130.2	128.9	126.2	127.8	120.5
1	**Beverages and tobacco**	105.9	106.1	106.2	106.5	106.7	107.1	107.5	107.7	107.8	108.2	108.3	108.4	108.6
11	Beverages	106.4	106.6	106.7	106.9	107.1	107.6	107.9	108.1	108.2	108.6	108.8	108.9	109.1
2	**Crude materials, inedible, except fuels**	125.7	134.0	135.1	125.1	121.7	125.5	129.6	135.7	135.0	134.4	131.9	130.5	128.1
24	Cork and wood	132.1	148.9	151.1	126.3	117.1	124.7	127.0	132.0	136.9	132.5	122.6	127.0	122.3
25	Pulp and waste paper	108.0	107.7	105.5	99.8	98.0	100.3	103.6	107.2	108.7	109.6	107.8	103.6	104.2
28	Metalliferous ores and metal scrap	145.3	160.8	162.6	166.2	167.0	167.3	170.8	169.6	176.9	183.8	181.3	176.0	178.8
29	Crude animal and vegetable materials, n.e.s.	101.2	97.6	98.7	96.3	96.5	98.3	110.1	137.5	109.9	109.0	122.8	111.7	100.8
3	**Mineral fuels, lubricants, and related products**	133.9	144.2	146.8	161.2	157.2	140.6	142.2	148.3	166.5	173.6	166.3	178.6	189.1
33	Petroleum, petroleum products, and related materials	133.0	144.8	149.5	165.7	155.3	137.0	140.4	148.6	169.0	174.6	167.0	182.0	193.2
34	Gas, natural and manufactured	134.8	136.3	121.9	124.1	166.2	163.5	150.8	143.3	145.8	161.3	158.0	148.5	157.3
5	**Chemicals and related products, n.e.s.**	104.6	105.1	106.7	108.4	108.9	109.6	110.2	111.8	112.2	114.0	113.2	112.4	113.8
52	Inorganic chemicals	122.2	123.8	124.1	125.5	126.8	126.7	127.6	128.9	130.2	133.0	135.1	138.2	140.6
53	Dying, tanning, and coloring materials	98.3	98.4	98.4	98.5	98.7	98.7	97.9	98.6	98.6	99.8	101.0	101.0	100.3
54	Medicinal and pharmaceutical products	107.3	107.3	106.6	106.4	107.4	108.9	110.5	110.1	110.2	110.8	110.4	110.3	110.4
55	Essential oils; polishing and cleaning preparations	93.5	93.4	93.4	93.6	93.7	94.4	94.9	95.2	95.5	95.4	94.5	94.5	94.5
57	Plastics in primary forms	107.8	108.4	109.6	109.9	113.2	116.1	123.0	124.2	125.9	126.7	126.9	125.1	125.9
58	Plastics in nonprimary forms	103.0	103.2	103.8	104.4	105.1	105.7	106.7	106.4	106.4	106.9	106.9	107.2	106.6
59	Chemical materials and products, n.e.s.	94.7	94.1	94.4	95.3	95.8	96.1	96.2	97.7	99.2	101.8	102.7	102.4	102.2
6	**Manufactured goods classified chiefly by materials**	106.1	107.7	108.9	108.9	109.4	110.4	111.4	111.8	112.8	113.1	112.8	112.8	112.3
62	Rubber manufactures, n.e.s.	100.5	100.8	100.8	101.0	101.3	101.9	102.2	102.6	103.5	104.2	104.2	104.6	104.4
64	Paper, paperboard, and articles of paper, pulp, and paperboard	96.4	96.9	97.9	99.2	99.4	99.0	100.0	99.9	100.3	101.4	101.7	102.1	103.9
66	Nonmetallic mineral manufactures, n.e.s.	99.3	100.2	100.4	100.5	100.5	100.7	100.9	100.8	100.9	101.1	101.1	101.4	101.4
68	Nonferrous metals	102.3	105.6	106.3	106.6	108.6	111.0	112.1	114.1	116.1	118.5	118.8	117.7	118.2
69	Manufactures of metals, n.e.s.	102.7	103.3	103.9	104.4	105.3	106.7	108.1	108.4	108.7	108.9	108.8	108.6	108.4
7	**Machinery and transport equipment**	95.0	95.0	95.0	94.9	95.1	95.2	95.3	95.2	95.1	95.1	95.1	95.0	94.6
72	Machinery specialized for particular industries	107.2	107.6	107.4	107.8	108.5	109.5	110.5	110.6	110.8	111.2	111.3	110.9	110.6
74	General industrial machines and parts, n.e.s., and machine parts	104.0	104.1	104.3	104.6	104.9	105.3	106.2	106.6	106.8	107.3	107.2	107.3	107.5
75	Computer equipment and office machines	74.9	74.3	73.9	73.2	73.0	72.8	72.4	71.9	71.2	71.2	70.7	70.5	69.1
76	Telecommunications and sound recording and reproducing apparatus and equipment	84.3	84.0	83.8	83.4	83.4	83.1	83.0	82.8	82.7	81.9	82.1	82.0	81.6
77	Electrical machinery and equipment	94.6	94.7	94.6	94.3	94.4	94.6	94.6	94.4	94.5	94.4	94.5	94.5	94.5
78	Road vehicles	102.6	102.8	103.1	103.4	103.6	103.7	103.6	103.7	103.7	103.8	103.8	103.8	103.9
85	Footwear	100.4	100.1	100.5	100.5	100.5	100.5	100.3	100.3	100.3	100.3	100.4	100.5	100.9
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	98.2	98.2	98.2	98.2	98.3	98.6	99.1	99.1	99.1	99.3	99.1	99.0	98.3

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

[2000 = 100]

Category	2004						2005						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
ALL COMMODITIES	103.9	103.4	103.8	104.4	104.7	104.8	105.6	105.7	106.4	106.9	106.7	106.6	106.7
Foods, feeds, and beverages	128.0	116.5	118.7	117.5	118.3	116.9	117.1	116.4	120.9	121.0	123.6	125.1	125.3
Agricultural foods, feeds, and beverages	129.9	117.0	119.3	117.8	118.5	116.6	116.7	116.0	120.7	120.9	123.8	125.6	125.6
Nonagricultural (fish, beverages) food products	110.1	110.9	113.0	114.4	115.5	118.4	119.7	119.7	121.8	120.9	120.8	119.7	122.0
Industrial supplies and materials	112.0	113.1	114.0	116.6	117.4	118.0	120.1	120.7	122.3	124.1	122.7	122.1	123.0
Agricultural industrial supplies and materials	109.0	108.4	109.4	109.2	108.5	109.5	112.9	112.8	115.6	117.0	117.1	116.2	116.3
Fuels and lubricants	118.6	120.4	121.5	132.2	128.3	125.4	128.3	133.0	143.8	152.3	145.0	148.1	157.3
Nonagricultural supplies and materials, excluding fuel and building materials	112.4	113.5	114.4	116.4	117.9	118.9	121.0	121.0	121.4	122.5	121.6	120.4	120.4
Selected building materials	102.8	103.3	104.0	103.9	104.0	104.4	104.6	104.8	105.3	105.4	105.8	106.2	105.9
Capital goods	97.8	97.8	97.8	98.0	98.1	98.2	98.4	98.5	98.4	98.4	98.4	98.4	98.0
Electric and electrical generating equipment	102.2	102.2	102.4	103.3	103.5	103.6	103.8	103.5	103.9	103.7	103.6	103.5	103.1
Nonelectrical machinery	94.0	94.0	93.9	93.9	93.8	93.9	94.0	94.0	93.9	93.8	93.7	93.7	93.2
Automotive vehicles, parts, and engines	102.4	102.6	102.5	102.7	102.8	102.9	103.1	103.1	103.3	103.3	103.4	103.4	103.5
Consumer goods, excluding automotive	100.9	101.1	101.0	100.9	101.0	101.2	101.7	101.6	101.6	101.9	101.7	101.5	101.5
Nondurables, manufactured	100.8	101.0	101.0	100.5	100.6	101.0	101.6	101.5	101.5	101.8	101.6	101.2	100.9
Durables, manufactured	100.8	101.0	100.9	100.8	101.0	101.1	101.4	101.5	101.5	101.7	101.5	101.5	101.5
Agricultural commodities	126.1	115.5	117.6	116.3	116.7	115.4	116.1	115.5	119.9	120.3	122.7	124.0	123.9
Nonagricultural commodities	102.2	102.5	102.8	103.6	103.9	104.1	104.9	105.0	105.4	106.0	105.5	105.3	105.4

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

[2000 = 100]

Category	2004						2005						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
ALL COMMODITIES	102.1	103.6	104.1	105.8	105.5	104.0	104.6	105.5	107.8	108.8	107.9	109.2	110.1
Foods, feeds, and beverages	107.5	107.3	108.7	110.0	110.3	111.5	111.1	112.2	115.9	115.6	115.5	114.1	113.3
Agricultural foods, feeds, and beverages	114.5	114.1	116.4	118.4	119.1	120.7	119.6	120.8	125.7	125.5	125.5	123.5	121.9
Nonagricultural (fish, beverages) food products	91.8	92.3	91.4	91.1	90.7	91.0	92.0	92.8	94.0	93.5	93.2	93.0	94.0
Industrial supplies and materials	120.6	126.6	128.5	134.9	133.2	126.4	127.9	130.7	139.8	143.7	139.8	145.3	150.2
Fuels and lubricants	133.2	143.4	146.2	160.8	157.0	141.0	142.5	148.0	165.6	173.0	165.9	177.7	188.1
Petroleum and petroleum products	132.7	144.4	149.2	165.8	155.9	138.1	141.2	148.4	168.3	174.4	166.7	181.1	192.1
Paper and paper base stocks	100.0	100.4	101.1	101.4	101.1	101.3	102.4	103.0	103.8	104.7	104.5	103.8	104.9
Materials associated with nondurable supplies and materials	106.5	107.7	108.0	108.7	109.3	109.8	111.3	112.0	113.0	114.0	113.8	113.5	114.4
Selected building materials	117.6	124.0	125.6	115.3	111.8	115.6	117.9	119.8	122.7	120.3	115.8	118.0	114.7
Unfinished metals associated with durable goods	126.1	129.8	133.1	134.2	136.4	138.5	139.6	138.8	140.4	142.4	141.3	139.9	138.6
Nonmetals associated with durable goods	98.5	98.5	98.8	98.9	99.2	99.7	100.9	100.9	100.8	101.1	101.0	100.9	100.3
Capital goods	92.2	92.1	92.0	91.8	91.9	92.2	92.5	92.4	92.3	92.5	92.4	92.3	91.7
Electric and electrical generating equipment	97.5	97.7	97.4	97.4	97.5	98.0	98.4	98.7	98.8	98.9	98.8	98.9	98.7
Nonelectrical machinery	90.0	89.9	89.8	89.5	89.6	89.9	90.1	90.0	89.8	90.0	89.9	89.8	89.0
Automotive vehicles, parts, and engines	102.3	102.5	102.7	103.0	103.1	103.2	103.2	103.2	103.2	103.3	103.3	103.4	103.4
Consumer goods, excluding automotive	98.5	98.4	98.4	98.5	98.7	99.0	99.6	100.1	99.9	99.8	99.9	99.9	99.7
Nondurables, manufactured	101.0	100.9	100.8	100.9	101.1	101.4	102.2	102.8	102.8	102.9	102.8	102.8	102.9
Durables, manufactured	95.9	95.9	95.9	96.0	96.2	96.5	96.8	96.7	96.8	96.5	96.6	96.6	96.3
Nonmanufactured consumer goods	97.4	97.9	97.9	97.9	98.0	98.2	100.1	105.0	100.3	100.3	103.0	101.8	100.1

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

[2000 = 100, unless indicated otherwise]

Category	2003			2004				2005	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Air freight (inbound)	109.4	112.5	112.9	116.2	116.6	118.7	125.2	126.3	125.9
Air freight (outbound)	95.4	95.5	94.9	96.1	99.0	100.7	104.7	103.8	107.6
Inbound air passenger fares (Dec. 2003 = 100)	–	–	100.0	105.1	106.1	110.1	112.5	114.5	116.1
Outbound air passenger fares (Dec. 2003 = 100))	–	–	100.0	99.3	114.2	114.2	105.4	105.0	120.5
Ocean liner freight (inbound)	116.1	116.2	117.7	119.1	121.1	120.3	122.7	121.3	128.4

NOTE: Dash indicates data not available.

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

[1992 = 100]

Item	2002			2003				2004				2005	
	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Business													
Output per hour of all persons	123.5	125.0	124.7	125.6	127.9	130.5	130.6	131.7	132.8	133.3	134.3	135.3	135.7
Compensation per hour	145.0	145.7	145.8	147.8	150.3	152.0	152.8	154.4	155.7	158.2	162.5	164.9	166.0
Real compensation per hour	115.7	115.7	115.1	115.5	117.3	118.0	118.4	118.5	118.2	119.6	121.8	122.9	122.4
Unit labor costs	117.7	116.9	116.2	117.7	117.5	116.4	117.0	117.3	117.2	118.7	121.0	121.9	122.3
Unit nonlabor payments	112.9	115.0	116.3	116.4	117.2	120.3	120.5	123.0	126.1	124.2	122.3	122.9	124.1
Implicit price deflator	115.9	116.2	116.7	117.2	117.4	117.9	118.3	119.4	120.5	120.7	121.5	122.3	123.0
Nonfarm business													
Output per hour of all persons	122.7	123.9	124.0	124.9	126.9	129.9	130.1	130.8	132.2	132.7	133.5	134.5	135.3
Compensation per hour	144.2	144.8	145.0	147.0	149.3	151.2	152.2	153.5	154.9	157.2	161.0	163.8	165.2
Real compensation per hour	115.0	114.9	114.5	114.9	116.5	117.4	117.9	117.8	117.6	118.8	120.7	122.0	121.8
Unit labor costs	117.5	116.9	116.9	117.7	117.6	116.4	116.9	117.3	117.1	118.5	120.7	121.7	122.1
Unit nonlabor payments	115.0	116.9	118.1	118.2	118.7	121.6	121.3	123.5	126.5	125.3	123.7	124.3	125.5
Implicit price deflator	116.6	116.9	117.3	117.9	118.0	118.3	118.6	119.6	120.6	121.0	121.8	122.7	123.4
Nonfinancial corporations													
Output per hour of all employees	127.9	129.1	130.1	130.4	132.7	135.1	135.9	136.1	136.1	139.4	142.3	143.5	–
Compensation per hour	141.8	142.7	143.2	144.6	147.0	148.9	149.8	150.3	151.7	154.0	158.0	160.8	–
Real compensation per hour	113.1	113.3	113.1	113.0	114.8	115.6	116.0	115.4	115.2	116.5	118.4	119.8	–
Total unit costs	110.9	110.4	110.0	111.0	110.7	110.4	110.4	110.7	111.0	110.5	110.5	110.9	–
Unit labor costs	110.9	110.6	110.1	110.9	110.8	110.2	110.2	110.4	110.8	110.5	111.0	112.0	–
Unit nonlabor costs	110.7	110.0	109.6	111.4	110.5	110.9	110.8	111.4	111.5	110.3	108.8	107.9	–
Unit profits	94.5	100.3	111.2	107.8	111.3	119.9	124.8	130.2	138.6	139.7	143.1	145.3	–
Unit nonlabor payments	103.4	107.4	110.0	110.5	111.4	113.3	114.6	116.4	118.7	118.2	118.0	117.9	–
Implicit price deflator	109.4	109.5	110.1	110.7	111.0	111.3	111.7	112.4	113.4	113.1	113.4	114.0	–
Manufacturing													
Output per hour of all persons	146.5	148.7	149.5	151.6	152.9	156.9	158.1	159.3	162.2	164.0	166.5	168.2	169.9
Compensation per hour	147.6	149.0	150.2	156.5	159.2	161.5	163.2	159.1	161.1	164.9	169.3	172.3	175.0
Real compensation per hour	117.7	118.3	118.6	122.3	124.3	125.4	126.5	122.1	122.3	124.7	126.9	128.4	129.1
Unit labor costs	100.8	100.2	100.5	103.2	104.1	102.9	103.2	99.9	99.3	100.6	101.7	102.4	103.0

NOTE: Dash indicates data not available.

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

[2000 = 100, unless otherwise indicated]

Item	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Private business													
Productivity:													
Output per hour of all persons	81.4	82.7	86.2	86.5	87.5	87.7	90.3	91.9	94.4	97.2	100.0	102.7	107.2
Output per unit of capital services	102.6	99.7	101.7	102.6	104.5	103.6	103.9	104.1	102.6	101.8	100.0	96.3	95.5
Multifactor productivity	90.9	90.3	92.7	93.1	94.1	93.8	95.5	96.3	97.4	98.7	100.0	100.1	102.0
Output	68.6	68.1	70.9	73.2	76.9	79.1	82.8	87.2	91.5	96.2	100.0	100.4	102.3
Inputs:													
Labor input	80.1	79.1	80.0	82.4	86.1	88.5	90.4	94.0	96.2	99.0	100.0	98.6	97.4
Capital services	66.9	68.4	69.7	71.3	73.5	76.4	79.7	83.8	89.2	94.5	100.0	104.2	107.1
Combined units of labor and capital input	75.5	75.4	76.5	78.6	81.7	84.3	86.7	90.5	93.9	97.5	100.0	100.4	100.3
Capital per hour of all persons	79.3	83.0	84.8	84.4	83.7	84.6	86.9	88.3	92.0	95.4	100.0	106.6	112.2
Private nonfarm business													
Productivity:													
Output per hour of all persons	81.7	83.1	86.5	86.9	87.9	88.4	90.8	92.2	94.7	97.3	100.0	102.6	107.2
Output per unit of capital services	104.2	101.1	102.8	103.8	105.4	104.7	104.7	104.6	103.0	102.1	100.0	96.3	95.4
Multifactor productivity	91.5	91.0	93.2	93.6	94.5	94.6	96.0	96.6	97.7	98.8	100.0	100.0	102.0
Output	68.6	68.1	70.8	73.2	76.7	79.3	82.9	87.2	91.5	96.3	100.0	100.5	102.4
Inputs:													
Labor input	79.8	78.7	79.6	82.2	85.6	88.0	90.0	93.7	96.0	99.0	100.0	98.8	97.3
Capital services	65.8	67.4	68.8	70.6	72.8	75.7	79.2	83.3	88.8	94.3	100.0	104.4	107.3
Combined units of labor and capital input	75.0	74.8	75.9	78.2	81.2	83.8	86.3	90.2	93.7	97.5	100.0	100.5	100.3
Capital per hour of all persons	78.4	82.3	84.1	83.7	83.3	84.4	86.7	88.2	91.9	95.3	100.0	106.6	112.4
Manufacturing [1996 = 100]													
Productivity:													
Output per hour of all persons	82.2	84.1	88.6	90.2	93.0	96.5	100.0	103.8	108.9	114.0	118.3	119.7	–
Output per unit of capital services	97.5	93.6	95.9	96.9	99.7	100.6	100.0	101.4	101.7	101.7	101.0	95.1	–
Multifactor productivity	93.3	92.4	94.0	95.1	97.3	99.2	100.0	103.1	105.7	108.7	111.3	110.3	–
Output	83.2	81.5	85.5	88.3	92.9	96.9	100.0	105.6	110.5	114.7	117.4	112.1	–
Inputs:													
Hours of all persons	101.1	96.9	96.5	97.8	99.9	100.4	100.0	101.7	101.5	100.7	99.2	93.6	–
Capital services	85.3	87.1	89.1	91.1	93.2	96.4	100.0	104.1	108.7	112.8	116.2	117.9	–
Energy	93.1	93.2	93.1	96.6	99.9	102.3	100.0	97.5	100.6	102.9	104.3	98.9	–
Nonenergy materials	77.5	78.5	83.5	86.5	90.3	93.1	100.0	101.9	107.5	107.9	106.9	105.5	–
Purchased business services	84.7	84.6	92.0	92.9	96.0	100.4	100.0	103.9	103.1	105.4	106.5	97.7	–
Combined units of all factor inputs	89.1	88.3	90.9	92.8	95.5	97.7	100.0	102.4	104.6	105.5	105.5	101.6	–

NOTE: Dash indicates data not available.

50. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1990	1996	1997	1998	1999	2000	2001	2002	2003	2004
Business													
Output per hour of all persons	48.9	66.3	79.1	94.5	104.7	106.7	109.7	112.9	116.1	119.0	123.8	128.6	133.0
Compensation per hour	13.9	23.6	54.1	90.6	109.6	113.1	120.0	125.8	134.5	140.2	145.0	150.7	157.7
Real compensation per hour	60.8	78.8	89.1	96.3	99.6	100.6	105.3	108.1	111.9	113.4	115.1	117.3	119.5
Unit labor costs	28.4	35.6	68.4	96.0	104.7	106.1	109.4	111.4	115.9	117.8	117.1	117.2	118.6
Unit nonlabor payments	24.8	31.5	61.3	93.8	112.0	113.9	110.1	109.5	107.4	110.2	114.4	8.6	123.9
Implicit price deflator	27.1	34.1	65.8	95.1	107.4	109.0	109.7	110.7	112.7	114.9	116.1	117.7	120.6
Nonfarm business													
Output per hour of all persons	51.9	68.0	80.6	94.5	104.9	106.6	109.5	112.6	115.6	118.5	123.3	128.0	132.3
Compensation per hour	14.5	23.7	54.4	90.4	109.5	112.9	119.6	125.2	134.0	139.3	144.2	149.9	156.7
Real compensation per hour	63.3	79.2	89.5	96.0	99.5	100.4	105.0	107.5	111.4	112.6	114.8	116.7	118.7
Unit labor costs	27.9	34.9	67.5	95.7	104.5	105.9	109.3	111.2	115.9	117.5	117.0	117.1	118.4
Unit nonlabor payments	24.3	31.2	60.4	93.5	112.2	114.6	111.1	111.1	108.9	111.8	116.3	120.0	124.7
Implicit price deflator	26.6	33.5	64.9	94.9	107.3	109.1	109.9	111.1	113.3	115.4	116.7	118.2	120.7
Nonfinancial corporations													
Output per hour of all employees	56.2	69.8	80.8	95.4	107.1	109.9	113.5	117.3	121.5	123.5	128.2	133.5	138.7
Compensation per hour	16.2	25.7	57.2	91.1	108.5	111.7	118.1	123.6	132.0	137.3	142.0	147.6	153.5
Real compensation per hour	70.8	85.9	94.1	96.8	98.5	99.4	103.6	106.2	109.7	111.1	113.0	114.8	116.4
Total unit costs	27.3	35.6	69.2	96.0	100.9	101.1	102.9	104.0	107.4	111.6	110.7	110.6	110.6
Unit labor costs	28.8	36.9	70.8	95.5	101.3	101.7	104.1	105.3	108.6	111.2	110.7	110.5	110.7
Unit nonlabor costs	23.3	32.2	64.9	97.3	100.0	99.7	99.5	100.4	104.2	112.6	110.8	110.9	110.5
Unit profits	50.2	44.4	66.9	96.9	150.0	154.3	137.0	129.1	108.7	82.2	95.4	116.7	138.0
Unit nonlabor payments	30.5	35.4	65.5	97.2	113.3	114.3	109.5	108.0	105.4	104.5	107.4	112.5	117.8
Implicit price deflator	29.4	36.4	69.0	96.1	105.3	105.9	105.9	106.2	107.5	108.9	109.6	111.2	113.1
Manufacturing													
Output per hour of all persons	41.8	54.2	70.1	92.9	113.9	118.0	123.6	128.1	134.1	136.9	147.3	154.8	163.0
Compensation per hour	14.9	23.7	55.6	90.5	109.3	112.2	118.7	123.4	134.7	137.8	147.9	160.1	163.6
Real compensation per hour	65.0	79.2	91.4	96.1	99.3	99.8	104.2	106.0	112.0	111.5	117.7	124.6	124.0
Unit labor costs	35.6	43.8	79.3	97.3	96.0	95.1	96.0	96.4	100.5	100.7	100.4	102.4	100.4
Unit nonlabor payments	26.8	29.3	80.2	100.8	110.7	110.4	104.2	105.1	107.1	105.9	–	–	–
Implicit price deflator	30.2	35.0	79.9	99.5	105.2	104.6	101.1	101.8	104.6	103.9	–	–	–

Dash indicates data not available.

51. Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Mining													
21	Mining	85.5	85.1	95.0	98.5	101.7	101.3	100.0	103.6	111.4	111.2	109.1	113.9	116.2
211	Oil and gas extraction	80.1	75.7	81.6	87.5	95.3	98.1	100.0	101.2	107.9	119.4	121.6	124.0	130.5
212	Mining, except oil and gas	69.8	79.3	86.8	93.0	94.0	96.0	100.0	104.6	105.9	106.8	109.0	111.4	113.6
2121	Coal mining	58.4	68.1	75.3	83.9	88.2	94.9	100.0	106.5	110.3	115.8	114.4	112.2	113.1
2122	Metal ore mining	71.2	79.9	91.7	104.1	98.5	95.3	100.0	109.5	112.7	124.4	131.8	142.4	141.0
2123	Nonmetallic mineral mining and quarrying	88.5	92.3	96.1	96.9	97.3	97.1	100.0	101.3	101.2	96.2	99.3	103.6	108.6
	Utilities													
2211	Power generation and supply	65.6	71.1	74.5	83.1	88.5	95.2	100.0	103.7	103.5	107.0	106.4	102.9	105.1
2212	Natural gas distribution	67.8	71.4	76.1	82.3	89.0	96.0	100.0	99.0	102.7	113.2	110.1	115.4	114.3
	Manufacturing													
3111	Animal food	83.6	91.5	90.5	87.4	93.8	86.1	100.0	109.0	110.9	109.7	131.4	142.7	140.4
3112	Grain and oilseed milling	81.1	88.6	91.1	94.3	98.7	90.0	100.0	107.5	116.1	113.1	119.5	123.8	122.0
3113	Sugar and confectionery products	87.6	89.5	89.2	92.7	93.2	97.8	100.0	103.5	106.5	109.8	108.6	108.2	112.2
3114	Fruit and vegetable preserving and specialty	92.4	87.6	91.9	95.5	98.3	98.8	100.0	107.1	109.5	111.8	121.4	126.7	121.8
3115	Dairy products	82.7	91.1	95.2	94.9	97.6	97.8	100.0	100.0	93.6	95.9	97.1	105.0	110.1
3116	Animal slaughtering and processing	97.4	94.3	101.8	97.4	99.0	94.2	100.0	100.0	101.2	102.6	103.7	107.8	107.0
3117	Seafood product preparation and packaging	123.1	119.7	117.8	115.5	110.3	118.0	100.0	120.2	131.6	140.5	153.0	170.0	177.8
3118	Bakeries and tortilla manufacturing	100.9	94.5	97.1	98.6	100.7	97.3	100.0	103.8	108.6	108.3	109.9	110.7	110.9
3119	Other food products	97.5	92.4	97.6	102.2	104.0	105.0	100.0	107.8	111.3	112.7	106.2	113.6	118.9
3121	Beverages	77.1	87.6	94.9	100.5	103.2	102.0	100.0	99.0	90.7	90.8	92.7	99.8	105.0
3131	Fiber, yarn, and thread mills	66.5	74.4	80.2	87.2	91.9	98.9	100.0	102.1	103.9	101.3	109.1	133.5	150.2
3132	Fabric mills	68.0	75.3	81.4	91.7	95.5	98.1	100.0	104.2	110.0	110.1	110.3	125.7	136.1
3133	Textile and fabric finishing mills	91.3	82.0	83.5	87.6	84.3	85.0	100.0	101.2	102.2	104.4	108.5	119.7	124.8
3141	Textile furnishings mills	91.2	88.0	92.7	90.1	92.3	93.8	100.0	99.3	99.1	104.5	103.1	103.5	111.9
3149	Other textile product mills	92.2	91.4	91.8	94.5	95.9	97.2	100.0	96.7	107.6	108.9	103.1	105.1	104.6
3151	Apparel knitting mills	76.2	86.2	93.3	104.3	109.3	122.1	100.0	96.1	101.4	108.9	105.6	114.8	107.5
3152	Cut and sew apparel	69.8	70.1	72.9	80.4	85.2	90.6	100.0	102.3	114.6	119.8	119.5	110.9	123.5
3211	Sawmills and wood preservation	77.6	79.4	85.7	84.6	90.4	95.9	100.0	100.3	104.7	105.4	108.8	114.4	120.6
3212	Plywood and engineered wood products	99.8	102.9	114.3	105.3	101.5	101.1	100.0	105.2	98.8	98.9	105.3	110.3	106.5
3219	Other wood products	103.2	105.5	103.2	98.2	99.8	100.5	100.0	101.1	104.6	103.1	104.9	114.2	112.9
3221	Pulp, paper, and paperboard mills	81.7	84.0	87.9	94.1	98.4	95.4	100.0	102.5	111.1	116.3	119.9	133.1	138.0
3222	Converted paper products	89.0	90.1	94.0	97.5	97.2	97.7	100.0	102.5	100.1	101.1	100.5	105.5	109.3
3231	Printing and related support activities	97.7	97.6	101.7	98.6	98.8	99.9	100.0	100.6	102.8	104.6	105.3	110.0	110.7
3241	Petroleum and coal products	72.1	76.1	79.0	83.8	89.9	93.5	100.0	102.2	107.1	113.5	112.1	117.9	118.9
3251	Basic chemicals	94.6	93.4	90.2	94.7	91.3	89.4	100.0	102.7	115.7	117.5	108.8	124.0	132.0
3252	Resin, rubber, and artificial fibers	77.4	76.4	80.4	93.4	95.4	93.1	100.0	106.0	109.8	109.8	106.2	123.0	120.9
3253	Agricultural chemicals	80.4	85.8	82.1	86.8	89.9	91.7	100.0	98.8	87.4	92.1	90.0	98.9	107.2
3254	Pharmaceuticals and medicines	87.3	91.3	87.5	93.4	95.9	100.0	100.0	93.8	95.7	95.6	99.5	96.0	98.6
3255	Paints, coatings, and adhesives	89.3	87.1	89.6	93.9	92.3	99.1	100.0	100.1	100.3	100.8	105.6	109.1	113.5
3256	Soap, cleaning compounds, and toiletries	84.4	84.8	85.0	90.8	96.1	97.3	100.0	98.0	93.0	102.8	106.0	124.5	114.6
3259	Other chemical products and preparations	75.4	77.8	85.8	92.3	93.5	94.0	100.0	99.2	109.3	119.7	110.4	118.9	122.7
3261	Plastics products	83.1	85.2	90.8	94.4	94.5	96.6	100.0	104.2	109.9	112.3	114.6	122.7	127.6
3262	Rubber products	75.5	83.5	84.7	90.7	92.9	94.2	100.0	99.4	100.2	101.7	102.3	107.9	111.7
3271	Clay products and refractories	86.9	89.4	92.0	96.3	97.4	102.4	100.0	101.2	102.7	102.9	98.4	99.8	103.5
3272	Glass and glass products	82.3	79.1	83.8	85.7	87.5	94.7	100.0	101.4	106.7	108.2	102.8	107.4	115.2
3273	Cement and concrete products	93.6	96.6	96.2	95.7	99.7	102.0	100.0	105.1	105.9	101.6	98.0	102.4	106.9
3279	Other nonmetallic mineral products	83.0	79.5	90.3	89.6	91.4	96.0	100.0	99.0	95.6	96.6	98.6	106.7	112.4
3311	Iron and steel mills and ferroalloy production	64.8	70.2	74.7	87.1	90.0	94.1	100.0	101.3	104.8	106.0	108.5	123.8	125.8
3312	Steel products from purchased steel	79.7	84.4	90.1	99.5	100.6	100.5	100.0	100.1	93.0	95.5	94.3	105.2	101.6
3313	Alumina and aluminum production	90.5	90.7	95.8	99.6	95.9	95.4	100.0	101.4	103.5	96.5	96.0	125.0	127.1
3314	Other nonferrous metal production	96.8	96.3	99.7	105.1	102.7	105.9	100.0	111.3	108.4	102.3	99.5	108.5	120.5
3315	Foundries	81.4	86.5	86.4	91.8	93.1	96.0	100.0	101.2	104.5	103.6	107.4	117.0	117.5
3321	Forging and stamping	85.4	89.0	92.2	93.4	93.9	97.4	100.0	103.5	110.9	121.1	120.7	125.3	132.9
3322	Cutlery and hand tools	86.3	85.4	87.4	94.1	97.2	103.8	100.0	99.9	108.0	105.9	110.3	107.5	109.0
3323	Architectural and structural metals	88.7	87.9	92.7	94.7	93.3	93.9	100.0	101.0	102.0	100.7	101.7	106.3	109.1
3324	Boilers, tanks, and shipping containers	86.0	90.1	95.4	100.1	97.3	100.7	100.0	100.4	97.1	94.7	94.6	99.7	102.0
3326	Spring and wire products	82.2	85.2	90.8	91.0	99.0	102.4	100.0	110.6	111.4	112.6	111.9	129.1	138.8
3327	Machine shops and threaded products	76.9	79.2	87.4	91.6	98.3	99.8	100.0	99.6	104.2	108.2	108.8	115.6	115.8
3328	Coating, engraving, and heat treating metals	75.5	81.3	86.6	95.8	102.2	101.7	100.0	100.9	101.0	105.5	107.3	115.2	116.9
3329	Other fabricated metal products	91.0	86.5	90.4	94.5	96.3	98.2	100.0	101.9	99.6	99.9	96.7	106.5	111.2
3331	Agriculture, construction, and mining machinery	74.6	83.3	79.0	91.0	95.4	95.7	100.0	103.3	94.3	100.3	100.3	103.7	116.6
3332	Industrial machinery	75.1	81.6	79.9	89.5	97.1	98.5	100.0	95.1	105.8	130.0	105.8	106.0	109.0
3333	Commercial and service industry machinery	86.9	95.6	100.1	103.1	103.6	107.2	100.0	105.9	109.8	100.9	94.3	102.0	109.7
3334	HVAC and commercial refrigeration equipment	84.0	90.6	91.5	97.1	96.4	97.2	100.0	106.2	110.2	107.9	110.8	117.6	127.5
3335	Metalworking machinery	85.1	86.5	89.2	93.5	99.2	97.5	100.0	99.1	100.3	106.1	103.3	115.6	117.4

51. Continued—Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
3336	Turbine and power transmission equipment	80.2	85.9	80.9	92.7	91.3	98.0	100.0	105.0	110.8	114.9	126.9	132.7	141.8
3339	Other general purpose machinery	83.5	86.8	85.4	91.3	94.0	94.9	100.0	103.7	106.0	113.7	110.5	117.6	124.5
3341	Computer and peripheral equipment	11.0	14.7	21.4	35.3	49.9	72.6	100.0	140.4	195.8	234.9	252.0	297.3	379.6
3342	Communications equipment	39.8	48.4	60.6	71.0	74.4	84.5	100.0	107.1	135.4	164.1	152.9	128.1	142.2
3344	Semiconductors and electronic components	17.0	21.9	29.8	43.3	63.8	83.1	100.0	125.8	173.9	232.4	230.4	264.1	322.1
3345	Electronic instruments	70.2	78.5	85.9	90.2	97.9	97.6	100.0	102.3	106.7	116.7	119.3	119.3	128.5
3351	Electric lighting equipment	91.1	88.2	94.1	94.0	91.9	95.8	100.0	104.4	102.7	102.0	106.7	112.3	113.1
3352	Household appliances	73.3	76.5	82.3	94.9	91.8	91.9	100.0	105.3	103.9	117.2	124.7	136.0	151.6
3353	Electrical equipment	68.7	73.6	79.0	88.6	98.0	100.4	100.0	100.2	98.7	99.4	101.0	103.2	104.9
3359	Other electrical equipment and components	78.7	76.0	82.2	89.1	92.0	96.3	100.0	105.7	114.6	119.6	112.9	115.6	116.9
3361	Motor vehicles	75.4	85.6	90.8	89.9	88.5	91.0	100.0	113.4	122.6	109.7	110.0	126.3	138.7
3362	Motor vehicle bodies and trailers	85.0	75.9	88.4	97.8	97.4	98.5	100.0	102.9	103.1	98.8	88.7	105.5	109.3
3363	Motor vehicle parts	78.7	76.0	82.3	91.4	92.3	93.0	100.0	105.0	110.0	112.3	114.8	130.7	135.9
3364	Aerospace products and parts	86.5	89.1	96.8	94.4	94.9	98.9	100.0	120.2	120.0	103.2	116.7	117.8	121.7
3366	Ship and boat building	95.5	99.6	99.4	98.9	93.1	93.5	100.0	99.3	112.0	121.9	121.5	131.0	133.8
3371	Household and institutional furniture	85.2	88.2	92.5	94.1	97.2	99.8	100.0	102.2	103.1	101.9	105.5	115.7	118.2
3372	Office furniture and fixtures	85.8	82.2	86.4	83.9	84.9	86.3	100.0	100.0	98.2	100.2	98.0	115.2	125.3
3379	Other furniture-related products	86.3	88.9	87.6	93.8	94.8	97.6	100.0	106.9	102.0	99.5	105.0	110.4	110.5
3391	Medical equipment and supplies	76.3	82.9	89.2	92.1	96.6	100.5	100.0	108.7	110.4	114.6	119.3	128.6	137.1
3399	Other miscellaneous manufacturing	85.4	90.5	90.3	93.6	95.9	99.7	100.0	102.0	105.0	113.6	111.7	129.5	135.3
	Wholesale trade													
42	Wholesale trade	73.5	78.5	86.3	91.3	93.4	96.3	100.0	104.8	112.0	115.7	118.5	124.3	128.6
423	Durable goods	62.1	66.7	75.0	84.3	88.8	93.9	100.0	105.9	116.2	120.2	121.2	127.5	133.7
4231	Motor vehicles and parts	72.9	76.6	82.0	94.2	93.4	95.7	100.0	105.1	120.3	113.9	115.3	122.2	128.8
4232	Furniture and furnishings	79.2	87.2	91.4	93.3	96.8	96.6	100.0	98.5	100.9	106.1	106.1	101.7	111.2
4233	Lumber and construction supplies	120.1	118.7	119.8	112.2	102.9	102.9	100.0	104.0	105.8	102.7	109.8	116.8	126.5
4234	Commercial equipment	28.0	33.9	48.3	60.4	74.8	88.3	100.0	118.4	143.4	150.6	169.5	196.3	212.4
4235	Metals and minerals	105.6	102.6	110.0	110.5	101.5	103.1	100.0	102.9	96.4	99.8	103.1	103.5	103.7
4236	Electric goods	40.3	47.5	51.8	68.7	79.8	87.5	100.0	105.5	127.9	152.4	147.4	154.6	164.7
4237	Hardware and plumbing	82.7	88.5	97.1	102.3	99.0	99.7	100.0	103.6	109.1	112.0	102.9	107.1	111.4
4238	Machinery and supplies	74.9	82.4	79.8	85.0	89.5	93.7	100.0	104.2	101.1	103.9	102.1	99.7	103.9
4239	Miscellaneous durable goods	86.2	87.3	109.2	103.4	98.0	100.2	100.0	102.3	114.5	118.4	118.1	124.4	120.3
424	Nondurable goods	93.3	97.9	102.8	101.5	99.6	99.0	100.0	103.5	104.9	106.3	108.1	112.0	117.1
4241	Paper and paper products	86.5	82.3	96.5	101.0	96.4	94.8	100.0	99.7	104.1	105.8	110.4	123.3	126.6
4242	Druggists' goods	70.1	80.7	90.4	91.9	94.7	98.4	100.0	99.9	101.4	95.7	99.7	117.5	133.9
4243	Apparel and piece goods	88.3	101.8	99.8	103.7	92.0	99.1	100.0	104.8	103.2	101.6	103.5	109.8	104.0
4244	Grocery and related products	88.1	95.9	104.0	104.0	103.5	99.9	100.0	102.5	104.2	106.0	107.3	107.2	110.2
4245	Farm product raw materials	82.4	79.5	83.7	79.2	86.3	88.7	100.0	101.5	116.2	121.3	123.4	134.3	134.2
4246	Chemicals	95.8	106.4	111.5	110.7	102.4	100.5	100.0	99.6	97.4	94.1	92.3	98.1	100.9
4247	Petroleum	93.5	96.2	117.2	114.2	108.2	104.4	100.0	113.8	109.5	111.1	114.6	121.8	125.9
4248	Alcoholic beverages	99.2	109.3	105.9	106.6	103.4	104.7	100.0	110.6	108.2	112.0	111.6	116.2	117.7
4249	Miscellaneous nondurable goods	107.9	107.3	93.6	93.5	97.0	99.0	100.0	104.1	105.8	113.0	112.3	107.2	115.5
425	Electronic markets and agents and brokers	65.7	73.2	83.4	89.6	92.6	97.0	100.0	104.9	117.3	126.5	135.4	139.7	131.0
42511	Business to business electronic markets	69.2	74.8	84.0	91.2	92.9	96.6	100.0	104.1	125.8	146.1	179.1	226.5	300.4
42512	Wholesale trade agents and brokers	64.2	72.6	83.5	89.6	93.1	97.3	100.0	105.0	112.7	116.9	115.6	110.9	98.2
	Retail trade													
44-45	Retail trade	80.8	83.1	86.5	92.7	94.6	98.0	100.0	104.9	110.5	114.8	118.7	123.2	129.8
441	Motor vehicle and parts dealers	85.6	90.7	93.9	97.4	97.6	99.3	100.0	103.6	107.1	107.6	110.2	111.1	112.9
4411	Automobile dealers	87.1	92.4	95.8	98.3	97.7	99.2	100.0	103.3	106.9	106.0	108.7	107.2	106.4
4412	Other motor vehicle dealers	73.3	73.3	81.6	93.2	91.0	98.8	100.0	107.5	112.6	110.3	115.4	117.5	131.6
4413	Auto parts, accessories, and tire stores	78.4	86.3	90.5	95.8	98.7	99.2	100.0	107.5	111.5	114.2	110.3	120.0	130.0
442	Furniture and home furnishings stores	76.7	80.1	88.3	90.9	94.7	100.2	100.0	102.6	110.0	116.3	120.3	124.8	135.3
4421	Furniture stores	76.3	83.3	90.5	90.8	93.5	97.9	100.0	103.3	107.9	113.8	120.3	124.3	131.4
4422	Home furnishings stores	77.0	75.8	85.3	90.8	96.1	103.0	100.0	102.0	112.8	119.5	120.4	125.6	140.4
443	Electronics and appliance stores	36.9	45.9	56.9	77.7	89.4	94.8	100.0	122.9	153.0	179.7	202.5	242.6	311.0
444	Building material and garden supply stores	77.4	81.5	82.7	92.8	93.1	97.4	100.0	108.0	113.9	114.4	116.4	120.8	129.3
4441	Building material and supplies dealers	78.2	83.0	83.3	94.0	94.2	97.5	100.0	109.2	115.6	115.7	116.3	121.6	130.4
4442	Lawn and garden equipment and supplies stores	73.1	73.8	79.3	85.8	86.8	97.1	100.0	101.0	103.4	105.9	117.5	115.1	121.6
445	Food and beverage stores	109.6	106.6	106.1	103.9	101.9	100.5	100.0	100.5	103.6	104.5	107.8	109.8	114.3
4451	Grocery stores	110.6	106.5	106.7	104.7	102.8	101.0	100.0	100.5	104.6	104.5	107.8	110.5	113.7
4452	Specialty food stores	127.0	119.3	106.3	101.4	97.6	94.4	100.0	97.9	95.4	102.0	108.8	108.0	123.2
4453	Beer, wine and liquor stores	95.6	98.7	97.2	94.5	95.1	103.8	100.0	107.0	101.9	112.1	113.5	112.8	127.2
446	Health and personal care stores	85.8	92.9	90.4	91.6	91.6	96.4	100.0	104.3	105.4	110.6	113.5	119.9	129.5
447	Gasoline stations	83.0	83.7	87.7	96.1	99.7	99.8	100.0	106.8	110.5	107.0	112.4	121.8	117.6
448	Clothing and clothing accessories stores	65.8	69.2	74.8	83.2	92.8	99.5	100.0	106.1	113.6	123.2	126.4	130.2	138.9
4481	Clothing stores	66.6	69.1	77.7	82.3	91.5	98.6	100.0	108.4	113.7	124.6	129.8	134.8	141.2

51. Continued—Annual indexes of output per hour for selected NAICS industries

[1997=100]

NAICS	Industry	1987	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
4482	Shoe stores	65.3	71.4	75.5	86.4	96.7	104.8	100.0	94.2	105.0	111.2	112.0	123.5	132.1
4483	Jewelry, luggage, and leather goods stores	63.6	67.8	61.9	84.8	95.7	98.6	100.0	108.3	121.5	128.6	125.0	117.8	135.3
451	Sporting goods, hobby, book, and music stores	73.7	81.1	85.0	87.8	94.3	94.6	100.0	109.6	116.0	122.8	130.8	131.7	131.7
4511	Sporting goods and musical instrument stores	69.4	78.3	81.7	85.7	94.0	93.2	100.0	113.9	122.0	129.7	136.7	136.7	137.8
4512	Book, periodical, and music stores	84.4	87.3	92.2	92.4	95.0	97.4	100.0	101.7	105.0	110.1	119.6	122.7	121.1
452	General merchandise stores	73.7	75.3	82.9	90.6	92.0	96.9	100.0	105.0	113.3	120.1	124.5	129.2	135.6
4521	Department stores	87.7	84.2	91.7	95.3	94.7	98.7	100.0	100.6	104.7	106.7	104.5	103.2	106.6
4529	Other general merchandise stores	54.8	61.4	69.5	82.5	87.2	93.9	100.0	113.4	129.8	145.9	162.1	176.5	184.6
453	Miscellaneous store retailers	65.7	69.5	74.1	86.5	88.8	94.7	100.0	107.7	109.6	110.7	109.6	114.5	120.8
4531	Florists	77.9	73.3	83.2	82.4	82.5	92.0	100.0	102.6	118.7	114.8	107.9	117.9	130.0
4532	Office supplies, stationery and gift stores	56.6	61.1	75.0	88.2	91.7	93.1	100.0	111.3	119.6	125.3	128.4	135.8	145.4
4533	Used merchandise stores	78.5	82.2	81.8	85.0	86.2	95.7	100.0	115.7	109.3	118.0	119.8	129.2	131.1
4539	Other miscellaneous store retailers	74.9	81.7	71.8	89.4	88.9	97.4	100.0	104.1	98.6	96.4	92.6	93.2	99.2
454	Nonstore retailers	52.7	56.4	62.6	75.2	80.0	92.0	100.0	112.3	123.3	150.1	155.7	175.1	203.0
4541	Electronic shopping and mail-order houses	40.0	43.9	50.5	62.5	71.3	84.7	100.0	118.3	140.9	158.1	176.3	204.8	242.2
4542	Vending machine operators	98.7	97.2	95.0	93.9	88.5	97.6	100.0	114.5	118.0	127.1	110.7	117.8	128.4
4543	Direct selling establishments	74.9	77.8	82.1	94.4	94.3	102.9	100.0	97.7	93.2	114.6	110.5	117.2	127.8
	Transportation and warehousing													
481	Air transportation	81.1	77.5	81.4	90.8	95.3	98.8	100.0	97.6	98.2	98.2	91.9	102.0	112.1
482111	Line-haul railroads	58.9	69.8	82.3	88.6	92.0	98.4	100.0	102.1	105.5	114.3	121.9	131.9	142.0
48412	General freight trucking, long-distance	86.8	87.5	97.2	97.8	95.2	96.7	100.0	99.8	99.2	101.0	102.1	106.6	108.8
48421	Used household and office goods moving	102.3	115.5	113.4	105.4	102.3	95.4	100.0	97.0	101.3	100.2	86.3	81.8	88.7
491	U.S. Postal Service	92.4	96.1	96.5	98.5	98.3	96.7	100.0	101.4	102.4	104.9	106.1	107.0	108.7
492	Couriers and messengers	147.8	138.8	155.8	113.8	101.5	100.2	100.0	112.5	117.5	122.1	122.9	131.4	134.4
	Information													
5111	Newspaper, book, and directory publishers	104.8	96.6	96.0	93.1	93.4	92.7	100.0	103.8	104.0	106.1	104.3	102.6	105.8
5112	Software publishers	10.2	28.5	43.0	64.9	73.2	88.3	100.0	119.0	117.8	112.2	113.7	122.5	138.4
51213	Motion picture and video exhibition	90.4	109.2	104.3	103.4	99.8	99.0	100.0	99.5	102.0	107.2	101.8	100.7	104.8
515	Broadcasting, except internet	99.0	97.9	102.6	103.9	103.4	102.1	100.0	105.0	105.7	105.9	100.5	106.5	108.4
5151	Radio and television broadcasting	97.2	97.2	103.8	106.6	105.9	104.4	100.0	98.1	97.3	95.7	91.5	97.1	99.0
5152	Cable and other subscription programming	105.9	100.6	96.5	92.0	93.2	93.3	100.0	131.4	136.0	140.2	128.9	135.4	138.0
5171	Wired telecommunications carriers	56.1	65.3	71.4	81.7	87.2	96.5	100.0	104.8	113.2	119.2	120.1	129.0	134.7
5172	Wireless telecommunications carriers	79.4	72.1	75.0	89.7	90.2	102.0	100.0	97.6	131.4	142.8	190.3	218.9	247.7
5175	Cable and other program distribution	105.4	100.3	96.2	91.9	93.5	93.3	100.0	95.4	93.5	89.3	85.1	92.2	97.2
	Finance and insurance													
52211	Commercial banking	72.8	80.7	83.3	92.8	95.6	100.0	100.0	96.7	98.6	100.8	96.3	98.6	101.5
	Real estate and rental and leasing													
532111	Passenger car rental	90.9	88.7	103.5	107.0	100.2	109.0	100.0	100.3	112.7	112.1	112.7	114.2	120.4
53212	Truck, trailer and RV rental and leasing	60.7	69.0	67.2	79.7	88.6	97.0	100.0	95.8	103.1	105.1	105.2	105.1	105.7
53223	Video tape and disc rental	71.5	92.9	99.6	117.9	115.7	101.2	100.0	114.6	133.0	140.6	137.8	135.8	154.0
	Professional, scientific, and technical services													
541213	Tax preparation services	89.9	91.9	105.4	122.1	96.9	92.6	100.0	112.2	110.5	101.3	91.2	115.9	114.9
54181	Advertising agencies	94.3	105.2	112.9	107.1	100.7	102.8	100.0	96.1	111.3	119.5	121.6	128.1	138.3
541921	Photography studios, portrait	104.8	107.7	108.2	115.7	118.7	102.0	100.0	106.3	101.3	101.6	104.1	103.3	113.2
	Administrative and waste management													
56151	Travel agencies	91.4	95.6	93.4	94.0	93.6	100.1	100.0	107.1	111.3	120.0	114.0	130.8	151.9
56172	Janitorial services	70.2	85.4	92.6	86.8	90.0	96.2	100.0	107.9	107.2	111.1	105.2	104.4	115.9
	Health care and social assistance													
62151	Medical and diagnostic laboratories	–	–	–	92.6	91.2	94.5	100.0	115.7	124.2	134.5	138.0	142.7	136.8
621511	Medical laboratories	–	–	–	92.6	91.4	94.7	100.0	108.6	115.8	125.1	127.7	126.3	117.0
621512	Diagnostic imaging centers	–	–	–	92.9	90.8	94.2	100.0	128.8	139.6	153.2	156.6	173.2	172.0
	Accommodation and food services													
7211	Traveler accommodations	83.8	80.8	90.7	95.4	97.9	99.7	100.0	100.3	106.6	113.0	109.4	113.2	115.6
722	Food services and drinking places	96.5	102.7	101.4	100.4	100.4	99.2	100.0	101.2	101.3	103.8	104.5	105.0	108.4
7221	Full-service restaurants	91.9	99.1	97.4	97.6	96.3	96.3	100.0	100.0	99.2	101.1	101.7	102.2	105.3
7222	Limited-service eating places	96.0	103.1	102.4	103.1	104.4	102.1	100.0	102.4	102.7	105.4	107.1	108.2	111.5
7223	Special food services	100.0	108.1	106.8	101.4	98.8	97.4	100.0	101.9	105.8	111.3	107.5	104.3	107.4
7224	Drinking places, alcoholic beverages	136.2	123.0	119.0	100.5	104.8	102.6	100.0	100.5	100.5	103.0	102.1	105.7	118.0
	Other services (except public administration)													
8111	Automotive repair and maintenance	85.9	90.6	89.4	95.9	102.4	99.1	100.0	104.7	106.5	108.5	109.0	103.5	104.3
81211	Hair, nail and skin care services	83.3	81.5	85.6	88.8	92.8	97.2	100.0	103.8	106.4	106.6	114.0	110.0	124.8
81221	Funeral homes and funeral services	100.2	93.1	104.2	106.2	100.7	97.0	100.0	107.3	103.9	94.9	91.8	93.1	95.5
8123	Drycleaning and laundry services	96.4	94.2	94.0	95.1	99.1	101.6	100.0	104.4	109.1	110.9	115.7	114.0	110.1
81292	Photofinishing	100.0	110.8	115.2	116.9	106.5	102.8	100.0	90.6	93.5	84.0	82.6	96.0	91.6

NOTE: Dash indicates data are not available.

52. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		2003				2004				2005
	2003	2004	I	II	III	IV	I	II	III	IV	I
United States	6.0	5.5	5.8	6.1	6.1	5.9	5.6	5.6	5.5	5.4	5.3
Canada	6.9	6.4	6.7	6.9	7.1	6.8	6.6	6.5	6.4	6.3	6.2
Australia	6.1	5.5	6.2	6.2	6.0	5.8	5.7	5.6	5.6	5.2	5.1
Japan	5.3	4.8	5.4	5.5	5.2	5.1	4.9	4.7	4.8	4.6	4.6
France	9.6	9.8	9.3	9.5	9.7	9.8	9.7	9.8	9.8	9.8	9.9
Germany	9.7	9.8	9.6	9.8	9.8	9.7	9.7	9.8	10.0	10.1	11.0
Italy	8.5	8.1	8.7	8.4	8.6	8.4	8.3	8.1	8.1	8.1	–
Sweden	5.8	6.6	5.3	5.5	5.8	6.3	6.7	6.8	6.6	6.4	6.3
United Kingdom	5.0	4.8	5.1	5.0	5.0	4.9	4.8	4.8	4.7	4.7	–

NOTE: Dash indicates data not available. Quarterly figures for Japan, France, Germany, Italy, and Sweden 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. See "Notes on the data" for information on breaks in series. for further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries, 1960-2004* (Bureau of Labor Statistics, May 13, 2005), on the Internet at **http://www.bls.gov/fls/home.htm**.

Monthly and quarterly unemployment rates, updated monthly, are also on this site.

53. Annual data: employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Civilian labor force												
United States	129,200	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510	147,401
Canada	14,233	14,336	14,439	14,604	14,863	15,115	15,389	15,632	15,892	16,367	16,729	16,956
Australia	8,613	8,770	8,995	9,115	9,204	9,339	9,414	9,590	9,752	9,907	10,092	10,244
Japan	65,470	65,780	65,990	66,450	67,200	67,240	67,090	66,990	66,860	66,240	66,010	65,760
France	24,490	24,676	24,743	24,985	25,109	25,434	25,764	26,078	26,354	26,686	26,870	–
Germany	39,102	39,074	38,980	39,142	39,415	39,754	39,375	39,301	39,456	39,499	39,591	39,698
Italy	22,771	22,592	22,574	22,674	22,749	23,000	23,172	23,357	23,520	23,728	24,021	24,065
Netherlands	7,014	7,152	7,208	7,301	7,536	7,617	7,848	8,149	8,338	8,285	8,353	8,457
Sweden	4,444	4,418	4,460	4,459	4,418	4,402	4,430	4,489	4,530	4,544	4,567	4,576
United Kingdom	28,094	28,124	28,135	28,243	28,406	28,478	28,782	28,957	29,090	29,340	29,562	29,748
Participation rate[1]												
United States	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2	66.0
Canada	65.5	65.1	64.8	64.6	64.9	65.3	65.7	65.8	65.9	66.7	67.3	67.3
Australia	63.5	63.9	64.5	64.6	64.3	64.3	64.0	64.4	64.4	64.4	64.6	64.7
Japan	63.3	63.1	62.9	63.0	63.2	62.8	62.4	62.0	61.6	60.8	60.3	60.0
France	55.4	55.6	55.4	55.7	55.6	55.9	56.3	56.6	56.9	57.2	57.4	–
Germany	57.8	57.4	57.1	57.1	57.3	57.7	56.9	56.7	56.7	56.5	56.4	–
Italy	48.3	47.6	47.3	47.3	47.3	47.6	47.9	48.1	48.2	48.5	49.1	49.1
Netherlands	57.9	58.6	58.8	59.2	60.8	61.1	62.6	64.5	65.6	64.7	64.9	65.5
Sweden	64.5	63.7	64.1	64.0	63.3	62.8	62.8	63.8	63.7	64.0	64.0	63.7
United Kingdom	62.6	62.4	62.4	62.4	62.5	62.5	62.8	62.9	62.7	62.9	63.0	63.0
Employed												
United States	120,259	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736	139,252
Canada	12,694	12,960	13,185	13,309	13,607	13,946	14,314	14,676	14,866	15,221	15,579	15,864
Australia	7,699	7,942	8,256	8,364	8,444	8,618	8,762	8,989	9,091	9,271	9,481	9,677
Japan	63,820	63,860	63,900	64,200	64,900	64,450	63,920	63,790	63,460	62,650	62,510	62,630
France	21,714	21,750	21,956	22,039	22,169	22,597	23,053	23,693	24,128	24,293	24,293	–
Germany	35,989	35,756	35,780	35,637	35,508	36,061	36,042	36,236	36,346	36,061	35,754	35,796
Italy	20,543	20,171	20,030	20,120	20,165	20,366	20,613	20,969	21,356	21,665	21,973	22,105
Netherlands	6,572	6,664	6,730	6,858	7,163	7,321	7,595	7,912	8,130	8,059	8,035	8,061
Sweden	4,028	3,992	4,056	4,019	3,973	4,034	4,117	4,229	4,303	4,310	4,303	4,276
United Kingdom	25,165	25,691	25,696	25,945	26,418	26,691	27,056	27,373	27,604	27,817	28,079	28,334
Employment-population ratio[2]												
United States	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3	62.3
Canada	58.4	58.9	59.2	59.0	59.5	60.3	61.2	61.9	61.9	62.4	63.0	63.4
Australia	56.8	57.8	59.2	59.3	59.0	59.3	59.6	60.3	60.1	60.3	60.7	61.2
Japan	61.7	61.3	60.9	60.9	61.0	60.2	59.4	59.0	58.4	57.5	57.1	57.1
France	49.2	49.0	49.2	49.1	49.1	49.7	50.4	51.5	52.1	52.1	51.9	–
Germany	53.2	52.6	52.4	52.0	51.6	52.3	52.1	52.2	52.2	51.6	51.0	–
Italy	43.6	42.5	42.0	42.0	41.9	42.2	42.6	43.2	43.8	44.3	44.9	45.1
Netherlands	54.3	54.6	54.9	55.6	57.8	58.7	60.6	62.7	63.9	62.9	62.4	62.4
Sweden	58.5	57.6	58.3	57.7	56.9	57.6	58.4	60.1	60.5	60.7	60.3	59.5
United Kingdom	56.0	57.0	57.0	57.3	58.2	58.5	59.1	59.4	59.5	59.6	59.8	60.0
Unemployed												
United States	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774	8,149
Canada	1,538	1,376	1,254	1,295	1,256	1,169	1,075	956	1,026	1,146	1,150	1,092
Australia	914	829	739	751	759	721	652	602	661	636	611	567
Japan	1,660	1,920	2,100	2,250	2,300	2,790	3,170	3,200	3,400	3,590	3,500	3,130
France	2,776	2,926	2,787	2,946	2,940	2,837	2,711	2,385	2,226	2,393	2,577	2,630
Germany	3,113	3,318	3,200	3,505	3,907	3,693	3,333	3,065	3,109	3,438	3,838	3,899
Italy	2,227	2,421	2,544	2,555	2,584	2,634	2,559	2,388	2,164	2,062	2,048	1,960
Netherlands	442	489	478	443	374	296	253	237	208	227	318	396
Sweden	416	426	404	440	445	368	313	260	227	234	264	300
United Kingdom	2,930	2,433	2,439	2,298	1,987	1,788	1,726	1,584	1,486	1,524	1,484	1,414
Unemployment rate												
United States	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0	5.5
Canada	10.8	9.6	8.7	8.9	8.4	7.7	7.0	6.1	6.5	7.0	6.9	6.4
Australia	10.6	9.4	8.2	8.2	8.3	7.7	6.9	6.3	6.8	6.4	6.1	5.5
Japan	2.5	2.9	3.2	3.4	3.4	4.1	4.7	4.8	5.1	5.4	5.3	4.8
France	11.3	11.9	11.3	11.8	11.7	11.2	10.5	9.1	8.4	9.0	9.6	9.8
Germany	8.0	8.5	8.2	9.0	9.9	9.3	8.5	7.8	7.9	8.7	9.7	9.8
Italy	9.8	10.7	11.3	11.3	11.4	11.5	11.0	10.2	9.2	8.7	8.5	8.1
Netherlands	6.3	6.8	6.6	6.1	5.0	3.9	3.2	2.9	2.5	2.7	3.8	4.7
Sweden	9.4	9.6	9.1	9.9	10.1	8.4	7.1	5.8	5.0	5.1	5.8	6.6
United Kingdom	10.4	8.7	8.7	8.1	7.0	6.3	6.0	5.5	5.1	5.2	5.0	4.8

[1] Labor force as a percent of the working-age population.

[2] Employment as a percent of the working-age population.

NOTE: Dash indicates data not available. See "Notes on the data" for for information on breaks in series.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, 'Ten Countries, 1960–2004* (Bureau of Labor Statistics, May 13, 2005), on the Internet at **http://www.bls.gov/fls/home.htm.**

54. Annual indexes of manufacturing productivity and related measures, 15 economies

[1992 = 100]

Measure and economy	1960	1970	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Output per hour																
United States	–	0.0	70.5	96.9	97.9	102.1	107.3	113.8	117.0	121.3	126.5	132.8	143.5	145.2	160.0	171.0
Canada	37.8	54.9	72.9	93.4	95.3	105.8	110.8	112.4	109.7	113.5	115.5	122.1	129.3	127.0	130.5	132.1
Australia	–	–	69.5	91.6	96.4	106.1	104.9	105.8	113.6	115.2	118.5	119.9	128.0	132.4	136.2	140.7
Japan	13.9	37.7	63.6	94.4	99.0	101.7	103.3	111.0	116.1	121.0	121.2	126.7	135.9	135.9	139.9	146.2
Korea	–	–	–	81.5	91.6	108.5	118.2	129.3	142.3	160.4	178.8	198.9	215.8	214.3	235.2	256.4
Taiwan	–	–	47.6	88.8	96.5	102.8	106.7	115.1	123.1	129.3	135.9	143.4	151.0	160.8	170.9	177.2
Belgium	18.0	32.9	65.4	96.8	99.1	102.5	108.4	113.2	116.3	125.5	126.9	125.5	130.8	132.6	141.7	146.2
Denmark	25.2	46.3	83.2	98.4	100.3	100.2	112.6	112.5	109.8	118.0	117.4	123.1	126.6	127.2	131.3	136.9
France	19.9	39.0	61.6	93.9	97.0	101.0	108.9	114.4	114.7	121.7	127.9	133.0	142.5	148.0	155.1	158.0
Germany	29.2	52.0	77.2	99.0	98.3	101.8	109.6	112.3	114.7	120.4	122.0	121.4	127.0	127.8	131.0	134.4
Italy	24.6	46.2	78.6	96.6	96.1	101.2	104.8	107.9	108.3	110.3	110.8	110.6	113.5	114.0	112.1	110.9
Netherlands	18.8	38.5	69.1	98.7	99.0	102.0	113.1	117.3	119.3	121.4	124.1	127.0	132.7	132.5	135.4	–
Norway	37.6	59.1	77.9	98.1	98.2	99.6	99.6	100.7	102.5	102.0	99.9	103.6	106.6	109.8	111.7	113.5
Sweden	27.3	52.2	73.1	94.6	95.5	107.3	117.8	124.5	129.5	141.0	149.5	162.7	175.5	170.3	185.6	196.5
United Kingdom	30.0	43.2	54.3	89.2	93.9	103.8	108.0	106.2	105.4	106.9	108.4	113.6	121.0	125.1	127.7	134.8
Output																
United States	–	–	75.8	101.6	98.3	103.5	111.1	118.4	121.3	127.9	133.1	138.9	147.6	139.6	142.9	145.4
Canada	33.4	58.9	83.6	106.0	99.0	105.9	114.1	119.6	119.6	127.7	133.9	144.9	159.2	153.6	158.0	157.3
Australia	–	–	89.8	104.1	100.7	103.8	109.1	108.7	112.6	115.1	118.6	118.3	123.8	123.8	128.7	130.2
Japan	10.8	39.4	60.8	97.1	102.0	96.3	94.9	98.9	103.0	106.5	100.2	101.9	109.2	105.5	103.4	106.7
Korea	–	7.0	29.9	86.7	95.0	105.4	116.8	129.9	138.3	145.0	133.5	162.6	190.2	194.3	209.1	219.1
Taiwan	–	12.7	44.0	90.0	96.1	102.4	108.5	114.9	120.3	128.3	132.6	141.5	151.8	143.1	152.1	160.9
Belgium	30.7	57.6	78.2	101.0	100.7	97.0	101.4	104.2	105.9	112.7	114.4	114.4	119.9	120.4	121.6	120.9
Denmark	42.0	72.7	94.3	101.7	100.7	97.0	107.3	112.6	107.7	115.9	116.7	117.9	121.9	121.6	120.8	121.4
France	27.9	57.7	81.6	99.1	99.8	95.7	100.3	104.9	104.6	109.7	115.0	118.7	124.3	128.0	129.1	128.5
Germany	41.5	70.9	85.3	99.1	102.3	92.4	95.1	95.2	92.5	95.7	97.7	95.8	100.1	99.9	99.6	99.8
Italy	23.0	48.1	84.4	99.4	99.3	96.5	102.4	107.2	105.4	108.8	110.7	110.3	113.6	113.0	111.7	110.2
Netherlands	31.9	59.8	76.9	99.0	99.8	97.7	104.5	108.2	108.9	111.6	114.9	117.6	122.8	121.9	121.0	117.6
Norway	57.7	91.0	104.9	101.4	99.0	101.7	104.6	107.3	110.3	114.2	113.7	113.6	112.8	112.3	111.5	107.3
Sweden	45.9	80.7	90.7	110.1	104.1	101.9	117.0	131.9	136.4	146.5	158.3	172.5	188.3	183.1	190.6	194.4
United Kingdom	67.5	90.2	87.2	105.3	100.1	101.5	106.2	107.8	108.6	110.7	111.3	112.1	115.0	113.4	109.9	110.3
Total hours																
United States	92.1	104.4	107.5	104.8	100.4	101.4	103.6	104.0	103.6	105.4	105.2	104.6	102.9	96.2	89.3	85.0
Canada	88.3	107.1	114.6	113.5	103.9	100.1	103.0	106.4	109.0	112.4	115.9	118.7	123.1	120.9	121.1	119.1
Australia	–	–	129.2	113.6	104.4	97.8	103.9	102.8	99.1	100.0	100.1	98.7	96.7	93.5	94.5	92.5
Japan	77.8	104.3	95.5	102.9	103.1	94.7	91.9	89.1	88.7	88.0	82.7	80.4	80.3	77.7	74.0	73.0
Korea	–	–	–	106.5	103.7	97.1	98.8	100.4	97.2	90.4	74.7	81.8	88.1	90.7	88.9	85.4
Taiwan	–	–	92.4	101.4	99.6	99.6	101.7	99.8	97.7	99.2	97.6	98.7	100.5	89.0	89.0	90.8
Belgium	170.7	174.7	119.7	104.3	101.5	94.7	93.6	92.0	91.0	89.8	90.2	91.2	91.7	90.8	85.8	82.7
Denmark	166.7	157.1	113.4	103.3	100.5	96.7	95.2	100.1	98.1	98.2	99.4	95.8	96.3	95.6	92.0	88.7
France	140.3	147.8	132.5	105.6	102.9	94.7	92.1	91.7	91.2	90.2	89.9	89.2	87.2	86.5	83.2	81.3
Germany	142.3	136.3	110.5	100.1	104.1	90.8	86.8	84.8	80.6	79.5	80.1	78.9	78.8	78.2	76.1	74.3
Italy	93.5	104.0	107.4	102.9	103.3	95.4	97.7	99.4	97.3	98.6	99.9	99.8	100.1	99.1	99.7	99.3
Netherlands	169.8	155.5	111.2	100.3	100.8	95.8	92.4	92.3	91.2	91.9	92.6	92.6	92.5	92.0	89.4	–
Norway	153.6	153.9	134.7	103.4	100.8	102.1	105.0	106.6	107.6	112.0	113.7	109.6	105.9	102.3	99.8	94.5
Sweden	168.3	154.7	124.0	116.4	109.0	94.9	99.4	105.9	105.3	103.9	105.9	106.0	107.3	107.5	102.7	98.9
United Kingdom	224.6	208.8	160.5	118.1	106.6	97.7	98.4	101.5	103.1	103.5	102.7	98.7	95.0	90.7	86.0	81.9
Hourly compensation (national currency basis)																
United States	14.9	23.7	55.6	90.8	95.6	102.7	105.6	107.9	109.4	111.5	117.4	122.0	133.2	136.3	145.4	157.8
Canada	10.0	17.1	47.5	88.3	95.0	102.0	103.7	106.0	107.0	109.3	111.7	115.8	119.6	123.7	126.8	131.4
Australia	–	–	–	86.3	94.0	105.9	104.3	113.2	122.8	124.6	128.2	133.0	140.0	149.5	154.7	–
Japan	4.3	16.4	58.6	90.6	96.5	102.7	104.7	108.3	109.1	112.6	115.4	114.8	113.7	114.6	122.8	123.8
Korea	–	–	–	68.6	86.2	114.3	129.8	158.3	184.3	200.3	218.2	219.4	234.2	241.7	266.1	290.9
Taiwan	–	–	29.6	85.2	93.5	105.9	111.1	120.2	128.2	132.4	140.3	144.3	146.6	150.0	145.8	146.7
Belgium	5.4	13.7	52.5	90.1	97.3	104.8	106.1	109.2	111.1	115.2	117.0	118.5	120.6	127.2	136.5	–
Denmark	3.9	11.1	45.1	93.5	97.9	102.4	106.0	108.1	112.8	116.6	119.6	127.3	130.2	136.5	143.2	150.0
France	4.3	10.5	41.2	90.9	96.4	103.1	106.5	110.4	112.2	111.8	112.7	116.6	122.8	128.3	135.2	139.1
Germany	8.1	20.7	53.6	89.4	91.5	106.4	111.8	117.6	123.3	125.7	127.6	130.6	137.4	142.0	145.5	148.9
Italy	1.8	5.3	30.4	87.6	94.2	105.7	106.8	111.3	119.0	123.0	122.2	124.2	127.8	132.5	135.7	140.0
Netherlands	6.2	19.4	60.5	89.8	94.8	104.5	109.0	112.1	114.4	117.2	122.0	126.0	132.0	138.2	147.3	–
Norway	4.7	11.8	39.0	92.3	97.5	101.5	104.4	109.2	113.6	118.7	125.7	133.0	140.5	148.9	157.9	164.6
Sweden	4.1	10.7	37.3	87.8	95.5	97.4	99.8	106.8	115.2	121.0	125.6	130.3	136.8	143.8	148.8	154.3
United Kingdom	2.9	6.1	32.0	82.9	93.8	104.5	107.3	108.8	111.4	115.7	123.0	129.9	137.6	144.3	152.2	160.3

See notes at end of table.

54. Continued— Annual indexes of manufacturing productivity and related measures, 15 economies

Measure and economy	1960	1970	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Unit labor costs (national currency basis)																
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.9	92.8	93.9	90.9	92.3
Canada	26.4	31.1	65.2	94.6	99.6	96.4	93.6	94.3	97.5	96.2	96.7	94.9	92.5	97.4	97.2	99.4
Australia	–	–	–	94.2	97.5	99.8	99.4	107.0	108.1	108.2	108.2	110.9	109.4	112.9	113.5	–
Japan	31.1	43.6	92.1	95.9	97.5	101.0	101.4	97.5	94.0	93.0	95.2	90.6	83.6	84.4	87.8	84.7
Korea	–	–	–	84.2	94.1	105.4	109.8	122.4	129.6	124.9	122.0	110.3	108.5	112.8	113.1	113.5
Taiwan	–	23.8	62.2	95.9	96.8	103.0	104.1	104.5	104.1	102.3	103.2	100.7	97.1	93.3	85.3	82.7
Belgium	30.1	41.7	80.3	93.0	98.1	102.3	97.9	96.4	95.5	91.8	92.2	94.4	92.2	95.9	96.4	–
Denmark	15.3	23.9	54.2	95.0	97.6	102.2	94.2	96.1	102.8	98.8	101.9	103.4	102.8	107.3	109.0	109.6
France	21.7	26.8	67.0	96.8	99.3	102.0	97.8	96.5	97.8	91.9	88.1	87.6	86.2	86.6	87.2	88.0
Germany	27.8	39.8	69.4	90.3	93.1	104.5	102.0	104.7	107.5	104.5	104.6	107.6	108.1	111.2	111.1	110.8
Italy	7.2	11.4	38.7	90.7	98.0	104.5	101.9	103.2	109.8	111.4	110.3	112.3	112.6	116.2	121.1	126.2
Netherlands	32.9	50.4	87.6	91.1	95.7	102.4	96.4	95.6	95.9	96.5	98.3	99.1	99.5	104.3	108.8	112.6
Norway	12.6	20.0	50.0	94.2	99.2	101.9	104.8	108.4	110.8	116.4	125.7	128.4	131.9	135.6	141.3	144.9
Sweden	15.0	20.6	51.0	92.9	100.0	90.8	84.7	85.8	89.0	85.8	84.0	80.1	77.9	84.4	80.2	78.6
United Kingdom	9.8	14.1	59.0	93.0	100.0	100.7	99.4	102.5	105.7	108.2	113.5	114.3	113.7	115.4	119.2	118.9
Unit labor costs (U.S. dollar basis)																
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.9	92.8	93.9	90.9	92.3
Canada	32.9	36.0	67.4	98.0	105.1	90.3	82.8	83.0	86.4	84.0	78.8	77.2	75.2	76.0	74.8	85.8
Australia	–	–	–	100.1	103.3	92.3	98.9	107.8	115.1	109.4	92.6	97.3	86.5	79.4	84.0	–
Japan	11.0	15.4	51.5	83.9	91.8	115.3	125.8	131.6	109.5	97.4	92.2	101.0	98.4	88.0	88.9	92.6
Korea	–	–	–	93.0	100.3	102.6	106.8	124.3	126.3	103.4	68.4	72.7	75.3	68.5	71.0	74.7
Taiwan	–	14.9	43.4	89.7	91.1	98.1	99.0	99.2	95.4	89.5	77.4	78.3	78.1	69.4	62.1	60.5
Belgium	19.4	27.0	88.3	89.5	92.3	95.1	94.2	105.2	99.1	82.4	81.6	80.2	67.8	68.4	72.6	–
Denmark	13.4	19.3	58.1	92.7	92.0	95.1	89.4	103.6	107.0	90.2	91.7	89.3	76.7	77.8	83.5	100.6
France	23.4	25.7	83.9	94.1	93.1	95.3	93.4	102.5	101.2	83.3	79.1	75.3	64.2	62.6	66.5	80.4
Germany	10.4	17.1	59.6	87.3	87.5	98.7	98.2	114.2	111.6	94.0	92.9	91.5	79.7	79.5	83.9	100.1
Italy	14.3	22.3	55.7	93.3	97.3	81.8	77.9	78.0	87.7	80.6	78.2	76.2	66.2	66.2	72.9	90.9
Netherlands	15.3	24.5	77.5	87.9	90.0	96.9	93.2	104.8	100.0	87.0	87.2	84.3	73.3	74.5	82.1	101.7
Norway	11.0	17.4	62.9	93.6	95.0	89.2	92.3	106.4	106.6	102.1	103.5	102.2	93.0	93.7	110.0	127.2
Sweden	16.9	23.1	70.2	91.3	96.3	67.8	64.0	70.0	77.3	65.4	61.5	56.4	49.5	47.6	48.1	56.6
United Kingdom	15.6	19.1	77.6	93.9	100.0	85.6	86.2	91.6	93.4	100.4	106.5	104.7	97.6	94.0	101.4	110.0

NOTE: Data for Germany for years before 1991 are for the former West Germany. Data for 1991 onward are for unified Germany. Dash indicates data not available

55. 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.

55. 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.

56. Fatal occupational injuries by event or exposure, 1998-2003

Event or exposure[1]	Fatalities			
	1998-2002	2002[3]	2003	
	average[2]	Number	Number	Percent
Total	6,896	5,534	5,559	100
Transportation incidents	2,549	2,385	2,367	42
Highway incident	1,417	1,373	1,350	24
Collision between vehicles, mobile equipment	696	636	648	12
Moving in same direction	136	155	135	2
Moving in opposite directions, oncoming	249	202	269	5
Moving in intersection	148	146	123	2
Vehicle struck stationary object or equipment in roadway	27	33	17	([4])
Vehicle struck stationary object, or equipment on side of road	281	293	324	6
Noncollision incident	367	373	321	6
Jackknifed or overturned—no collision	303	312	252	5
Nonhighway (farm, industrial premises) incident	358	323	347	6
Overturned	192	164	186	3
Worker struck by a vehicle	380	356	336	6
Rail vehicle	63	64	43	1
Water vehicle	92	71	68	1
Aircraft	235	194	208	4
Assaults and violent acts	910	840	901	16
Homicides	659	609	631	11
Shooting	519	469	487	9
Stabbing	61	58	58	1
Self-inflicted injuries	218	199	218	4
Contact with objects and equipment	963	872	911	16
Struck by object	547	505	530	10
Struck by falling object	336	302	322	6
Struck by flying object	55	38	58	1
Caught in or compressed by equipment or objects	272	231	237	4
Caught in running equipment or machinery	141	110	121	2
Caught in or crushed in collapsing materials	126	116	126	2
Falls	738	719	691	12
Fall to lower level	651	638	601	11
Fall from ladder	113	126	113	2
Fall from roof	152	143	127	2
Fall from scaffold, staging	91	88	85	2
Fall on same level	65	64	69	1
Exposure to harmful substances or environments	526	539	485	9
Contact with electric current	289	289	246	4
Contact with overhead power lines	130	122	107	2
Contact with temperature extremes	45	60	42	1
Exposure to caustic, noxious, or allergenic substances	102	99	121	2
Inhalation of substances	50	49	65	1
Oxygen deficiency	89	90	73	1
Drowning, submersion	69	60	52	1
Fires and explosions	190	165	198	4

[1] Based on the 1992 BLS *Occupational Injury and Illness Classification Manual*. Includes other events and exposures, such as bodily reaction, in addition to those shown separately.

[2] Excludes fatalities from the Sept. 11, 2001, terrorist attacts.

[3] The BLS news release of September 17, 2003, reported a total of 5,524 fatal work injuries for calendar year 2003. Since then, an additional 10 job-related fatalities were identified, bringing the total job-related fatality count for 2002 to 5,534.

[4] Equal to or greater than 0.5 percent.

NOTE: Totals for major categories may include sub-categories not shown separately. Percentages may not add to totals because of rounding.

Retirement Plan Design and the Mobile Workforce

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Originally Posted: September 28, 2005

Today's mobile workforce faces complicated rules and choices regarding the accumulation of retirement income benefits from employer plans.
Lord I was born a ramblin' man,
Tryin' to make a livin' and doin' the best I can.
And when it's time for leavin',
I hope you'll understand,
That I was born a ramblin' man.

While singing about "tryin' to make a livin'" in the 1970s, Dickey Betts and the Allman Brothers Band may not have worried too much about planning for retirement.[1] In contrast, today's "rambling" worker--only 31 percent of workers in 2004 had been with their current employer for 10 or more years[2]--may need to be concerned about the availability of retirement benefits as they move from job to job. Employer-provided retirement income plans, which were traditionally designed to reward those who stayed with the same employer for their entire career, have been modified in many cases to mitigate the effect of switching jobs. Still, employees must be aware of plan rules, because making the wrong move can be costly. For example, consider the following:

- Employees who switch employers typically cannot continue to accrue benefits in the same employer retirement plan.
- Rather, departing employees may have to "cash out" or transfer their accumulated benefits.
- Employer plans often require new employees to work for a period of time before they become a participant in a retirement plan and to complete an additional number of years of service before they gain a nonforfeitable right to their retirement benefits. These rules can limit the accumulation of benefits among job switchers.
- Benefits typically accumulate in employer plans on the basis of years of service, with greater benefits going to those who stay with the same employer for a number of years.

This is the first of two companion articles on the effect of job switching on employer-provided retirement income benefits. The focus of this article is plan features that can affect the benefits of those who switch jobs. The second article, scheduled for publication in the *October* issue of *Compensation and Working Conditions Online*, looks at the options available to employees once they have made the decision to leave an employer that provides retirement income benefits. This present article begins with some background information on job tenure. It then discusses various types of retirement plans and how they are affected by job tenure. The article concludes with a brief discussion of certain kinds of occupations that do not lend themselves to long service, such as limited-term political jobs or professional athletes. Data on employment and retirement income trends from the Bureau of Labor Statistics form the basis for much of this analysis.

Employee Mobility

The much-discussed "mobile workforce" is difficult to measure. Data from surveys of individuals indicate that the median time that workers had been with their current employer was 4.0 years as of January 2004. This median has risen slightly over the last two decades, from 3.5 years in 1983. (See table 1.) Among workers age 25 and over, the percent that have been with their current employer for 10 years or more has held fairly steady since 1983, at just over 30 percent. But these data mask the fact that the percent of men with such long tenure has declined while the opposite is true for women. Not surprisingly, the tenure data also show that as American workers get older, their tenure increases.[3]

Other sources of data describe the mobile workforce in different ways. BLS data on labor turnover from a survey of employers suggest that employees are changing jobs frequently. Over the past few years, for example, nearly 50 million hires

and 50 million separations have occurred in any 12-month period.[4] In some cases, the same workers exited and entered the labor force multiple times. This "churning" of the labor force may make it difficult for such workers to accumulate retirement benefits.

Data from the National Longitudinal Surveys program on the job experience of younger Americans indicate that those born from 1957 to 1964 held an average of 10.2 jobs from ages 18 to 38. The data also show that as they grew older, these baby boomers changed jobs less frequently: They held 4.4 jobs from ages 18 to 22, 3.3 jobs from ages 23 to 27, and 2.6 jobs from ages 28 to 32. Still, many of these workers continued to change jobs fairly frequently well into their 30s. Among those who started a job from ages 33 to 38, 39 percent had ended it in less than a year, and 70 percent had moved on in less than 5 years.[5]

Retirement Plan Design

An individual covered by an employer-sponsored retirement plan who leaves that employer for another job may be impacted in a number of ways. First, many retirement income plans impose eligibility requirements; new employees are not allowed to participate in the plan until they have been working with the employer for a period of time, typically 1 year.[6] Those who switch jobs frequently may not be eligible for retirement benefits from some of their employers or may have gaps in coverage due to eligibility requirements. As table 2 shows, these provisions have been largely consistent over the past two decades.

A second feature of plan design is that plans often include a vesting requirement, which is the amount of service an employee must complete before they obtain a nonforfeitable right to the benefits of the plan. The length of vesting requirements has declined over the past 30 years, in response to changes in pension law designed to lessen the penalties imposed on short-service workers.[7] (See table 3.) Currently, most plans impose a 5-year vesting requirement. Those who leave their job prior to meeting this vesting requirement generally lose all rights to future benefits funded by the employer, although all benefits funded by the employee are fully vested.

Eligibility and vesting features are similar for both defined benefit plans (which specify benefits available to employees at retirement and require employers to provide sufficient funds to pay these benefits) and defined contribution plans (which specify contributions placed in individual employee accounts and identify retirement benefits as the accumulated contributions and earnings in the account). Another similarity between these types of plans is the effect of tenure on the ultimate benefit available from the plan. While plan contributions and benefit payments are structured differently, in each type of plan increases in service generally lead to increases in benefits. Some of the specific differences in the various types of plans are described in the paragraphs that follow.

In a *defined benefit* plan, the relationship between employee tenure and benefit accumulation is often straightforward--the more time you work, the greater the benefit you accumulate. This may be as simple as a one-to-one relationship between years of service and benefit accumulation. For example, a flat dollar-amount defined benefit pension, which is typically available to blue-collar workers covered under a collective bargaining agreement, might provide a monthly pension of $40 per year of service. Employees with 5 years of service would receive $200 per month; those with 6 years of service would receive $240 per month, and so on. Similarly, a flat percent-of-earnings plan, typical of white-collar worker plans, might provide 1 percent of final earnings times the number of years of service. Employees with 10 years of service would receive 10 percent of earnings; those with 11 years of service would receive 11 percent.

The relationship between tenure and benefit accumulation may be more complicated, with some defined benefit plans providing greater benefits for later years of service than for earlier years. For example, a plan may express benefits as 1 percent of final year earnings for each of the first 10 years of service and 1.5 percent of final year earnings for the 11th year and beyond. Under this type of plan, those leaving after 10 years of service would receive benefits equal to 10 percent of final earnings; those leaving after 11 years of service would receive benefits equal to 11.5 percent of final earnings.

The effect of these service-related formulas can be seen in the calculation of replacement rates--the percent of pre-retirement income that will be paid by a defined benefit plan. (See table 4.) Consider an employee who earns $40,000 in the year prior to leaving the employer. The available benefit will vary depending upon the plan formula and years of service. The

replacement rate calculations consider three formulas--one a fixed percentage rate, regardless of the number of years of service, and two others that increase after a certain number of years. Two effects are evident in table 4. First, as the number of years of service increases, benefits increase. This is true regardless of the benefit formula. Beyond that, however, those formulas that increase with service provide greater benefits at greater years of service. At 30 years, the 1-percent formula provides a benefit of 30 percent of earnings; the formulas that increase with service provide as much as 45 percent of earnings.

Additional plan features can increase benefits even further as service increases. For defined benefit formulas that provide a percent of earnings (regardless of the formula), the plan defines how the earnings are to be calculated. Unlike the simple replacement rate examples described previously, most plans use multiple years of earnings and calculate an average of earnings to be used in the benefit formula. Among the earnings calculations found in defined benefit plans are an average of the highest 5 years of earnings or, less often, an average of the highest 3 years of earnings. Some plans add the complexity of looking at the highest 3 or 5 consecutive years of earnings or the highest 5 out of the last 10 years, or some other variation. Assuming that most workers get an increase in salary every year, using earnings in the years closest to the current year will generally provide the greatest benefit. The definition of earnings designated in the formula is yet another way that service affects retirement benefits.

A recent variation on defined benefit plans is known as a *hybrid plan*, which includes cash balance plans and pension equity plans. Hybrid plans identify a lump sum balance that is available to the employee upon retirement and require employers to maintain sufficient funds in the plan to pay the lump sum. In general, the balance in the plan increases with each year of service. And in many cases, the amount added to the balance gets larger as service increases. For example, a plan might specify an annual credit to an employees account equal to 2 percent of earnings for each of the first 5 years of service, 4 percent for the next 10 years of service, and 6 percent for each subsequent year.[8]

In a *defined contribution* plan, increased service results in more years that the employee and employer are making contributions to the employee's account. In addition, increased service means previous contributions have had more time to accumulate earnings. Chart 1 illustrates the effects of compounding on contributions to an employer retirement plan.[9]

In a small number of cases (3 percent of participants in 2002), plans provide greater employer contributions to those with greater service. A typical 401(k) savings plan might indicate that the employee can contribute from 1 percent to 16 percent of earnings, and that the employer will match 50 percent of the first 6 percent of earnings contributed. Thus, if the employee contributed 6 percent or more of earnings, the employer would contribute 3 percent of earnings. In a plan that varies with service, the employer contribution might be 50 percent of the first 6 percent of earnings contributed for those with up to 10 years of service; but it would rise to 75 percent for those with 11 to 20 years of service, and to 100 percent for those with more than 20 years of service. Under such a formula, the maximum employer contribution is 3 percent of earnings for the first 10 years of service, 4.5 percent of earnings for years 11 to 20, and 6 percent of earnings for more than 20 years of service.

While most of the provisions just discussed demonstrate that longer tenure can be more advantageous to plan participants, there is at least one feature of defined contribution plans that favors short service employees. Employers may want to encourage defined contribution plan participation among newer employees to meet certain nondiscrimination tests. By law, pretax contributions to 401(k) plans must not unduly favor highly compensated employees.[10] Plan sponsors are required to comply with this rule by comparing the average pretax contribution of highly paid employees to the contributions of all other employees. Encouraging plan participation among newly hired workers, who typically will not be highly paid, can help plans to pass these nondiscrimination tests. Some plans have gone as far as automatically enrolling newly hired workers into a defined contribution plan, with an automatic contribution amount and an investment profile. While workers can opt out of such a plan, studies indicate that workers often maintain their participation.[11] BLS first explored this topic in its benefits survey in 2002 and found that 5 percent of those enrolled in 401(k) savings plans were covered by an automatic enrollment feature.

Short-service Occupations

A few unique occupations may not lend themselves to long service--for example, politicians and professional athletes. Politicians run the risk of not being re-elected, or may have legal limits imposed on their number of terms in office. For example, governors in many States are limited to two full terms in office (typically 8 years) and some State legislatures have similar limits. Professional athletes generally can maintain a high level of performance or endure the physical challenges of their job only for a limited number of years. In these cases, the occupations do not allow for an accumulation of a lifetime of service. The special circumstances of these occupations are taken into account in their retirement benefits.

Many government employee retirement plans have special provisions for elected officials to prevent them from being penalized for term limits or lost elections. For example, a plan may allow elected officials to be eligible for benefits at the plan's earliest retirement age (typically age 55) after only a few years of service. Nonelected employees may have the same retirement age requirement, but typically they would have to meet a longer service requirement. Similarly, the provisions of the National Football League retirement plan are designed to provide benefits to short-service athletes. Players must be on the roster of an NFL team for at least three seasons to qualify for benefits, with benefits increasing as the number of seasons increases.[12]

What Can A Worker Do After Leaving A Job?

So what about a worker who is not a governor or a quarterback but still had a short career with his or her last employer? Such workers face a decision regarding their accumulated retirement benefits. In the next issue of *Compensation and Working Conditions Online*, the companion article "Preretirement Distributions: Can you take them with you?" attempts to answer this question by looking at the consequences of leaving an employer and the various options available to such workers.

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Notes

1 "Ramblin' Man," words and music by Dickey Betts, Unichappell Music Inc. and F.R. Betts Music Co., 1973; from the album *Brothers and Sisters* by the Allman Brothers Band (Capricorn Records, released 1973).

2 See *Employee Tenure in 2004*, USDL 04-1829 (U.S. Department of Labor), September 21, 2004, table 2; on the Internet at http://www.bls.gov/news.release/pdf/tenure.pdf. The data in this news release are from the Current Population Survey (CPS); the cited figures are for wage and salary workers aged 25 years and over.

3 *Ibid*. For background information on the concept of employee tenure and how to interpret the data, see the technical note.

4 These data are from the Job Openings and Labor Turnover Survey. For more information on this survey, see Kelly A. Clark, "The Job Opening and Labor Turnover Survey: what initial data show," *Monthly Labor Review*, November 2004, pp. 14-23.

5 See *Number of Jobs Held, Labor Market Activity, and Earnings Growth Among Younger Baby Boomers: Recent Results from a Longitudinal Survey*, USDL 04-1678 (U.S. Department of Labor), August 25, 2004; on the Internet at http://www.bls.gov/news.release/pdf/nlsoy.pdf.

6 Unless otherwise indicated, all data on benefit provisions are from the BLS National Compensation Survey. See *National Compensation Survey: Employee Benefits in Private Industry in the United States, 2002-2003*, Bulletin 2573 (Bureau of Labor Statistics, January 2005); on the Internet at http://www.bls.gov/ncs/ebs/sp/ebbl0020.pdf.

7 For more information on changes to vesting schedules, see John W. Thompson, "Defined Benefit Plans at the Dawn of ERISA," *Compensation and Working Conditions Online*, March 30, 2005.

8 For more information on hybrid defined benefit plans, see Kenneth R. Elliott and James H. Moore, Jr., "Cash Balance Pension Plans: The New Wave," *Compensation and Working Conditions*, Summer 2000, pp. 3-11; and L. Bernard Green, "What is a Pension Equity Plan?," *Compensation and Working Conditions Online*, October 29, 2003.

9 For a study on the effect of compound interest on employer defined contribution plans, see Michael Bucci, "Contributions to savings and thrift plans," *Monthly Labor Review*, November 1990, pp. 28-36.

10 Section 401(k) of the Internal Revenue code identifies a feature of defined contribution plans that allows employees to contribute pretax funds. Most often, 401(k) features are part of savings and thrift plans, with employee pretax funds matched (in whole or in part) by employer funds. Such plans are often referred to as "401(k) plans." Another feature of these plans is that they do not discriminate in favor of highly compensated employees. To ensure this, plans are required to conduct nondiscrimination tests to compare pretax contributions of different groups of workers. For information on these tests and recent changes to them, see "Treasury and IRS Finalize Comprehensive Rules for 401(k) Plans," JS-2171 (U.S. Department of Treasury), December 28, 2004.

11 For more information on automatic enrollment plans, see Brigitte C. Madrian and Dennis F. Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *The Quarterly Journal of Economics*, (November 2001), pp. 1149-87.

12 One example of special provisions for elected officials is the special treatment of members of Congress within the Federal Employees Retirement System (FERS). For details on these special provisions, see the website of the U.S. Office of Personnel Management at http://www.opm.gov/fers_election/ri_90/f_seg.htm, visited August 6, 2005. For more information on the National Football League retirement plan, see the NFL website at http://www.nfl.com/news/story/5356696, visited August 6, 2005.

Table 1. Employee tenure with current employer, employed wage and salary workers, 1983-2004

	January 1983	January 1987	January 1991	February 1996	February 1998	February 2000	February 2002	January 2004
Median years of tenure by age group								
16 years and over	3.5	3.4	3.6	3.8	3.6	3.5	3.7	4.0
25 years and over	5.0	5.0	4.8	5.0	4.7	4.7	4.7	4.9
25-34	3.0	2.9	2.9	2.8	2.7	2.6	2.7	2.9
35-44	5.2	5.5	5.4	5.3	5.0	4.8	4.6	4.9
45-54	9.5	8.6	8.9	8.3	8.1	8.2	7.6	7.7
55-64	12.2	11.6	11.1	10.2	10.1	10.0	9.9	9.6
65 and older	9.6	9.5	8.1	8.4	7.8	9.4	8.6	9.0
Percent of employees 25 years and over with 10 or more years of tenure by gender								
All workers	31.9	30.7	32.2	30.5	30.7	31.5	30.8	30.6
Men	37.7	35.0	35.9	33.1	32.7	33.4	32.6	32.4
Women	24.9	25.7	28.2	27.6	28.4	29.5	28.8	28.6

Source: Employee Tenure in 2004, USDL 04-1829 (U.S. Department of Labor), September 21, 2004, tables 1, 2.

Table 2. Eligibility requirement information for retirement plan participants(1), 1982-2002

Year	Percent required to work a specified length of service	Average service requirement
Defined benefit plans		
1982	57	-
1983	60	-
1984	60	-
1985	56	-
1986	56	-
1988	63	-

Footnotes:
(1) Data are generally for full-time workers in larger private industry establishments.
(2) Data are for savings and thrift plans, which typically have been the most prevalent type of defined contribution plan.

NOTE: Dashes indicate data not available.

Year	Percent required to work a specified length of service	Average service requirement
1989	61	-
1991	67	-
1993	62	11.2 months
1995	66	11.6 months
1997	65	11.7 months
2000	68	11.8 months
2002	67	11 months
Defined contribution (savings and thrift) plans (2)		
1985	86	-
1986	89	-
1988	84	-
1989	84	-
1991	80	-
1993	79	10.8 months
1995	67	11.3 months
1997	75	10 months
2002	75	9.1 months

Footnotes:
(1) Data are generally for full-time workers in larger private industry establishments.
(2) Data are for savings and thrift plans, which typically have been the most prevalent type of defined contribution plan.

NOTE: Dashes indicate data not available.

Table 3. Percent of participants in defined benefit pension plans by vesting provisions, 1980-2002

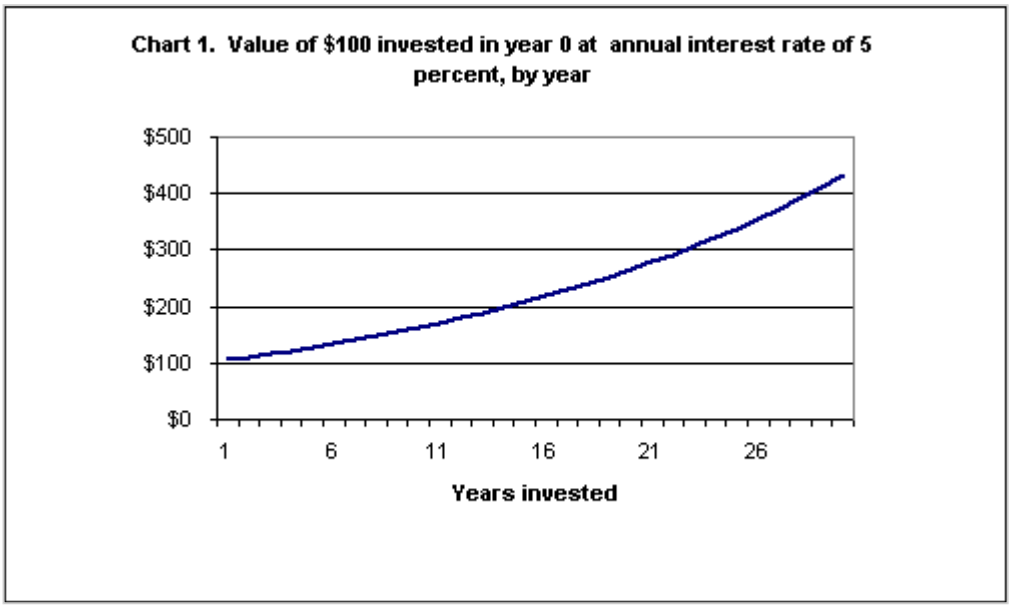
Year	10 year cliff vesting(1)	5 year cliff vesting(1)	Other vesting provision(2)
1980	89	-	11
1985	86	-	14
1989	38	50	12
1995	6	90	4
2000	1	91	8
2002	1	82	17

Footnotes:
(1) Under cliff vesting, no benefit is available until the specified years of service are met.
(2) Other vesting provisions include cliff vesting at different years, graded vesting (which gives employees the right to an increasing amount of benefit over time), immediate vesting, and cases where the vesting provisions are unknown.

NOTE: Dashes indicate data not available.

Table 4. Example of replacement rates from defined benefit plans with differing formulas

Benefit formula	Benefit amount/Amount replaced	10 years	11 years	20 years	30 years
1 percent	Annual benefit	$4,000	$4,400	$8,000	$12,000
	Replacement rate	10 percent	11 percent	20 percent	30 percent
1 percent up to 10 years; 1.5 percent thereafter	Annual benefit	$4,000	$4,600	$10,000	$16,000
	Replacement rate	10 percent	11.5 percent	25 percent	40 percent
1 percent up to 10 years; 1.5 percent up to 20 years; 2 percent thereafter	Annual benefit	$4,000	$4,600	$10,000	$18,000
	Replacement rate	10 percent	11.5 percent	25 percent	45 percent
Note: All calculations assume final earnings of $40,000 per year.					



Data for Chart. Value of $100 invested in year 0 at annual interest rate of 5 percent, by year

After Year Number...	Value
1	$105.00
2	$110.25
3	$115.76
4	$121.55
5	$127.63
6	$134.01
7	$140.71
8	$147.75
9	$155.13
10	$162.89
11	$171.03

After Year Number...	Value
12	$179.59
13	$188.56
14	$197.99
15	$207.89
16	$218.29
17	$229.20
18	$240.66
19	$252.70
20	$265.33
21	$278.60
22	$292.53
23	$307.15
24	$322.51
25	$338.64
26	$355.57
27	$373.35
28	$392.01
29	$411.61
30	$432.19