

# News

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Department  
of Labor



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## EMPLOYMENT COST INDEX—DECEMBER 1998

The Employment Cost Index (ECI), not seasonally adjusted, for December 1998 was 139.8 (June 1989=100), an increase of 3.4 percent from December 1997, the U.S. Department of Labor's Bureau of Labor Statistics reported today. The ECI measures changes in compensation costs, which include wages, salaries, and employer costs for employee benefits.

### Quarterly changes, seasonally adjusted

On a seasonally adjusted basis, compensation costs for civilian workers (private industry plus state and local government) rose 0.7 percent during the September-December 1998 period, following a gain of 1.0 percent in September 1998. Wages and salaries also increased 0.7 percent during the September-December 1998 period. The increase was 1.2 percent in the June-September 1998 period. Benefit costs increased 0.6 percent in the September-December 1998 period; for each of the two previous quarters, the increase was 0.8 percent.

Table A. 3-month percent changes in Employment Cost Index, seasonally adjusted

Compensation Component	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998	Dec. 1998
<b>Civilian workers</b>								
Compensation costs	0.7	0.8	0.8	1.0	0.7	0.9	1.0	0.7
Wages and salaries	0.8	0.9	0.9	1.1	0.8	0.9	1.2	0.7
Benefit costs	0.3	0.5	0.5	0.8	0.4	0.8	0.8	0.6
<b>Private industry</b>								
Compensation costs	0.6	0.9	0.8	1.0	0.7	0.9	1.1	0.7
Wages and salaries	0.9	0.9	1.0	1.1	0.8	1.0	1.3	0.7
Benefit costs	0.1	0.6	0.5	0.9	0.3	0.8	0.7	0.6
<b>State and local government</b>								
Compensation costs	0.6	0.5	0.6	0.6	0.8	0.7	0.8	0.6
Wages and salaries	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.8
Benefit costs	0.4	0.3	0.3	0.3	0.8	0.7	1.0	0.4

Compensation costs for private industry workers increased 0.7 percent during the September-December 1998 period; in September, the increase was 1.1 percent. The 3-month change in costs of wages and salaries was 0.7 percent in December 1998; in September, it was 1.3 percent. Benefit costs rose 0.6 percent in December 1998; in September, the increase was 0.7 percent. (See tables A and 1.)

The change in compensation costs for workers in the goods-producing industries was 0.6 percent during the September-December period and 0.7 percent in the previous 3-month period. The change in compensation costs in the service-producing industries was 0.8 percent in December 1998, down from 1.3 percent in September 1998. The 3-month change in wages and salaries in the service-producing industries was 0.7 percent after a 1.5 percent gain in September. Benefit costs rose 0.8 percent in December for workers in the service-producing industries, the same gain as in September. (See table 1.)

Compensation costs for state and local government workers increased 0.6 percent during the September-December 1998 period, following a gain of 0.8 percent in September. Wages and salaries increased 0.8 percent in December, following gains of 0.7 percent in each of the previous three quarters. Benefit costs increased 0.4 percent in the December quarter; the previous quarterly increase was 1.0 percent. (See tables A and 1.)

#### Over-the-year changes, not seasonally adjusted

Compensation costs for civilian workers (not seasonally adjusted) were up 3.4 percent for the year ended in December 1998. This compares with increases of 3.3 percent in December 1997 and 2.9 percent in December 1996. Compensation costs in private industry rose 3.5 percent in December 1998, compared with a 3.4 percent increase in December 1997 and 3.1 percent in December 1996. Compensation costs for state and local governments increased 3.0 percent for the year ended in December 1998. The gain in local and state governments for the year ended in December 1997 was 2.3 percent, and, in December 1996, the increase was 2.6 percent. (See tables B, 2, and 3.)

#### Private industry

In private industry, wages and salaries rose 3.9 percent for the year ended in December 1998, the same as reported for the year ended in December 1997. (See tables B and 6.) Benefit costs for private industry workers increased 2.4 percent for the year ended in December 1998, compared with 2.3 percent in December 1997. (See chart A and tables B and 8.)

In private industry, over-the-year compensation cost increases were 3.9 percent for white-collar occupations, 2.7 percent for blue-collar occupations, and 2.9 percent for service occupations. Among the occupational groups, changes in compensation costs ranged from 1.4 percent for transportation and material moving occupations to 6.8 percent for sales occupations. Compensation costs for executive, administrative, and managerial occupations increased 3.2 percent. (See table 3.)

Table B. 12-month percent changes in Employment Cost Index, not seasonally adjusted

Compensation Component	Dec. 1993	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	Dec. 1998
<b>Civilian workers</b>						
Compensation costs	3.5	3.0	2.7	2.9	3.3	3.4
Wages and salaries	3.1	2.8	2.9	3.3	3.8	3.7
Benefit costs	4.6	3.4	2.3	2.0	2.1	2.6
<b>Private industry</b>						
Compensation costs	3.6	3.1	2.6	3.1	3.4	3.5
Wages and salaries	3.1	2.8	2.8	3.4	3.9	3.9
Benefit costs	5.0	3.7	2.2	2.0	2.3	2.4
<b>State and local government</b>						
Compensation costs	2.8	3.0	2.9	2.6	2.3	3.0
Wages and salaries	2.7	3.1	3.2	2.8	2.7	3.1
Benefit costs	2.9	2.8	2.6	2.2	1.3	3.0

The changes in private industry compensation costs were 3.8 percent in service-producing industries and 2.8 percent in goods-producing industries for the year ended December 1998. Compensation costs had risen 3.9 percent in service-producing industries and 2.4 percent in goods-producing industries in the prior year. Among industry divisions, December 1997-to-December 1998 changes ranged from 2.7 percent in manufacturing to 5.9 percent in finance, insurance, and real estate. (See table 3.)

The changes in compensation costs for nonunion workers in private industry were reported at 3.5 percent, while costs for union workers were 3.0 percent. Compensation costs in service-producing industries increased 3.9 percent for nonunion workers and 3.0 percent for union workers. At the same time, compensation costs in goods-producing industries increased 3.0 percent for union workers and 2.7 percent for nonunion workers. In manufacturing, the total compensation increase was 2.7 percent for union workers and 2.6 percent for nonunion workers. Compensation in blue-collar occupations increased 2.8 percent for both union and nonunion workers. (See table 4.)

#### State and local government

In state and local governments, the December 1998 over-the-year increase in wages and salaries was 3.1 percent, less than the 3.9 percent recorded in private industry. In December 1997, the increase was 2.7 percent. The December 1998 increase includes health services at 2.9 percent, educational services at 3.0 percent, and public administration at 3.4 percent. State and local government benefit costs for December 1998 increased 3.0 percent, up from the December 1997 increase of 1.3 percent. (See tables 5 and 8.)

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#### NOTES:

Starting in March 1999, seasonal adjustment factors will be published to reflect the new seasonal patterns exhibited over the past year. The new factors for 1999, along with revised seasonally adjusted indexes for the past five years, will be available Tuesday, April 27, 1999. These data can be obtained on the Internet site (<http://stats.gov/ecthome.htm>) or upon request.

The ECI for March 1999 is scheduled to be released Thursday, April 29, 1999, at 8:30 a.m. (EDT).

ECI data are available on the ECI home page (<http://stats.bls.gov/ecthome.htm>). To access data using Anonymous FTP, use the Internet address (<ftp://ftp.bls.gov>).

Send e-mail for technical assistance in using the BLS Internet site ([labstat.helpdesk@bls.gov](mailto:labstat.helpdesk@bls.gov)) or for ECI data requests ([ocltinfo@bls.gov](mailto:ocltinfo@bls.gov)).

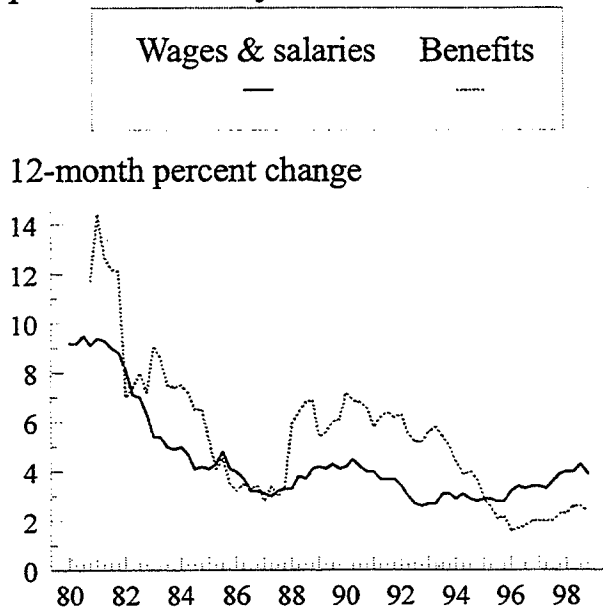
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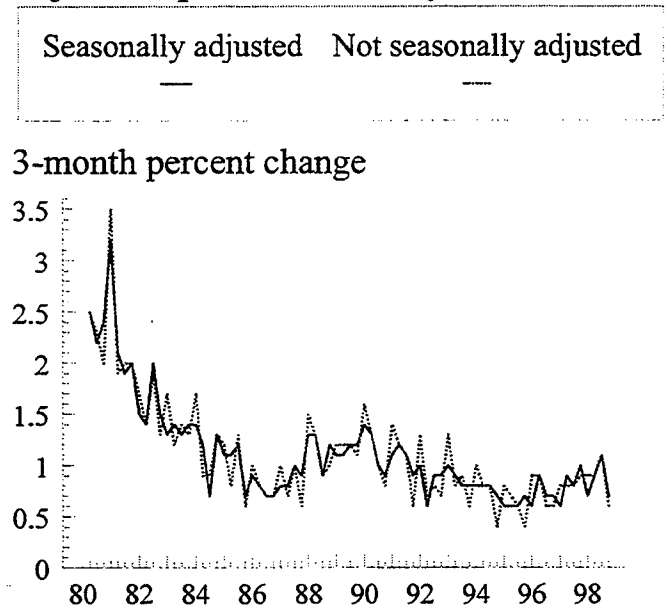
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# Employment Cost Index

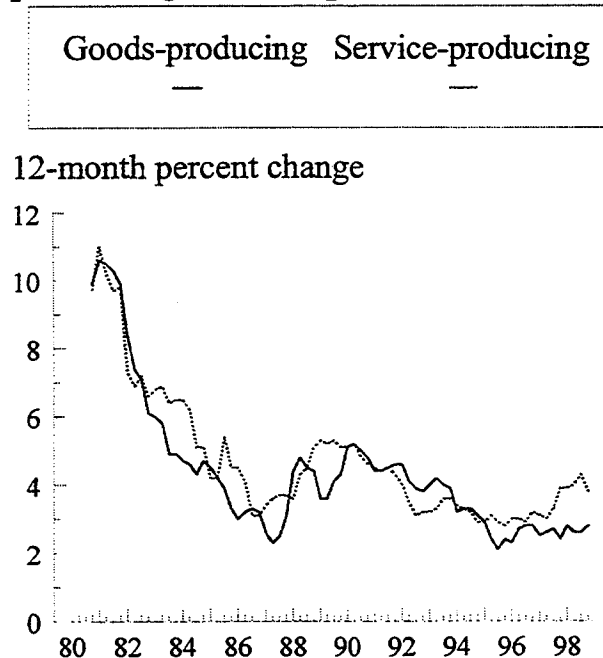
**Chart A. Changes in wages and salaries and benefit costs, private industry**



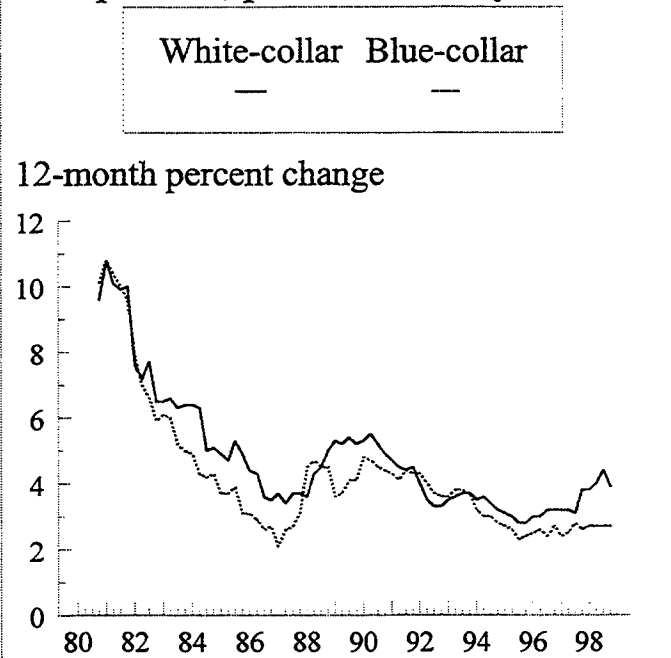
**Chart B. Changes in compensation, seasonally adjusted and not seasonally adjusted, private industry**



**Chart C. Changes in compensation, goods-producing and service-producing sectors, private industry**



**Chart D. Changes in compensation, white-collar and blue-collar occupations, private industry**



Bureau of Labor Statistics, Office of Compensation Levels and Trends

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**Table 1. Employment Cost Index for total compensation<sup>1</sup>, wages and salaries, and benefit costs by industry and occupational group**

(Seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)		Percent changes for 3-months ended—							
	Sep. 1998	Dec. 1998	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998	Dec. 1998
<b>TOTAL COMPENSATION</b>										
Civilian workers .....	138.7	139.7	0.7	0.8	0.8	1.0	0.7	0.9	1.0	0.7
State and local government .....	138.6	139.5	.6	.5	.6	.6	.8	.7	.8	.6
Private industry .....	138.7	139.7	.6	.9	.8	1.0	.7	.9	1.1	.7
<b>Industry</b>										
Goods producing <sup>2</sup> .....	137.1	137.9	.3	.9	.8	.4	.6	.9	.7	.6
Construction <sup>3</sup> .....	133.1	134.6	.6	.8	.7	.5	.7	1.2	.5	1.1
Manufacturing .....	138.2	138.9	.3	.8	.7	.5	.7	.5	.9	.5
Durables .....	138.5	139.3	.2	.8	.7	.6	.5	.6	.9	.6
Nondurables .....	137.8	138.3	.4	.9	.8	.5	.9	.5	1.0	.4
Service producing <sup>4</sup> .....	139.5	140.6	.8	.8	.9	1.3	.7	.9	1.3	.8
Transportation and public utilities <sup>5</sup> .....	138.6	139.3	.4	.7	.8	1.0	1.0	1.3	.9	.5
Wholesale trade <sup>3</sup> .....	140.8	143.0	1.4	.4	.8	.5	1.8	.4	1.8	1.6
Retail trade .....	135.6	135.6	1.1	.7	.9	.6	1.3	.7	.9	.0
Finance, insurance, and real estate <sup>3,6</sup> .....	141.0	142.5	2.1	.6	.9	3.1	1.6	1.2	1.9	1.1
Services .....	141.8	142.8	.7	.9	1.0	1.2	.4	.8	1.1	.7
Nonmanufacturing .....	138.8	139.9	.8	.8	.8	1.3	.7	1.0	1.2	.8
<b>Occupational group</b>										
White collar .....	141.1	142.2	.8	.8	.9	1.3	.8	.9	1.3	.8
Blue collar .....	135.1	136.1	.3	.8	.8	.7	.5	.8	.7	.7
Service .....	137.0	137.4	.9	.9	1.6	.5	1.0	.7	.9	.3
<b>WAGES AND SALARIES</b>										
Civilian workers .....	136.7	137.7	.8	.9	.9	1.1	.8	.9	1.2	.7
State and local government .....	137.1	138.2	.6	.6	.7	.8	.7	.7	.7	.8
Private industry .....	136.6	137.6	.9	.9	1.0	1.1	.8	1.0	1.3	.7
<b>Industry</b>										
Goods producing <sup>2,6</sup> .....	134.3	135.2	.6	1.1	.8	.5	1.1	.9	.8	.7
Construction <sup>3</sup> .....	128.2	129.5	1.1	.9	.8	.6	1.0	1.3	.2	1.0
Manufacturing <sup>6</sup> .....	136.0	136.8	.5	.9	.8	.7	1.1	.7	1.0	.6
Durables <sup>6</sup> .....	135.9	136.9	.5	.9	.8	.5	1.1	.8	1.0	.7
Nondurables .....	136.1	136.9	.5	.9	.8	.9	1.1	.4	1.0	.6
Service producing <sup>4</sup> .....	137.6	138.6	.9	.9	1.1	1.4	.8	1.0	1.5	.7
Transportation and public utilities <sup>5</sup> .....	134.4	135.0	.8	.8	.9	.8	.5	.8	1.1	.4
Wholesale trade <sup>3</sup> .....	139.3	141.3	1.6	.2	.8	.5	2.2	.2	1.8	1.4
Retail trade .....	135.0	134.8	1.0	1.0	.9	.7	1.1	1.0	1.3	-.1
Finance, insurance, and real estate <sup>3,6</sup> .....	138.1	139.8	1.9	.6	.9	3.3	1.5	1.7	2.4	1.2
Services .....	140.0	140.8	.9	1.1	1.2	1.1	.7	.9	1.2	.6
Nonmanufacturing .....	136.3	137.6	.9	.9	1.0	1.3	.8	1.0	1.2	1.0

See footnotes at end of table.

**Table 1. Employment Cost Index for total compensation<sup>1</sup>, wages and salaries, and benefit costs by industry and occupational group — Continued**

(Seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)		Percent changes for 3-months ended—							
	Sep. 1998	Dec. 1998	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998	Dec. 1998
<b>WAGES AND SALARIES—Continued</b>										
<b>Occupational group</b>										
White collar .....	139.0	140.1	0.9	0.9	1.1	1.3	0.9	1.0	1.5	0.8
Blue collar <sup>6</sup> .....	132.4	133.2	.7	1.0	.8	.6	.9	.8	.8	.6
Service .....	134.4	135.0	.9	1.0	1.6	.7	1.0	.9	.8	.4
<b>BENEFIT COSTS</b>										
Civilian workers .....	143.8	144.6	.3	.5	.5	.8	.4	.8	.8	.6
State and local government .....	142.0	142.6	.4	.3	.3	.3	.8	.7	1.0	.4
Private industry .....	144.2	145.1	.1	.6	.5	.9	.3	.8	.7	.6
<b>Industry</b>										
Goods producing <sup>2</sup> .....	143.0	143.5	-.1	.6	.6	.2	-.3	.6	.5	.3
Manufacturing .....	142.7	143.0	-.3	.8	.5	.4	-.4	.5	.4	.2
Service producing <sup>4</sup> .....	144.9	146.0	.4	.6	.5	1.4	.6	.8	.8	.8
Nonmanufacturing .....	145.0	146.0	.4	.6	.5	1.1	.6	1.0	.8	.7
<b>Occupational group</b>										
White collar .....	146.4	147.8	.4	.5	.3	1.4	.5	.7	.6	1.0
Blue collar .....	140.9	141.6	.1	.4	.6	.2	.1	.8	.4	.5
Service <sup>3</sup> .....	144.8	144.6	.8	.9	1.4	.2	1.1	.2	.8	-.1

<sup>1</sup> Includes wages, salaries, and employer costs for employee benefits.

<sup>2</sup> Includes mining, construction, and manufacturing.

<sup>3</sup> Average standard errors (SE) for the unadjusted series upon which this series is based exceeded 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SEs for estimates in this news release (excluding seasonally adjusted series) will be available on the

Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

<sup>4</sup> Includes transportation, communication, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

<sup>5</sup> Estimates for transportation and public utilities reflect the changes in SIC coding. See Explanatory Notes for further information.

<sup>6</sup> No identifiable seasonality was found for this series.

**Table 2. Employment Cost Index for total compensation<sup>1</sup> for civilian and State and local government workers by industry and occupational group**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Civilian workers</b> .....	135.2	139.0	139.8	0.8	1.2	0.6	3.3	3.7	3.4
Excluding sales occupations .....	135.3	138.8	139.5	.8	1.0	.5	3.1	3.4	3.1
<b>Industry</b>									
Goods producing <sup>2</sup> .....	134.1	137.2	137.9	.4	.7	.5	2.4	2.7	2.8
Manufacturing .....	135.3	138.2	138.9	.5	.7	.5	2.4	2.7	2.7
Service producing <sup>3</sup> .....	135.5	139.6	140.4	1.0	1.4	.6	3.5	4.0	3.6
Services .....	137.6	140.8	141.7	.8	1.3	.6	3.3	3.2	3.0
Health services .....	137.9	139.1	139.1	.9	.4	.0	2.6	1.8	.9
Hospitals .....	136.7	139.4	140.2	.8	.9	.6	2.2	2.8	2.6
Educational services .....	137.0	140.2	141.0	.4	1.8	.6	2.3	2.7	2.9
Public administration <sup>4</sup> .....	135.1	138.9	139.9	.7	1.1	.7	2.5	3.6	3.6
Nonmanufacturing .....	135.1	139.0	139.9	1.0	1.2	.6	3.5	3.9	3.6
<b>Occupational group</b>									
White collar .....	136.5	140.6	141.4	1.0	1.4	.6	3.5	4.0	3.6
Excluding sales .....	136.9	140.6	141.2	1.0	1.2	.4	3.4	3.7	3.1
Professional specialty and technical .....	136.7	140.0	141.0	.7	1.2	.7	2.7	3.1	3.1
Executive, administrative, and managerial ...	137.3	141.7	141.8	1.5	1.4	.1	4.4	4.7	3.3
Administrative support, including clerical .....	136.9	140.4	141.3	.8	.8	.6	3.2	3.4	3.2
Blue collar .....	132.4	135.3	136.1	.5	.7	.6	2.6	2.7	2.8
Service .....	135.6	139.4	140.0	.7	1.1	.4	3.5	3.6	3.2
<b>State and local government</b> .....	135.7	139.0	139.8	.5	1.5	.6	2.3	3.0	3.0
<b>Industry</b>									
Services .....	136.0	139.0	139.7	.4	1.8	.5	2.2	2.7	2.7
Excluding schools <sup>5,6</sup> .....	135.3	138.7	138.8	.7	1.8	.1	2.5	3.2	2.6
Health services .....	137.2	140.3	140.7	.9	1.7	.3	2.3	3.2	2.6
Hospitals .....	137.6	140.7	141.2	1.0	1.7	.4	2.5	3.2	2.6
Educational services .....	135.9	138.8	139.6	.4	1.7	.6	2.2	2.5	2.7
Schools .....	136.2	139.1	139.9	.4	1.8	.6	2.1	2.5	2.7
Elementary and secondary .....	135.8	138.8	139.3	.2	1.9	.4	2.0	2.4	2.6
Colleges and universities .....	137.2	140.1	141.5	.7	1.4	1.0	2.4	2.8	3.1
Public administration <sup>4</sup> .....	135.1	138.9	139.9	.7	1.1	.7	2.5	3.6	3.6
<b>Occupational group</b>									
White collar .....	135.5	138.4	139.3	.5	1.6	.7	2.3	2.7	2.8
Professional specialty and technical .....	135.1	137.7	138.5	.4	1.5	.6	2.1	2.3	2.5
Executive, administrative, and managerial ...	136.4	140.4	141.6	.6	1.8	.9	2.6	3.5	3.8
Administrative support, including clerical .....	136.1	139.5	140.3	.6	1.7	.6	2.3	3.1	3.1
Blue collar .....	134.2	136.8	137.8	.7	1.2	.7	2.3	2.6	2.7
Service .....	137.8	143.0	143.4	.6	1.4	.3	2.5	4.4	4.1

<sup>1</sup> Includes wages, salaries, and employer costs for employee benefits.

<sup>2</sup> Includes mining, construction, and manufacturing.

<sup>3</sup> Includes transportation, communication, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.

<sup>4</sup> Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

<sup>5</sup> Formerly called hospitals and other services.

<sup>6</sup> Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SEs for estimates in this news release (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

**Table 3. Employment Cost Index for total compensation<sup>1</sup> for private industry workers, by industry and occupational group**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Private industry workers</b> .....	135.1	139.0	139.8	0.9	1.1	0.6	3.4	3.8	3.5
Excluding sales occupations .....	135.2	138.8	139.4	.8	.9	.4	3.4	3.5	3.1
<b>Industry</b>									
<b>Goods producing<sup>2</sup></b> .....	134.1	137.1	137.8	.4	.7	.5	2.4	2.6	2.8
Excluding sales .....	133.6	136.5	137.2	.4	.7	.5	2.4	2.6	2.7
White collar .....	136.2	139.7	140.2	.4	.6	.4	2.5	3.0	2.9
Excluding sales .....	135.0	138.3	138.8	.4	.7	.4	2.2	2.8	2.8
Blue collar .....	132.8	135.5	136.3	.3	.7	.6	2.5	2.3	2.6
Construction <sup>3</sup> .....	129.7	133.4	134.3	.0	.5	.7	2.6	2.9	3.5
Manufacturing .....	135.3	138.2	138.9	.5	.7	.5	2.4	2.7	2.7
White collar .....	136.7	140.1	140.5	.7	.7	.3	2.3	3.2	2.8
Excluding sales .....	135.3	138.3	138.7	.6	.7	.3	2.1	2.8	2.5
Blue collar .....	134.3	136.8	137.7	.4	.7	.7	2.4	2.3	2.5
Durables .....	135.7	138.5	139.2	.5	.8	.5	2.3	2.6	2.6
Aircraft manufacturing (SIC 3721) .....	136.9	139.3	139.7	-.7	.3	.3	-.4	1.1	2.0
White collar .....	134.3	137.4	136.6	-.2	.2	-.6	-.4	2.1	1.7
Blue collar .....	139.6	140.8	143.4	-1.6	.5	1.8	-1.9	-.7	2.7
Nondurables .....	134.5	137.6	138.2	.6	.7	.4	2.7	2.9	2.8
Service producing <sup>4</sup> .....	135.3	139.6	140.5	1.1	1.3	.6	3.9	4.3	3.8
Excluding sales .....	136.1	140.0	140.6	1.2	1.1	.4	4.0	4.1	3.3
White collar .....	136.6	141.2	142.2	1.3	1.4	.7	4.2	4.7	4.1
Excluding sales .....	138.1	142.2	142.8	1.3	1.1	.4	4.1	4.3	3.4
Blue collar .....	130.9	134.3	134.8	.7	.8	.4	2.8	3.3	3.0
Service .....	133.9	137.0	137.8	.9	.9	.6	4.1	3.2	2.9
Transportation and public utilities <sup>5</sup> .....	134.2	138.5	139.3	1.0	1.0	.6	2.9	4.2	3.8
Transportation <sup>3,5</sup> .....	133.4	136.7	137.3	1.0	1.3	.4	3.3	3.5	2.9
Public utilities .....	135.1	140.7	141.9	1.0	.7	.9	2.6	5.2	5.0
Communications .....	134.0	140.5	141.7	1.7	.9	.9	2.2	6.6	5.7
Electric, gas, and sanitary services .....	136.4	141.0	142.1	.3	.5	.8	3.0	3.7	4.2
Wholesale and retail trade .....	132.9	137.6	138.2	.4	1.3	.4	3.3	3.9	4.0
Excluding sales .....	134.0	138.1	138.8	.8	1.3	.5	3.9	3.8	3.6
Wholesale trade <sup>3</sup> .....	135.1	140.8	142.8	.4	1.6	1.4	3.2	4.6	5.7
Excluding sales .....	135.4	140.0	141.2	.7	1.3	.9	3.4	4.1	4.3
Retail trade .....	131.7	135.9	135.6	.5	1.1	-.2	3.4	3.7	3.0
General merchandise stores <sup>3</sup> .....	130.0	133.2	134.0	1.1	.2	.6	2.9	3.6	3.1
Food stores <sup>3</sup> .....	129.4	133.7	132.7	-.3	.6	-.7	.8	3.0	2.6
Finance, insurance, and real estate <sup>3</sup> .....	134.5	141.0	142.5	3.1	1.9	1.1	6.7	8.0	5.9
Excluding sales .....	137.6	143.2	143.3	3.1	1.3	.1	6.5	7.3	4.1
Banking, savings and loan, and other credit agencies <sup>3</sup> .....	140.6	148.4	146.7	5.6	2.1	-1.1	9.8	11.5	4.3
Insurance <sup>3</sup> .....	134.8	141.9	141.7	1.3	2.2	-.1	4.0	6.6	5.1
Excluding sales .....	138.6	141.6	142.5	.9	.5	.6	3.8	3.1	2.8
Services .....	138.5	141.8	142.7	1.1	1.1	.6	3.8	3.5	3.0
Business services <sup>3</sup> .....	138.6	143.5	145.9	1.7	2.0	1.7	5.2	5.3	5.3
Health services .....	138.1	139.0	139.0	.8	.2	.0	2.7	1.5	.7
Hospitals .....	136.5	139.1	139.9	.8	.7	.6	2.1	2.7	2.5
Nursing homes .....	-	-	-	.8	1.0	.6	2.6	3.3	3.2
Educational services .....	142.6	147.0	147.7	.7	2.2	.5	3.3	3.8	3.6
Colleges and universities .....	143.7	147.8	148.5	.8	2.1	.5	3.3	3.7	3.3

See footnotes at end of table.



**Table 3. Employment Cost Index for total compensation<sup>1</sup> for private industry workers, by industry and occupational group — Continued**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Industry—Continued</b>									
<b>Nonmanufacturing industries</b> .....	134.7	138.9	139.7	1.1	1.2	0.6	3.8	4.2	3.7
White collar .....	136.5	141.1	142.0	1.2	1.4	.6	4.1	4.6	4.0
Excluding sales .....	137.9	142.0	142.7	1.2	1.1	.5	4.1	4.3	3.5
Blue collar .....	130.1	133.4	134.0	.5	.8	.4	2.7	3.1	3.0
Service .....	133.8	136.9	137.7	.8	.9	.6	4.0	3.2	2.9
<b>Occupational group</b>									
<b>White collar</b> .....	136.7	141.1	142.0	1.1	1.2	.6	3.8	4.4	3.9
Excluding sales .....	137.4	141.3	141.9	1.1	1.0	.4	3.7	4.0	3.3
Professional specialty and technical .....	137.8	141.6	142.6	.8	1.1	.7	3.1	3.6	3.5
Executive, administrative, and managerial ...	137.4	141.9	141.8	1.6	1.4	-.1	4.6	5.0	3.2
Sales <sup>3</sup> .....	133.5	140.4	142.6	1.0	2.3	1.6	4.2	6.2	6.8
Administrative support, including clerical .....	137.0	140.6	141.4	.8	.7	.6	3.4	3.5	3.2
<b>Blue collar</b> .....	132.3	135.2	135.9	.5	.7	.5	2.6	2.7	2.7
Precision production, craft, and repair .....	131.9	135.4	136.1	.2	.7	.5	2.2	2.8	3.2
Machine operators, assemblers, and inspectors .....	133.0	135.7	136.8	.6	.7	.8	2.7	2.6	2.9
Transportation and material moving .....	128.9	130.7	130.7	.7	.6	.0	3.0	2.1	1.4
Handlers, equipment cleaners, helpers, and laborers .....	135.8	138.5	139.2	1.2	.7	.5	3.4	3.2	2.5
<b>Service</b> .....	134.1	137.3	138.0	.8	1.0	.5	4.0	3.2	2.9
<b>Production and nonsupervisory occupations<sup>6</sup></b> .....	134.2	138.0	139.0	.8	1.0	.7	3.2	3.6	3.6

<sup>1</sup> Includes wages, salaries, and employer costs for employee benefits.

<sup>2</sup> Includes mining, construction, and manufacturing.

<sup>3</sup> Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SEs for estimates in this news release (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

<sup>4</sup> Includes transportation, communication, and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and service industries.

<sup>5</sup> Estimates for transportation and public utilities reflect the changes in SIC coding. See Explanatory Notes for further information.

<sup>6</sup> This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

NOTE: Dashes indicate data not available.

**Table 4. Employment Cost Index for total compensation<sup>1</sup> for private industry workers, by bargaining status, region, and area**

(Not seasonally adjusted data)

Bargaining status, region, and area	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Bargaining status</b>									
<b>Union</b> .....	133.5	136.8	137.5	0.2	1.1	0.5	2.1	2.7	3.0
Blue-collar occupations .....	131.6	134.6	135.3	.3	1.0	.5	2.1	2.6	2.8
Goods-producing industries <sup>2</sup> .....	132.5	135.6	136.5	.2	1.0	.7	2.1	2.5	3.0
Service-producing industries <sup>3</sup> .....	134.5	138.0	138.5	.4	1.3	.4	2.1	3.0	3.0
Manufacturing .....	133.3	136.0	136.9	.2	1.0	.7	2.1	2.3	2.7
Blue-collar occupations .....	133.0	135.5	136.4	.3	1.0	.7	2.2	2.2	2.6
Nonmanufacturing .....	133.2	136.9	137.4	.2	1.2	.4	2.1	3.0	3.2
<b>Nonunion</b> .....	135.3	139.3	140.1	1.0	1.1	.6	3.8	4.0	3.5
Blue-collar occupations .....	132.6	135.5	136.3	.6	.6	.6	2.9	2.8	2.8
Goods-producing industries <sup>2</sup> .....	134.7	137.7	138.3	.5	.6	.4	2.6	2.8	2.7
Service-producing industries <sup>3</sup> .....	135.3	139.7	140.6	1.2	1.2	.6	4.2	4.5	3.9
Manufacturing .....	135.9	138.9	139.4	.6	.7	.4	2.6	2.8	2.6
Blue-collar occupations .....	134.8	137.4	138.3	.4	.5	.7	2.6	2.4	2.6
Nonmanufacturing .....	134.9	139.1	140.0	1.1	1.2	.6	4.1	4.3	3.8
<b>Region<sup>4</sup></b>									
Northeast .....	135.0	138.7	139.5	.7	1.2	.6	3.0	3.5	3.3
South .....	134.6	137.6	138.1	1.6	.9	.4	3.8	3.8	2.6
Midwest .....	136.9	140.9	141.4	.5	.9	.4	3.6	3.5	3.3
West .....	133.4	138.5	140.0	.7	1.4	1.1	3.5	4.5	4.9
<b>Area</b>									
Metropolitan .....	135.1	139.1	139.8	.9	1.2	.5	3.4	3.9	3.5
Other .....	135.3	138.2	139.4	1.1	.8	.9	3.9	3.3	3.0

<sup>1</sup> Includes wages, salaries, and employer costs for employee benefits.<sup>2</sup> Includes mining, construction, and manufacturing.<sup>3</sup> Includes transportation, communication, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.<sup>4</sup> The regional coverage is as follows: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia,

and West Virginia; Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

**Table 5. Employment Cost Index for wages and salaries for civilian and State and local government workers, by industry and occupational group**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Civilian workers</b> .....	132.8	136.8	137.7	0.9	1.3	0.7	3.8	4.0	3.7
Excluding sales occupations .....	132.8	136.6	137.3	.8	1.3	.5	3.7	3.7	3.4
<b>Industry</b>									
Goods producing <sup>1</sup> .....	130.6	134.4	135.2	.5	.8	.6	3.0	3.5	3.5
Manufacturing .....	132.2	136.0	136.8	.7	1.0	.6	3.0	3.6	3.5
Service producing <sup>2</sup> .....	133.6	137.8	138.7	1.1	1.5	.7	4.0	4.2	3.8
Services .....	136.0	139.6	140.5	.9	1.5	.6	3.7	3.6	3.3
Health services .....	135.4	137.6	137.6	.8	.8	.0	3.0	2.5	1.6
Hospitals .....	133.6	136.4	137.1	.8	1.0	.5	2.4	2.9	2.6
Educational services .....	135.9	139.1	140.0	.4	1.9	.6	2.7	2.8	3.0
Public administration <sup>3</sup> .....	131.4	134.8	135.9	.8	1.2	.8	2.9	3.5	3.4
Nonmanufacturing .....	132.8	137.0	137.8	1.0	1.4	.6	3.9	4.2	3.8
<b>Occupational group</b>									
White collar .....	134.3	138.8	139.7	1.0	1.5	.6	3.9	4.4	4.0
Excluding sales .....	134.8	138.8	139.5	1.0	1.3	.5	3.8	4.0	3.5
Professional specialty and technical .....	135.0	138.5	139.4	.7	1.4	.6	3.3	3.4	3.3
Executive, administrative, and managerial ...	135.6	140.5	140.3	1.6	1.6	-.1	4.8	5.2	3.5
Administrative support, including clerical .....	133.7	137.5	138.6	.8	1.0	.8	3.6	3.6	3.7
Blue collar .....	129.3	132.6	133.3	.7	.9	.5	3.1	3.3	3.1
Service .....	132.6	136.1	137.0	.8	1.2	.7	3.9	3.5	3.3
<b>State and local government</b> .....	134.4	137.6	138.5	.6	1.6	.7	2.7	3.0	3.1
<b>Industry</b>									
Services .....	135.3	138.4	139.2	.4	1.8	.6	2.6	2.7	2.9
Excluding schools <sup>4,5</sup> .....	134.4	137.8	138.2	.8	1.7	.3	3.0	3.4	2.8
Health services .....	135.3	138.7	139.2	1.0	1.6	.4	3.0	3.6	2.9
Hospitals .....	135.2	138.6	139.1	1.1	1.5	.4	3.0	3.7	2.9
Educational services .....	135.3	138.4	139.3	.4	1.9	.7	2.5	2.7	3.0
Schools .....	135.5	138.5	139.5	.4	1.8	.7	2.5	2.7	3.0
Elementary and secondary .....	135.7	138.7	139.3	.3	1.9	.4	2.5	2.5	2.7
Colleges and universities .....	134.6	137.7	139.6	.7	1.6	1.4	2.6	3.1	3.7
Public administration <sup>3</sup> .....	131.4	134.8	135.9	.8	1.2	.8	2.9	3.5	3.4
<b>Occupational group</b>									
White collar .....	134.5	137.6	138.5	.6	1.8	.7	2.6	2.9	3.0
Professional specialty and technical .....	135.1	137.9	138.7	.5	1.7	.6	2.6	2.6	2.7
Executive, administrative, and managerial ...	134.1	138.0	139.3	.8	1.8	.9	3.0	3.7	3.9
Administrative support, including clerical .....	132.3	135.4	136.5	.7	1.6	.8	2.6	3.0	3.2
Blue collar .....	132.3	135.1	136.0	.8	1.2	.7	2.7	3.0	2.8
Service .....	135.2	139.2	140.0	.7	1.5	.6	3.2	3.7	3.6

<sup>1</sup> Includes mining, construction, and manufacturing.<sup>2</sup> Includes transportation, communication, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.<sup>3</sup> Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.<sup>4</sup> Formerly called hospitals and other services.<sup>5</sup> Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SEs for estimates in this news release (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

**Table 6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Private industry workers</b> .....	132.3	136.6	137.4	1.0	1.3	0.6	3.9	4.3	3.9
Excluding sales occupations .....	132.4	136.3	136.9	.9	1.1	.4	3.8	3.9	3.4
<b>Industry</b>									
<b>Goods producing</b> <sup>1</sup> .....	130.6	134.3	135.2	.5	.8	.7	3.0	3.4	3.5
Excluding sales .....	130.0	133.6	134.4	.5	.8	.6	2.9	3.3	3.4
White collar .....	132.9	137.4	138.2	.5	.8	.6	2.9	3.9	4.0
Excluding sales .....	131.6	135.7	136.4	.5	.8	.5	2.7	3.7	3.6
Blue collar .....	129.2	132.3	133.3	.6	.8	.8	3.1	3.0	3.2
Construction <sup>2</sup> .....	124.9	128.5	129.3	.2	.3	.6	3.4	3.0	3.5
Manufacturing .....	132.2	136.0	136.8	.7	1.0	.6	3.0	3.6	3.5
White collar .....	133.6	138.3	139.0	.6	1.1	.5	2.7	4.1	4.0
Excluding sales .....	132.2	136.3	137.1	.7	1.0	.6	2.6	3.8	3.7
Blue collar .....	131.2	134.3	135.3	.8	.9	.7	3.1	3.1	3.1
Durables .....	131.9	135.9	136.9	.5	1.0	.7	2.7	3.6	3.8
Aircraft manufacturing (SIC 3721) .....	134.0	137.2	138.3	.5	.2	.8	2.4	2.9	3.2
White collar .....	129.8	133.9	134.5	.4	.1	.4	2.6	3.6	3.6
Blue collar .....	139.6	141.0	143.2	.9	.4	1.6	1.8	1.9	2.6
Nondurables .....	132.6	136.0	136.8	.9	.8	.6	3.2	3.5	3.2
Service producing <sup>3</sup> .....	133.1	137.6	138.4	1.2	1.5	.6	4.4	4.6	4.0
Excluding sales .....	133.9	137.9	138.5	1.2	1.2	.4	4.4	4.2	3.4
White collar .....	134.3	139.2	140.1	1.3	1.6	.6	4.5	5.0	4.3
Excluding sales .....	135.9	140.2	140.7	1.3	1.3	.4	4.6	4.5	3.5
Blue collar .....	128.9	132.4	132.9	.8	1.0	.4	3.3	3.5	3.1
Service .....	131.0	134.2	135.2	.9	.9	.7	4.3	3.4	3.2
Transportation and public utilities <sup>4</sup> .....	131.3	134.3	135.1	.9	1.1	.6	3.4	3.2	2.9
Transportation <sup>2,4</sup> .....	129.5	132.4	132.9	.8	1.5	.4	3.8	3.0	2.6
Public utilities .....	133.5	136.5	137.8	1.1	.6	1.0	2.9	3.4	3.2
Communications .....	134.0	136.7	138.0	1.7	.7	1.0	2.8	3.7	3.0
Electric, gas, and sanitary services .....	132.9	136.3	137.4	.5	.5	.8	3.0	3.1	3.4
Wholesale and retail trade .....	131.6	136.6	137.0	.5	1.5	.3	3.6	4.4	4.1
Excluding sales .....	133.2	137.6	138.2	.8	1.5	.4	4.3	4.1	3.8
Wholesale trade <sup>2</sup> .....	133.6	139.3	141.3	.5	1.6	1.4	3.1	4.7	5.8
Excluding sales .....	135.0	139.6	140.8	.8	1.3	.9	4.0	4.3	4.3
Retail trade .....	130.6	135.2	134.8	.5	1.4	-.3	3.8	4.1	3.2
General merchandise stores <sup>2</sup> .....	128.4	132.2	133.0	1.3	.5	.6	3.0	4.3	3.6
Food stores <sup>2</sup> .....	127.0	131.7	130.5	.2	.9	-.9	1.8	3.9	2.8
Finance, insurance, and real estate <sup>2</sup> .....	130.6	138.1	139.8	3.3	2.4	1.2	6.9	9.3	7.0
Excluding sales .....	133.6	139.7	139.6	3.3	1.6	-.1	6.6	8.0	4.5
Banking, savings and loan, and other credit agencies <sup>2</sup> .....	138.3	147.0	144.4	7.3	2.7	-1.8	11.7	14.0	4.4
Insurance <sup>2</sup> .....	130.2	138.7	138.5	1.2	2.9	-.1	3.3	7.8	6.4
Excluding sales .....	133.7	136.6	137.9	.6	.7	1.0	3.1	2.8	3.1
Services .....	136.2	140.0	140.8	1.1	1.2	.6	4.4	3.9	3.4
Business services <sup>2</sup> .....	137.3	141.8	144.1	1.8	1.9	1.6	5.5	5.1	5.0
Health services .....	135.4	137.5	137.4	.8	.7	-.1	3.0	2.4	1.5
Hospitals .....	133.2	135.8	136.5	.8	.8	-.5	2.2	2.7	2.5
Nursing homes .....	-	-	-	.8	1.0	.5	3.1	3.9	3.7
Educational services .....	138.4	142.8	143.5	.4	2.3	.5	3.4	3.6	3.7
Colleges and universities .....	138.7	142.8	143.6	.7	2.2	.6	3.7	3.6	3.5

See footnotes at end of table.

**Table 6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group — Continued**

(Not seasonally adjusted data)

Industry and occupational group	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Industry—Continued</b>									
<b>Nonmanufacturing industries</b> .....	132.1	136.5	137.4	1.1	1.3	0.7	4.2	4.4	4.0
White collar .....	134.1	138.9	139.8	1.3	1.5	.6	4.5	4.9	4.3
Excluding sales .....	135.5	139.8	140.3	1.3	1.2	.4	4.6	4.5	3.5
Blue collar .....	127.1	130.5	131.1	.6	.8	.5	3.2	3.2	3.1
Service .....	130.9	134.1	135.1	.9	.9	.7	4.3	3.4	3.2
<b>Occupational group</b>									
<b>White collar</b> .....	134.2	139.0	139.9	1.1	1.5	.6	4.3	4.7	4.2
Excluding sales .....	134.8	139.1	139.7	1.0	1.2	.4	4.2	4.3	3.6
Professional specialty and technical .....	134.8	138.7	139.7	.8	1.2	.7	3.8	3.7	3.6
Executive, administrative, and managerial ...	135.8	140.9	140.5	1.6	1.6	-.3	5.0	5.5	3.5
Sales <sup>2</sup> .....	131.4	138.8	141.3	1.2	2.7	1.8	4.4	6.9	7.5
Administrative support, including clerical .....	133.9	137.9	138.9	.8	.9	.7	3.6	3.8	3.7
<b>Blue collar</b> .....	129.1	132.4	133.2	.6	.8	.6	3.2	3.2	3.2
Precision production, craft, and repair .....	128.7	132.3	133.0	.4	.8	.5	2.9	3.2	3.3
Machine operators, assemblers, and inspectors .....	130.6	133.8	134.9	.8	.8	.8	3.3	3.3	3.3
Transportation and material moving .....	125.1	127.6	127.8	.8	.9	.2	3.3	2.8	2.2
Handlers, equipment cleaners, helpers, and laborers .....	131.8	135.1	135.8	1.2	1.0	.5	3.7	3.8	3.0
<b>Service</b> .....	131.1	134.4	135.3	.9	1.1	.7	4.3	3.5	3.2
<b>Production and nonsupervisory occupations<sup>5</sup></b> .....	131.2	135.2	136.4	.8	1.2	.9	3.7	3.9	4.0

<sup>1</sup> Includes mining, construction, and manufacturing.

<sup>2</sup> Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SEs for estimates in this news release (excluding seasonally adjusted series) will be available on the Internet site (<http://stats.bls.gov/ecthome.htm>). All series will continue to be published until further notice.

<sup>3</sup> Includes transportation, communication, and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and service industries.

<sup>4</sup> Estimates for transportation and public utilities reflect the changes in SIC coding. See Explanatory Notes for further information.<sup>5</sup> This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

NOTE: Dashes indicate data not available.

**Table 7. Employment Cost Index for wages and salaries for private industry workers by bargaining status, region, and area**

(Not seasonally adjusted data)

Bargaining status, region, and area	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Bargaining status</b>									
<b>Union</b> .....	128.9	132.4	133.1	0.5	1.3	0.5	2.8	3.2	3.3
Blue-collar occupations .....	126.7	129.9	130.6	.6	1.1	.5	2.7	3.1	3.1
Goods-producing industries <sup>1</sup> .....	127.1	131.0	131.7	.4	1.2	.5	2.8	3.5	3.6
Service-producing industries <sup>2</sup> .....	131.2	134.1	134.8	.6	1.4	.5	2.8	2.8	2.7
Manufacturing .....	128.6	132.2	133.0	.6	1.4	.6	2.7	3.4	3.4
Blue-collar occupations .....	128.4	131.4	132.4	.6	1.1	.8	2.7	3.0	3.1
Nonmanufacturing .....	129.1	132.4	133.1	.4	1.2	.5	2.9	3.0	3.1
<b>Nonunion</b> .....	133.0	137.4	138.3	1.1	1.3	.7	4.2	4.4	4.0
Blue-collar occupations .....	130.6	134.0	134.8	.7	.8	.6	3.4	3.3	3.2
Goods-producing industries <sup>1</sup> .....	132.0	135.7	136.5	.6	.7	.6	3.1	3.4	3.4
Service-producing industries <sup>2</sup> .....	133.2	137.9	138.8	1.2	1.5	.7	4.5	4.8	4.2
Manufacturing .....	133.5	137.3	138.2	.7	.8	.7	3.0	3.5	3.5
Blue-collar occupations .....	133.0	136.2	137.2	.8	.8	.7	3.3	3.2	3.2
Nonmanufacturing .....	132.6	137.1	138.0	1.1	1.3	.7	4.4	4.6	4.1
<b>Region<sup>3</sup></b>									
Northeast .....	131.6	135.4	136.4	.7	1.2	.7	3.1	3.6	3.6
South .....	133.0	136.5	136.7	1.8	1.2	.1	4.7	4.5	2.8
Midwest .....	133.0	137.5	138.0	.6	1.1	.4	4.2	4.0	3.8
West .....	131.2	136.7	138.4	.8	1.6	1.2	3.7	5.0	5.5
<b>Area</b>									
Metropolitan .....	132.3	136.9	137.7	.9	1.3	.6	3.8	4.4	4.1
Other .....	132.0	134.7	136.0	1.2	1.0	1.0	4.3	3.3	3.0

<sup>1</sup> Includes mining, construction, and manufacturing.<sup>2</sup> Includes transportation, communication, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.<sup>3</sup> The regional coverage is as follows: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest: Illinois, Indiana, Iowa, Kansas, Michigan,

Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

**Table 8. Employment Cost Index for benefits for civilian, State and local government, and private industry workers by industry, occupational group, and bargaining status**

(Not seasonally adjusted data)

Industry, occupational group, and bargaining status	Indexes (June 1989=100)			Percent changes for—					
	Dec. 1997	Sep. 1998	Dec. 1998	3 months ended—			12 months ended—		
				Dec. 1997	Sep. 1998	Dec. 1998	Dec. 1997	Sep. 1998	Dec. 1998
<b>Civilian workers</b> .....	141.1	144.0	144.7	0.6	0.7	0.5	2.1	2.6	2.6
State and local government .....	138.6	142.1	142.7	.3	1.3	.4	1.3	2.8	3.0
Private industry .....	141.8	144.5	145.2	.7	.6	.5	2.3	2.6	2.4
<b>Industry</b>									
Goods producing <sup>1</sup> .....	141.5	143.0	143.2	.0	.4	.1	1.3	1.1	1.2
Service producing .....	141.4	144.9	145.7	1.1	.8	.6	2.9	3.6	3.0
Manufacturing .....	141.7	142.6	142.7	.2	.1	.1	1.4	.8	.7
Aircraft manufacturing (SIC 3721) .....	143.0	143.8	142.6	-3.1	.5	-.8	-5.7	-2.6	-.3
White collar .....	144.8	145.5	141.2	-1.4	.3	-3.0	-4.0	-.9	-2.5
Blue collar .....	139.6	140.7	144.0	-5.8	.9	2.3	-8.3	-5.1	3.2
Nonmanufacturing .....	141.5	145.0	145.8	.9	.8	.6	2.6	3.4	3.0
<b>Occupational group</b>									
White collar .....	143.4	146.6	147.4	1.0	.7	.5	2.6	3.2	2.8
Blue collar .....	139.0	141.0	141.6	.1	.4	.4	1.5	1.6	1.9
Service .....	142.0	144.7	144.8	.4	.7	.1	3.3	2.3	2.0
<b>Bargaining status</b>									
Union .....	142.0	145.0	145.5	-.1	.8	.3	.9	2.0	2.5
Nonunion .....	141.5	144.2	144.9	.9	.6	.5	2.7	2.9	2.4

<sup>1</sup> Includes mining, construction, and manufacturing.

## EXPLANATORY NOTES

The Employment Cost Index (ECI) is a measure of the change in the cost of labor, free from the influence of employment shifts among occupations and industries. The compensation series includes changes in wages and salaries and employer costs for employee benefits. The wage and salary series and the benefit cost series provide the change for the two components of compensation.

Wages and salaries are defined as the hourly straight-time wage rate or, for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, and nonproduction bonuses such as lump-sum payments provided in lieu of wage increases. Production bonuses, incentive earnings, commission payments, and cost-of-living adjustments are included in straight-time wage and salary rates.

Benefits covered by the ECI are: Paid leave--vacations, holidays, sick leave, and other leave; supplemental pay--premium pay for work in addition to the regular work schedule (such as overtime, weekends, and holidays), shift differentials, and nonproduction bonuses such as lump-sum payments provided in lieu of wage increases); insurance benefits--life, health, short-term disability, and long-term disability; retirement and savings benefits--defined benefit and defined contribution plans; legally required benefits--social security, Federal and State unemployment insurance, and workers' compensation; and other benefits--severance pay and supplemental unemployment plans.

The ECI provides data for the civilian economy, which includes the total private economy and the public sector--excluding farms, households, and the Federal government. The private industry series and the state and local government series provide data for the two sectors separately.

Data for this quarter were collected from a probability sample of approximately 18,000 occupations within about 4,400 sample establishments in private industry and approximately 4,100 occupations within about 800 sample establishments in state and local governments. Data are collected for the pay period including the 12<sup>th</sup> day of the survey months of March, June, September, and December.

The sample establishments are classified in industry categories based on the 1987 Standard Industrial Classification (SIC), as defined by the U.S. Office of Management and Budget. In 1996, some establishments in Motor freight transportation and warehousing (SIC 42), Transportation by air (SIC 45), and Transportation services (SIC 47) were reclassified into Air courier services (SIC 4513), which includes support establishments. While the establishments in question were engaged in the delivery of letters, parcels, and packages, they were operated by enterprises engaged in furnishing air delivery of individually addressed letters, parcels, and packages. The ECI sample introduced these reclassifications with the June 1998 reference period.

Within an establishment, specific job categories are selected to represent broader occupational groups. From June 1986 through December 1994, the jobs were classified according to definitions used in the 1980 Census. Prior to June 1986, they were classified according to the 1970 Census. Differences between the two classification systems are slight, as indicated in the article "Introducing new weights for the Employment Cost Index," in the June 1985 issue of the Monthly Labor Review. Beginning with March 1995, the jobs are classified according to the 1990 Census, which differs little from the 1980 Census.

Fixed employment weights are used each quarter to calculate the most aggregate indexes--civilian, private, and state and local governments. These fixed weights are also used to derive all of the industry and occupation series indexes. Beginning in March 1995, 1990 employment counts, primarily from the Bureau's Occupational Employment Statistics survey, were used. A description of the reweighting is included in an article "Introducing 1990 Weights for the Employment Cost Index," published in the June 1995 issue of Compensation and Working Conditions, and available upon request. From June 1986 through December 1994, employment counts from the 1980 Census were used as weights. Prior to June 1986, employment counts from the 1970 Census were used.

For the series based on bargaining status, region, or area size, employment data are not available. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable to those for the aggregate, industry, and



occupation series. A fuller explanation of the calculation of index numbers appears in an article, "Estimation procedures for the Employment Cost Index," in the May 1982 issue of the Monthly Labor Review.

Beginning with the March 1990 ECI release, indexes were rebased to June 1989=100. A description of the rebasing is included in the article "Employment Cost Index Rebased to June 1989," in the April 1990 issue of the Monthly Labor Review.

Beginning with the December 1990 ECI release, seasonally adjusted data are available for selected ECI series. Seasonal adjustment removes the effects of events that follow a more or less regular pattern each year. These adjustments make nonseasonal patterns easier to spot. ECI series are seasonally adjusted using either direct or composite seasonally adjusted estimates. Industry and occupational series, such as construction and service occupations, are adjusted directly. More aggregate series, such as civilian or private industry workers, use composite estimates. The composite estimates could be obtained by aggregating either the industry or the occupational components, and the results may differ depending on which method is used. The aggregate seasonally adjusted ECI series are estimated by aggregating the component seasonally adjusted industry series, so they are not necessarily a weighted average of the component occupation series. The seasonal adjustment factors are recalculated once a year. The March release contains data reflecting the newly updated seasonal adjustment factors. The historical data for the last five years are then revised based on the newly estimated factors. The new seasonally adjusted factors for 1999, and revised seasonally adjusted indexes for the past five years, will be available Tuesday, April 27, 1999 on the Internet at (<http://stats.bls.gov/ecthome.htm>) or upon request. The factors are also published in the summer issue of Compensation and Working Conditions.

The ECI sample is rotated over approximately five years; this makes it more representative and reduces respondent burden. The sample is replaced on a cross-area, cross-industry basis.

The costs per hour worked of compensation components, based on March 1998 data from the ECI, are published in a separate news release titled "Employer Costs for Employee Compensation - March 1998," and in an annual bulletin, Employer Costs for Employee Compensation, 1986-97, (Bulletin 2505). A description of the cost levels data (ECEC) is provided in the article "Analyzing employers' costs for wages, salaries, and benefits" in the October 1987 issue of the Monthly Labor Review. This article, along with other ECEC research articles, also appears in the annual bulletin. The cost levels are calculated with current employment weights, rather than the fixed 1990 weights used in computing the ECI. Therefore, year-to-year changes in the cost levels will usually differ from those in the ECI.

Because the ECI is a sample survey, it is subject to sampling errors. Sampling errors are differences that occur between the results computed from a sample of observations and those computed from all observations in the population. The estimates derived from different samples selected using the same sample design may differ from each other. A measure of the variation among these differing estimates is the standard error. It can be used to measure the precision with which an estimate from a particular sample approximates the expected result of all possible samples. The chances are about 68 out of 100 that an estimate from the survey differs from a complete population figure by less than the standard error. The chances are about 90 out of 100 that this difference would be less than 1.6 times the standard error. All the statements of comparisons appearing in this publication are significant at a 1.6 standard error level or better, unless otherwise indicated. This means that for differences cited the estimated difference is greater than 1.6 times the standard error of the difference.

Because standard errors vary from quarter to quarter, the ECI uses a five-year moving average of standard errors to evaluate published series. Currently, in the higher level aggregate series the standard errors for 3-month changes are generally 0.1 percent or less; for 12-month changes, standard errors are generally 0.25 percent or less. Currently, in the lower level series, standard errors are generally 0.3 percent or less for 3-month changes and 0.6 percent or less for 12-month changes. Series found to have a higher average standard error for the five years ending December 1996 are footnoted in the tables.

BLS is evaluating ECI publication standards as part of its overall quality improvement plan. The first phase of this evaluation, a review of the statistical reliability of the ECI series, is complete. To improve the quality of the ECI estimates, the sample size is being increased and other initiatives, such as revising collection procedures, are being explored. All series will continue to be published until further notice, although, as indicated above, standard errors for some series are large. Standard errors for all estimates (excluding seasonally adjusted series) will now be available on the Internet site (<http://stats.bls.gov/ecthome.htm>) shortly after publication of the news release.