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Workforce Education and the Future of the Texas Economy

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Contents

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Since 1992, the Texas economy has experienced record growth, surpassing that of the nation's economy. Between 1992 and 1999 the state's non-farm employment increased by 26.3 percent compared with an 18.7 percent increase nationwide. Over the same period, the state's gross product (equivalent to the nation's gross domestic product) in constant dollars increased 28.1 percent while the nation's gross domestic product rose only 18.4 percent. All sectors of the state's economic growth rates were larger than the nation's. Despite this unprecedented economic growth, the 1997 state per capita income, $25,028, was only 94.5 percent of the nation's average per capita income of $26,482.

Long-term growth of the Texas economy depends on three factors: human capital, physical capital and natural resources. Texas is endowed with riches in all three categories. The Texas population is projected to rise 13.6 percent by 2010 compared with an 8.4 percent rise for the nation. Since its union with the United States, the state's economy has enjoyed access to a well-developed capital market and has contributed to the growth and sophistication of this market. Texas is one of the richest states in natural resources, with an abundance of land, water, forests, oil and natural gas.

The key challenge to the growth of the Texas economy in the future will be supplying the skilled workforce required by the state's growing industries. The Texas Workforce Commission projects Texas will generate more than 400,000 job vacancies each year, most of them requiring college degrees or at least a high school diploma and some college education (Table 1). Texas' population grows by nearly 350,000 each year, creating an ever-growing pool of workers from which to hire. But these workers must be willing to acquire the skills and education needed to participate in the 21st century economy.

In March 1998, Texas ranked 39th among the states in percent of population with a high school diploma or more education. The percentage of Texas residents without a high school diploma was 21.7 percent compared with 17.9 percent nationwide. The percentage of Texas residents without a high school diploma fell from 27.9 percent in 1990, compared with 24.8 percent nationwide, but the percentage decline for Texas, 22 percent, trailed the nationwide drop of almost 28 percent. Demographic changes in Texas may mean the percentage of residents without a high school education will increase in the years ahead.

Currently, 2.3 percent of Hispanic students drop out of high school annually, compared with less than 1 percent of white students (Table 3). The high percentage of Hispanic dropouts in Texas' education system reflects, to a great extent, the national pattern of high school dropouts (Table 4). However, in the context of the growing proportion of Hispanics in Texas, the percentage of Hispanic dropouts is alarming. Currently Texas' Hispanic population accounts for 29.6 percent of the state's population, but Hispanic students constitute more than 50 percent of high school dropouts. By 2020, Hispanics are expected to account for more than 38 percent of Texas' population and, if current trends in school dropouts prevail, more than 40 percent of them will not have a high school diploma.

Economics of Education Attainment

The theoretical foundation of the relationship between educational attainment and earnings has been investigated by Gary S. Becker, who was awarded a 1992 Noble Prize for his research in human capital (see Becker 1993). Some of Becker's findings follow.

A strong positive relationship exists between the education level of heads of households (householders) and the money incomes of their families (Table 6). The median income of high school graduates in 1996 was $38,563 compared with $20,781 for those with less than a ninth grade education, an 85.5 percent income increase for three years of high school education. A college degree raises the median annual income of a high school graduate 66.7 percent to $64,293.

A close positive relationship also exists between the wealth of families and the education level of their householders (Table 7). The median net worth of a family that includes a high school graduate is about half of the net worth of a family that includes a member with a bachelor's degree. The median net worth of a household whose head has no high school diploma is about half of the net worth of a family whose

head of household has a high school diploma.

Education level is also an important determinant of poverty level (Table 8). Householders without a high school diploma account for 24.4 percent of families whose annual incomes are below poverty level. For African-American and Hispanic householders without a high school diploma, the poverty rates are 39.9 and 37.5 percent, respectively. Householders with a bachelor's degree make up only 2.4 percent of families whose incomes are below poverty level.

The brunt of unemployment is borne by those with lower education levels (Table 9). In 1996, the unemployment rate for householders without a high school diploma was 10.4 percent; for African-American and Hispanic householders without a high school diploma, unemployment rates were 16.6 and 9.6 percent, respectively. Only 2.4 percent of householders with a bachelor's degree were unemployed.

The education level of a region's workforce has an important impact on the region's economy. The location of a particular industry is determined by a host of factors, such as labor costs, energy costs, costs of materials, size of the market for the firm's product(s), the existence of other firms in the same region and the degree of existing competition. Labor cost is a key factor because it is often the largest component of the total costs of a company. A region whose workforce is not well educated cannot expect to attract knowledge-intensive industries that require well-educated workers and pay higher wages and salaries.

Lower-paying industries are mostly located in regions with lower wages that are linked to the workforce's lower education. Jobs generated by a company have a multiplier effect on a region's economy when incomes generated by employment are spent on other goods and services produced in the region. Higher-paying jobs typically generate more income, more personal expenditures, more demand for goods and services and create even more jobs. For example, the state's chemical industry pays an average annual compensation of $57,600 per employee. For each new job in the chemical industry, 6.6 additional jobs are created in the state's economy (Table 10). By comparison, annual compensation per employee in the state's apparel industry is $18,720. For each job in this industry, only 1.7 jobs are created in the state's economy.

Is There a Solution? A Tale of One City

The availability of well-educated workers is one reason for the success story of the Austin Metropolitan Statistical Area (MSA) over the past two decades. Since 1980, Austin's non-farm employment has increased by 160 percent compared with 54.4 percent statewide (Table 11). Almost all sectors of Austin's economy have grown faster than the state averages. Employment in the metro area's manufacturing sector, driven by high-tech manufacturing industries, has increased by 178.2 percent compared with 3.2 percent statewide (Table 11).

An important aspect of Austin's economic growth, given that Austin is the capital of Texas, is government employment's decrease from 33 percent of the metro area's non-farm employment in 1980 to 20.9 percent in 1999 (Table 12). Austin's services employment rose by 330 percent, compared with 156.2 percent statewide. The area's services sector comprises knowledge-intensive service industries such as health care services, professional services and computer-related services (Table 13). In 1995, *Fortune* magazine ranked Austin the seventh best U.S. city for business and cited Austin as home to 825 high-tech firms and a leader in research and development among computer industries. In 1998, Austin ranked first among *Fortune's* best cities and ranked second in *Forbes'* top ten regions for business. Austin ranked 14th in the *Entrepreneur's* list of top 20 regions for small business in 1998.

The most convincing explanation of the Austin area's economic growth is that the availability of a highly educated workforce has attracted several of the world's largest high-tech companies, including Motorola, Advanced Micro Devices, IBM, Texas Instruments and Dell Products, as well as several hundred smaller companies. The city is one of the nation's research and development leaders. The University of Texas at Austin and Southwest Texas State University have played major roles in providing the workforce needed to attract high-tech companies.

The growth of Austin's economy demonstrates the enormous importance of workforce education in the Texas economy. Texas employers will be forced to hire workers with required skills from an out-of-state pool if the state's higher education system fails to deliver the skills demanded by growing industries. Worse still, Texas could lose important companies who find it preferable to relocate to areas of the country where needed workforce skills are more readily available. Texas recently ranked 22nd in terms of the proportion of its residents with a college degree or more (Table 14).

When Texas declared independence, one of the main complaints of the signatories of the Declaration of Independence was the issue of public education:

> "It has failed to establish any public system of education, although possessed of almost boundless resources (the public domain) and, although, is an axiom, in political science, that unless a people are educated and enlightened it is idle to expect the continuance of civil liberty, or the capacity for self-government."

Today the issue of education in Texas is as important as at the time of the Declaration of Independence. The state's economic future is inextricably tied to its ability to educate tomorrow's workforce.

Table 1. Occupations Demanded by the Texas Economy

Occupation	Employment		Job Openings		
	1994	2005	Growth	Replacement	Total
Total of all occupations	8,586,500	10,938,200	213,790	188,560	402,350
Managerial and administrative occupations	606,400	789,750	16,670	12,895	29,565
Professional, technicians	1,794,850	2,382,500	53,425	35,220	88,645
Management support occupations	242,100	307,700	5,965	4,600	10,565
Engineers	120,000	183,100	5,735	2,580	8,315
Architects and surveyors	12,650	16,050	310	275	585
Engineering technicians	81,200	101,700	1,865	1,675	3,540
Physical scientists	16,850	20,950	375	510	885
Life scientists	7,700	10,350	245	215	460
Physical and life science technicians	20,800	24,200	310	470	780
Computer systems analysts	71,600	123,950	4,760	1,355	6,115
Math scientists/research analysts	6,350	9,300	270	140	410
Social scientists	10,000	12,600	235	180	415
Social, recreation, religion works	70,500	102,150	2,875	1,425	4,300
Lawyers and judicial workers	53,200	63,750	960	710	1,670
Legal assistants and technicians	16,150	20,950	435	170	605
College and University faculty	97,750	112,500	1,335	3,010	4,345
Teachers and instructors	398,750	491,200	8,400	7,565	15,965
Librarians, archivists, and related workers	74,250	95,450	1,925	1,265	3,190
Health diagnosing occupations	39,900	51,150	1,025	755	1,780
Therapists	23,600	39,750	1,470	415	1,885
Health assessment and treatment	208,900	284,200	6,845	3,565	10,410
Health technicians, technologists	49,850	69,550	1,790	885	2,675
Health professionals and technicians	32,200	42,900	975	595	1,570
Writers, editors, artists	90,000	120,850	2,805	1,750	4,555
Other professionals and technicians	50,550	78,200	2,515	1,110	3,625
Marketing and sales occupations	1,052,350	1,308,400	23,275	29,755	53,030
Marketing and sales supervisors	152,550	192,250	3,610	2,745	6,355
Marketing and sales, service	112,250	131,250	1,725	2,245	3,970
Other sales workers	787,550	984,900	17,940	24,765	42,705
Admin support occupations, clerical	1,420,350	1,665,750	22,310	27,785	50,095
Clerical supervisors	97,150	130,800	3,060	2,455	5,515
Banking, security, finance, credit	74,100	88,200	1,280	1,670	2,950
Selected insurance workers	33,450	41,600	740	400	1,140
Investigative and related workers	18,350	28,550	925	185	1,110
Municipal workers	5,700	8,400	245	65	310
Lodging and travel workers	19,550	24,550	455	640	1,095
Industry specific workers	30,700	40,650	905	655	1,560
Secretarial workers	227,000	270,050	3,915	3,985	7,900
General office occupations	553,950	639,250	7,755	11,190	18,945
Electronic data processing	69,650	59,750	0	1,280	1,280
Communication equipment operators	26,700	23,650	0	540	540
Mail and message distributors	47,550	52,800	475	1,135	1,610
Mat record, distributors	166,700	206,200	3,590	2,985	6,575
Other clerical and administrative workers	49,800	51,300	135	600	735
Service occupations	1,354,000	1,883,150	48,105	32,440	80,545
Service workers supervisors	62,050	77,650	1,420	1,630	3,050
Private household workers	25,600	36,000	950	610	1,560

Table 1. Occupations Demanded by the Texas Economy *(continued)*

Occupation	Employment		Job Openings		
	1994	2005	Growth	Replacement	Total
Protective service occupations	152,500	237,650	7,740	4,235	11,975
Food and beverage preparation	539,900	707,700	15,255	15,365	30,620
Health service occupations	159,800	250,500	8,245	2,895	11,140
Cleaning and building services	195,400	232,500	3,375	3,515	6,890
Personal service occupations	209,700	328,750	10,825	3,995	14,820
Service workers	9,050	12,400	305	195	500
Agriculture, forestry, fishing	284,550	329,250	4,065	5,020	9,085
Precision product, craft and repair	922,750	1,161,250	21,680	19,605	41,285
Production/construction/maintenance supervisors	147,400	178,100	2,790	3,370	6,160
Inspectors	37,750	46,100	755	680	1,435
Mechanics, installers, and repairers	363,550	475,100	10,140	8,465	18,605
Vehicle and mobile equipment mechanics	115,150	151,700	3,325	2,930	6,255
Communications equipment mechanics	4,750	6,650	170	75	245
Electric and electronic eq mechanics	57,400	74,450	1,550	1,295	2,845
Other mechanics, installers, repair person	66,300	88,800	2,045	1,575	3,620
Construction trades, extractive occupations	255,000	326,050	6,465	5,080	11,545
Construction trades workers	216,450	287,450	6,455	4,495	10,950
Extractive and related workers	38,550	38,600	5	585	590
Precision product occupations	119,050	135,900	1,530	2,010	3,540
Metal workers, precision	55,950	67,150	1,020	990	2,010
Woodworkers, precision	12,900	18,500	510	275	785
Textile, apparel, furnish workers	20,700	17,800	0	200	200
Printing workers, precision	8,750	9,700	85	110	195
Food workers, precision	10,000	10,400	35	230	265
Precision workers	10,750	12,350	150	205	355
Operators, fabricators and laborers	1,151,250	1,418,150	24,265	25,845	50,110
Mach setters, set-up operators	244,250	278,600	3,135	5,170	8,305
Machine operators	14,950	18,550	325	365	690
Numeric and com machine operators	6,250	9,150	265	90	355
Metal fabricating operators	10,550	13,950	310	215	525
Metal/plastic process machine operators	12,700	15,900	290	335	625
Metal and plastic machine operators	3,100	4,850	160	70	230
Woodworking machine operators	4,550	4,850	25	90	115
Printing, binding, related occupations	19,100	20,400	120	320	440
Textile machine operators	64,150	65,500	125	1,165	1,290
Other machine operators	95,400	110,400	1,365	2,320	3,685
Hand work occupations, inc. assembly	165,300	211,350	4,185	3,830	8,015
Plant and system occupations	36,500	41,600	465	785	1,250
Transportation operators	356,600	442,700	7,815	6,445	14,260
Motor vehicle operators	235,150	287,250	4,735	4,000	8,735
Rail transportation workers	7,050	7,400	60	60	120
Water transportation occupations	5,450	6,000	60	80	140
Other transportation workers	36,450	50,200	1,250	915	2,165
Material moving operators	72,600	91,800	1,745	1,390	3,135
Hand labor, material moving helpers	348,600	443,900	8,665	9,615	18,280

Source: Texas Workforce Commission

Table 2. States Ranked by the Percent of Residents Age 25 Years and Older with a High School Diploma or More, March 1998

Rank	State	Percent
1	Washington	92.0
2	Alaska	90.6
3	Wyoming	90.0
4	Colorado	89.6
5	Minnesota	89.4
6	Utah	89.3
7	Kansas	89.2
8 (tie)	Montana, Nevada	89.1
10	Wisconsin	88.0
11	Iowa, Nebraska	87.7
13	Maine, Vermont	86.7
15	New Jersey	86.5
16	South Dakota	86.3
17	Ohio	86.2
18	Massachusetts	85.6
19	Oregon	85.5
20	Michigan	85.4
21	Delaware	85.2
22	Maryland	84.7
23	Hawaii, Oklahoma	84.6
25	North Dakota	84.3
26	Illinois	84.2
27	Pennsylvania	84.1
28	New Hampshire	84.0
29	Connecticut	83.7
30	Indiana	83.5
31	Missouri	82.9
32	Idaho	82.7
33	Virginia	82.6
34 (tie)	Arizona, Florida	81.9
36	New York	81.5
37	North Carolina	81.4
38	Rhode Island	80.7
39	California	80.1
40	Georgia	80.0
41	New Mexico	79.6
42	Alabama	78.8
43	**Texas**	**78.3**
44 (tie)	Louisiana, South Carolina	78.6
46	Kentucky	77.9
47	Mississippi	77.3
48	Tennessee	76.9
49	Arkansas	76.8
50	West Virginia	76.4

Source: Bureau of Census

Table 3. Texas High School Dropout Rates by Ethnicity, 1997-1998

Ethnicity	7-12 Grade Enrollment	Total Dropouts	Annual Dropout Rate	Percent of Total Dropouts
White	828,660	7,734	0.9	28.1
African American	244,987	5,152	2.1	18.7
Hispanic	619,855	14,127	2.3	51.3
Other	49,637	537	1.1	1.9
Total	1,743,139	27,550	1.6	100.0

Source: Texas Education Commission

Table 4. U.S. High School Dropout Rates by Ethnicity, 1996 (in percent, as of October)

	Event Dropouts[1] (Grades 10 to 12)	Status Dropouts[2] (18 to 24 years old)
White	4.5	12.5
Male	4.8	12.9
Female	4.1	12.1
African American	6.3	16.0
Male	4.6	17.4
Female	7.8	14.7
Hispanic	8.4	34.5
Male	9.2	36.2
Female	7.6	32.7
Total	4.7	12.8

Source: U.S Bureau of Census, Current Population Reports.

[1]Percent of students who drop out in a single year without completing high school.

[2]Percent of the population who have not completed high school and are not enrolled.

Table 5. Texas Population Forecast by Ethnicity, 1990-2020 (in thousands)

		White		Hispanic		Black		Other	
Year	Texas Total	Number	Percentage Total	Number	Percentage Total	Number	Percentage Total	Number	Percentage Total
1999	20,139	11,311	56.1	5,955	29.6	2,330	11.6	544	2.7
2005	22,263	11,804	53.0	7,218	32.5	2,545	11.4	696	3.1
2010	23,889	12,130	50.8	8,239	34.5	2,710	11.3	810	3.4
2015	25,558	12,434	48.7	9,323	36.5	2,872	11.2	929	3.6
2020	27,412	12,759	46.5	10,546	38.5	3,039	11.1	1,068	3.9

Source: Texas Comptroller of Public Accounts

Table 6. Relationships Between the Money Income of Families and Education Attainment, 1996

Education attainment of householder	Median Income
Less than ninth grade	$20,781
Ninth to 12th grade (no diploma)	24,575
High school graduates	38,563
Some college, no degree	44,814
Associate degree	51,176
Bachelor's degree	64,293
Master's degree	76,055
Professional degree	102,557
Doctorate degree	92,316

Source: U.S. Bureau of the Census, Current Population Reports.

Table 7. Relationships Between Educational Attainment and Family Net Worth in Dollars, 1996

		Net Worth	
Education of householder	Percent of families	Average	Median
No high school diploma	18.5	$83,200	$22,700
High school diploma	31.7	$128,900	$50,700
Some college, less than bachelor's degree	19.1	$184,900	$45,200
Bachelor's degree or more	30.7	$379,400	$102,600

Source: *Federal Reserve Bulletin*, January 1997 and the *U.S. Statistical Abstracts*

Table 8. Relationships Between Educational Attainment, Race and Poverty Level, 1996

	Percent below poverty level			
Education of householder	All Races	White	Black	Hispanic
No high school diploma	24.4	20.7	39.9	37.5
High school diploma, no college	10.2	7.7	25.1	18.4
Some college, less than bachelor's degree	7.3	5.7	16.2	13.4
Bachelor's degree or more	2.4	2.0	4.6	6.2

Source: *U.S. Statistical Abstracts*, 1998

Table 9. Relationships Between Educational Attainment and Unemployment Rate, 1997 (in percent)

Education of householder	All Races	White	Black	Hispanic
Less than high school diploma	10.4	9.4	16.6	9.6
High school graduate, no degree	5.1	4.6	8.2	7.5
Less than a bachelor's degree	3.8	3.4	6.1	5.5
College graduate	2.0	1.8	4.4	3.0

Source: U.S. Bureau of Labor Statistics and U.S. Statistical Abstracts

Table 10. Annual Compensation per Employee and Employment Multipliers in Selected Texas Industries

Industry	Compensation per employee	Ratio of Total Jobs to Direct Jobs
Petroleum refining	$65,000	8.0
Chemical	57,600	6.6
Industrial machinery and equipment	46,949	2.8
Instruments and related products	43,430	2.9
Paper and allied products	37,650	2.6
Motor vehicles and equipment	34,860	2.7
Stone, clay, and glass products	24,230	2.5
Leather and leather products	20,120	2.3
Apparel and other textile products	18,720	1.7

Source: Texas Input-Output Model

Table 11. Austin-San Marcos MSA Growth Rates of Employment by Industry in Past 20 Years

	Employment (1,000)		Growth Rate, 1980-99	
	1980*	1999**	Austin	Texas
Total non-farm employment	245.3	637.8	160.0%	54.4%
Sectors				
Mining	0.6	1.30	116.7	-38.7
Construction	13.9	36.6	163.3	25.9
Manufacturing	30.7	85.4	178.2	3.2
Transportation, communication and public utilities	7.3	21.7	197.3	53.5
Trade	53.4	138.8	159.9	46.8
Finance, insurance and real estate	14.9	33.0	121.4	50.4
Services	43.4	186.6	330.0	156.2
Total government	81.1	133.4	64.5	51.2

Source: Texas Workforce Commission and Real Estate Center at Texas A&M University
*December; ** October

Table 12. Structural Changes in Austin's Economy in Past 20 Years

	Industry's employment as a percentage of total employment			
	1980*		1999**	
	Austin	Texas	Austin	Texas
Total non-farm employment	100.0	100.0	100.0	100.0
Sectors				
Mining	0.2	4.2	0.2	1.7
Construction	5.7	7.1	5.7	5.8
Manufacturing	12.5	17.7	13.4	11.8
Transportation, communications and public utilities	3.0	6.1	3.4	6.1
Trade	21.8	24.4	21.8	23.3
Finance, insurance and real estate	6.1	5.8	5.2	5.6
Services	17.7	17.3	29.4	28.7
Total government	33.0	17.4	20.9	17.0

Source: Texas Workforce Commission and Real Estate Center at Texas A&M University

Table 13. Austin-San Marcos MSA, Industries with More than $400 Million of Output, 1995

Industry	Value of Output (millions of dollars)
Electronic computers	$4,087.51
Semiconductors and related devices	3,803.47
Real estate	3,291.95
Wholesale trade	1,811.91
Eating and drinking	1,330.43
Computer and data processing services	1,272.13
Communications, except radio and television	992.22
Doctors and dentists	980.92
Insurance carriers	876.12
New residential structures	835.69
Maintenance and repair	784.07
Banking	751.77
State and local electric utilities	749.41
Legal services	737.89
New industrial and commercial buildings	713.62
New government facilities	673.41
Automotive dealers and service stations	657.55
Telephone and telegraph apparatus	574.45
Automobile repair and services	551.53
Engineering, architectural services	539.85
Accounting, auditing and bookkeeping	524.46
Insurance agents and brokers	522.70
Hospitals	552.15
Food stores	517.74
Research, development and testing services	505.27
Management and consulting services	488.50
Natural gas and crude petroleum	450.71
New mineral extraction facilities	438.38
Motor freight transport and warehousing	425.78
Drugs	421.74

Source: Texas input-output model

Table 14. States Ranked by the Percent of Residents with a Bachelor's Degree or Higher, March 1998

Rank	State	Percent
1	Colorado	34.0
2	Maryland	31.8
3	Connecticut	31.4
4 (tie)	Massachusetts, Minnesota	31.0
6	Virginia	30.3
7	New Jersey	30.1
8	Kansas	28.5
9	Washington	28.1
10	Rhode Island	27.8
11	Oregon	27.7
12	Utah	27.6
13	Vermont	27.1
14	New York	26.8
15	New Hampshire	26.6
16	California	26.4
17	Illinois	25.8
18	Delaware	25.1
19	Alaska	24.2
20	Hawaii	24.0
21	Montana	23.9
22 (tie)	**Texas, North Carolina**	**23.3**
24	New Mexico	23.1
25 (tie)	Florida, North Dakota	22.5
27	Missouri	22.4
28	Wisconsin	22.3
29	Michigan	22.1
30	Pennsylvania	22.1
31	Arizona	21.9
32	South Dakota	21.8
33	Ohio	21.5
34	South Carolina	21.3
35	Nebraska	20.9
36	Georgia	20.7
37 (tie)	Alabama, Nevada	20.6
39	Oklahoma	20.5
40 (tie)	Idaho, Iowa	20.3
42	Kentucky	20.1
43	Wyoming	19.8
44 (tie)	Louisiana, Mississippi	19.5
46	Maine	19.2
47	Indiana	17.7
48	Tennessee	16.9
49	West Virginia	16.3
50	Arkansas	16.2

Source: Bureau of Census

References

Becker, Gary S. 1993, Human capital: A theoretical and empirical analysis, with special reference to education, University of Chicago Press, 1993.

Texas Comptroller of Public Accounts, Population Projections, web site: www.window.texas.gov.

Texas Education Commission, Texas Dropout Rates, web site: www.tea.state.tx.us

Texas Workforce Commission, Labor Market Information, 101E. 15th., Austin, Texas 78778, web site: www.twc.state.tx.us.

U.S. Bureau of Census, *Statistical Abstract of the United States*, 1998.

U.S. Bureau of Labor Statistics, Employment Data, web site: stats.bls.gov

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