

EMPLOYMENT and payrolls

**DETAILED REPORT
JUNE 1951**

**UNITED STATES DEPARTMENT OF LABOR
Maurice J. Tobin - Secretary
BUREAU OF LABOR STATISTICS
Ewan Clague - Commissioner**

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EMPLOYMENT AND PAY ROLLS

Detailed Report

June 1951

<u>CONTENTS</u>	<u>PAGE</u>
<u>Employment Review</u>	
Employment Trends	2
Industry Employment Reports:	
Automobiles	9
Merchant Marine	15
<u>Statistical Tables</u>	A:1
<u>Explanatory Notes and Glossary</u>	i

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EMPLOYMENT TRENDS

JULY 1951

The employment situation showed continued strength in the Nation as a whole in mid-Summer 1951, despite the recent declines in activity in certain sectors of the economy. Total employment in nonfarm activities in July was at an all-time high for the month and the unemployment level remained at a postwar low for the season. Although a moderate rise in industrial lay-offs in July was indicated by unemployment insurance reports, these lay-offs were largely of very short duration and had little apparent effect on the over-all unemployment total.

Employment and hours declines in consumer-durable goods industries

Employment and hours in most of the consumer durable goods industries have been declining since early Spring, as a result of restrictions on non-defense uses of metal as well as some slackening in consumer demand from the record levels of earlier months. Available production data indicate, however, that cutbacks in the output of civilian goods have been relatively greater than the employment reductions in these industries. In part, this may reflect the stepped-up flow of military procurement orders as the defense production program gained momentum. Reductions in the workweek also have served to lessen the effect of production cutbacks on employment.

The following table shows that appreciable declines in production worker employment and man-hours have occurred between March and June of this year in selected consumer durable goods industries, with the sharpest reductions occurring in plants producing furniture and radio and television sets. In fact, employment in all but 2 of the selected 7 industries in June 1951 was below the June 1950 level, in contrast to an over-all gain of 3 percent in total manufacturing employment over this period. Except in the radio and television industry, man-hours declined even more sharply than employment, because of decreases in the average workweek.

Changes in employment and manhours in
selected consumer durable goods industries,
June 1950 and March - June 1951

Industry	Production worker employment							
	Number				Percent change in			
	(in thousands)				manhours			
	June:	March:	June:	June 1950-:	March -	June 1950-:	March -	
	1951:	1951:	1950:	June 1951:	June 1951:	June 1951:	June 1951:	
Automobiles	737.3	793.4	764.7	-3.6	-7.1	-11.9	-9.8	
Household furniture	199.1	236.1	222.3	-10.4	-15.7	-14.5	-20.3	
Radios and television	149.4	183.2	151.6	-1.5	-18.4	-0.7	-18.4	
Service industry and household machines	139.9	148.4	147.9	-5.4	-5.7	-10.8	-10.9	
Heating apparatus	128.6	133.9	121.9	5.5	-4.0	7.1	-5.3	
Toys and sporting goods	65.5	68.9	63.6	3.0	-4.9	1.2	-6.6	
Jewelry and silverware	41.4	47.2	42.5	-2.6	-12.3	-3.5	-16.4	

Nonfarm employment dips seasonally in July

The number of employees in industry, commerce, and government declined by about 200,000 between mid-June and mid-July, but, at 46.4 million, was still at a record high for the season. Over the month, widespread vacation shut-downs in manufacturing industries and mid-summer reductions in such fields as retail trade and public school employment more than offset gains in canning, construction, and defense-related industries. (See Tables 1 and 2).

Factory employment, at 15.8 million in mid-July, was down by more than 100,000 over the month. Minor employment declines were reported in nearly every industry, partly reflecting short-term lay-offs of workers not eligible for vacation pay when their plants shut down. Somewhat greater reductions occurred in industries producing certain consumer durable goods, including radios and television sets, refrigerators and other household appliances, and automobiles.

Seasonal employment declines were reported in the textile, apparel, and lumber industries over the month. On the other hand, aircraft plants continued to add workers, and, by mid-July, had increased their employment by over 200,000, or 86 percent, since the start of the Korean War in June 1950.

Employment in contract construction was at an all-time high of 2.7 million in July, following a moderate seasonal gain of 40,000 over the month. Increases in expenditures for industrial and military construction were reported in July, continuing the sharp uptrend of recent months. However, private home-building expenditures failed to show the normal seasonal gain and commercial building began to drop, as the effects of restrictions on nondefense construction became more evident.

Employment in Federal defense agencies, including naval shipyards, arsenals, and military bases, rose by about 28,000 over the month. Federal defense employment in the continental U. S. totaled 1.1 million in July, up by nearly a half million from June 1950. Well over nine-tenths of this increase occurred in Government defense installations located outside of the Washington, D. C. area.

Factory workweek reduced to year-ago level

The average workweek of production workers in manufacturing plants declined by nearly a half hour between mid-June and mid-July, to 40.4 hours, or about the level of a year ago. The reduction in hours over the month occurred primarily among the durable goods industries, and was largely the result of widespread vacation shutdowns.

Over the year, decreases in the average workweek have been reported in many consumer durable goods industries, such as household appliances, furniture, and automobiles, where both hours and employment have been declining since early Spring of this year. Slackened consumer demand since Spring also has resulted in reductions in the average workweek below the level of a year ago in certain soft-goods industries, including textiles, leather, and men's and boys' clothing. However, significant over-the-year increases in hours have been reported in such defense-connected industries as metalworking machinery, aircraft, and shipbuilding.

Average weekly earnings of production workers in manufacturing declined 76 cents over the month but, at \$64.56 in July, were \$5.35 above a year ago. The June to July decrease resulted primarily from a reduction of nearly an hour in the average workweek in durable goods plants. Gross hourly earnings of factory workers, including overtime and other premium pay, averaged \$1.60 in July, unchanged over the month and up 14 cents over the year.

Factory hiring at pre-Korea level in June

Factories hired workers at a rate of 48 per 1,000 employees in June, the same rate as in June 1950. This contrasts with the pattern in earlier months of this year, when the hiring rate in manufacturing industries was substantially above the rate in the corresponding months of 1950, and reflects the recent easing in demand in many consumer goods industries. Hiring rates continued significantly higher than a year earlier, however,

in a number of industries related to defense production, including machinery, ordnance, instruments, chemicals, and petroleum products.

Between May and June, the hiring rate in manufacturing industries rose moderately, largely because of initial preparations for the Fall season in a number of soft goods industries. However, in the apparel, textiles, and furniture industries, the hiring rate in June was lower than the rate of separations due to quits, lay-offs, and other causes.

Lay-offs of manufacturing workers declined between May and June from 12 to 9 per 1,000 employees, and equalled the June 1950 rate -- a postwar low for the month. Seasonal declines in lay-offs were reported in most nondurable goods industries. Lay-off rates were highest in June in furniture and automobile plants. In the latter industry, curtailments of automobile production have resulted in relatively high lay-off rates in the past few months.

The quit rate of factory workers also declined between May and June, from 28 to 24 per 1,000 employees, but remained substantially above the June 1950 level of 17 per 1,000. However, the quit rate was above year-ago levels in every industry group, with increases most pronounced in defense-related industries, including primary metals, machinery, and ordnance. Relatively small increases in voluntary separations over the year were reported in most consumer goods industries, where employment opportunities have slackened in recent months.

Total unemployment continues at seasonal low

Unemployment totaled 1.9 million in July, or more than 300,000 below the previous postwar low for the month in 1948, according to Bureau of the Census estimates. This was the sixth consecutive month in which the unemployment total was below the previous postwar low point for the season. Most of those seeking work in July, moreover, had been unemployed only for brief periods accompanying recent entry into the labor force or voluntary job shifting. Only about one out of every eight job seekers had been unemployed for 15 weeks or more. A year ago, by way of contrast, one out of five jobless workers was in this group of long-term unemployed.

Between June and July 1951, unemployment dropped by 100,000 as young people who had entered the labor market with the close of the school year were rapidly absorbed into employment. Unemployment among adult workers, aged 25 years and over, remained substantially unchanged over the month and, at 1 million in July, was down to about half the level of a year earlier.

Continued claims for State unemployment insurance benefits showed a moderate contraseasonal rise in July, to about 1 million, or approximately the same as in the corresponding month in 1948. In the previous quarter, however, continued claims had averaged about 10 percent below 1948 levels for the corresponding period.

Reports from State employment security agencies indicated that both curtailments in certain consumer goods industries and widespread vacation shutdowns had been responsible for these increases in claims. Many of the workers added to plant payrolls in recent months and not eligible for vacation pay applied for unemployment benefits when their plants shut down. Short-term lay-offs of this type, with a specific date of return, generally are not reflected in the Census count of unemployed and may largely account for the difference in trend over the month between Census estimates and unemployment insurance claims data.

Employment of women rises over the year

In response to large-scale expansion in employment opportunities, relatively heavy inflows of women into the labor force have occurred over the past year. A net influx of 1.1 million women between July 1950 and July 1951 has offset a comparable decline in the number of men in the civilian labor force resulting from the large-scale build-up of the armed forces since the outbreak of the Korean war. As a result, the civilian labor force of 64.4 million in July of this year was at about the same level as in July 1950.

In March 1951, manufacturing plants reported a total of 4.2 million women on their payrolls, a net addition of a half million women over the year. This increase has been concentrated in industries where rapid expansion in total employment has occurred. In the metals and metals products industries, where total employment rose by 1.4 million over the year, 300,000 women were added to plant payrolls.

Over all, the relative importance of women workers in manufacturing plants remained unchanged over the year -- at 26 percent of total manufacturing employment in both March 1950 and March 1951. This reflects the fact that the heavy industries, which normally employ relatively few women, accounted for the bulk of the rise in total factory employment. Nevertheless, most industries showed an increase in the proportion of women employed over the year. Among the industries where the percentage of women workers rose significantly were household equipment, optoelectric and photographic goods, aircraft, and communication equipment. The gains in the proportion of women workers were, however, much smaller than in the early World War II period when both inflows of women into the labor force and withdrawals of men to armed forces were on a considerably greater scale.

Despite the evidence of increased utilization of women workers in many industries, the basic pattern of their employment in manufacturing remains essentially unchanged. In March 1951, about half of the women working in manufacturing plants were employed in the food, textile, apparel and leather industries. The apparel industry alone employed over 900,000 women, constituting three-quarters of the industry's labor force.

TABLE 1

7.

Employees in Nonagricultural Establishments, by Industry Division and Selected Groups
July, June, May, 1951 and July 1950

(In thousands)

Industry division and group	1951			1950	Net change	
	July 1/	June	May	July	June 1951 to July 1951	July 1950 to July 1951
TOTAL	46,389	46,563	46,232	44,096	-174	+2,293
MANUFACTURING	15,830	15,964	15,873	14,777	-134	+1,053
MINING	896	923	913	922	- 27	- 26
Metal mining	106	105	104	103	+ 1	+ 3
Bituminous-coal	356	379	377	382	- 23	- 26
Nonmetallic mining and quarrying	108	108	106	101	0	+ 7
CONTRACT CONSTRUCTION	2,726	2,683	2,592	2,532	+ 43	+ 194
TRANSPORTATION AND PUBLIC UTILITIES	4,166	4,161	4,138	4,062	+ 5	+ 104
Transportation	2,912	2,922	2,912	2,839	- 10	+ 73
Communication	690	686	680	667	+ 4	+ 23
Other public utilities	564	553	546	556	+ 11	+ 8
TRADE	9,656	9,728	9,676	9,390	- 72	+ 266
Wholesale trade	2,584	2,580	2,567	2,528	+ 4	+ 56
Retail trade	7,072	7,148	7,109	6,862	- 76	+ 210
General merchandise stores	1,397	1,457	1,472	1,372	- 60	+ 25
Food and liquor stores	1,276	1,269	1,269	1,203	+ 7	+ 73
Automotive and accessories dealers	753	746	742	746	+ 5	+ 7
Apparel and accessories stores	519	543	549	501	- 29	+ 18
Other retail trade	3,127	3,126	3,077	3,040	+ 1	+ 87
FINANCE	1,907	1,893	1,875	1,831	+ 14	+ 76
SERVICE	4,852	4,834	4,768	4,841	+ 18	+ 11
GOVERNMENT	6,356	6,377	6,377	5,741	- 21	+ 615
Federal	2,313	2,271	2,244	1,820	+ 42	+ 493
State and local	4,043	4,106	4,133	3,921	- 63	+ 122

1/ Preliminary

TABLE 2

8.

Employees in Manufacturing Industry Groups
July, June, May 1951 and July 1950

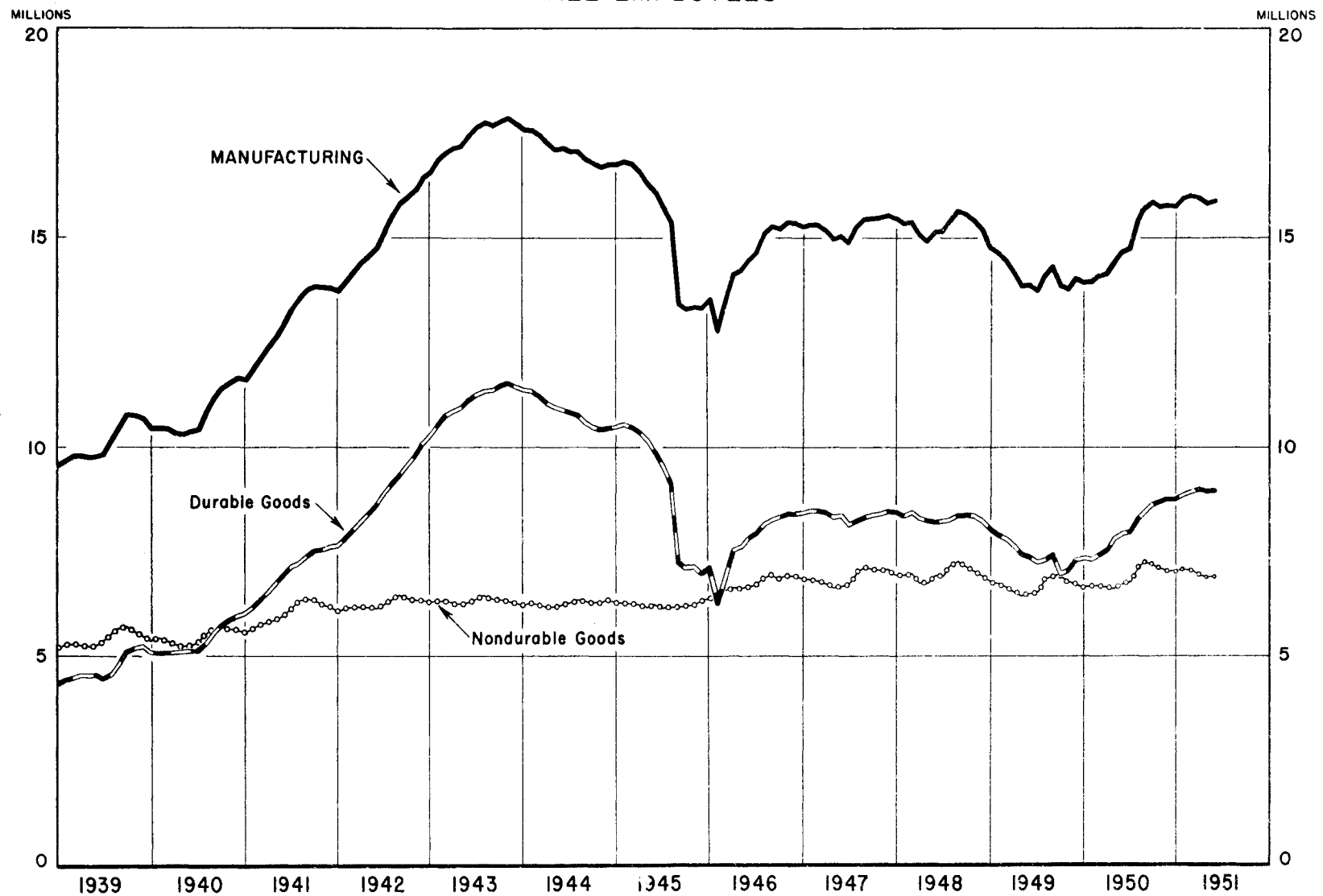
(In thousands)

Industry Group	1951			1950	Net change	
	July 1/	June	May	July	June 1951 to July 1951	July 1950 to July 1951
MANUFACTURING	15,830	15,964	15,873	14,777	-134	+1,053
DURABLE GOODS	8,858	9,006	8,987	7,978	-148	+ 880
Ordnance and accessories	44.5	41.9	39.9	23.7	+ 2.6	+ 20.8
Lumber and wood products (except furniture)	819	843	835	812	- 24	+ 7
Furniture and fixtures	330	335	349	350	- 5	- 20
Stone, clay, and glass products	553	562	560	512	- 9	+ 41
Primary metal industries	1,349	1,354	1,345	1,222	- 5	+ 127
Fabricated metal products (except ordnance, machinery, and transportation equipment)	985	1,019	1,026	929	- 34	+ 56
Machinery (except electrical)	1,602	1,620	1,604	1,343	- 18	+ 259
Electrical machinery	903	934	932	817	- 31	+ 86
Transportation equipment	1,521	1,519	1,512	1,297	+ 2	+ 224
Instruments and related products	293	299	297	242	- 6	+ 51
Miscellaneous manufacturing industries	458	479	487	430	- 21	+ 28
NONDURABLE GOODS	6,972	6,958	6,886	6,799	+ 14	+ 173
Food and kindred products	1,615	1,538	1,483	1,617	+ 77	- 2
Tobacco manufactures	82	82	81	82	0	0
Textile-mill products	1,256	1,295	1,301	1,250	- 39	+ 6
Apparel and other finished textile products	1,111	1,119	1,120	1,097	- 8	+ 14
Paper and allied products	426	502	498	465	- 6	+ 31
Printing, publishing, and allied industries	759	761	760	739	- 2	+ 20
Chemicals and allied products	742	742	742	669	0	+ 73
Products of petroleum and coal	268	264	260	241	+ 2	+ 25
Rubber products	268	273	271	249	- 5	+ 19
Leather and leather products	377	382	370	390	- 5	- 13

1/ Preliminary

EMPLOYMENT IN MANUFACTURING INDUSTRIES

ALL EMPLOYEES



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

INDUSTRY EMPLOYMENT REPORTS

AUTOMOBILES

...cut-backs in employment expected

Employment in the automobile industry¹ declined during the second quarter of 1951 from the record-breaking levels attained since the outbreak of Korean hostilities. June employment showed a net decline of over 56,000 production workers from the 1951 high of 793,400 in March. During the third and fourth quarter fewer workers will be employed to produce the limited number of cars and trucks scheduled under the Controlled Materials Plan. Anticipated employment declines on civilian products may reach 100,000 workers, but will be partly offset by increasing employment on defense production of such items as jet aircraft engines and tanks, for which the automobile industry already holds contracts.

Employment Trends and Outlook

Month by month declines in employment characterized the second quarter of 1951 in contrast to the all-time high quarterly average of 784,000 production workers during the first quarter. In June 737,300 production workers were employed, a net decline of over 56,000 workers from the 1951 high of 793,400 in March. Some plants have shut down completely for a week or two. In other plants, the second shift has been eliminated or assembly line production halted for 1 or 2 days during the week.

By the end of 1951, automobile employment is expected to show a decline of about 100,000 production workers from second quarter levels, if the workweek remains close to the present average of about 40 hours. This estimate is based upon an output in the fourth quarter, under the Controlled Materials Plan, of 1.1 million passenger cars and 275,000 trucks, and a small increase in the production of replacement parts over 1950 levels. (See table II.)

1. The automobile industry includes establishments primarily engaged in manufacturing motor vehicles, passenger-car bodies, truck and bus bodies, motor vehicle parts and accessories, and truck and automobile trailers.

Statements in early July by several spokesmen for the automobile industry indicate that only a small percentage of their workers were actually engaged in producing military equipment at that time although a growing volume of defense contracts had been obtained. Large increases in the number of automobile workers in defense production are not anticipated until 1952; only a moderate rise in employment on military orders is expected during the second half of 1951. As these increases occur, they will partly offset employment declines in motor-vehicle production.

Estimates of declining employment for the second half of 1951 contrast sharply with the 1950 pattern. In May 1950, automobile employment began a steady upward climb, rising to an all-time peak in October of nearly 795,000 production workers. The 1950 employment average of 713,500 exceeded all previous levels for the industry by more than 50,000, even though there was a long work stoppage at one of the major producers.

The trend of employment has been upward throughout most of the post World War II period despite wide monthly fluctuations. Employment for the years 1947 to 1949 averaged about 14 percent higher than the prewar peak of 571,000 production workers in 1941. Increases in employment during World War II reflect conversion of the industry to defense production with only a small proportion of total manhours devoted to the output of motor vehicles.

TABLE I

PRODUCTION WORKER EMPLOYMENT - AUTOMOBILE INDUSTRY, 1932-51
(In thousands)

<u>Period</u>	<u>Total</u>		<u>Period</u>	<u>Total</u>
1932...	257		1950: January.....	675.4
1933...	257		February.....	567.1
1934...	380		March.....	575.6
1935...	408		April.....	595.3
1936...	430		May.....	736.3
1937...	505		June.....	764.7
1938...	306		July.....	756.7
1939...	402		August.....	780.9
1940...	465		September.....	787.8
1941...	571		October.....	794.8
1942...	490		November.....	760.4
1943...	642		December.....	767.3
1944...	663			
1945...	538		1951: January.....	767.3
1946...	544		February.....	790.6
1947...	648.8		March.....	793.4
1948...	657.6		April.....	774.1
1949...	643.5		May.....	752.6
1950...	713.5		June.....	737.3

Production Trends

Output of motor vehicles in the United States in 1950 surpassed all previous levels. The total production of over 8 million units included 6.6 million passenger cars. Although the first quarter total was only 1.6 million vehicles, the industry produced well over 2 million vehicles in each of the last three quarters of the year. Capacity operations throughout the entire year would have resulted in an even higher total output. Part of this huge demand for motor vehicles was the result of advance buying in anticipation of future shortages. However, the American market has absorbed about 3 million passenger cars each 6 months since the beginning of 1949.

Production during the first quarter of 1951 was close to the 1950 level with a total of about 1,980,000 vehicles -- 1.6 million passenger cars and 378,000 trucks. Total output during the second quarter declined by more than 72,000 units from the first quarter rate. Passenger car production dropped over 106,000 units, but an increase in truck production partially offset the decline. Truck production in the second quarter of 1951 reached nearly 413,000 units -- the highest on record. The previous peak level was attained in the second quarter of 1948 when 362,000 trucks were produced.

Materials restrictions were applied to the production of passenger cars but not to truck production in the second quarter. Steel, copper, and aluminum were allocated to manufacturers of passenger cars on the basis of their use of these metals during the period of January-June 1950, with some modification for inequities. Steel consumption was held to slightly less than 80 percent of base period use, copper to 70 percent, and aluminum to 65 percent. Materials limitations in the second quarter resulted in a smaller unit decline than these percentages indicate, although by the end of the period some plants were forced to close down for short periods of time because of the lack of materials.

In July, the National Production Administration began to allocate the three basic metals -- steel, copper and aluminum -- to both military and civilian claimants, under the Controlled Materials Plan. Under present controls, producers of passenger cars are permitted only enough steel to make about 1.2 million units in the third quarter. Individual producers, although limited in the amounts of material available, have discretion as to actual output during the period, and may use their supplies to produce a larger number of light-weight cars or a smaller number of heavier ones. Truck production of 275,000 units in the third quarter is provided for under the Controlled Materials Plan. Output by individual producers is based on a percentage of this total.

TABLE II

MOTOR VEHICLE OUTPUT BY QUARTERS, 1949-51
(In thousands)

Type Vehicle and Period	Number of Vehicles		
	1949	1950	1951
Passenger cars:			
First quarter	1,053	1,343	1,602
Second quarter	1,325	1,751	1,495
Third quarter	1,575	1,895	1/1,200
Fourth quarter	1,162	1,677	1/1,100
Total	5,115	6,666	1/5,397
Average	1,279	1,666	1/1,349
Trucks and busses:			
First quarter	323	294	378
Second quarter	293	360	413
Third quarter	288	352	1/ 275
Fourth quarter	225	326	1/ 275
Total	1,129	1,332	1/1,341
Average	282	333	1/ 335
TOTAL:			
First quarter	1,376	1,637	1,980
Second quarter	1,618	2,113	1,908
Third quarter	1,863	2,248	1/1,475
Fourth quarter	1,387	2,005	1/1,375
Total	6,244	8,003	1/6,738
Average	1,561	2,001	1/1,685

1/ Estimated

Source: U. S. Department of Commerce, Survey of Current Business.
Data include total factory sales of motor vehicles produced in
plants in the United States.

Fourth quarter allocations have not yet been announced for trucks, although it appears likely that some upward adjustment may be made, particularly if larger quantities of trucks are scheduled for military deliveries. A further cutback in passenger car production for the fourth quarter has been announced, limiting output to about 1.1 million cars. These estimates indicate that in 1951 total motor vehicle output will be slightly higher than in 1949 -- down about 1.2 million units from the 8 million peak achieved in 1950. Production of passenger cars will total 5.4 million in contrast to last year's total of 6.6 million, but truck output will be about the same as in 1950 -- 1.3 million units.

Replacement parts sales which took a declining proportion of total dollar sales of the automobile industry in 1950, increased during the first quarter of 1951. The 1951 production is expected to be about 10 percent higher than the 1950 total. Limitations on output of new vehicles tend to stimulate demand for replacement parts as the average age of vehicles in use increases. No limitation has been made on metal supplies for the production of replacement parts.

Military Output by the Automobile Industry

Currently defense contracts for military items to be produced by the automobile industry are estimated to total well over \$7 billion. In addition, many aircraft contracts are being subcontracted to plants now turning out automobile engines and parts. Output of military equipment by the automobile industry is increasing. The large expansion, however, is not expected until well into 1952. The increase in employment resulting from military contracts has thus far been obscured by the downward trend of employment in the production of civilian items.

The situation today under partial mobilization differs from the Nation's experience in World War II. At that time automobile and truck production for civilian use was completely curtailed, and existing facilities were converted to the manufacture of military items. At the height of World War II motor vehicles and parts, including combat vehicles, represented only about 32 percent of the industry's total dollar volume of shipments. Aircraft and parts accounted for 16 percent of total shipments and aircraft engines nearly 14 percent. Remaining shipments by the industry between July 1943 - June 1944 included such diverse items as tanks, guns and mounts, ammunition, bombs, depth charges, mines and torpedoes, amphibian combat vehicles and parts, and marine engines. Present mobilization plans call for the production of many of these same items by the automobile industry.

Several factors tend to create a longer time lag between the awarding of a military contract and the delivery date of the scheduled item. One factor is the complexity of design of most equipment introduced since World War II, requiring a longer period of engineering and tooling-up before assembly line production can be started. Since no complete curtailment of civilian automobile production is anticipated, plant facilities must be increased if both military and civilian output are to be achieved simultaneously. The shortage of machine tools for these plants has also slowed the transition to defense production.

Location of the Industry

About three-fourths of all workers in the automobile industry are employed in the three East North Central States of Michigan, Ohio, and Indiana. More than half of all automobile employment is concentrated in Michigan. However, this represents a decline from the prewar level when nearly two-thirds of all automobile workers were employed in that state.

Other States in which a substantial number of automobile workers are employed include New York, Wisconsin, Pennsylvania, California and Illinois.

Industry Employment Reports

MERCHANT MARINE

. . . employment leveling off after rapid expansion

Employment in the American merchant marine has increased almost one-third since the outbreak of hostilities in Korea. It climbed from a post-war low of about 75,000 in June 1950, to about 100,000 by July 1951.

This rapid growth in employment has created a tight balance between labor supply and demand. As a result, shortages have appeared in the following occupations: radio operator, high pressure marine engineer, able seaman, and in the skilled engine department occupations such as oiler, fireman, water tender, and electrician. To date, however, there have been no manpower shortages comparable to those of World War II. Moreover, the industry is approaching the peak of its anticipated peacetime expansion so that few new jobs will be added during the next few years. During this period the main manpower problem will be to find replacements for the thousands of men who leave the industry each year.

Merchant Marine Vital to National Defense

The American merchant marine is a vital link in the Nation's transportation system. In time of war it becomes an indispensable auxiliary to our Armed Forces. In time of peace it carries cargo and passengers to and from other countries and our offshore possessions.

In July 1951, the active American merchant marine consisted of about 1,900 deep-sea vessels of 1,000 gross tons or over. Most of the ships are dry cargo vessels and tankers. About 1,300 of these vessels are privately owned and operated and the remainder government owned. With the exception of about 160 vessels operated by the Military Sea Transport Service and government owned ships are operated by private steamship lines.

Activity Greatest Along Atlantic Coast

Shipping operations are scattered along 7,000 miles of coast line in 70 ports with more than half of the Nation's shipping activity limited to 16 principal deep sea ports along the Atlantic, Gulf, and Pacific Coasts. Greatest sea-borne commerce flows through the Atlantic ports, with New York the busiest port in the Nation. Other important Atlantic ports are those in the Philadelphia harbor area, Baltimore, Boston, Norfolk, Charleston, and Savannah. The Gulf ports handle a substantial volume of cargo, much of which is petroleum and petroleum products. Chief ports in the Gulf area are Houston and Galveston, New Orleans, Port Arthur, Mobile and Tampa. On the West Coast the principal ports are those in the San Francisco Bay area, the San Pedro-Wilmington area, and the Puget Sound and Columbia River ports.

Shipping Rises Sharply to Meet Defense Needs

The outbreak of war in Korea on June 25, 1950, marked a turning point in the shipping outlook. Shipping activity declined during the period following World War II. While war-stimulated business was declining, the world merchant fleet grew steadily. This brought intensified competition which forced down world shipping rates. By the fall of 1949 and the first half of 1950 many American operators found it more difficult than usual to compete with lower cost foreign operators. As a result charters were canceled and American vessels were laid up. By June 1950 the American flag fleet had shrunk to about 1,400 vessels, from the more than 4,000 American flag vessels in operation during World War II.

Korean hostilities created a sharp demand for additional shipping space. Ships were needed to transport troops and supplies to the Korean fighting fronts, to bolster our European defenses, and to help our allies stock pile strategic materials. Direct military requirements arising from the war in Korea were not the only reasons for the shipping boom. A large volume of coal, grain, and foodstuffs had also begun to move to Europe in the latter part of 1950, some of it Economic Cooperation Administration aid and much of it financed by European countries with their own funds. On the import side the United States began to make substantial imports of petroleum and strategic ores and minerals to build up our stock piles.

The increased volume of world trade resulted in a shortage of available ships. This was reflected in the sharp increase of freight rates, particularly in the unscheduled service. For example, coal moves to Europe at a rate of \$12 per ton compared with \$4 per ton before the outbreak of hostilities in Korea. To meet the demand for shipping space the active, American flag, oceangoing fleet increased from about 1,400 vessels in June 1950 to about 1,900 in July 1951.

The outlook for the latter part of 1951 and for 1952 is dependent upon many unpredictable factors. If the present tempo of the limited mobilization program continues through 1952, military and economic requirements throughout the world will necessitate the addition of another 50 to 100 American flag vessels. Economic Cooperation Administration is carrying on a heavy coal shipment program this summer and in the fall world grain shipments will pick up. In addition the military requirements for a European build-up will strengthen the industry's position. By early 1952 the American fleet will level off at about 1,950 to 2,000 ships. This will probably represent the peak of maritime expansion. In the event of full mobilization the number of ships required would of course greatly exceed this estimate.

TABLE 1
ESTIMATED AVERAGE MONTHLY EMPLOYMENT ON AMERICAN FLAG MERCHANT VESSELS
1929-51 1/

<u>Year</u>	<u>Average monthly employment 2/</u>
1929 - - - - -	63,825
1930 - - - - -	62,360
1931 - - - - -	57,180
1932 - - - - -	52,600
1933 - - - - -	54,620
1934 - - - - -	56,295
1935 - - - - -	56,575
1936 - - - - -	53,025
1937 - - - - -	57,170
1938 - - - - -	50,905
1939 - - - - -	52,445
1940 - - - - -	50,975
1941 - - - - -	50,225
1942 - - - - -	47,650
1943 - - - - -	76,800
1944 - - - - -	125,755
1945 - - - - -	158,755
1946 - - - - -	127,175
1947 - - - - -	115,000
1948 - - - - -	3/90,000
1949 - - - - -	3/80,000
1950 - - - - -	3/62,000
July 1951 - - - - -	3/87,000

1/ Represents personnel on active merchant steam and motor vessels of 1,000 gross tons and over, engaged in deep-sea trades. Includes only combination passenger and freight, freight, and tank vessels.

2/ Excludes personnel employed on vessels under bareboat charter, or owned by Army or Navy.

3/ Includes personnel employed on vessels under bareboat charter.

Source: United States Maritime Administration

Employment Up One-Third Since Korean War

Since the outbreak of hostilities in Korea, employment has increased substantially. By July 1951, shipboard employment had climbed to about 100,000. It is expected that by early 1952 the industry will have 1,950 to 2,000 vessels in active operation, a gain of from 50 to 100 ships over the July 1951 figure. From 2,000 to 4,000 seamen will be needed to man these additional ships based on an average crew of 40.

Wide fluctuations in employment are characteristic of the ocean shipping industry. These ups and downs in employment are associated with changes in world political and economic conditions and particularly with war and national defense needs. War, with its tremendous requirements for shipping space, causes a sharp rise in maritime employment. Table 1 shows that at the peak of World War II employment on American flag merchant vessels rose to almost 160,000, compared with 50,000 prior to the attack on Pearl Harbor. The volume of shipping produced for war was far greater than could be utilized in peacetime commerce and excess ships were sold or put into reserve anchorages. Employment declined steadily to a level of about 75,000 in June 1950.

Employment Outlook Favorable

Employment levels are expected to remain high for the next few years if international conditions remain tense. The long-range employment trend, however, will be downward. Many nations are expanding their merchant fleet. This will intensify world shipping competition and force rates down. Any substantial drop in the current rate structure will result in the laying-up of a number of privately owned American flag vessels. Moreover, any reductions in military shipping needs and Economic Cooperation Administration requirements would cut down the size of the active government owned fleet. But for the next few years at least, despite the levelling off of employment, the industry will offer favorable employment opportunities because of high labor turn over.

Labor Turn Over High

Ocean voyages are generally long, confining, and hazardous so that seamen customarily take time off between trips for relaxation ashore. Such time off may be for a week or more. Others leave the sea for short periods of time because of illness or for personal or business reasons. Many more tire of sea life and the frequent spells of unemployment and permanently leave the industry for shore employment. On the average, seamen work about 8 or 9 months in the year, and there is constant movement into and out of the industry at all times.

To replace men who temporarily or permanently leave the industry there must be a reserve of seamen for manning purposes. The size of this reserve is estimated at about 25 to 30 percent of the total number of men employed. Actually this reserve force varies from time to time. In bad times the reserve force is generally larger than 30 percent because of the number of men looking for work, but it is much smaller than 25 percent when maritime employment rises sharply.

The pool of potential seamen is far greater than that which was available at the outset of World War II, when nearly 100,000 experienced workers were brought back to sea according to a Maritime Commission estimate. Moreover, the active labor force today is almost twice as large as that existing in December 1941.

World War II experience leaves little doubt that in time of grave national peril many experienced seamen would return to the sea to help meet wartime shipping needs. During the present period of limited mobilization, however, it has been extremely difficult to persuade experienced men to return. They can be given no assurance of long-term employment and are thus naturally reluctant to give up secure, year-round, shore jobs. As a result, whenever ship sailings are stepped up it is difficult to recruit experienced men.

EMPLOYMENT AND PAY ROLLS

Detailed Report

Statistical Tables

June 1951

<u>TABLE</u>	<u>CONTENTS</u>	<u>PAGE</u>
1	Employees in Nonagricultural Establishments, by Industry Division.....	A:2
2	Employees in Nonagricultural Establishments, by Industry Division and Group.....	A:3
3	All Employees and Production Workers in Mining and Manufacturing Industries.....	A:5
4	Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries.....	A:10
5	Employees in the Shipbuilding and Repairing Industry, by Region.....	A:11
6	Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government Employment and Pay Rolls in Washington, D. C.....	A:12
7	Employees in Nonagricultural Establishments, by Industry Division, by State.....	A:13
8	Employees in Nonagricultural Establishments, by Industry Division, in Selected Areas.....	A:17
9	Production Workers in Selected Manufacturing Industries.....	A:22

Data for the 2 most recent months
shown are subject to revision

* * * * *

Explanatory notes outlining briefly the
concepts, methodology, and sources used
in preparing data presented in this re-
port appear in the appendix. See pages
1 - viii.

TABLE 1: Employees in Nonagricultural Establishments, by Industry Division

(In thousands)

Year and month	Total	Mining	Contract con- struction	Manufac- turing	Transporta- tion and public utilities	Trade	Finance	Service	Govern- ment
Annual average:									
1939	30,287	845	1,150	10,078	2,912	6,612	1,382	3,321	3,987
1940	32,031	916	1,294	10,780	3,013	6,940	1,419	3,477	4,192
1941	36,164	947	1,790	12,974	3,248	7,416	1,462	3,705	4,622
1942	39,697	983	2,170	15,051	3,433	7,333	1,440	3,857	5,431
1943	42,042	917	1,567	17,381	3,619	7,189	1,401	3,919	6,049
1944	41,480	883	1,094	17,111	3,798	7,260	1,374	3,934	6,026
1945	40,069	826	1,132	15,302	3,872	7,522	1,394	4,055	5,967
1946	41,412	852	1,661	14,461	4,023	8,602	1,586	4,621	5,607
1947	43,371	943	1,982	15,247	4,122	9,196	1,641	4,786	5,454
1948	44,201	981	2,165	15,286	4,151	9,491	1,716	4,799	5,613
1949	43,006	932	2,156	14,146	3,977	9,438	1,763	4,782	5,811
1950	44,124	904	2,318	14,884	4,010	9,524	1,812	4,761	5,910
<u>1950</u>									
Apr..	42,926	939	2,076	14,162	3,928	9,346	1,803	4,757	5,915
May..	43,311	940	2,245	14,413	3,885	9,326	1,812	4,790	5,900
June..	43,945	946	2,414	14,666	4,023	9,411	1,827	4,826	5,832
July..	44,096	922	2,532	14,777	4,062	9,390	1,831	4,841	5,741
Aug..	45,080	950	2,629	15,450	4,120	9,474	1,837	4,827	5,793
Sept..	45,684	946	2,626	15,685	4,139	9,641	1,827	4,816	6,004
Oct..	45,898	939	2,631	15,827	4,132	9,752	1,821	4,757	6,039
Nov..	45,873	938	2,571	15,765	4,123	9,896	1,820	4,723	6,037
Dec..	46,595	937	2,403	15,789	4,125	10,443	1,828	4,694	6,376
<u>1951</u>									
Jan..	45,246	932	2,281	15,784	4,072	9,592	1,831	4,666	6,088
Feb..	45,390	930	2,228	15,978	4,082	9,554	1,839	4,557	6,122
Mar..	45,850	924	2,326	16,022	4,112	9,713	1,854	4,682	6,217
Apr..	45,998	911	2,471	15,955	4,132	9,627	1,865	4,745	6,292
May..	46,232	913	2,592	15,873	4,138	9,676	1,875	4,788	6,377
June..	46,563	923	2,683	15,964	4,161	9,728	1,893	4,834	6,377

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 2: Employees in Nonagricultural Establishments, by Industry
Division and Group

(In thousands)

Industry division and group	1951			1950	
	June	May	April	June	May
TOTAL	46,563	46,232	45,998	43,945	43,311
MINING	923	913	911	946	940
Metal mining	105.4	103.5	103.8	101.8	99.9
Anthracite	70.2	70.4	67.6	75.3	76.1
Bituminous-coal	378.6	377.3	381.9	410.4	413.1
Crude petroleum and natural gas production	260.6	255.9	254.6	258.9	253.9
Nonmetallic mining and quarrying	107.9	105.8	103.1	100.0	97.3
CONTRACT CONSTRUCTION	2,683	2,592	2,471	2,414	2,245
NONBUILDING CONSTRUCTION	538	508	460	493	442
Highway and street	230.3	213.8	181.3	213.5	182.4
Other nonbuilding construction	307.7	294.6	278.6	279.3	260.0
BUILDING CONSTRUCTION	2,145	2,084	2,011	1,921	1,803
GENERAL CONTRACTORS	926	891	848	827	766
SPECIAL-TRADE CONTRACTORS	1,219	1,193	1,163	1,094	1,037
Plumbing and heating	300.2	291.5	289.3	267.4	257.1
Painting and decorating	173.8	167.5	155.9	140.0	126.7
Electrical work	146.2	142.1	139.1	127.6	122.0
Other special-trade contractors	598.8	592.2	578.4	558.6	530.8
MANUFACTURING	15,964	15,873	15,955	14,666	14,413
DURABLE GOODS	9,006	8,987	9,003	7,964	7,809
NONDURABLE GOODS	6,958	6,886	6,952	6,702	6,604
TRANSPORTATION AND PUBLIC UTILITIES	4,161	4,138	4,132	4,023	3,885
Transportation	2,922	2,912	2,909	2,813	2,685
Interstate railroads	1,470	1,465	1,463	1,407	1,296
Class I railroads	1,295	1,291	1,287	1,240	1,135
Local railways and bus lines	142	144	144	147	149
Trucking and warehousing	617	619	624	577	562
Other transportation and services	693	684	678	682	678
Air transportation (common carrier)	82.6	79.4	78.5	74.6	74.6
Communication	686	680	678	662	659
Telephone	637.2	630.3	629.0	614.6	610.7
Telegraph	48.3	48.8	48.4	46.7	46.9

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 2: Employees in Nonagricultural Establishments, by Industry
Division and Group (Continued)

(In thousands)

Industry division and group	1951			1950	
	June	May	April	June	May
TRANSPORTATION AND PUBLIC UTILITIES (Continued)					
Other public utilities	553	546	545	548	541
Gas and electric utilities	527.1	521.1	519.8	522.3	515.8
Electric light and power utilities	235.0	232.5	231.9	235.2	232.5
Gas utilities	117.9	116.0	115.6	115.5	113.1
Electric light and gas utilities combined	174.2	172.6	172.3	171.6	170.2
Local utilities, not elsewhere classified	25.5	24.9	25.4	25.6	25.0
TRADE	9,728	9,676	9,627	9,411	9,326
Wholesale trade	2,580	2,567	2,579	2,502	2,479
Retail trade	7,148	7,109	7,048	6,909	6,847
General merchandise stores	1,457	1,472	1,453	1,411	1,412
Food and liquor stores	1,269	1,269	1,264	1,205	1,204
Automotive and accessories dealers	748	742	739	733	714
Apparel and accessories stores	548	549	542	536	533
Other retail trade	3,126	3,077	3,050	3,024	2,984
FINANCE	1,893	1,875	1,865	1,827	1,812
Banks and trust companies	460	452	451	427	421
Security dealers and exchanges	63.8	63.8	63.9	60.0	59.2
Insurance carriers and agents	671	664	662	646	640
Other finance agencies and real estate	698	695	688	694	692
SERVICE	4,834	4,788	4,745	4,826	4,790
Hotels and lodging places	479	451	445	482	451
Laundries	365.0	359.6	354.4	362.1	353.7
Cleaning and dyeing plants	161.0	158.5	153.0	155.9	150.1
Motion pictures	248	249	249	249	236
GOVERNMENT	6,377	6,377	6,292	5,832	5,900
Federal ^{1/}	2,271	2,244	2,201	1,851	1,890
State and local	4,106	4,133	4,091	3,981	4,010

See explanatory notes, sections A-G, and the glossary for definitions.

^{1/} Fourth class postmasters are excluded here but are included in Table 6.

TABLE 3: All Employees and Production Workers in Mining and Manufacturing Industries

(In thousands)

Industry group and industry	All employees			Production workers		
	1951			1951		
	June	May	April	June	May	April
MINING	923	913	911	--	--	--
METAL MINING	105.4	103.5	103.8	92.8	91.2	91.7
Iron mining	38.6	37.7	36.9	34.4	33.8	33.1
Copper mining	28.9	28.5	28.9	25.2	24.8	25.3
Lead and zinc mining	20.4	19.9	20.2	17.8	17.3	17.6
ANTHRACITE	70.2	70.4	67.6	66.0	66.1	63.6
BITUMINOUS-COAL	376.6	377.3	381.9	353.7	352.8	357.4
CRUDE PETROLEUM AND NATURAL GAS PRODUCTION	260.6	255.9	254.6	--	--	--
Petroleum and natural gas production (except contract services)	--	--	--	129.7	125.6	124.9
NONMETALLIC MINING AND QUARRYING	107.9	105.8	103.1	94.8	93.0	90.2
MANUFACTURING	15,964	15,873	15,955	13,058	13,004	13,108
DURABLE GOODS	9,006	8,987	9,003	7,412	7,417	7,445
NONDURABLE GOODS	6,958	6,886	6,952	5,646	5,587	5,663
ORDNANCE AND ACCESSORIES	41.9	39.9	37.7	33.8	32.1	30.3
FOOD AND KINDRED PRODUCTS	1,538	1,483	1,466	1,144	1,097	1,085
Meat products	296.5	291.7	291.6	232.7	229.3	229.2
Dairy products	157.9	150.3	143.7	115.1	109.0	103.1
Canning and preserving	179.5	162.6	153.3	153.7	136.4	128.0
Grain-mill products	128.4	123.1	126.1	95.8	90.3	93.8
Bakery products	289.5	286.5	286.2	191.9	189.4	189.7
Sugar	29.8	29.3	28.6	24.6	24.1	23.5
Confectionery and related products	90.4	90.6	92.1	73.5	73.7	75.3
Beverages	226.0	213.8	210.0	155.2	145.8	143.4
Miscellaneous food products	139.7	135.0	134.5	101.7	99.1	99.2
TOBACCO MANUFACTURES	82	81	83	76	74	76
Cigarettes	25.7	25.4	25.6	23.3	22.9	23.1
Cigars	40.5	39.3	40.8	38.3	37.2	38.6
Tobacco and snuff	11.9	12.1	12.1	10.3	10.5	10.5
Tobacco stemming and redrying	4.3	4.4	4.8	3.6	3.6	4.0

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 3: All Employees and Production Workers in Mining and Manufacturing Industries (Continued)

(In thousands)

Industry group and industry	All employees			Production workers		
	1951			1951		
	June	May	April	June	May	April
TEXTILE-MILL PRODUCTS	1,295	1,301	1,309	1,199	1,206	1,214
Yarn and thread mills	168.4	170.8	171.2	157.3	159.9	160.2
Broad-woven fabric mills	613.8	603.6	599.1	583.1	572.8	567.3
Knitting mills	235.2	241.2	250.1	215.2	221.6	230.3
Dyeing and finishing textiles	89.6	90.8	87.6	79.1	80.3	77.6
Carpets, rugs, other floor coverings	55.0	58.5	61.0	47.1	50.6	53.2
Other textile-mill products	132.7	135.6	140.3	117.5	120.3	125.0
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS	1,119	1,120	1,168	1,000	1,001	1,047
Men's and boys' suits and coats	146.4	148.6	152.0	132.5	134.6	138.2
Men's and boys' furnishings and work clothing	265.6	271.7	280.2	247.5	252.9	261.1
Women's outerwear	290.7	285.6	301.5	256.4	251.3	267.4
Women's, children's under garments	96.9	99.6	105.7	86.3	89.1	94.9
Millinery	17.0	17.1	20.0	14.5	14.6	17.5
Children's outerwear	65.5	62.0	65.4	59.7	56.3	59.5
Fur goods and miscellaneous apparel	98.0	94.4	94.9	85.7	82.7	83.1
Other fabricated textile products	139.3	141.0	148.1	117.6	119.0	125.4
LUMBER AND WOOD PRODUCTS (EXCEPT FURNITURE)	843	835	815	778	770	752
Logging camps and contractors	83.4	80.5	70.3	79.0	76.5	66.5
Sawmills and planing mills	492.3	486.3	473.7	459.4	452.2	442.5
Millwork, plywood, and prefabricated structural wood products	122.9	122.7	123.4	107.5	107.5	107.7
Wooden containers	81.7	82.3	82.5	75.9	76.3	76.3
Miscellaneous wood products	62.9	63.4	64.8	56.6	57.3	58.5
FURNITURE AND FIXTURES	335	349	366	288	302	317
Household furniture	227.6	240.4	256.0	199.1	212.0	226.8
Other furniture and fixtures	107.5	108.6	109.5	88.8	89.8	90.5

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 3: All Employees and Production Workers in Mining and Manufacturing Industries (Continued)

(In thousands)

Industry group and industry	All employees			Production workers		
	1951			1951		
	June	May	April	June	May	April
PAPER AND ALLIED PRODUCTS	502	498	500	427	424	427
Pulp, paper, and paperboard mills	250.7	246.2	245.5	216.3	213.0	212.4
Paperboard containers and boxes	136.5	137.2	139.1	116.6	117.0	118.7
Other paper and allied products	114.5	114.4	115.7	94.1	94.3	95.4
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES	761	760	757	511	510	510
Newspapers	299.5	299.9	297.1	152.5	152.0	150.6
Periodicals	52.2	52.5	52.8	33.7	34.5	35.4
Books	49.4	49.0	49.1	35.9	35.8	36.0
Commercial printing	206.2	204.9	204.8	168.7	167.8	167.9
Lithographing	41.1	41.1	41.3	32.1	32.1	32.2
Other printing and publishing	112.7	112.1	112.2	88.1	87.3	87.5
CHEMICALS AND ALLIED PRODUCTS	742	742	749	528	531	538
Industrial inorganic chemicals	83.6	81.7	81.0	60.7	59.5	59.2
Industrial organic chemicals	228.7	225.3	224.2	171.5	169.6	168.4
Drugs and medicines	107.1	106.0	105.3	70.7	70.1	69.7
Paints, pigments, and fillers	76.8	76.6	76.3	50.1	49.9	49.8
Fertilizers	31.3	36.4	40.1	24.6	29.6	33.4
Vegetable and animal oils and fats	47.8	49.1	51.7	36.2	37.5	40.3
Other chemicals and allied products	167.1	167.2	170.6	114.6	115.2	117.0
PRODUCTS OF PETROLEUM AND COAL	264	260	258	197	194	194
Petroleum refining	210.9	208.2	205.7	153.3	150.7	150.2
Coke and byproducts	22.0	21.6	21.5	19.1	18.7	18.6
Other petroleum and coal products	31.1	30.5	30.7	24.8	24.4	24.8
RUBBER PRODUCTS	273	271	270	221	219	219
Tires and inner tubes	113.8	112.2	111.7	89.7	88.2	87.4
Rubber footwear	31.2	30.8	30.3	25.7	25.4	24.8
Other rubber products	128.4	128.0	128.4	105.3	105.8	106.3
LEATHER AND LEATHER PRODUCTS	382	370	392	343	331	353
Leather	47.0	47.6	49.1	42.3	42.7	44.4
Footwear (except rubber)	244.0	232.7	247.4	221.0	210.3	224.9
Other leather products	90.8	89.2	95.9	79.8	77.6	84.1

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 3: All Employees and Production Workers in Mining and Manufacturing Industries (Continued)
(In thousands)

Industry group and industry	All employees			Production workers		
	1951			1951		
	June	May	April	June	May	April
STONE, CLAY, AND GLASS PRODUCTS	562	560	559	485	484	483
Glass and glass products	147.0	148.1	148.8	129.5	131.1	132.0
Cement, hydraulic	43.5	42.6	42.4	37.3	36.5	36.3
Structural clay products	93.3	91.0	89.7	84.8	83.0	81.7
Pottery and related products	59.8	60.5	61.0	54.0	54.7	55.2
Concrete, gypsum, and plaster products	102.3	101.2	100.5	86.8	85.7	85.4
Other stone, clay, and glass products	116.2	116.4	116.1	92.6	92.9	92.8
PRIMARY METAL INDUSTRIES	1,354	1,345	1,344	1,169	1,161	1,161
Blast furnaces, steel works, and rolling mills	653.5	647.4	644.8	570.5	564.5	561.6
Iron and steel foundries	284.7	283.6	282.6	253.5	252.3	251.5
Primary smelting and refining of nonferrous metals	57.2	55.6	56.4	47.8	46.4	47.2
Rolling, drawing, and alloying of nonferrous metals	100.7	99.7	103.1	82.5	81.3	84.9
Nonferrous foundries	109.4	110.9	110.9	91.1	93.0	93.3
Other primary metal industries	148.4	147.6	146.5	123.6	123.0	122.5
FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY, AND TRANSPORTATION EQUIPMENT)	1,019	1,026	1,033	843	850	859
Tin cans and other tinware	49.7	49.1	49.4	43.6	42.9	43.1
Cutlery, hand tools, and hardware	162.3	163.9	165.0	137.2	138.3	140.3
Heating apparatus (except electric) and plumbers' supplies	157.8	159.3	161.6	128.6	130.1	132.8
Fabricated structural metal products	227.6	229.9	228.1	177.2	178.8	177.7
Metal stamping, coating, and engraving	185.8	188.5	192.6	158.9	161.9	166.4
Other fabricated metal products	236.1	235.4	236.4	197.6	197.7	198.3
MACHINERY (EXCEPT ELECTRICAL)	1,620	1,604	1,592	1,256	1,246	1,239
Engines and turbines	91.5	89.9	88.8	68.8	67.9	67.0
Agricultural machinery and tractors	196.1	193.2	193.1	152.9	151.7	151.8
Construction and mining machinery	121.0	118.5	117.0	90.9	88.9	87.8
Metalworking machinery	296.5	290.4	287.0	233.6	228.8	226.7
Special-industry machinery (except metalworking machinery)	198.4	197.6	197.1	150.7	149.7	150.0
General industrial machinery	230.2	228.2	226.8	166.9	165.7	164.7
Office and store machines and devices	105.6	104.7	103.3	88.7	88.2	86.9
Service-industry and household machines	176.5	179.9	179.7	139.9	143.6	144.1
Miscellaneous machinery parts	204.4	201.2	199.2	163.5	161.4	160.1

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 3: All Employees and Production Workers in Mining and Manufacturing Industries (Continued)

(In thousands)

Industry group and industry	All employees			Production workers		
	1951			1951		
	June	May	April	June	May	April
ELECTRICAL MACHINERY	934	932	941	705	709	718
Electrical generating, transmission, distribution, and industrial apparatus	377.0	370.1	365.0	275.9	270.6	266.4
Electrical equipment for vehicles	82.4	82.0	80.8	67.5	67.2	66.1
Communication equipment	325.0	329.3	343.6	240.5	248.6	261.5
Electrical appliances, lamps, and miscellaneous products	149.6	150.7	151.9	120.9	122.2	123.6
TRANSPORTATION EQUIPMENT	1,519	1,512	1,520	1,232	1,231	1,243
Automobiles	875.7	892.7	913.9	737.3	752.6	774.1
Aircraft and parts	447.6	427.4	415.9	330.4	317.4	309.3
Aircraft	302.9	288.2	281.7	224.4	215.6	211.3
Aircraft engines and parts	87.0	84.2	81.1	61.2	59.3	57.1
Aircraft propellers and parts	10.2	10.4	10.2	7.3	7.4	7.4
Other aircraft parts and equipment	47.5	44.6	42.9	37.5	35.1	33.5
Ship and boat building and repairing	112.0	109.0	108.6	97.6	94.6	94.3
Ship building and repairing	97.3	94.2	93.8	84.3	81.4	81.1
Boat building and repairing	14.7	14.8	14.8	13.3	13.2	13.2
Railroad equipment	73.1	72.0	70.1	57.8	57.0	55.5
Other transportation equipment	10.9	11.2	11.9	9.1	9.3	10.0
INSTRUMENTS AND RELATED PRODUCTS	299	297	295	223	222	221
Ophthalmic goods	28.0	28.1	28.0	22.8	23.0	23.1
Photographic apparatus	60.5	59.0	58.6	43.9	42.9	42.8
Watches and clocks	34.2	33.9	34.5	28.8	28.4	29.2
Professional and scientific instruments	176.5	175.7	173.4	127.4	127.5	125.7
MISCELLANEOUS MANUFACTURING INDUSTRIES	479	487	500	399	410	422
Jewelry, silverware, and plated ware	50.6	52.4	54.9	41.4	43.1	45.3
Toys and sporting goods	74.9	77.3	78.9	65.5	67.6	69.4
Costume jewelry, buttons, notions	53.3	55.8	60.8	44.7	47.1	51.9
Other miscellaneous manufacturing industries	300.4	301.1	305.6	247.8	251.7	255.7

See explanatory notes, sections A-G, and the glossary for definitions.

TABLE 4: Indexes of Production Worker Employment and Weekly Payrolls in Manufacturing Industries

(1939 Average = 100)

Period	Production-worker employment index	Production-worker pay-roll index
<u>Annual average:</u>		
1939	100.0	100.0
1940	107.5	113.6
1941	132.8	164.9
1942	156.9	241.5
1943	183.3	331.1
1944	178.3	343.7
1945	157.0	293.5
1946	147.8	271.7
1947	156.2	326.9
1948	155.2	351.4
1949	141.6	325.3
1950	149.7	371.7
<u>1950</u>		
April	141.6	337.2
May	144.5	348.0
June	147.3	362.7
July	148.3	367.5
August	156.3	394.4
September	158.9	403.2
October	160.3	415.8
November	159.2	414.6
December	159.4	426.0
<u>1951</u>		
January	158.9	424.0
February	161.0	430.0
March	161.0	435.0
April	160.0	433.2
May	158.7	428.8
June	159.4	435.7

See explanatory notes, section D, and the glossary for definitions.

TABLE 5: Employees in the Shipbuilding and Repairing Industry, by Region ^{1/}

(In thousands)

Region	1951			1950	
	June	May	April	June	May
ALL REGIONS	221.4	216.9	214.8	134.8	132.4
PRIVATE	97.3	94.2	93.8	66.4	66.2
NAVY	124.1	122.7	121.0	68.4	66.2
NORTH ATLANTIC	101.0	99.9	97.6	68.0	65.8
Private	45.1	44.6	43.2	37.0	35.7
Navy	55.9	55.3	54.4	31.0	30.1
SOUTH ATLANTIC	38.5	37.2	37.5	22.8	22.8
Private	15.1	14.1	14.6	7.9	8.5
Navy	23.4	23.1	22.9	14.9	14.3
GULF:					
Private	18.0	16.2	17.1	9.3	8.9
PACIFIC	53.4	53.4	52.0	28.5	28.4
Private	8.6	9.1	8.3	6.0	6.6
Navy	44.8	44.3	43.7	22.5	21.8
GREAT LAKES:					
Private	6.1	5.8	6.2	2.1	2.4
INLAND:					
Private	4.4	4.4	4.4	4.1	4.1

^{1/} The North Atlantic region includes all yards bordering on the Atlantic in the following states: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

The South Atlantic region includes all yards bordering on the Atlantic in the following states: Georgia, Virginia, North Carolina, and South Carolina.

The Gulf region includes all yards bordering on the Gulf of Mexico in the following states: Alabama, Florida, Louisiana, Mississippi, and Texas.

The Pacific region includes all yards in California, Oregon, and Washington.

The Great Lakes region includes all yards bordering on the Great Lakes in the following states: Illinois, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

The Inland region includes all other yards.

TABLE 6: Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government Employment and Pay Rolls in Washington, D. C. 1/

(In thousands)

Area and branch	Employment (as of first of month)			Pay rolls (total for month)		
	1951			1951		
	June	May	April	June	May	April
<u>All Areas</u>						
TOTAL FEDERAL	2,462.3	2,432.6	2,385.5	\$702,517	\$742,529	\$687,876
Executive	2,450.1	2,420.5	2,373.5	697,505	737,428	683,273
Defense agencies	1,237.5	1,212.1	1,180.0	346,264	370,700	337,876
Post Office Department 2/	491.2	492.1	488.4	131,634	131,353	129,796
Other agencies	721.4	716.3	705.1	219,607	235,375	215,601
Legislative	8.3	8.2	8.1	3,379	3,338	3,197
Judicial	3.9	3.9	3.9	1,633	1,763	1,406
<u>Continental United States</u>						
TOTAL FEDERAL	2,290.5	2,263.9	2,219.9	661,940	698,694	648,017
Executive	2,278.4	2,251.9	2,208.0	656,972	693,638	643,454
Defense agencies	1,113.3	1,089.8	1,059.7	318,668	340,465	310,605
Post Office Department 2/	489.3	490.3	486.6	131,128	130,850	129,310
Other agencies	675.8	671.8	661.7	207,176	222,323	203,539
Legislative	8.3	8.2	8.1	3,379	3,338	3,197
Judicial	3.8	3.8	3.8	1,589	1,718	1,366
<u>Washington, D. C.</u>						
TOTAL GOVERNMENT	272.4	271.4	268.5	94,033	104,400	91,887
D. C. government	20.0	20.1	20.3	5,573	5,883	5,618
Federal	252.4	251.3	248.2	88,460	98,517	86,269
Executive	243.4	242.4	239.4	84,779	94,863	82,781
Defense agencies	83.9	83.6	82.2	29,619	31,082	28,739
Post Office Department	7.7	7.8	7.8	2,940	2,946	2,855
Other agencies	151.8	151.0	149.4	52,220	60,835	51,187
Legislative	8.3	8.2	8.1	3,379	3,338	3,197
Judicial	.7	.7	.7	302	316	291

See the glossary for definitions.

1/ Data for Central Intelligence Agency are excluded.

2/ Includes fourth class postmasters, excluded from Table 2.

TABLE 7: Employees in Nonagricultural Establishments by Industry Division,
by State
(In thousands)

State	Total			Mining			Contract Construction		
	1951		1950	1951		1950	1951		1950
	June	May	June	June	May	June	June	May	June
Alabama	634.3	625.5	596.5	22.9	22.3	26.0	30.1	30.1	27.7
Arizona	177.2	176.9	156.7	12.3	12.2	11.6	14.0	14.0	11.8
Arkansas	309.4	307.6	295.0	6.6	6.6	6.1	26.0	25.5	20.4
California	3,417.0	3,392.4	3,165.7	35.2	34.8	33.3	234.0	230.7	221.1
Colorado	378.8	372.8	339.3	8.9	9.3	9.2	34.5	32.7	20.4
Connecticut	820.6	818.2	759.3	3/	3/	3/	44.1	42.1	40.8
Delaware 1/									
District of Columbia	519.4	517.2	481.4	4/	4/	4/	25.2	25.2	25.4
Florida	681.2	693.8	643.4	6.4	6.4	6.0	66.3	64.7	59.6
Georgia	827.9	829.5	770.8	4.5	4.5	4.0	52.1	52.6	42.3
Idaho	139.6	136.3	132.4	5.4	5.4	5.6	15.0	14.6	12.2
Illinois 1/	3,231.6	3,208.6	3,106.6	45.2	45.0	47.5	163.8	155.8	145.6
Indiana	1,258.6	1,290.0	1,230.7	14.5	13.4	14.6	64.4	59.5	53.0
Iowa	620.4	612.1	594.1	2.3	2.2	2.8	38.0	34.0	33.6
Kansas	497.7	490.8	462.2	17.7	17.2	17.2	36.7	34.5	33.0
Kentucky				57.6	57.5	63.8			
Louisiana				26.2	25.8	26.9			
Maine	270.1	260.4	251.1	.7	.7	.7	9.5	8.7	10.1
Maryland	743.3	732.4	696.5	2.4	2.5	2.2	57.2	57.5	55.8
Massachusetts	1,804.8	1,801.0	1,733.5	4/	4/	4/	69.1	68.0	79.6
Michigan 2/									
Minnesota	823.9	815.9	783.3	18.3	18.3	17.2	44.9	42.3	40.5
Mississippi									
Missouri 1/	1,210.9	1,201.7	1,147.1	9.2	8.9	8.2	57.6	55.8	52.0
Montana	153.9	151.3	153.6	10.0	10.1	10.4	13.4	13.0	12.9
Nebraska 1/	327.7	323.8	313.9	4/	4/	4/	17.4	16.8	19.7
Nevada	57.8	56.3	55.4	3.5	3.4	3.0	3.9	4.1	5.0
New Hampshire	171.2	156.9	167.2	.3	.3	.3	7.5	7.0	8.3
New Jersey	1,687.5	1,679.8	1,600.4	3.7	3.9	3.8	88.0	87.4	79.4
New Mexico	156.3	154.9	147.4	13.1	12.4	11.7	16.8	16.4	15.8
New York 1/	5,721.3	5,689.0	5,505.8	11.5	11.2	10.8	243.5	239.5	229.6
North Carolina	924.6	917.4	873.6	3.6	3.6	3.5	61.6	58.9	45.8
North Dakota	116.1	114.6	114.4	1.0	.9	.8	10.4	9.4	10.5
Ohio 1/									
Oklahoma	498.0	494.1	472.7	44.0	44.1	42.4	33.8	34.4	31.7
Oregon	467.1	462.5	451.5	1.8	1.7	1.5	29.0	27.3	28.9
Pennsylvania	3,738.6	3,723.8	3,541.7	181.1	178.0	191.6	176.0	166.5	163.4
Rhode Island	299.2	301.1	285.9	4/	4/	4/	16.3	16.3	14.8
South Carolina	474.2	470.4	440.2	1.0	1.1	1.1	33.7	30.5	25.3
South Dakota	118.0	116.2	120.6	2.1	2.1	2.6	7.4	6.5	10.1
Tennessee	750.5	752.5	723.4	12.5	12.5	12.9	45.7	44.8	47.1
Texas	2,015.4	1,994.2	1,884.5	115.3	111.3	105.3	162.7	160.0	139.0
Utah 2/	109.8	204.5	187.2	12.6	12.4	12.6	15.0	14.0	13.1
Vermont	101.4	100.0	96.2	1.2	1.2	1.1	4.1	3.7	4.1
Virginia	837.1	829.5	775.3	22.5	22.5	24.4	61.5	60.3	53.1
Washington	726.5	717.9	673.0	2.8	2.9	3.2	45.9	44.7	46.7
West Virginia	537.6	534.6	521.3	125.5	125.1	126.8	19.5	19.5	21.2
Wisconsin	1,054.3	1,043.6	997.6	3.9	3.8	3.5	47.7	44.7	43.3
Wyoming	85.4	82.0	85.4	9.0	8.9	9.4	6.9	6.3	8.6

See footnotes at end of table and explanatory notes, sections G and H.

TABLE 7: Employees in Nonagricultural Establishments by Industry Division,
by State
(In thousands)

State	Manufacturing			Trans. & Public Util.			Trade		
	1951		1950	1951		1950	1951		1950
	June	May	June	June	May	June	June	May	June
Alabama	224.6	216.1	209.1	52.3	52.3	50.1	121.6	121.9	117.6
Arizona	18.7	18.3	15.2	22.8	22.6	21.2	43.4	43.7	40.6
Arkansas	78.5	76.5	75.2	32.1	31.8	30.9	69.9	70.9	71.0
California	850.3	842.1	731.0	312.0	311.1	302.2	795.7	790.7	735.3
Colorado	62.4	61.1	54.7	44.3	43.4	41.7	95.9	94.8	90.9
Connecticut	417.3	418.0	366.8	42.1	41.9	41.4	133.8	133.7	130.1
Delaware	50.6	50.1	45.9						
District of Columbia	17.1	17.0	16.4	30.4	30.2	29.4	91.3	90.8	90.5
Florida	22.5	100.8	90.1	66.2	66.6	65.0	197.5	204.4	190.2
Georgia	288.5	290.1	274.2	70.2	70.2	64.2	178.6	178.8	171.5
Idaho	25.3	23.0	23.3	17.5	17.2	16.5	34.5	33.8	33.3
Illinois	1,216.7	1,210.3	1,155.9	301.2	299.1	296.6	603.3	602.7	671.1
Indiana	537.9	537.0	569.6	112.5	112.5	108.5	241.4	240.1	233.8
Iowa	162.1	159.4	150.2	64.2	63.1	62.1	166.7	166.5	161.8
Kansas	113.6	110.0	91.6	65.3	64.1	61.9	118.1	118.0	117.7
Kentucky	145.9	144.7	136.2	60.0	59.5	57.8	114.2	114.7	110.7
Louisiana	140.1	138.9	133.7	80.1	78.6	76.1	145.0	145.0	144.8
Maine	115.6	109.5	111.5	18.9	18.5	19.1	49.8	49.4	49.5
Maryland	254.8	248.7	223.6	71.7	72.3	70.7	145.5	143.2	143.9
Massachusetts	735.4	736.6	684.9	128.4	128.3	125.7	368.2	366.4	364.2
Michigan	1,126.6	1,133.7	1,108.7						
Minnesota	206.1	202.5	190.5	98.4	97.2	87.7	209.4	208.7	206.7
Mississippi	88.7	90.5	84.0	25.5	25.5	25.4			
Missouri	373.2	367.4	342.6	130.0	128.4	122.9	303.6	302.4	296.0
Montana	17.2	16.9	19.0	23.9	23.3	22.5	37.0	36.5	37.3
Nebraska	55.2	53.1	50.0	44.1	43.1	41.6	92.4	92.3	90.6
Nevada	3.5	3.4	3.3	8.8	8.6	8.5	11.8	11.4	11.6
New Hampshire	80.1	79.0	75.7	10.7	10.7	10.5	28.8	28.5	28.8
New Jersey	766.0	766.1	711.6	141.5	139.4	136.8	275.7	273.4	273.3
New Mexico	13.3	13.3	11.7	15.6	16.5	15.6	35.5	35.1	33.3
New York	1,885.8	1,870.0	1,750.5	486.9	487.2	485.5	1,238.1	1,234.8	1,225.6
North Carolina	417.0	412.8	399.3	60.6	60.2	54.1	166.6	165.7	162.1
North Dakota	6.2	5.9	6.1	14.9	14.6	14.3	36.9	36.8	36.9
Ohio	1,286.3	1,284.5	1,173.1						
Oklahoma	73.5	72.2	66.6	49.8	49.1	49.6	122.8	121.8	123.4
Oregon	152.2	144.7	147.0	48.9	48.2	46.6	103.4	101.9	100.7
Pennsylvania	1,498.0	1,502.9	1,375.3	352.7	353.3	337.7	676.6	675.0	664.1
Rhode Island	147.6	149.9	139.7	15.5	15.2	15.6	52.5	53.1	51.0
South Carolina	216.8	214.5	204.2	26.4	26.9	25.5	85.0	86.1	81.1
South Dakota	11.2	11.1	11.4	11.7	11.5	11.4	34.6	34.4	36.8
Tennessee	256.1	259.4	240.6	60.1	60.1	57.9	163.3	163.5	159.4
Texas	390.7	383.9	344.0	218.1	214.5	216.4	515.8	515.5	501.0
Utah	30.5	29.1	27.2	22.2	21.8	21.0	46.1	45.5	44.4
Vermont	39.3	39.2	34.9	9.2	9.0	9.0	17.9	17.6	18.2
Virginia	236.7	234.7	218.2	81.9	80.0	79.1	174.4	173.1	166.7
Washington	195.3	190.4	175.3	70.0	69.8	64.2	160.4	159.5	155.7
West Virginia	142.8	141.6	131.4	54.7	54.3	51.5	87.5	85.8	84.9
Wisconsin	457.2	452.7	418.4	79.1	77.1	76.3	211.0	209.6	207.3
Wyoming	6.1	5.9	6.1	16.1	15.8	15.2	18.6	17.2	18.1

See footnotes at end of table and explanatory notes, sections G and H.

TABLE 7: Employees in Nonagricultural Establishments by Industry Division,
by State
(In thousands)

State	Finance			Service			Government		
	1951		1950	1951		1950	1951		1950
	June	May	June	June	May	June	June	May	June
Alabama	17.7	17.7	17.2	54.2	53.6	52.8	111.5	111.5	96.0
Arizona	5.7	5.7	5.3	24.0	24.0	18.4	36.3	36.4	34.6
Kansas	8.0	7.9	7.7	35.5	35.2	35.0	52.7	53.2	48.7
California	153.3	152.3	142.9	446.4	442.8	436.7	589.6	587.9	513.2
Colorado	15.1	14.5	14.5	45.9	45.4	45.4	71.8	71.6	62.5
Connecticut	36.9	37.0	37.1	80.1	79.4	78.2	66.3	66.1	65.0
Delaware							10.7	10.8	10.0
District of Columbia	23.4	23.3	22.3	59.1	59.4	58.7	272.9	271.3	238.7
Florida	30.9	30.6	29.7	94.3	100.1	89.2	120.1	120.2	113.6
Georgia	25.4	24.7	25.1	75.3	75.4	74.7	133.3	133.2	114.8
Idaho	3.8	3.8	3.8	14.2	14.3	14.5	24.0	24.2	23.2
Illinois	149.6	146.9	147.3	344.6	341.8	336.0	327.2	327.0	305.5
Indiana	35.8	35.1	34.2	91.6	91.2	90.7	140.5	141.2	126.4
Iowa	24.3	23.8	23.3	68.4	67.9	67.8	94.6	95.4	92.6
Kansas	18.0	17.3	16.4	47.9	47.7	47.7	80.4	82.0	76.7
Kentucky	15.5	15.2	14.8	56.6	57.6	56.2	84.8	85.2	77.1
Louisiana	20.1	19.8	19.0	68.7	69.3	68.8	94.2	94.5	90.4
Maine	6.8	6.8	6.7	25.3	24.0	25.2	43.5	42.8	38.3
Maryland	31.3	30.4	30.4	78.5	76.6	77.1	101.9	101.2	92.8
Massachusetts	81.6	80.7	77.5	195.7	195.8	195.2	226.4	225.2	206.4
Michigan							230.0	231.1	219.2
Minnesota	37.1	36.8	35.8	97.6	97.6	96.5	112.1	112.5	108.5
Mississippi	7.9	7.9	7.8				62.9	63.3	61.7
Missouri	55.1	54.3	52.5	137.3	139.3	136.6	144.9	145.2	136.3
Montana	4.2	4.1	4.0	20.4	19.5	19.1	27.8	27.9	27.4
Nebraska	17.2	16.8	16.5	39.7	39.8	39.0	61.7	61.9	56.4
Nevada	1.2	1.2	1.1	12.9	12.0	12.4	12.2	12.2	10.5
New Hampshire	4.5	4.5	4.4	19.2	16.9	19.9	20.1	20.1	19.4
New Jersey	59.9	59.3	58.5	170.6	167.9	159.7	182.1	182.4	167.3
New Mexico	4.1	4.3	4.5	23.1	23.1	22.3	33.8	33.8	31.5
New York	389.3	390.0	387.2	779.1	770.9	761.2	687.2	685.5	655.6
North Carolina	22.6	22.2	21.8	85.6	86.0	85.6	107.0	108.0	101.4
North Dakota	4.1	4.1	3.9	13.4	13.3	13.3	29.3	29.5	28.7
Idaho							312.2	311.9	287.7
Oklahoma	18.4	18.1	18.0	50.9	50.3	50.5	104.8	104.1	90.5
Oregon	14.8	14.5	14.8	53.4	50.4	49.8	63.6	63.8	62.0
Pennsylvania	120.9	119.1	117.3	362.9	358.9	358.9	370.4	370.0	333.4
Rhode Island	10.6	10.4	10.3	23.8	23.3	24.8	32.9	32.9	29.7
South Carolina	8.4	8.5	8.3	35.2	35.1	35.7	67.7	67.7	59.0
South Dakota	4.3	4.2	4.1	14.8	14.6	13.6	31.9	32.0	30.6
Tennessee	24.6	23.9	23.2	77.4	77.3	77.5	110.8	111.0	104.8
Texas	77.9	76.6	74.0	239.1	236.6	238.0	295.8	295.8	266.8
Utah	6.6	6.4	6.2	21.5	20.5	20.5	55.3	54.8	42.2
Vermont	2.9	2.9	2.9	11.9	11.3	11.4	15.0	15.1	14.7
Virginia	28.4	28.2	25.9	78.1	77.4	77.2	153.6	153.3	130.7
Washington	27.0	26.7	26.5	79.9	79.5	78.3	145.2	144.4	123.1
West Virginia	9.7	9.6	9.5	41.9	42.0	40.3	56.0	56.7	55.7
Wisconsin	32.7	32.4	31.7	95.1	95.3	94.7	127.6	128.1	122.3
Wyoming	2.0	2.0	1.8	11.4	10.6	11.6	15.3	15.3	14.6

See footnotes at end of table and explanatory notes, sections G and H.

TABLE 7: Employees in Nonagricultural Establishments by Industry Division,
by State

See explanatory notes, sections G and H.

- 1/ Government estimates and affected totals revised; not strictly comparable with previously published data.
- 2/ Revised series; not strictly comparable with previously published data.
- 3/ Mining combined with construction.
- 4/ Mining combined with service.

TABLE 8: Employees in Nonagricultural Establishments by Industry Division, Selected Areas
(In thousands)

AREA	Number of Employees			AREA	Number of Employees		
	1951		1950		1951		1950
	June	May	June		June	May	June
ALABAMA				Washington-Continued			
<u>Birmingham</u>				Manufacturing	25.7	25.2	22.1
Mining	16.3	15.7	18.3	Trans. & Public Util.	40.9	40.6	39.7
Manufacturing	58.5	58.6	55.9	Trade	114.7	114.2	114.1
ARIZONA				Finance	30.4	30.3	28.9
<u>Phoenix</u>				Service 2/ Government	74.2	74.7	74.3
Mining	.1	.1	.1		282.1	281.0	248.4
Manufacturing	11.6	11.4	8.1	FLORIDA			
Trans. & Public Util. 1/	7.7	7.7	7.2	<u>Jacksonville</u>			
Trade	23.7	24.2	21.5	Manufacturing	17.4	16.4	14.0
Finance	3.7	3.6	3.5	Trans. & Public Util.	14.5	14.7	13.6
Service	10.7	10.8	9.5	Trade	31.0	31.2	30.5
<u>Tucson</u>				Finance	5.7	5.8	5.7
Mining	1.7	1.7	1.6	Service 2/ Government	11.8	11.8	11.2
Manufacturing	2.0	1.9	1.7		14.5	14.5	12.9
Trans. & Public Util. 1/	3.0	2.9	2.5	<u>Miami</u>			
Trade	8.2	8.3	8.0	Manufacturing	14.0	15.0	12.9
Finance	1.2	1.2	1.0	Trans. & Public Util.	21.7	21.7	19.1
Service	9.0	9.1	4.7	Trade	52.4	53.6	46.2
ARKANSAS				Finance	8.4	8.5	8.4
<u>Little Rock</u>				Service 2/ Government	27.4	29.0	23.9
Total	64.3	64.5	64.0		16.6	16.6	17.4
Contract Construction	6.4	6.0	6.4	<u>Tampa-St. Petersburg</u>			
Manufacturing	12.0	12.0	11.3	Total	103.2	104.4	99.8
Trans. & Public Util.	6.5	6.4	6.7	Contract Construction	9.3	9.2	9.4
Trade	17.2	17.7	17.4	Manufacturing	19.2	19.8	19.1
Finance	2.5	3.5	3.5	Trans. & Public Util.	9.6	9.7	9.4
Service 2/ Government	8.3	8.5	8.4	Trade	33.8	34.4	32.2
	10.5	10.6	10.5	Finance	5.1	5.0	4.6
CALIFORNIA				Service 2/ Government	13.5	13.7	13.0
<u>Los Angeles</u>					12.9	12.8	12.2
Manufacturing	476.0	470.4	401.2	GEORGIA			
<u>Sacramento</u>				<u>Atlanta</u>			
Manufacturing	10.0	10.1	9.6	Total	264.6	263.5	250.2
<u>San Diego</u>				Contract Construction	17.9	18.4	16.8
Manufacturing	37.7	36.4	21.8	Manufacturing	64.2	63.2	57.2
<u>San Francisco-Oakland</u>				Trans. & Public Util.	30.5	30.3	27.6
Manufacturing	174.4	173.4	159.4	Trade	72.9	73.5	71.7
<u>San Jose</u>				Finance	15.5	15.2	15.4
Manufacturing	21.0	21.9	17.4	Service 2/ Government	32.0	31.8	32.5
					31.6	31.1	29.0
COLORADO				<u>Savannah</u>			
<u>Denver</u>				Total	41.1	40.8	38.3
Mining	1.0	1.0	1.0	Contract Construction	3.2	3.1	2.0
Contract Construction	19.9	19.5	11.3	Manufacturing	12.6	12.9	12.3
Manufacturing	42.1	41.5	39.9	Trans. & Public Util.	6.8	6.8	6.0
Trans. & Public Util.	25.8	25.3	24.1	Trade	8.5	8.2	8.3
Trade	57.8	57.3	54.1	Finance	1.2	1.2	1.2
Finance	10.7	10.4	10.0	Service 2/ Government	4.4	4.1	4.3
					4.4	4.5	4.2
DISTRICT OF COLUMBIA				ILLINOIS			
<u>Washington</u>				<u>Peoria</u>			
Total	609.7	607.6	571.2	Manufacturing	47.8	47.0	44.1
Contract Construction	41.7	41.6	43.7	<u>Rockford</u>			
				Manufacturing	40.7	40.4	36.8

See footnotes at end of table and explanatory notes, sections G, H, and I.

TABLE 8: Employees in Nonagricultural Establishments by Industry Division, Selected Areas
(In thousands)

AREA	Number of Employees			AREA	Number of Employees		
	1951		1950		1951		1950
	June	May	June		June	May	June
INDIANA				MARYLAND			
<u>Evansville</u>				<u>Baltimore</u>			
Total	63.5	64.0	64.2	Total	519.2	515.5	487.6
Manufacturing	32.1	32.8	32.6	Mining	.6	.5	.5
Nonmanufacturing	31.4	31.2	31.5	Contract Construction	37.2	38.0	35.5
<u>Fort Wayne</u>				Manufacturing	191.9	189.2	168.7
Total	79.9	78.7	73.8	Trans. & Public Util.	53.2	53.8	53.4
Manufacturing	42.4	41.7	37.8	Trade	101.6	100.4	100.4
Nonmanufacturing	37.5	37.0	36.0	Finance	24.3	23.6	23.6
<u>Indianapolis</u>				Service	54.8	54.8	54.2
Total	274.7	272.1	248.4	Government	55.6	55.2	51.3
Contract Construction	16.0	14.6	13.1	MASSACHUSETTS			
Manufacturing	113.0	112.6	94.2	<u>Boston</u>			
Trans. & Public Util.	25.3	25.0	24.2	Manufacturing	303.1	303.1	275.8
Trade	60.5	60.3	58.3	<u>Fall River</u>			
Finance	14.0	13.7	13.3	Manufacturing	30.5	31.5	28.7
Other Nonmanufacturing 3/	45.8	46.0	45.4	<u>New Bedford</u>			
IOWA				Manufacturing	36.1	36.9	31.8
<u>Des Moines</u>				<u>Springfield-Holyoke</u>			
Manufacturing	21.1	20.6	19.1	Manufacturing	76.1	76.3	72.7
KANSAS				<u>Worcester</u>			
<u>Topeka</u>				Manufacturing	55.3	54.9	50.4
Total	41.8	41.3	38.0	MINNESOTA			
Mining	.1	.1	.1	<u>Duluth</u>			
Contract Construction	2.3	2.2	1.6	Total	41.6	40.8	41.8
Manufacturing	6.7	6.9	6.5	Contract Construction	2.1	2.1	2.2
Trans. & Public Util.	7.3	7.2	6.9	Manufacturing	11.3	10.4	11.3
Trade	9.0	8.8	8.2	Trans. & Public Util.	7.1	7.1	7.1
Finance	2.0	2.1	1.9	Trade	10.3	10.3	10.3
Service	4.3	4.3	4.4	Finance	1.4	1.4	1.4
Government	10.2	9.9	8.6	Service 2/	5.3	5.3	5.2
<u>Wichita</u>				Government	4.1	4.1	4.1
Total	99.6	97.0	78.4	<u>Minneapolis</u>			
Mining	1.3	1.3	1.3	Total	260.2	258.2	245.6
Contract Construction	4.8	4.6	5.0	Contract Construction	16.5	15.5	13.9
Manufacturing	43.0	41.0	24.7	Manufacturing	72.7	72.4	66.0
Trans. & Public Util.	6.9	6.9	6.8	Trans. & Public Util.	26.3	25.8	24.7
Trade	23.7	23.5	21.5	Trade	76.1	75.8	75.0
Finance	3.7	3.7	3.7	Finance	16.9	16.7	16.1
Service	9.1	9.0	8.7	Service 2/	28.4	28.6	28.2
Government	7.2	7.2	6.8	Government	23.4	23.4	21.8
LOUISIANA				<u>St. Paul</u>			
<u>New Orleans</u>				Total	144.7	144.0	140.2
Manufacturing	51.9	51.2	46.2	Contract Construction	7.7	7.4	7.2
MAINE				Manufacturing	41.7	41.4	40.0
<u>Portland</u>				Trans. & Public Util.	20.6	20.4	19.9
Total	4.0	45.9	46.4	Trade	34.9	34.9	34.5
Contract Construction	2.3	2.2	2.3	Finance	8.6	8.5	8.4
Manufacturing	12.5	11.9	12.1	Service 2/	15.0	14.9	14.2
Trans. & Public Util.	5.5	5.4	5.6	Government	16.2	16.4	15.9
Trade	12.9	12.7	12.9	MISSISSIPPI			
Finance	2.4	2.4	2.4	<u>Jackson</u>			
Service 2/	8.0	7.9	7.9	Manufacturing	7.6	8.3	7.7
Government	3.4	3.4	3.2				

See footnotes at end of table and explanatory notes, sections G, H, and I.

TABLE 8: Employees in Nonagricultural Establishments by Industry Division, Selected Areas
(In thousands)

AREA	Number of Employees			AREA	Number of Employees		
	1951		1950		1951		1950
	June	May	June		June	May	June
MISSOURI				Trenton			
<u>Kansas City (including Kansas City, Kansas)</u>				<u>Manufacturing</u>	45.3	45.0	44.3
Total	340.1	332.9	318.0	NEW MEXICO			
Mining	.9	.9	.7	<u>Albuquerque</u>			
Contract Construction	21.4	20.8	15.6	<u>Contract Construction</u>	5.8	6.0	6.1
Manufacturing	100.2	95.0	90.2	<u>Manufacturing</u>	6.5	6.6	4.9
Trans. & Public Util.	43.6	42.9	40.7	<u>Trans. & Public Util.</u>	4.8	4.8	4.5
Trade	93.5	92.9	90.5	<u>Trade</u>	11.7	11.7	11.3
Finance	19.5	19.4	16.8	<u>Finance</u>	2.2	2.3	2.5
Service	39.8	39.8	40.8	<u>Service 2/</u>	6.3	6.1	6.2
Government	21.2	21.2	20.6				
<u>St. Louis</u>				NEW YORK			
<u>Manufacturing</u>	210.4	208.4	196.9	<u>Albany-Schenectady-Troy</u>			
				<u>Manufacturing</u>	87.4	86.4	75.2
MONTANA				<u>Binghamton</u>			
<u>Great Falls</u>				<u>Manufacturing</u>	38.4	37.9	35.9
<u>Manufacturing</u>	2.7	2.7	3.2	<u>Buffalo</u>			
<u>Trans. & Public Util.</u>	2.6	2.5	2.4	<u>Manufacturing</u>	203.2	200.9	180.6
<u>Trade</u>	5.7	5.7	5.6				
NEBRASKA				<u>Elmira</u>			
<u>Omaha</u>				<u>Manufacturing</u>	16.7	16.6	14.8
Total	141.5	140.2	134.6	<u>New York City</u>			
Contract Construction	6.6	6.5	6.4	<u>Contract Construction</u>	118.8	117.4	126.2
Manufacturing	32.5	32.1	29.9	<u>Manufacturing</u>	967.7	955.9	932.3
Trans. & Public Util.	23.1	22.8	21.8	<u>Trade</u>	838.9	837.7	827.3
Trade	37.7	37.7	36.7	<u>Rochester</u>			
Finance	10.6	10.4	10.1	<u>Manufacturing</u>	106.7	105.0	97.7
Service 2/	17.3	17.0	17.0				
Government	14.0	13.8	12.9	<u>Syracuse</u>			
				<u>Manufacturing</u>	60.1	59.9	52.4
NEVADA				<u>Utica-Rome</u>			
<u>Reno</u>				<u>Manufacturing</u>	46.1	45.8	42.9
<u>Contract Construction</u>	1.8	1.9	2.0				
<u>Manufacturing 2/</u>	1.6	1.6	1.6	NORTH CAROLINA			
<u>Trans. & Public Util.</u>	3.1	3.0	3.0	<u>Charlotte</u>			
<u>Trade</u>	5.8	5.6	5.5	<u>Contract Construction</u>	10.3	10.5	7.9
<u>Finance</u>	.9	.9	.8	<u>Manufacturing</u>	22.5	21.7	20.7
<u>Service</u>	5.2	4.9	5.0	<u>Trans. & Public Util.</u>	10.6	10.6	9.8
				<u>Trade</u>	22.4	22.5	21.7
NEW HAMPSHIRE				<u>Finance</u>	4.4	4.4	4.3
<u>Manchester</u>							
Total	40.5	40.1	38.7	OKLAHOMA			
Contract Construction	1.6	1.5	1.8	<u>Oklahoma City</u>			
Manufacturing	20.7	20.6	19.0	Total	123.5	123.8	112.6
Trans. & Public Util.	2.3	2.3	2.1	<u>Contract Construction</u>	8.3	8.4	9.5
Trade	7.7	7.6	7.8	<u>Mining</u>	5.6	5.9	5.6
Finance	1.6	1.5	1.6	<u>Manufacturing</u>	13.9	13.7	13.1
Service	4.1	4.0	4.0	<u>Trans. & Public Util.</u>	11.1	11.1	10.4
Government	2.6	2.6	2.5	<u>Trade</u>	33.9	34.1	34.1
				<u>Finance</u>	6.6	6.7	6.7
NEW JERSEY				<u>Service</u>	13.1	13.0	13.0
<u>Newark-Jersey City</u>				<u>Government</u>	31.1	30.9	20.4
<u>Manufacturing</u>	365.4	366.0	335.3				
<u>Paterson</u>				<u>Tulsa</u>			
<u>Manufacturing</u>	163.2	162.4	146.4	Total	90.7	90.3	86.2
<u>Perth Amboy</u>				<u>Mining</u>	9.6	9.8	8.9
<u>Manufacturing</u>	77.6	77.4	75.0				

See footnotes at end of table and explanatory notes, sections G, H, and I.

TABLE 8: Employees in Nonagricultural Establishments by Industry Division, Selected Areas
(In thousands)

AREA	Number of Employees			AREA	Number of Employees		
	1951		1950		1951		1950
	June	May	June		June	May	June
OKLAHOMA-Continued				Knoxville-Continued			
<u>Tulsa-Continued</u>				Service	9.4	9.2	9.0
Contract Construction	5.6	6.3	6.6	Government	12.9	12.9	12.4
Manufacturing	20.4	19.7	16.7	Memphis			
Trans. & Public Util.	11.0	10.7	11.1	Mining	.4	.4	.9
Trade	24.3	24.0	23.3	Manufacturing	41.7	41.4	39.4
Finance	4.6	4.5	4.5	Trans. & Public Util.	15.2	15.4	15.2
Service	9.6	9.7	9.6	Trade	46.5	47.1	45.1
Government	5.7	5.6	5.5	Finance	7.5	7.4	6.7
OREGON				Service	22.6	22.5	23.0
<u>Portland</u>				Government	19.3	18.7	13.4
Manufacturing	62.1	58.6	57.9	Nashville			
PENNSYLVANIA				Manufacturing	35.0	35.8	32.5
<u>Philadelphia</u>				Trans. & Public Util.	11.4	11.4	11.3
Manufacturing	581.6	586.4	527.2	Trade	23.8	24.1	23.7
Pittsburgh				Finance	6.1	5.9	5.8
Manufacturing	377.0	373.5	335.3	Service	13.8	14.0	14.7
RHODE ISLAND				Government	13.1	13.1	13.1
<u>Providence</u>				UTAH			
Total	293.7	295.9	277.0	<u>Salt Lake City 4/</u>			
Contract Construction	14.4	14.5	12.9	Mining	6.1	6.0	5.9
Manufacturing	153.5	156.1	143.1	Contract Construction	7.9	7.7	8.0
Trans. & Public Util.	13.8	13.7	14.2	Manufacturing	14.7	14.3	13.2
Trade	50.3	51.0	48.2	Trans. & Public Util. 1/	7.2	7.0	6.7
Finance	10.6	10.4	10.2	Trade	28.8	27.6	27.2
Service 2/	22.0	21.4	22.6	Finance	5.0	4.8	4.7
Government	29.1	28.8	25.8	VERMONT			
SOUTH CAROLINA				<u>Burlington</u>			
<u>Charleston</u>				Manufacturing	6.1	6.0	5.3
Manufacturing	8.7	8.8	8.3	WASHINGTON			
Trans. & Public Util.	4.9	5.1	4.3	<u>Seattle</u>			
Columbia				Total	267.3	265.1	241.8
Manufacturing	7.9	5.8	7.2	Contract Construction	13.5	13.1	14.4
SOUTH DAKOTA				Manufacturing	72.2	71.3	57.8
<u>Sioux Falls</u>				Trans. & Public Util.	29.1	29.6	25.7
Manufacturing	5.2	5.0	5.2	Trade	66.2	66.0	65.0
TENNESSEE				Finance	14.5	14.4	14.3
<u>Chattanooga</u>				Service 2/	33.4	33.3	32.9
Mining	.2	.	.2	Government	38.4	37.4	31.7
Manufacturing	42.0	42.6	37.7	Spokane			
Trans. & Public Util.	4.9	4.8	4.7	Total	66.9	65.8	65.0
Trade	17.0	17.5	15.8	Contract Construction	4.1	3.7	4.2
Finance	2.8	2.8	2.7	Manufacturing	14.0	13.5	12.9
Service	9.6	9.6	9.9	Trans. & Public Util.	10.5	10.4	10.7
Government	7.8	7.8	7.8	Trade	18.2	18.1	17.8
Knoxville				Finance	2.9	2.9	3.1
Mining	2.7	2.7	2.5	Service 2/	9.7	9.7	9.6
Manufacturing	40.7	41.8	36.7	Government	7.5	7.5	6.8
Trans. & Public Util.	7.0	7.0	7.2	Tacoma			
Trade	21.2	21.3	21.4	Total	73.3	72.4	67.1
Finance	3.7	3.6	3.6	Contract Construction	4.6	4.5	4.9
				Manufacturing	18.9	18.6	18.7
				Trans. & Public Util.	6.5	6.5	6.3

See footnotes at end of table and explanatory notes, sections G, H, and I.

TABLE 8: Employees in Nonagricultural Establishments by Industry Division, Selected Areas
(In thousands)

AREA	Number of Employees			AREA	Number of Employees		
	1951		1950		1951		1950
	June	May	June		June	May	June
WASHINGTON-Continued				Charleston-Continued			
<u>Tacoma-Continued</u>				Trans. & Public Util.	9.1	9.0	8.6
Trade	14.8	14.4	14.5	Trade	16.6	16.3	16.6
Finance	2.7	2.7	2.6	Finance	2.7	2.7	2.6
Service ^{2/}	7.1	6.9	7.0	Service	7.1	7.1	7.2
Government	18.7	18.8	13.1	Government	8.8	8.7	8.3
WEST VIRGINIA				WISCONSIN			
<u>Charleston</u>				<u>Milwaukee</u>			
Total	98.2	97.3	96.4	Manufacturing	196.6	194.2	176.4
Mining	21.3	21.3	22.0				
Contract Construction	4.2	4.1	5.8	<u>Racine</u>			
Manufacturing	28.6	28.2	25.5	Manufacturing	25.1	24.8	22.3

See explanatory notes, sections G, H, and I.

^{1/} Excludes interstate railroads.

^{2/} Includes mining.

^{3/} Includes mining, service, and government.

^{4/} Revised series; not strictly comparable with previously published data.

TABLE 9: Production Workers in Selected Manufacturing Industries

(In thousands)

Industry	1951		
	June	May	April
FOOD AND KINDRED PRODUCTS:			
Meat packing, wholesale	161.2	159.2	159.4
Prepared meats	34.1	33.8	33.8
Concentrated milk	14.2	13.4	12.9
Ice cream and ices	22.9	21.2	19.1
Flour and meal	27.4	27.1	27.0
Cane-sugar refining	14.3	13.9	13.8
Beet sugar	6.0	5.8	5.4
Confectionery products	55.5	55.9	56.8
Malt liquors	66.7	62.8	60.6
Distilled liquors, except brandy	18.8	17.5	19.2
TEXTILE-MILL PRODUCTS:			
Yarn mills, wool (except carpet), cotton and silk systems	109.7	111.7	111.7
Cotton and rayon broad-woven fabrics	415.6	405.5	397.8
Woolen and worsted fabrics	100.7	101.6	104.3
Full-fashioned hosiery mills	60.6	63.6	65.9
Seamless hosiery mills	50.0	51.1	54.4
Knit underwear mills	34.1	34.5	35.7
Wool carpets, rugs, and carpet yarn	33.4	35.7	38.3
Fur-felt hats and hat bodies	8.1	8.3	8.9
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS:			
Men's dress shirts and nightwear	82.0	84.8	87.6
Work shirts	13.2	13.1	13.0
FURNITURE AND FIXTURES:			
Wood household furniture, except upholstered	104.4	109.9	118.7
Mattresses and bedsprings	22.4	27.5	28.5
CHEMICALS AND ALLIED PRODUCTS:			
Plastics materials	22.3	22.4	22.3
Synthetic rubber	7.4	7.5	7.2
Synthetic fibers	56.4	56.4	56.6
Soap and glycerin	18.9	19.4	20.4
STONE, CLAY, AND GLASS PRODUCTS:			
Glass containers	44.1	44.1	44.0
Pressed and blown glass, not elsewhere classified	33.9	35.4	36.6
Brick and hollow tile	29.9	29.1	28.7
Sewer pipe	8.9	8.7	8.7

See explanatory notes, section A.

TABLE 9: Production Workers in Selected Manufacturing Industries (Continued)

(In thousands)

Industry	1951		
	June	May	April
PRIMARY METAL INDUSTRIES:			
Gray-iron foundries	162.0	162.7	163.7
Malleable-iron foundries	28.1	27.9	27.7
Steel foundries	63.5	62.3	61.0
Primary copper, lead, and zinc	26.2	26.0	26.1
Primary aluminum	10.3	9.4	9.9
Iron and steel forgings	34.8	34.2	34.0
Wire drawing	44.4	44.1	43.9
FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY, AND TRANSPORTATION EQUIPMENT):			
Cutlery and edge tools	23.9	24.2	24.6
Hand tools, not elsewhere classified, files, hand saws, and saw blades	38.5	38.8	38.7
Hardware, not elsewhere classified	71.4	72.0	73.5
Metal plumbing fixtures and fittings	30.9	31.1	31.4
Oil burners, heating and cooking apparatus, not elsewhere classified	78.2	79.4	81.7
Structural and ornamental products	65.0	64.5	63.7
Boiler shop products	53.5	56.2	56.0
Metal stampings	116.6	119.6	123.5
MACHINERY (EXCEPT ELECTRICAL):			
Tractors	73.7	72.5	72.2
Farm machinery, except tractors	75.7	75.8	76.4
Machine tools	59.6	58.5	58.4
Metalworking machinery, not elsewhere classified	43.9	42.3	41.8
Cutting tools, jigs, fixtures, etc.	92.1	90.8	88.8
Computing and related machines	41.7	41.5	41.0
Typewriters	21.8	21.4	21.2
Refrigeration machinery	98.8	101.6	102.6
Ball and roller bearings	47.4	46.6	46.1
Machine shops	47.2	46.5	46.3
ELECTRICAL MACHINERY:			
Radios and related products	149.4	157.7	171.1
Telephone and telegraph equipment and communication equipment, not elsewhere classified	40.4	39.3	38.9
TRANSPORTATION EQUIPMENT:			
Locomotives and parts	25.2	24.9	24.7
Railroad and streetcars	34.2	33.5	32.1
MISCELLANEOUS MANUFACTURING INDUSTRIES:			
Silverware and plated ware	16.3	16.9	17.5

See explanatory notes, section A.

EXPLANATORY NOTES

Section A. Scope of the BLS Employment Series - The Bureau of Labor Statistics publishes each month the number of employees in all nonagricultural establishments and in the 8 major industry divisions: mining, contract construction, manufacturing, transportation and public utilities, trade, finance, service, and government. Both all-employee and production-worker employment series are also presented for 21 major manufacturing groups, over 100 separate manufacturing industries, and the durable and nondurable goods subdivisions. Within nonmanufacturing, total employment information is published for over 50 series. Production worker employment is also presented for most of the industry components of the mining division.

Table 9 shows production-worker data for 60 new industries. These series are based on the levels of employment indicated by the 1947 Census of Manufactures and have been carried forward by use of the employment changes reported by the BLS monthly sample of cooperating establishments. These series are not comparable with the data shown in table 3 since the latter are adjusted to bench-mark levels indicated by social insurance agency data through 1947.

Hours and earnings information for manufacturing and selected nonmanufacturing industries are published monthly in the Hours and Earnings Industry Report and in the Monthly Labor Review.

Section B. Definition of Employment - For privately operated establishments in the nonagricultural industries the BLS employment information covers all full- and part-time employees who were on the pay roll, i.e., who worked during, or received pay for, the pay period ending nearest the 15th of the month. For Federal establishments the employment period relates to the pay period ending prior to the first of the month; in State and local governments, during the pay period ending on or just before the last of the month. Proprietors, self-employed persons, domestic servants, unpaid family workers, and members of the armed forces are excluded from the employment information.

Section C. Comparability With Other Employment Data - The Bureau of Labor Statistics employment series differ from the Monthly Report on the Labor Force in the following respects: (1) The BLS series are based on reports from cooperating establishments, while the MRLF is based on employment information obtained from household interviews; (2) persons who worked in more than one establishment during the reporting period would be counted more than once in the BLS series, but not in the MRLF; (3) the BLS information covers all full- and part-time wage and salary workers in private nonagricultural establishments who worked during, or received pay for, the pay period ending nearest the 15th of the month; in Federal establishments during the pay period ending just before the first of the month; and in State and local government during the pay period ending on or just before the last of the month, while the MRLF series relates to the calendar week which contains the 8th day of the month; (4) proprietors, self-employed, domestic servants, and unpaid family workers are excluded from the BLS but not the MRLF series.

Section D. Methodology - Changes in the level of employment are based on reports from a sample group of establishments, inasmuch as full coverage is prohibitively costly and time-consuming. In using a sample, it is essential that a complete count or "bench mark" be established from which the series may be carried

forward. Briefly, the BLS computes employment data as follows: first, a bench mark or level of employment is determined; second, a sample of establishments is selected; and third, changes in employment indicated by this reporting sample are applied to the bench mark to determine the monthly employment between bench-mark periods. An illustration of the estimation procedure used in those industries for which both all-employee and production-worker employment information is published follows: The latest production-worker employment bench mark for a given industry was 50,000 in January. According to the BLS reporting sample, 60 establishments in that industry employed 25,000 workers in January and 26,000 in February, an increase of 4 percent. The February figure of 52,000 would be derived by applying the change for identical establishments reported in the January-February sample to the bench mark:

$$50,000 \times \frac{26,000}{25,000} \text{ (or } 1.04) = 52,000$$

The estimated all-employee level of 65,000 for February is then determined by using that month's sample ratio (.800) of production workers to total employment

$$\frac{52,000}{.800} \text{ (or multiplied by } 1.25) = 65,000.$$

When a new bench mark becomes available, employment data prepared since the last bench mark are reviewed to determine if any adjustment of level is required. In general, the month-to-month changes in employment reflect the fluctuations shown by establishments reporting to the BLS, while the level of employment is determined by the bench mark.

The pay-roll index is obtained by dividing the total weekly pay roll for a given month by the average weekly pay roll in 1939. Aggregate weekly pay rolls for all manufacturing industries combined are derived by multiplying gross average weekly earnings by production-worker employment.

Section E. Sources of Sample Data - Approximately 143,000 cooperating establishments furnish monthly employment and pay-roll schedules, by mail, to the Bureau of Labor Statistics. In addition, the Bureau makes use of data collected by the Interstate Commerce Commission, the Civil Service Commission, and the Bureau of the Census.

APPROXIMATE COVERAGE OF MONTHLY SAMPLE USED IN
BLS EMPLOYMENT AND PAY-ROLL STATISTICS

Division or industry	Number of establishments	Employees	
		Number in sample	Percent of total
Mining	3,000	467,000	50
Contract construction	19,300	539,000	26
Manufacturing	39,000	9,092,000	64
Transportation and public utilities:			
Interstate railroads (ICC)	--	1,329,000	98
Rest of division (BLS)	12,500	1,309,000	51
Trade	58,100	1,676,000	18
Finance	7,900	367,000	20
Service:			
Hotels	1,300	144,000	33
Laundries and cleaning and dyeing plants	1,800	97,000	20
Government:			
Federal (Civil Service Commission)	--	1,939,000	100
State and local (Bureau of Census - quarterly)	--	2,450,000	62

Section F. Sources of Bench-Mark Data - Reports from Unemployment Insurance Agencies presenting (1) employment in firms liable for contributions to State unemployment compensation funds, and (2) tabulations from the Bureau of Old-Age and Survivors Insurance on Employment in firms exempt from State unemployment insurance laws because of their small size comprise the basic sources of bench-mark data for nonfarm employment. Most of the employment data in this report have been adjusted to levels indicated by these sources for 1947. Special bench marks are used for industries not covered by the Social Security program. Bench marks for State and local government are based on data compiled by the Bureau of the Census, while information on Federal Government employment is made available by the U. S. Civil Service Commission. The Interstate Commerce Commission is the source for railroads.

Bench marks for production-worker employment are not available on a regular basis. The production-worker series are, therefore, derived by applying to all-employee bench marks the ratio of production-worker employment to total employment, as determined from the Bureau's industry samples.

Section G. Industrial Classification - In the BLS employment and hours and earnings series, reporting establishments are classified into significant economic groups on the basis of major postwar product or activity as determined from annual sales data. The following references present the industry classification structure currently used in the employment statistics program.

- (1) For manufacturing industries - Standard Industrial Classification Manual, Vol. I, Manufacturing Industries, Bureau of the Budget, November 1945;
- (2) For nonmanufacturing industries - Industrial Classification Code, Federal Security Agency Social Security Board, 1942.

Section H. State Employment - State data are collected and prepared in cooperation with various State Agencies as indicated below. The series have been adjusted to recent data made available by State Unemployment Insurance Agencies and the Bureau of Old-Age and Survivors Insurance. Since some States have adjusted to more recent bench-marks than others, and because varying methods of computation are used, the total of the State series differs from the national total. A number of States also make available more detailed industry data and information for earlier periods which may be secured directly upon request to the appropriate State Agency.

The following publications are available upon request from the BLS Regional Offices or the Bureau's Washington Office:

Nonagricultural Employment, by State, 1947-48-49;

Employment in Manufacturing Industries, by State,
1947-48-49.

COOPERATING STATE AGENCIES

Alabama - Department of Industrial Relations, Montgomery 5.
Arizona - Unemployment Compensation Division, Employment Security Commission, Phoenix.
Arkansas - Employment Security Division, Department of Labor, Little Rock.
California - Division of Labor Statistics and Research, Department of Industrial Relations, San Francisco 1.
Colorado - Department of Employment Security, Denver 2.
Connecticut - Employment Security Division, Department of Labor, Hartford 5.
Delaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pennsylvania.
District of Columbia - U. S. Employment Service for D. C., Washington 25.
Florida - Unemployment Compensation Division, Industrial Commission, Tallahassee.
Georgia - Employment Security Agency, Department of Labor, Atlanta 3.
Idaho - Employment Security Agency, Boise.
Illinois - Division of Placement and Unemployment Compensation, Department of Labor, Chicago 54.
Indiana - Employment Security Division, Indianapolis 9.
Iowa - Employment Security Commission, Des Moines 8.
Kansas - Employment Security Division, State Labor Department, Topeka.
Kentucky - Bureau of Employment Security, Department of Economic Security, Frankfort.

Louisiana - Division of Employment Security, Department of Labor, Baton Rouge 4.
 Maine - Employment Security Commission, Augusta.
 Maryland - Department of Employment Security, Baltimore 1.
 Massachusetts - Division of Statistics, Department of Labor and Industries,
 Boston 10.
 Michigan - Employment Security Commission, Detroit 2.
 Minnesota - Division of Employment and Security, St. Paul 1.
 Mississippi - Employment Security Commission, Jackson.
 Missouri - Division of Employment Security, Department of Labor and Industrial
 Relations, Jefferson City.
 Montana - Unemployment Compensation Commission, Helena.
 Nebraska - Division of Employment Security, Department of Labor, Lincoln 1.
 Nevada - Employment Security Department, Carson City.
 New Hampshire - Division of Employment Security, Department of Labor, Concord.
 New Jersey - Department of Labor and Industry, Trenton 8.
 New Mexico - Employment Security Commission, Albuquerque.
 New York - Bureau of Research and Statistics, Division of Placement and Unemployment
 Insurance, New York Department of Labor, 1440 Broadway, New York 18.
 North Carolina - Department of Labor, Raleigh.
 North Dakota - Unemployment Compensation Division, Bismarck.
 Ohio - Bureau of Unemployment Compensation, Columbus 16.
 Oklahoma - Employment Security Commission, Oklahoma City 2.
 Oregon - Unemployment Compensation Commission, Salem.
 Pennsylvania - Federal Reserve Bank of Philadelphia, Philadelphia 1 (mfg.); Bureau
 of Research and Information, Department of Labor and Industry,
 Harrisburg (nonmfg.).
 Rhode Island - Department of Labor, Providence 2.
 South Carolina - Employment Security Commission, Columbia 10.
 South Dakota - Employment Security Department, Aberdeen.
 Tennessee - Department of Employment Security, Nashville 3.
 Texas - Employment Commission, Austin 19.
 Utah - Department of Employment Security, Industrial Commission, Salt Lake City 13.
 Vermont - Unemployment Compensation Commission, Montpelier.
 Virginia - Division of Research and Statistics, Department of Labor and Industry,
 Richmond 19.
 Washington - Employment Security Department, Olympia.
 West Virginia - Department of Employment Security, Charleston.
 Wisconsin - Industrial Commission, Madison 3.
 Wyoming - Employment Security Commission, Casper.

Section I. Area Employment - Figures on area employment are prepared by
 cooperating State agencies. The methods of adjusting to bench marks and of making
 computations used to prepare State employment are also applied in preparing area in-
 formation. Hence, the appropriate qualifications should also be observed. For a
 number of areas, data in greater industry detail and for earlier periods can be ob-
 tained by writing directly to the appropriate State agency.

GLOSSARY

All Employees or Wage and Salary Workers - In addition to production and related workers as defined elsewhere, includes workers engaged in the following activities: executive, purchasing, finance, accounting, legal, personnel (including cafeterias, medical, etc.), professional and technical activities, sales, sales-delivery, advertising, credit collection, and in installation and servicing of own products, routine office functions, factory supervision (above the working foreman level). Also includes employees on the establishment pay roll engaged in new construction and major additions or alterations to the plant who are utilized as a separate work force (force-account construction workers).

Continental United States - Covers only the 48 States and the District of Columbia.

Contract Construction - Covers only firms engaged in the construction business on a contract basis for others. Force-account construction workers, i.e., hired directly by and on the pay rolls of Federal, State, and local government, public utilities, and private establishments, are excluded from contract construction and included in the employment for such establishments.

Defense Agencies - Covers civilian employees of the Department of Defense (Secretary of Defense: Army, Air Force, and Navy), National Advisory Committee for Aeronautics, The Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Selective Service System, National Security Resources Board, National Security Council.

Durable Goods - The durable goods subdivision includes the following major groups: ordnance and accessories; lumber and wood products (except furniture); furniture and fixtures; stone, clay, and glass products; primary metal industries; fabricated metal products (except ordnance, machinery, and transportation equipment); machinery (except electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.

Federal Government - Executive Branch - Includes Government corporations (including Federal Reserve Banks and mixed-ownership banks of the Farm Credit Administration) and other activities performed by Government personnel in establishments such as navy yards, arsenals, hospitals, and on force-account construction. Data, which are based mainly on reports to the Civil Service Commission, are adjusted to maintain continuity of coverage and definition with information for former periods.

Finance - Covers establishments operating in the fields of finance, insurance, and real estate; excludes the Federal Reserve Banks and the mixed-ownership banks of the Farm Credit Administration which are included under Government.

Government - Covers Federal, State, and local governmental establishments performing legislative, executive, and judicial functions, as well as all government-operated establishments and institutions (arsenals, navy yards, hospitals, etc.), government corporations, and government force-account construction. Fourth-class postmasters are excluded from table 2, because they presumably have other major jobs; they are included, however, in table 6. State and local government

employment excludes as nominal employees paid volunteer firemen, employees hired to conduct elections, and elected officials of small local governments.

Indexes of Manufacturing Production-Worker Employment - Number of production workers expressed as a percentage of the average employment in 1939.

Indexes of Manufacturing Production-Worker Weekly Pay Rolls - Production-worker weekly pay rolls expressed as a percentage of the average weekly pay roll for 1939.

Manufacturing - Covers only privately-operated establishments; governmental manufacturing operations such as arsenals and navy yards are excluded from manufacturing and included with government.

Mining - Covers establishments engaged in the extraction from the earth of organic and inorganic minerals which occur in nature as solids, liquids, or gases; includes various contract services required in mining operations, such as removal of over-burden, tunnelling and shafting, and the drilling or acidizing of oil wells; also includes ore dressing, beneficiating, and concentration.

Nondurable Goods - The nondurable goods subdivision includes the following major groups: food and kindred products; tobacco manufactures; textile-mill products; apparel and other finished textile products; paper and allied products; printing, publishing, and allied industries; chemicals and allied products; products of petroleum and coal; rubber products; and leather and leather products.

Pay Rolls - Private pay rolls represent weekly pay rolls of both full- and part-time production and related workers who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month, before deductions for old-age and unemployment insurance, group insurance, withholding tax, bonds, and union dues; also, includes pay for sick leave, holidays, and vacations taken. Excludes cash payments for vacations not taken, retroactive pay not earned during period reported, value of payments in kind, and bonuses, unless earned and paid regularly each pay period. Federal civilian pay rolls cover the working days in the calendar month.

Production and Related Workers - Includes working foremen and all nonsupervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, products development, auxiliary production for plant's own use (e.g., power plant), and record-keeping and other services closely associated with the above production operations.

Service - Covers establishments primarily engaged in rendering services to individuals and business firms, including automobile repair services. Excludes all government-operated services such as hospitals, museums, etc., and all domestic service employees.

Trade - Covers establishments engaged in wholesale trade, i.e., selling merchandise to retailers, and in retail trade, i.e., selling merchandise for personal or household consumption, and rendering services incidental to the sales of goods.

Transportation and Public Utilities - Covers only privately-owned and operated enterprises engaged in providing all types of transportation and related services; telephone, telegraph, and other communication services; or providing electricity, gas, steam, water, or sanitary service. Government operated establishments are included under government.

Washington, D. C. - Data for the executive branch of the Federal Government also include areas in Maryland and Virginia which are within the metropolitan area, as defined by the Bureau of the Census.

Labor - D. C.