

L 2.3:
1612

INDEXES OF OUTPUT PER MAN-HOUR SELECTED INDUSTRIES 1939 and 1947-67

Dayton & Montgomery Co.
Public Library

MAR 1 1 1969

DOCUMENT COLLECTION

DECEMBER 1968



BLS Bulletin No. 1612

**UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS**

1900-1910
1910-1920
1920-1930
1930-1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
2000-2010
2010-2020

INDEXES OF OUTPUT PER MAN-HOUR SELECTED INDUSTRIES 1939 and 1947-67



BLS Bulletin No.1612

December 1968

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 – Price \$1.00

Contents

	Page
Introduction	1
Highlights of trends in output per man-hour for selected industries ..	2
Methods and data	5
Tables:	
Selected Industries: SIC codes, 1966 employment, and average annual rates of change in output per man-hour, 1947-66 and 1957-66	8
<u>Mining Industries:</u>	
Output per man-hour, unit labor requirements, and related data:	
Iron mining, crude ore - SIC 101	
1. All employees	9
2. Production workers	10
3. Nonproduction workers	11
Iron mining, usable ore - SIC 101	
4. All employees	12
5. Production workers	13
6. Nonproduction workers	14
Copper mining, crude ore - SIC 102	
7. All employees	15
8. Production workers	16
9. Nonproduction workers	17
Copper mining, recoverable metal - SIC 102	
10. All employees	18
11. Production workers	19
12. Nonproduction workers	20
Coal mining - SIC 11, 12	
13. All employees	21
14. Production workers	22
15. Nonproduction workers	23
Bituminous coal and lignite mining - SIC 12	
16. All employees	24
17. Production workers	25
18. Nonproduction workers	26
<u>Manufacturing Industries:</u>	
Output per man-hour, unit labor requirements, and related data:	
Canning and preserving - SIC 203	
19. All employees	27
20. Production workers	28
21. Nonproduction workers	29

Contents--Continued

Page

Tables - Continued:

Manufacturing Industries - Continued:

Output per man-hour, unit labor requirements, and related data:

Flour and other grain-mill products - SIC 2041	
22. All employees	30
23. Production workers	31
24. Nonproduction workers	32
Beet sugar - SIC 2063	
25. All employees	33
26. Production workers	34
27. Nonproduction workers	35
Candy and other confectionery products - SIC 2071	
28. All employees	36
29. Production workers	37
30. Nonproduction workers	38
Malt liquors - SIC 2082	
31. All employees	39
32. Production workers	40
33. Nonproduction workers	41
Tobacco products-total - SIC 211, 212, 213	
34. All employees	42
35. Production workers	43
36. Nonproduction workers	44
Cigarettes, chewing and smoking tobacco - SIC 211, 213	
37. All employees	45
38. Production workers	46
39. Nonproduction workers	47
Cigars - SIC 212	
40. All employees	48
41. Production workers	49
42. Nonproduction workers	50
Hosiery - SIC 2251, 2252	
43. All employees	51
44. Production workers	52
45. Nonproduction workers	53
Paper, paperboard and pulp mills - SIC 261, 262, 263, 266	
46. All employees	54
47. Production workers	55
48. Nonproduction workers	56
Man-made fibers - SIC 2823, 2824	
49. All employees	57
50. Production workers	58
51. Nonproduction workers	59

Contents--Continued

Page

Tables - Continued:

Manufacturing Industries - Continued:

Output per man-hour, unit labor requirements, and related data:

Petroleum refining - SIC 2911	
52. All employees	60
53. Production workers	61
54. Nonproduction workers	62
Tires and inner tubes - SIC 3011	
55. All employees	63
56. Production workers	64
57. Nonproduction workers	65
Footwear - SIC 3141, 3142	
58. All employees	66
59. Production workers	67
60. Nonproduction workers	68
Glass containers - SIC 3221	
61. All employees	69
62. Production workers	70
63. Nonproduction workers	71
Cement, hydraulic - SIC 3241	
64. All employees	72
65. Production workers	73
66. Nonproduction workers	74
Concrete products - SIC 3271, 3272	
67. All employees	75
68. Production workers	76
69. Nonproduction workers	77
Steel - SIC 331	
70. All employees	78
71. Production workers	79
72. Nonproduction workers	80
Primary copper, lead and zinc - SIC 3331, 3332, 3333	
73. All employees	81
74. Production workers	82
75. Nonproduction workers	83
Primary aluminum - SIC 3334	
76. All employees	84
77. Production workers	85
78. Nonproduction workers	86
Aluminum rolling and drawing - SIC 3352	
79. All employees	87
80. Production workers	88
81. Nonproduction workers	89

Contents--Continued

Page

Tables - Continued:

Manufacturing Industries - Continued:

Output per man-hour, unit labor requirements, and related data:

Radio and television receiving sets - SIC 3651

82. All employees	90
83. Production workers	91
84. Nonproduction workers	92

Other Industries:

Output per man-hour, unit labor requirements, and related data:

Railroad transportation, revenue traffic - SIC 401

85. All employees	93
86. Production workers	94
87. Nonproduction workers	95

Railroad transportation, car-miles - SIC 401

88. All employees	96
89. Production workers	97
90. Nonproduction workers	98

Air transportation - SIC 451

91. All employees	99
-------------------------	----

Gas and electric utilities - SIC 491, 492, 493

92. All employees	100
93. Production workers	101

INDEXES OF OUTPUT PER MAN-HOUR: SELECTED INDUSTRIES, 1939 and 1947-67

Introduction

This bulletin updates industry indexes of output per man-hour, output per employee, and unit labor requirements for the industries currently included in the U.S. Government's productivity measurement program. The data cover the years 1939 and 1947 through 1966 or 1967. Indexes for the radio and television receiving sets industry are included for the first time.

The selected industries for which output per man-hour indexes are shown are not necessarily a representative cross section of American industry. They should not be combined, therefore, to obtain an overall measure for the entire economy or for any sector. Each index is intended to represent only the change in output per man-hour for the designated industry or combination of industries. However, the Bureau of Labor Statistics does publish indexes of output per man-hour and related measures for the total private economy and major sectors--farm, nonfarm, manufacturing, and nonmanufacturing.¹ Those measures show the relationship between gross national product originating in the private economy, or major sectors, and employment and man-hours.

This bulletin was prepared in the Office of Productivity, Technology and Growth by Edwin Adelman, John Carey, Carolyn Fehd, John Ferris, Sidney Gelb, John Henneberger, Clyde Huffstutler, Elmer Persigehl, and Robert Robinowitz under the direction of Hazen F. Gale and Charles W. Ardolini.

¹ Trends in Output per Man-Hour in the Private Economy, 1909-1958 (BLS Bulletin 1249, 1959), and subsequent releases.

HIGHLIGHTS OF TRENDS IN OUTPUT PER MAN-HOUR FOR SELECTED INDUSTRIES

The most significant development in output per man-hour for the 28 selected industries is that all of the industries experienced increases over the 1957-66 period as well as over the 1947-66 period. These productivity gains were attained by industries classified in manufacturing, mining, transportation, and utilities and were associated with a wide range of output changes.

Productivity rates for individual industries were far from uniform, however, and differed in magnitude and variability. The patterns of output, employment, and productivity relationships also differed significantly among the selected industries.

Differences in Growth Rates

Increases in output per man-hour averaged somewhat higher during 1957-66 as compared with the 1947-66 period; about two-thirds of the industries experienced higher growth rates in 1957-66 than in the 1947-57 period. Only four industries had lower productivity gains and for three of these--air transportation, gas and electric utilities, and concrete products--lower output advances were experienced. This overall higher pattern of productivity growth in the latter period generally reflects the greater rate of growth in productivity for all manufacturing and the private nonfarm sector. This increase may be attributed to the increase in capital investment which became especially noticeable in 1963.

Several of the selected industries maintained rates of growth substantially above the manufacturing average for the 1957-66 period. These include air transportation, cigars, aluminum rolling and drawing, petroleum refining, gas and electric utilities, railroads, radio and television sets, tires and tubes, hosiery, coal mining, malt liquors, and primary aluminum.

Moderate rates of productivity growth occurred in hydraulic cement, pulp and paper mills, man-made fibers, flour mills, candy and confectionery, beet sugar, iron mining, primary copper, lead and zinc, and canning and preserving.

Below average rates were reported for copper mining, steel, concrete products, glass containers, cigarettes, and footwear.

To some extent, the industries which were high for the 1957-66 period were also high for the 1947-57 period. There were certain notable exceptions, however, such as concrete products, hydraulic cement, and hosiery, all of which declined from high rates during 1947-57 to relatively low rates during 1957-67.

Output per production worker man-hour behaved similarly to the output per all employee man-hour for the 1957-66 period because production workers account for a large proportion of total employment. Rates for production workers and nonproduction workers were frequently very close. This close relationship is in contrast to the 1947-57 period when output per all employee measures tended to be lower than the output per production worker measures. During that period, output per nonproduction worker man-hour often increased much faster than output per production worker man-hour because of the rapid increases in employment of nonproduction workers.

About two-thirds of the industries showed slower rates of gain in 1966 or 1967 than in the year earlier. This slackening of growth rates may reflect a strain on available resources as a result of continuing increases in output for the whole economy during 1961-67. However, many of the 28 industries presented here have experienced slowly declining employment for many years and so were not affected greatly by this prosperity. On the other hand, general economic prosperity may make the recruitment of replacements more difficult even for industries which have low rates of labor turnover.

Productivity and Output

Changes in productivity often are related to changes in output, which is evident from the close association of large year-to-year fluctuations in output per man-hour with large changes in output. For the 1957-66 period, 4 of the 12 industries which have high productivity rates also experienced above average output increases. These include air transportation, gas and electric utilities, aluminum rolling and drawing, and radio and television sets.

Several industries, such as coal mining, flour, malt liquors, cigars, hydraulic cement, and railroads, were able to achieve major gains in productivity despite moderate or little growth in output during the 1957-66 period. For a few industries, such as cigarettes, footwear, steel, and glass containers, low output rates and low productivity rates were reported.

Productivity and Employment

The relationship between productivity gains and employment changes is dependent upon output changes. When output expands more rapidly than productivity, man-hours will increase and employment will rise correspondingly unless the workweek is lengthened. For the period 1957-66, very high output gains outstripped high productivity gains for the radio and television industry, aluminum rolling and drawing industry, and air transportation industry. As a result, employment rose substantially. For concrete products, a modest output gain was combined with a below average productivity gain to account for the employment increase. For man-made fibers, a high output gain exceeded the productivity advance which was slightly above the average.

Large employment decreases occur where low output and high productivity coincide. This situation occurred over the 1957-66 period for cigars, petroleum refining, coal mining, and railroads. Most of the remaining industries showed employment changes of relatively modest proportions; a high percentage of the industries showed declines.

Methods and Data

The productivity measures presented reflect the relationship between output in physical terms and related labor time. They show the changes from year to year in the amount of labor time required to produce a unit of output. Although the measures relate output to employment and man-hours, they do not measure the specific contributions of labor, capital, or any other factor of production. Rather, they reflect the joint effect of a number of interrelated influences, such as changes in technology, capital investment per worker, changes in the level of output, utilization of capacity, layout and flow of material, managerial skill, and skills and effort of the work force.

The indexes of output per man-hour are computed by dividing an output index by an index of aggregate man-hours. Corresponding measures also are computed relating output to the number of employees. Thus, the industry indexes presented here measure changes in the relationship between output and employment or man-hours. Although, traditionally, output per man-hour has been the measurement most frequently used, in some instances studies of physical output per man-hour are simplified if made in terms of the reciprocal: man-hour requirements per unit of output (unit man-hours). Therefore, unit labor requirements indexes are shown for all industries covered in this report.

The output indexes are based primarily on the physical output of the products of the industry, combined with fixed period weights. Unit man-hour weights are used whenever possible. For most industries, however, unit value weights, which are assumed to be proportional to unit man-hour weights, are used as substitute weights. Indexes for 1947-58 are based on 1947 weights; for 1958-63, 1958 weights; and for 1963-67, 1963 weights. For three industries--railroads, iron mining, and copper mining--two alternative output measures, representing different concepts of industry output, are presented.

Employment and man-hour indexes are developed from basic data compiled by the Bureau of the Census or the Bureau of Labor Statistics. In concept, indexes based on man-hour data from the Bureau of the Census relate to plant hours only. Man-hour data from the Bureau of Labor Statistics include not only hours at work but also payroll hours such as vacations, holidays, and sick leave paid by the establishment directly to the employee.²

² Indexes for the railroad transportation industry are based on data from the Interstate Commerce Commission (ICC), and are related primarily to hours at work.

In general, because of increases in paid leave during the period, output per man-hour worked would tend to show a somewhat higher rate of gain than output per man-hour paid. However, actual differences may result from statistical limitations in the data as well as from differences in concept.

This report includes indexes of output per man-hour and output per employee. In most cases, the indexes are shown for all employees, production workers, and nonproduction workers.³ Although both the Bureau of the Census and the Bureau of Labor Statistics provide data on production worker man-hours, neither source provides annual data by industry on nonproduction worker or all employee man-hours. Therefore, the nonproduction worker man-hours are estimated.

The estimates of aggregate nonproduction worker man-hours for the manufacturing industries are derived from published employment data and from estimates of average annual hours worked or paid per nonproduction worker. The estimates of average annual hours paid are calculated by multiplying the number of workweeks in the year by the scheduled weekly hours. Estimated hours for vacations, holidays, disability, and personal time off are subtracted from average annual hours paid to obtain an estimate of average annual hours worked. Vacation and holiday trends are based on studies by the U.S. Department of Health, Education and Welfare, and on data from Bureau of Labor Statistics surveys. Personal time off has been estimated as a constant on the basis of data obtained from various sources.

All employee man-hour estimates for manufacturing industries are derived by summing the aggregate man-hours for production workers and the estimated aggregate man-hours for nonproduction workers.⁴

³ The term "production workers" has been used for many years to cover manufacturing and mining employees who work at the plant or mine and who are generally in nonsupervisory occupations. The remaining employees, such as professional, technical, clerical, supervisory, etc., have been identified as "nonproduction workers."

⁴ The ICC publishes all employee man-hours for the railroad transportation industry.

Indexes involving nonproduction worker man-hours are subject to a wider margin of error than are the indexes involving only production worker man-hours because it was necessary to estimate the average man-hours of nonproduction workers. Any errors in these estimates, however, would have a relatively insignificant effect on the indexes of man-hours for all employees.

The output indexes and man-hour components of the industry productivity indexes are based on data from various sources which are identified in the accompanying tables.

The indexes refer to the standard reference base (1957-59=100) and conform to the 1967 Standard Industrial Classification (SIC) system.

All average annual rates of change are based on the linear least squares trends of the logarithms of the index numbers. Average annual rates of change for any time periods shown in this report are available upon request from the Bureau of Labor Statistics.*

More detailed information on the methods, limitations, and data sources is contained in the BLS Handbook of Methods for Surveys and Studies, Bulletin 1458, 1966, chapter 23, and in a number of individual industry reports. These publications, as well as additional information, are available upon request from the Bureau of Labor Statistics.

**SELECTED INDUSTRIES: SIC Codes, 1966 Employment, and Average Annual Rates of Change in Output Per Man-Hour,
1947-66 and 1957-66**

SIC Code	Industry title	1966 employment (thousands) ^{1/}			Output per man-hour: Average annual rate of change (percent) ^{2/}					
		All employees	Production workers	Non-production workers	1947-66			1957-66		
					All employees	Production workers	Non-production workers*	All employees	Production workers	Non-production workers*
<u>Mining</u>										
101	Iron mining, crude ore ^{3/} -----	26	22	4	(<u>4/</u>)	5.2	(<u>4/</u>)	(<u>4/</u>)	7.2	(<u>4/</u>)
101	Iron mining, usable ore ^{3/} -----	26	22	4	(<u>4/</u>)	1.9	(<u>4/</u>)	(<u>4/</u>)	3.6	(<u>4/</u>)
102	Copper mining, crude ore ^{3/} -----	32	26	6	(<u>4/</u>)	4.6	(<u>4/</u>)	(<u>4/</u>)	3.8	(<u>4/</u>)
102	Copper mining, recoverable metal ^{3/} -----	32	26	6	(<u>4/</u>)	3.1	(<u>4/</u>)	(<u>4/</u>)	2.8	(<u>4/</u>)
11, 12	Coal mining ^{3/} -----	137	119	18	(<u>4/</u>)	6.3	(<u>4/</u>)	(<u>4/</u>)	6.2	(<u>4/</u>)
12	Bituminous coal and lignite mining ^{3/} -----	130	112	17	(<u>4/</u>)	6.4	(<u>4/</u>)	(<u>4/</u>)	6.2	(<u>4/</u>)
<u>Manufacturing</u>										
203	Canning and preserving-----	276	233	42	3.6	3.9	(1.6)	3.3	3.2	(3.7)
2041	Flour and other grain mill products-----	20	15	5	3.9	4.1	(3.0)	4.1	3.8	(4.9)
2063	Beet sugar-----	12	10	2	4.5	4.3	(6.0)	<u>5/</u> 3.6	<u>5/</u> 3.7	<u>5/</u> (3.1)
2071	Candy and other confectionery products---	67	56	11	3.5	3.4	(3.4)	3.7	3.1	(6.3)
2082	Malt liquors-----	61	40	20	4.3	4.4	(3.9)	5.9	5.7	(6.5)
211, 212, 213	Tobacco products--Total-----	59	53	6	3.6	3.9	(1.4)	4.1	4.3	(1.6)
211, 213	Cigarettes, chewing and smoking tobacco--	40	35	5	1.3	1.5	(-0.1)	1.8	2.2	(-1.1)
212	Cigars-----	19	18	1	6.7	6.9	(4.2)	7.8	7.8	(7.4)
2251, 2252	Hosiery-----	97	89	8	4.8	4.8	(4.0)	6.3	6.3	(6.4)
261, 262, 263, 266	Paper, paperboard, and pulp mills-----	228	184	44	3.9	4.3	(1.4)	4.9	5.2	(3.6)
2823, 2824	Man-made fibers-----	93	68	25	(<u>4/</u>)	(<u>4/</u>)	(<u>4/</u>)	4.1	4.2	(3.7)
2911	Petroleum refining-----	107	76	30	5.9	6.4	(4.3)	7.4	7.7	(6.7)
3011	Tires and inner tubes-----	93	72	21	4.3	4.6	(3.2)	6.3	6.4	(6.2)
3141, 3142	Footwear-----	220	199	21	1.9	1.9	(1.7)	1.2	1.1	(2.3)
3221	Glass containers-----	64	57	7	1.3	1.4	(0.7)	2.2	2.2	(2.4)
3241	Cement, hydraulic-----	34	27	7	4.7	5.2	(2.1)	5.0	5.8	(1.2)
3271, 3272	Concrete products-----	85	64	21	3.2	3.7	(0.8)	2.5	2.7	(1.6)
331	Steel ^{3/} -----	652	531	121	1.7	2.2	(-0.6)	2.8	2.7	(3.5)
3331, 3332, 3333	Primary copper, lead, and zinc-----	27	23	4	2.6	2.9	(1.2)	3.4	3.1	(4.9)
3334	Primary aluminum-----	21	17	4	5.3	5.6	(3.9)	5.6	5.4	(6.9)
3352	Aluminum rolling and drawing-----	63	51	13	(<u>4/</u>)	(<u>4/</u>)	(<u>4/</u>)	<u>5/</u> 7.4	<u>5/</u> 7.2	<u>5/</u> (8.5)
3651	Radio and television receiving sets-----	130	110	20	(<u>4/</u>)	(<u>4/</u>)	(<u>4/</u>)	<u>5/</u> 6.5	<u>5/</u> 5.5	<u>5/</u> (11.3)
<u>Other</u>										
401, Class I	Railroads, revenue traffic ^{3/} -----	656	587	69	5.1	5.4	(2.3)	6.6	6.8	(4.9)
401, Class I	Railroads, car-miles ^{3/} -----	656	587	69	4.3	4.5	(1.5)	4.2	4.4	(2.5)
451	Air transportation ^{3/} -----	215	(<u>4/</u>)	(<u>4/</u>)	<u>6/</u> 7.9	(<u>4/</u>)	(<u>4/</u>)	<u>6/</u> 8.1	(<u>4/</u>)	(<u>4/</u>)
491, 492, 493	Gas and electric utilities ^{3/} -----	588	<u>7/</u> 509	<u>8/</u> 78	7.3	<u>7/</u> 7.8	(<u>4/</u>)	6.7	<u>7/</u> 7.2	(<u>4/</u>)

^{1/} Because of rounding, the sum of production workers and nonproduction workers does not always equal all employees.

^{2/} Based on the linear least squares trends of the logarithms of the index numbers.

^{3/} Rates of change through 1967 are shown on industry tables.

^{4/} Not available.

^{5/} Average annual rate of change is for 1958-66.

^{6/} Output per employee.

^{7/} Nonsupervisory personnel.

^{8/} Supervisory personnel and force account construction workers.

*Note: Rates of change for non-production workers (in parentheses) are subject to a wider margin of error than other rates shown because of the method for estimating nonproduction worker man-hours.

TABLE 1. IRON MINING, CRUDE ORE SIC 101
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT	ALL EMPLOYEES
1939.....	(¹)	(¹)	48.7	(¹)
1947.....	88.3	113.3	93.9	106.4
1948.....	91.4	109.5	103.6	113.4
1949.....	82.0	121.9	85.7	104.5
1950.....	92.9	107.6	102.4	110.2
1951.....	105.5	94.8	123.3	116.9
1952.....	99.8	100.2	103.6	103.8
1953.....	101.4	98.7	126.0	124.3
1954.....	80.1	124.8	87.6	109.3
1955.....	108.3	92.4	114.1	105.4
1956.....	108.9	91.8	117.3	107.7
1957.....	107.8	92.8	129.1	119.8
1958.....	91.7	109.1	88.2	96.2
1959.....	98.3	101.7	82.6	84.0
1960.....	123.9	80.7	125.1	101.0
1961.....	135.2	74.0	110.6	81.8
1962.....	151.2	66.2	116.4	77.0
1963.....	168.6	59.3	124.4	73.8
1964.....	187.5	53.3	141.4	75.4
1965.....	183.0	54.7	144.9	79.2
1966 ²	186.6	53.6	148.5	79.6
1967.....	190.1	52.6	149.4	78.6
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	4.3	-4.1	1.9	-2.3
1957-67.....	8.1	-7.5	4.5	-3.3

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 2. IRON MINING, CRUDE ORE SIC 101
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	56.8	60.2	176.0	166.1	48.7	85.7	80.9
1947.....	74.8	70.4	133.8	142.0	93.9	125.6	133.3
1948.....	78.0	71.5	128.2	139.8	103.6	132.8	144.8
1949.....	71.6	68.3	139.7	146.4	85.7	119.7	125.5
1950.....	81.5	75.5	122.7	132.5	102.4	125.6	135.7
1951.....	92.8	82.9	107.7	120.6	123.3	132.8	148.7
1952.....	90.3	78.1	110.7	128.1	103.6	114.7	132.7
1953.....	91.4	81.7	109.4	122.5	126.0	137.8	154.3
1954.....	73.9	74.1	135.3	134.9	87.6	118.5	118.2
1955.....	101.3	95.5	98.7	104.7	114.1	112.6	119.5
1956.....	104.5	99.5	95.7	100.5	117.3	112.2	117.9
1957.....	104.5	100.5	95.7	99.5	129.1	123.5	128.5
1958.....	93.3	98.0	107.1	102.0	88.2	94.5	90.0
1959.....	100.9	101.3	99.2	98.7	82.6	81.9	81.5
1960.....	121.0	114.6	82.7	87.3	125.1	103.4	109.2
1961.....	135.7	132.5	73.7	75.5	110.6	81.5	83.5
1962.....	150.6	142.3	66.4	70.3	116.4	77.3	81.8
1963.....	163.5	157.3	61.2	63.6	124.4	76.1	79.1
1964.....	180.8	169.1	55.3	59.1	141.4	78.2	83.6
1965.....	176.9	162.6	56.5	61.5	144.9	81.9	89.1
1966.....	183.1	163.5	54.6	61.1	148.5	81.1	90.8
1967 ²	187.2	167.5	53.4	59.7	149.4	79.8	89.2
	AVERAGE ANNUAL RATES (PERCENT)						
1947-67.....	5.1	5.2	-4.9	-4.9	1.9	-3.1	-3.1
1957-67.....	7.8	6.5	-7.3	-6.1	4.5	-3.1	-1.9

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor

TABLE 3. IRON MINING, CRUDE ORE SIC 101
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	(²)	(²)	48.7	(²)
1947.....	207.3	48.2	93.9	45.3
1948.....	199.2	50.2	103.6	52.0
1949.....	153.0	65.3	85.7	56.0
1950.....	167.0	59.9	102.4	61.3
1951.....	184.9	54.1	123.3	66.7
1952.....	149.5	66.9	103.6	69.3
1953.....	155.0	64.5	126.0	81.3
1954.....	109.5	91.3	87.6	80.0
1955.....	138.0	72.5	114.1	82.7
1956.....	125.7	79.5	117.3	93.3
1957.....	119.5	83.7	129.1	108.0
1958.....	87.1	114.9	88.2	101.3
1959.....	91.1	109.8	82.6	90.7
1960.....	134.1	74.6	125.1	93.3
1961.....	133.7	74.8	110.6	82.7
1962.....	153.2	65.3	116.4	76.0
1963.....	186.5	53.6	124.4	66.7
1964.....	212.0	47.2	141.4	66.7
1965.....	205.0	48.8	144.9	70.7
1966 ³	198.8	50.3	148.5	74.7
1967.....	200.0	50.0	149.4	74.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	0.3	-0.3	1.9	1.6
1957-67.....	9.1	-8.3	4.5	-4.2

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 4. IRON MINING, USUABLE ORE SIC 101
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-67
(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT	ALL EMPLOYEES
1939.....	(¹)	(¹)	66.7	(¹)
1947.....	113.1	88.4	120.3	106.4
1948.....	115.3	86.7	130.8	113.4
1949.....	105.2	95.1	109.9	104.5
1950.....	115.2	86.8	127.0	110.2
1951.....	129.3	77.3	151.2	116.9
1952.....	122.4	81.7	127.1	103.8
1953.....	123.4	81.0	153.4	124.3
1954.....	92.5	108.1	101.1	109.3
1955.....	126.2	79.2	133.0	105.4
1956.....	116.8	85.6	125.8	107.7
1957.....	113.9	87.8	136.5	119.8
1958.....	89.9	111.2	86.5	96.2
1959.....	91.7	109.1	77.0	84.0
1960.....	113.2	88.4	114.3	101.0
1961.....	112.5	88.9	92.0	81.8
1962.....	120.8	82.8	93.0	77.0
1963.....	129.3	77.4	95.4	73.8
1964.....	145.5	68.7	109.7	75.4
1965.....	143.2	69.8	113.4	79.2
1966.....	147.0	68.0	117.0	79.6
1967 ²	138.8	72.0	109.1	78.6
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	1.0	-1.0	-1.3	-2.3
1957-67.....	4.6	-4.4	1.1	-3.3

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 5. IRON MINING, USUABLE ORE SIC 101
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	77.8	82.4	128.5	121.3	66.7	85.7	80.9
1947.....	95.8	90.2	104.4	110.8	120.3	125.6	133.3
1948.....	98.5	90.3	101.5	110.7	130.8	132.8	144.8
1949.....	91.8	87.6	108.9	114.2	109.9	119.7	125.5
1950.....	101.1	93.6	98.9	106.9	127.0	125.6	135.7
1951.....	113.9	101.7	87.8	98.3	151.2	132.8	148.7
1952.....	110.8	95.8	90.2	104.4	127.1	114.7	132.7
1953.....	111.3	99.4	89.8	100.6	153.4	137.8	154.3
1954.....	85.3	85.5	117.2	116.9	101.1	118.5	118.2
1955.....	118.1	111.3	84.7	89.8	133.0	112.6	119.5
1956.....	112.1	106.7	89.2	93.7	125.8	112.2	117.9
1957.....	110.5	106.2	90.5	94.1	136.5	123.5	128.5
1958.....	91.5	96.1	109.2	104.0	86.5	94.5	90.0
1959.....	94.0	94.5	106.4	105.8	77.0	81.9	81.5
1960.....	110.5	104.7	90.5	95.5	114.3	103.4	109.2
1961.....	112.9	110.2	88.6	90.8	92.0	81.5	83.5
1962.....	120.3	113.7	83.1	86.0	93.0	77.3	81.8
1963.....	125.4	120.6	79.8	82.9	95.4	76.1	79.1
1964.....	140.3	131.2	71.3	76.2	109.7	78.2	83.6
1965.....	138.5	127.3	72.2	78.6	113.4	81.9	89.1
1966 ²	144.3	128.9	69.3	77.6	117.0	81.1	90.8
1967 ²	136.7	122.3	73.1	81.8	109.1	79.8	89.2
	AVERAGE ANNUAL RATES (PERCENT)						
1947-67.....	1.8	1.8	-1.8	-1.8	-1.3	-3.1	-3.1
1957-67.....	4.3	3.1	-4.1	-3.0	1.1	-3.1	-1.9

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 6. IRON MINING, USUABLE ORE SIC 101
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	(A)	(A)	66.7	(A)
1947.....	265.6	37.7	120.3	45.3
1948.....	251.5	39.8	130.8	52.0
1949.....	196.3	51.0	109.9	56.0
1950.....	207.2	48.3	127.0	61.3
1951.....	226.7	44.1	151.2	66.7
1952.....	183.4	54.5	127.1	69.3
1953.....	188.7	53.0	153.4	81.3
1954.....	126.4	79.1	101.1	80.0
1955.....	160.8	62.2	133.0	82.7
1956.....	134.8	74.2	125.8	93.3
1957.....	126.4	79.1	136.5	108.0
1958.....	85.4	117.1	86.5	101.3
1959.....	84.9	117.8	77.0	90.7
1960.....	122.5	81.6	114.3	93.3
1961.....	111.2	89.9	92.0	82.7
1962.....	122.4	81.7	93.0	76.0
1963.....	143.0	69.9	95.4	66.7
1964.....	164.5	60.8	109.7	66.7
1965.....	160.4	62.3	113.4	70.7
1966.....	156.6	63.8	117.0	74.7
1967 ³	146.1	68.5	109.1	74.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	-2.8	2.9	-1.3	1.6
1957-67.....	5.5	-5.2	1.1	-4.2

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 7. COPPER MINING, CRUDE ORE SIC 102
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT ¹	ALL EMPLOYEES
1939.....	(²)	(²)	46.1	(²)
1947.....	74.9	133.5	74.4	99.3
1948.....	72.9	137.1	71.9	98.6
1949.....	69.2	144.5	64.7	93.5
1950.....	86.6	115.5	80.6	93.1
1951.....	87.2	114.7	81.5	93.5
1952.....	89.3	111.9	85.5	95.7
1953.....	83.8	119.3	86.6	103.3
1954.....	79.8	125.2	80.4	100.7
1955.....	92.7	107.9	96.7	104.3
1956.....	94.3	106.1	113.4	120.3
1957.....	95.7	104.5	111.7	116.7
1958.....	98.9	101.1	98.9	100.0
1959.....	106.8	93.6	89.4	83.7
1960.....	116.2	86.1	117.0	100.7
1961.....	121.5	82.3	124.2	102.2
1962.....	131.6	76.0	131.1	99.6
1963.....	133.6	74.8	128.3	96.0
1964.....	145.0	69.0	136.0	93.8
1965.....	146.0	68.5	151.8	104.0
1966.....	148.2	67.5	163.8	110.5
1967.....	133.0	75.2	111.3	83.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	3.9	-3.7	3.8	0.0
1957-67.....	4.4	-4.2	3.6	-0.7

¹ Represents output in terms of copper ore (including old tailings) sold or treated.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 8. COPPER MINING, CRUDE ORE SIC 102
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	40.5	39.3	247.1	254.4	46.1	113.9	117.3
1947.....	68.2	61.8	146.6	161.7	74.4	109.1	120.3
1948.....	66.2	59.5	151.0	168.2	71.9	108.6	120.9
1949.....	63.5	61.0	157.5	163.8	64.7	101.9	106.0
1950.....	80.6	72.9	124.1	137.2	80.6	100.0	110.6
1951.....	82.3	72.5	121.5	137.9	81.5	99.0	112.4
1952.....	85.5	76.1	117.0	131.3	85.5	100.0	112.3
1953.....	81.2	72.0	123.2	138.9	86.6	106.7	120.3
1954.....	78.1	74.7	128.0	134.0	80.4	102.9	107.7
1955.....	91.1	84.0	109.8	119.0	96.7	106.2	115.1
1956.....	91.5	85.4	109.3	117.1	113.4	123.9	132.8
1957.....	94.1	93.6	106.3	106.9	111.7	118.7	119.4
1958.....	98.9	103.3	101.1	96.8	98.9	100.0	95.7
1959.....	109.3	105.3	91.5	95.0	89.4	81.8	84.9
1960.....	116.4	107.9	85.9	92.6	117.0	100.5	108.4
1961.....	116.9	110.4	85.5	90.6	124.2	106.2	112.5
1962.....	125.1	120.3	79.9	83.1	131.1	104.8	109.0
1963.....	125.3	119.7	79.8	83.6	128.3	102.4	107.2
1964.....	136.7	131.1	73.2	76.3	136.0	99.5	103.7
1965.....	136.1	129.1	73.5	77.5	151.8	111.5	117.6
1966.....	138.6	131.1	72.2	76.3	163.8	118.2	124.9
1967 ²	134.4	128.4	74.4	77.9	111.3	82.8	86.7
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	4.1	4.4	-3.9	-4.2	3.8	-0.2	-0.5
1957-67.....	3.9	3.3	-3.7	-3.2	3.6	-0.2	0.3

¹ Represents output in terms of copper ore (including old tailings) sold or treated. The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 9. COPPER MINING, CRUDE ORE SIC 102
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	(²)	(²)	46.1	(²)
1947.....	108.3	92.3	74.4	68.7
1948.....	107.0	93.5	71.9	67.2
1949.....	96.3	103.9	64.7	67.2
1950.....	112.6	88.8	80.6	71.6
1951.....	107.1	93.4	81.5	76.1
1952.....	104.1	96.0	85.5	82.1
1953.....	93.6	106.8	86.6	92.5
1954.....	84.2	118.8	80.4	95.5
1955.....	98.2	101.9	96.7	98.5
1956.....	104.0	96.1	113.4	109.0
1957.....	101.2	98.8	111.7	110.4
1958.....	98.9	101.1	98.9	100.0
1959.....	99.8	100.2	89.4	89.6
1960.....	115.3	86.8	117.0	101.5
1961.....	138.6	72.1	124.2	89.6
1962.....	156.8	63.8	131.1	83.6
1963.....	168.6	59.3	128.3	76.1
1964.....	178.7	56.0	136.0	76.1
1965.....	188.3	53.1	151.8	80.6
1966.....	189.1	52.9	163.8	86.6
1967 ³	128.5	77.8	111.3	86.6
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	3.0	-2.9	3.8	0.8
1957-67.....	6.3	-6.0	3.6	-2.6

¹ Represents output in terms of copper ore (including old tailings) sold or treated. The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 10. COPPER MINING, RECOVERABLE METAL SIC 102
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT ¹	ALL EMPLOYEES
1939.....	(²)	(²)	74.1	(²)
1947.....	87.9	113.7	87.3	99.3
1948.....	87.1	114.8	85.9	98.6
1949.....	82.1	121.7	76.8	93.5
1950.....	100.1	99.9	93.2	93.1
1951.....	101.6	98.4	95.0	93.5
1952.....	95.4	100.6	95.1	95.7
1953.....	92.6	107.9	95.7	103.3
1954.....	85.7	116.7	86.3	100.7
1955.....	95.3	100.7	103.6	104.3
1956.....	95.3	105.0	114.6	120.3
1957.....	56.4	103.7	112.5	116.7
1958.....	101.8	98.2	101.8	100.0
1959.....	102.3	97.8	85.6	83.7
1960.....	111.5	89.7	112.3	100.7
1961.....	118.6	84.3	121.2	102.2
1962.....	128.2	78.0	127.7	99.6
1963.....	131.3	76.2	126.0	96.0
1964.....	138.4	72.3	129.8	93.8
1965.....	135.3	73.9	140.7	104.0
1966 ₃	134.6	74.2	148.9	110.5
1967 ³	118.3	84.5	99.0	83.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	2.3	-2.3	2.3	0.0
1957-67.....	3.2	-3.1	2.5	-0.7

¹ Represents output in terms of copper recovered from copper ore, old tailings, and precipitates.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 11. COPPER MINING, RECOVERABLE METAL SIC 102
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	65.1	63.2	153.7	158.3	74.1	113.9	117.3
1947.....	80.0	72.6	125.0	137.8	87.3	109.1	120.3
1948.....	75.1	71.1	126.4	140.7	85.9	108.6	120.9
1949.....	75.4	72.5	132.7	138.0	76.8	101.9	106.0
1950.....	93.2	84.3	107.3	118.7	93.2	100.0	110.6
1951.....	96.0	84.5	104.2	118.3	95.0	99.0	112.4
1952.....	95.1	84.7	105.2	118.1	95.1	100.0	112.3
1953.....	85.7	79.6	111.5	125.7	95.7	106.7	120.3
1954.....	83.9	80.1	119.2	124.8	86.3	102.9	107.7
1955.....	97.6	90.0	102.5	111.1	103.6	106.2	115.1
1956.....	92.5	86.3	108.1	115.9	114.6	123.9	132.8
1957.....	94.8	94.2	105.5	106.1	112.5	118.7	119.4
1958.....	101.8	106.4	98.2	94.0	101.8	100.0	95.7
1959.....	104.6	100.8	95.6	99.2	85.6	81.8	84.9
1960.....	111.7	103.6	89.5	96.5	112.3	100.5	108.4
1961.....	114.1	107.7	87.6	92.8	121.2	106.2	112.5
1962.....	121.9	117.2	82.1	85.4	127.7	104.8	109.0
1963.....	123.0	117.5	81.3	85.1	126.0	102.4	107.2
1964.....	130.5	125.2	76.7	79.9	129.8	99.5	103.7
1965.....	126.2	119.6	79.2	83.6	140.7	111.5	117.6
1966.....	126.0	119.2	79.4	83.9	148.9	118.2	124.9
1967 ²	119.6	114.2	83.6	87.6	99.0	82.8	86.7
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	2.6	2.9	-2.5	-2.8	2.3	-0.2	-0.5
1957-67.....	2.7	2.2	-2.7	-2.2	2.5	-0.2	0.3

¹ Represents output in terms of copper recovered from copper ore, old tailings, and precipitates. The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 12. COPPER MINING, RECOVERABLE METAL SIC 102
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	(²)	(²)	74.1	(²)
1947.....	127.1	78.7	87.3	68.7
1948.....	127.8	78.2	85.9	67.2
1949.....	114.3	87.5	76.8	67.2
1950.....	130.2	76.8	93.2	71.6
1951.....	124.8	80.1	95.0	76.1
1952.....	115.8	86.3	95.1	82.1
1953.....	103.5	96.7	95.7	92.5
1954.....	90.4	110.7	86.3	95.5
1955.....	105.2	95.1	103.6	98.5
1956.....	105.1	95.1	114.6	109.0
1957.....	101.9	98.1	112.5	110.4
1958.....	101.8	98.2	101.8	100.0
1959.....	95.5	104.7	85.6	89.6
1960.....	110.6	90.4	112.3	101.5
1961.....	135.3	73.9	121.2	89.6
1962.....	152.8	65.5	127.7	83.6
1963.....	165.6	60.4	126.0	76.1
1964.....	170.6	58.6	129.8	76.1
1965.....	174.6	57.3	140.7	80.6
1966.....	171.9	58.2	148.9	86.6
1967 ³	114.3	87.5	99.0	86.6
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	1.5	-1.5	2.3	0.8
1957-67.....	5.2	-4.9	2.5	-2.6

¹ Represents output in terms of copper recovered from copper ore, old tailings, and precipitates. The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 13. COAL MINING SIC 11, 12
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT	ALL EMPLOYEES
1939.....	45.1	221.9	98.9	219.5
1947.....	66.9	149.4	151.3	226.1
1948.....	62.9	159.1	144.7	230.2
1949.....	50.8	196.8	106.3	209.2
1950.....	63.1	158.4	123.9	196.2
1951.....	64.6	154.8	125.8	194.7
1952.....	64.9	154.1	111.7	172.1
1953.....	70.5	141.9	105.9	150.3
1954.....	78.1	128.0	91.7	117.4
1955.....	96.2	104.0	105.8	110.0
1956.....	100.5	99.5	114.8	114.2
1957.....	97.6	102.5	112.2	115.0
1958.....	97.4	102.7	93.9	96.4
1959.....	106.0	94.4	93.9	88.6
1960.....	112.6	88.8	93.6	83.1
1961.....	125.5	79.7	90.2	71.9
1962.....	138.8	72.1	93.8	67.6
1963.....	152.5	65.6	101.7	66.7
1964.....	163.1	61.3	106.8	65.5
1965.....	176.0	56.8	110.7	62.9
1966.....	187.2	53.4	114.4	61.1
1967 ¹	189.6	52.7	118.5	62.5
AVERAGE ANNUAL RATES (PERCENT)				
1947-67....	6.6	-6.2	-1.1	-7.2
1957-67....	7.9	-7.3	1.8	-5.7

¹ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 14. COAL MINING SIC 11, 12
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	41.9	48.6	238.9	205.9	98.9	236.3	203.6
1947.....	62.7	54.5	159.5	183.3	151.3	241.3	277.4
1948.....	58.9	54.5	169.7	183.4	144.7	245.5	265.4
1949.....	48.0	57.2	208.5	175.0	106.3	221.6	186.0
1950.....	59.7	61.6	167.6	162.2	123.9	207.7	201.0
1951.....	60.9	61.8	164.1	161.7	125.8	206.4	203.4
1952.....	61.6	65.2	162.2	153.4	111.7	181.2	171.3
1953.....	67.1	70.1	149.0	142.6	105.9	157.8	151.0
1954.....	75.7	81.9	132.1	122.0	91.7	121.1	111.9
1955.....	93.1	87.7	107.4	114.0	105.8	113.6	120.6
1956.....	97.9	91.9	102.2	108.8	114.8	117.3	124.9
1957.....	55.8	93.2	104.4	107.3	112.2	117.1	120.4
1958.....	58.3	103.4	101.7	96.7	93.9	95.5	90.8
1959.....	107.4	105.7	93.1	94.6	93.9	87.4	88.8
1960.....	114.4	111.8	87.4	89.4	93.6	81.8	83.7
1961.....	127.0	123.2	78.7	81.2	90.2	71.0	73.2
1962.....	139.2	130.8	71.9	76.4	93.8	67.4	71.7
1963.....	151.6	135.6	66.0	73.7	101.7	67.1	75.0
1964.....	161.8	144.1	61.8	69.4	106.8	66.0	74.1
1965.....	176.0	152.9	56.8	65.4	110.7	62.9	72.4
1966.....	188.8	161.6	53.0	61.9	114.4	60.6	70.8
1967 ²	191.1	163.7	52.3	61.1	118.5	62.0	72.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	7.1	6.2	-6.6	-5.9	-1.1	-7.6	-6.9
1957-67.....	7.9	5.9	-7.4	-5.6	1.8	-5.7	-3.9

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 15. COAL MINING SIC 11, 12
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	102.8	97.3	98.9	96.2
1947.....	131.8	75.9	151.3	114.8
1948.....	122.8	81.4	144.7	117.8
1949.....	90.2	110.8	106.3	117.8
1950.....	110.5	90.5	123.9	112.1
1951.....	115.3	86.7	125.8	109.1
1952.....	106.1	94.3	111.7	105.3
1953.....	110.9	90.2	105.9	95.5
1954.....	102.6	97.5	91.7	89.4
1955.....	126.4	79.1	105.8	83.7
1956.....	125.7	79.5	114.8	91.3
1957.....	112.7	88.8	112.2	99.6
1958.....	91.8	108.9	93.9	102.3
1959.....	56.1	104.0	93.9	97.7
1960.....	101.7	98.3	93.6	92.0
1961.....	115.6	86.5	90.2	78.0
1962.....	136.1	73.5	93.8	68.9
1963.....	156.5	62.5	101.7	63.6
1964.....	173.1	57.8	106.8	61.7
1965.....	178.3	56.1	110.7	62.1
1966.....	178.8	55.9	114.4	64.0
1967 ²	180.9	55.3	118.5	65.5
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	3.3	-2.3	-1.1	-3.3
1957-67.....	7.8	-7.2	1.8	-5.6

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 16. BITUMINOUS COAL AND LIGNITE MINING SIC 12
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-67
(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT	ALL EMPLOYEES
1939.....	44.2	226.1	88.8	200.8
1947.....	66.1	151.2	141.8	214.4
1948.....	61.6	162.5	134.8	219.0
1949.....	50.0	200.0	98.4	196.8
1950.....	63.3	158.1	116.1	183.5
1951.....	64.9	154.1	120.0	184.9
1952.....	64.6	154.8	104.9	162.4
1953.....	72.0	138.9	102.7	142.7
1954.....	78.3	127.7	88.0	112.4
1955.....	57.0	103.1	104.9	108.1
1956.....	100.1	99.9	113.5	113.4
1957.....	98.0	102.1	112.1	114.4
1958.....	97.2	102.9	93.8	96.5
1959.....	105.5	94.8	94.1	89.2
1960.....	112.5	88.9	94.7	84.2
1961.....	124.8	80.2	91.7	73.5
1962.....	137.3	72.8	96.0	69.9
1963.....	151.5	66.0	104.2	68.8
1964.....	162.6	61.5	110.6	68.0
1965.....	176.7	56.6	116.3	65.8
1966.....	187.3	53.4	121.2	64.7
1967 ¹	187.3	53.4	125.1	66.8
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	6.6	-6.2	-0.4	-6.6
1957-67.....	7.9	-7.3	2.4	-5.0

¹ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 17. BITUMINOUS COAL AND LIGNITE MINING SIC 12
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRDUCTION WORKER	PRDUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRDUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	40.9	47.3	244.4	211.3	88.8	217.0	187.6
1947.....	61.8	53.9	161.8	185.5	141.8	229.5	263.1
1948.....	57.7	53.7	173.4	186.1	134.8	233.8	250.8
1949.....	47.1	56.6	212.2	176.8	98.4	208.8	174.0
1950.....	59.7	61.9	167.5	161.5	116.1	194.5	187.5
1951.....	61.1	61.5	163.7	162.5	120.0	196.4	195.0
1952.....	61.3	65.2	163.2	153.5	104.9	171.2	161.0
1953.....	68.4	70.5	146.2	141.8	102.7	150.1	145.6
1954.....	75.3	81.9	132.8	122.0	88.0	116.9	107.4
1955.....	93.6	88.2	106.9	113.3	104.9	112.1	118.9
1956.....	97.3	91.2	102.8	109.7	113.5	116.7	124.5
1957.....	96.3	93.3	103.8	107.2	112.1	116.4	120.2
1958.....	98.0	103.5	102.0	96.6	93.8	95.7	90.6
1959.....	107.1	105.5	93.4	94.8	94.1	87.9	89.2
1960.....	114.1	111.9	87.6	89.3	94.7	83.0	84.6
1961.....	126.3	123.6	79.2	80.9	91.7	72.6	74.2
1962.....	137.5	130.8	72.7	76.5	96.0	69.8	73.4
1963.....	150.1	135.7	66.6	73.7	104.2	69.4	76.8
1964.....	161.5	144.4	61.9	69.3	110.6	68.5	76.6
1965.....	176.5	154.2	56.7	64.8	116.3	65.9	75.4
1966.....	188.8	162.5	53.0	61.6	121.2	64.2	74.6
1967 ²	188.4	162.5	53.1	61.6	125.1	66.4	77.0
	AVERAGE ANNUAL RATES (PERCENT)						
1947-67.....	7.1	6.3	-6.6	-5.9	-0.4	-7.0	-6.3
1957-67.....	7.9	5.9	-7.3	-5.6	2.4	-5.0	-3.3

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 18. BITUMINOUS COAL AND LIGNITE MINING SIC 12
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER NON- PRODUCTION WORKER	UNIT LABOR REQUIREMENTS IN TERMS OF NON- PRODUCTION WORKERS	RELATED DATA	
			OUTPUT ¹	NON- PRODUCTION WORKERS
1939.....	106.2	94.1	88.8	83.6
1947.....	134.4	74.4	141.8	105.5
1948.....	121.1	82.6	134.8	111.3
1949.....	89.4	111.9	98.4	110.1
1950.....	111.8	89.4	116.1	103.8
1951.....	117.5	85.1	120.0	102.1
1952.....	106.3	94.1	104.9	98.7
1953.....	115.8	86.4	102.7	88.7
1954.....	109.6	91.3	88.0	80.3
1955.....	132.8	75.3	104.9	79.0
1956.....	127.4	78.5	113.5	89.1
1957.....	112.6	88.8	112.1	99.6
1958.....	92.2	108.4	93.8	101.7
1959.....	95.7	104.5	94.1	98.3
1960.....	102.9	97.1	94.7	92.0
1961.....	115.5	86.6	91.7	79.4
1962.....	135.2	74.0	96.0	71.0
1963.....	162.1	61.7	104.2	64.3
1964.....	173.1	57.8	110.6	63.9
1965.....	178.6	56.0	116.3	65.1
1966.....	178.0	56.2	121.2	68.1
1967 ²	180.5	55.4	125.1	69.3
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	2.2	-2.2	-0.4	-2.6
1957-67.....	7.8	-7.2	2.4	-5.0

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 19. CANNING AND PRESERVING SIC 203
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1935-66

(INDEXES, 1957-59 = 100)

YEAR	CUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	43.9	(¹)	(¹)
1947.....	66.3	65.3	150.9	153.1	70.1	105.8	107.3
1948.....	65.2	66.3	153.4	150.8	69.3	106.3	104.5
1949.....	70.8	71.5	141.3	139.8	71.6	101.2	100.1
1950.....	76.7	78.8	127.0	126.9	76.6	97.3	97.2
1951.....	83.7	82.0	119.5	122.0	87.0	104.0	106.1
1952.....	82.2	81.5	121.7	122.7	83.6	101.7	102.6
1953.....	82.6	82.7	121.1	121.0	87.7	106.2	106.1
1954.....	88.1	88.9	113.5	112.5	88.6	100.6	99.7
1955.....	91.0	92.2	109.8	108.4	92.5	101.6	100.3
1956.....	95.2	98.3	100.8	101.7	103.4	104.2	105.2
1957.....	95.5	99.7	100.5	100.3	99.1	99.6	99.4
1958.....	96.5	98.1	101.1	101.9	97.6	98.7	99.5
1959.....	101.7	102.3	98.4	97.8	103.4	101.7	101.1
1960.....	108.1	108.3	92.5	92.3	109.6	101.4	101.2
1961.....	113.9	115.6	87.8	86.5	117.1	102.8	101.3
1962.....	117.1	116.9	85.4	85.5	123.0	105.0	105.2
1963.....	117.2	117.1	85.3	85.4	121.1	103.3	103.4
1964.....	124.6	123.7	80.2	80.8	129.5	103.9	104.7
1965.....	132.1	130.2	75.7	76.8	140.8	106.6	108.1
1966 ²	128.7	126.8	77.7	78.9	145.3	112.9	114.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.7	3.6	-3.5	-3.5	3.8	0.2	0.2
1957-66.....	3.5	3.3	-3.4	-3.2	4.6	1.1	1.3

¹ Not available.

² Preliminary.

Source: Output based on data from National Canners Association, U.S. Department of the Interior, U.S. Department of Agriculture, and U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 20. CANNING AND PRESERVING SIC 203
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	52.8	55.8	189.3	179.3	43.9		78.7
1947.....	62.9	61.9	158.9	161.6	70.1	111.4	113.3
1948.....	62.4	63.5	160.3	157.4	69.3	111.1	109.1
1949.....	68.3	68.9	146.5	145.1	71.6	104.9	103.9
1950.....	76.2	76.1	131.2	131.3	76.6	100.5	100.6
1951.....	80.6	78.6	124.1	127.2	87.0	108.0	110.7
1952.....	75.6	78.8	125.6	126.9	83.6	105.0	106.1
1953.....	80.1	79.9	124.9	125.1	67.7	109.5	109.7
1954.....	85.5	86.4	116.9	115.8	88.6	103.6	102.6
1955.....	88.9	90.0	112.5	111.1	92.5	104.1	102.8
1956.....	96.8	95.7	103.3	104.5	103.4	106.8	108.1
1957.....	98.6	98.7	101.4	101.3	99.1	100.5	100.4
1958.....	99.4	98.5	100.6	101.5	57.6	98.2	99.1
1959.....	102.1	102.8	98.0	57.3	103.4	101.3	100.6
1960.....	108.4	108.5	92.2	92.2	109.6	101.1	101.0
1961.....	114.6	116.2	87.3	86.1	117.1	102.2	100.8
1962.....	117.7	116.3	85.0	86.0	123.0	104.5	105.8
1963.....	117.7	116.9	85.0	85.5	121.1	102.9	103.6
1964.....	124.8	123.2	80.2	81.2	129.5	103.8	105.1
1965.....	132.7	129.8	75.4	77.1	140.8	106.1	108.5
1966 ²	128.9	126.0	77.6	79.4	145.3	112.7	115.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.0	3.9	-3.8	-3.8	3.8	-0.1	-0.1
1957-66.....	3.5	3.2	-3.4	-3.1	4.6	1.1	1.4

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Preliminary.

Source: Output based on data from National Canners Association, U.S. Department of the Interior, U.S. Department of Agriculture, and U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 21. CANNING AND PRESERVING SIC 203
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	43.9	(³)	(³)
1947.....	102.0	(96.8)	98.0	(103.3)	70.1	68.7	(72.4)
1948.....	93.1	(88.8)	107.4	(112.6)	65.3	74.4	(78.0)
1949.....	94.0	(91.2)	106.4	(109.6)	71.6	76.2	(78.5)
1950.....	101.3	(98.8)	98.7	(101.2)	76.6	75.6	(77.5)
1951.....	113.1	(109.4)	88.4	(91.4)	87.0	76.9	(79.5)
1952.....	104.9	(101.8)	95.3	(98.2)	83.6	79.7	(82.1)
1953.....	105.0	(102.5)	95.2	(97.6)	87.7	83.5	(85.6)
1954.....	105.7	(107.4)	91.2	(93.1)	88.6	80.8	(82.5)
1955.....	109.3	(107.9)	91.5	(92.6)	92.5	84.6	(85.7)
1956.....	119.4	(117.4)	83.8	(85.2)	103.4	86.6	(88.1)
1957.....	106.0	(105.4)	94.3	(94.9)	99.1	93.5	(94.0)
1958.....	55.4	(95.7)	104.8	(104.5)	97.6	102.3	(102.0)
1959.....	55.2	(99.4)	100.8	(100.6)	103.4	104.2	(104.0)
1960.....	105.9	(107.3)	94.4	(93.2)	109.6	103.5	(102.1)
1961.....	109.8	(112.9)	91.0	(88.6)	117.1	106.6	(103.7)
1962.....	113.8	(117.8)	87.9	(84.9)	123.0	108.1	(104.4)
1963.....	114.5	(118.6)	87.4	(84.3)	121.1	105.8	(102.1)
1964.....	123.3	(127.2)	81.1	(78.6)	129.5	105.0	(101.8)
1965.....	128.8	(133.5)	77.6	(74.9)	140.8	109.3	(105.5)
1966 ⁴	127.0	(132.0)	78.7	(75.8)	145.3	114.4	(110.1)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.1	(1.6)	-1.1	(-1.6)	3.8	2.7	(2.2)
1957-66.....	3.1	(3.7)	-3.0	(-3.5)	4.6	1.5	(0.9)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from National Canners Association, U.S. Department of the Interior, U.S. Department of Agriculture, and U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 22. FLOUR AND OTHER GRAIN-MILL PRODUCTS SIC 2041
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	86.7	(¹)	(¹)
1947.....	83.9	76.7	119.2	130.3	119.0	141.8	155.1
1948.....	(¹)	(¹)	(¹)	(¹)	108.6	(¹)	(¹)
1949.....	72.1	70.8	138.7	141.3	92.5	128.3	130.7
1950.....	72.2	72.5	138.4	138.0	89.3	123.6	123.2
1951.....	73.5	72.0	136.1	138.9	91.5	124.5	127.1
1952.....	73.3	70.4	136.5	142.0	91.2	124.5	129.5
1953.....	78.9	76.0	126.7	131.5	88.5	112.1	116.4
1954.....	85.3	84.0	117.2	119.0	88.5	103.7	105.3
1955.....	88.0	87.5	113.7	114.3	90.8	103.2	103.8
1956.....	92.2	91.9	108.4	108.8	92.4	100.2	100.5
1957.....	100.1	99.9	99.9	100.1	97.1	97.0	97.2
1958.....	100.2	101.8	99.8	98.2	101.2	101.0	99.4
1959.....	99.7	98.4	100.3	101.7	101.7	102.0	103.4
1960.....	106.3	103.3	94.1	96.8	103.6	97.5	100.3
1961.....	110.3	107.4	90.7	93.1	104.9	95.1	97.7
1962.....	114.5	110.5	87.4	90.5	105.3	92.0	95.3
1963.....	129.6	124.3	77.2	80.5	103.9	80.2	83.6
1964.....	133.3	129.0	75.0	77.5	104.4	78.3	80.9
1965 ²	134.1	131.9	74.6	75.8	99.6	74.3	75.5
1966 ²	139.5	137.2	71.7	72.9	100.3	71.9	73.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.8	3.9	-3.7	-3.7	0.3	-3.2	-3.2
1957-66.....	4.4	4.1	-4.2	-3.9	0.2	-4.0	-3.7

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 23. FLOUR AND OTHER GRAIN-MILL PRODUCTS SIC 2041
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	74.4	78.0	134.5	128.2	86.7	119.3	113.7
1947.....	78.8	71.4	126.9	140.1	119.0	151.0	166.7
1948.....	(²)	(²)	(²)	(²)	106.6	(²)	(²)
1949.....	68.6	67.7	145.7	147.8	92.5	134.8	136.7
1950.....	69.0	69.8	145.0	143.3	89.3	129.5	128.0
1951.....	70.2	69.0	142.5	144.9	91.5	130.4	132.6
1952.....	71.0	68.1	140.8	146.8	91.2	128.4	133.9
1953.....	75.3	72.3	132.8	138.3	88.5	117.5	122.4
1954.....	84.3	82.8	118.6	120.8	86.5	105.0	106.9
1955.....	87.6	86.8	114.2	115.2	90.8	103.7	104.6
1956.....	91.3	91.1	109.5	109.7	92.4	101.2	101.4
1957.....	99.5	99.3	100.5	100.7	97.1	97.6	97.8
1958.....	100.7	102.8	99.3	97.2	101.2	100.5	98.4
1959.....	99.8	98.0	100.2	102.1	101.7	101.9	103.8
1960.....	108.3	103.6	92.4	96.5	103.6	95.7	100.0
1961.....	110.7	105.9	90.4	94.5	104.9	94.8	99.1
1962.....	113.8	107.8	87.8	92.8	105.3	92.5	97.7
1963.....	129.1	121.2	77.5	82.5	103.9	80.5	85.7
1964.....	133.5	126.9	74.9	78.8	104.4	78.2	82.3
1965.....	134.8	130.5	74.2	76.6	99.6	73.9	76.3
1966 ³	139.5	134.8	71.7	74.2	100.3	71.9	74.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.2	4.1	-4.0	-3.9	0.3	-3.5	-3.5
1957-66.....	4.4	3.8	-4.2	-3.7	0.2	-4.0	-3.5

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

**TABLE 24. FLOUR AND OTHER GRAIN-MILL PRODUCTS SIC 2041
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-66**

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	88.7	(³)	(³)
1947.....	102.0	(99.8)	98.1	(100.2)	119.0	116.7	(119.2)
1948.....	(³)	(³)	(³)	(³)	108.6	(³)	(³)
1949.....	83.6	(82.6)	119.6	(121.1)	92.5	110.6	(112.0)
1950.....	83.1	(82.4)	120.3	(121.4)	89.3	107.4	(108.4)
1951.....	84.4	(83.3)	118.5	(120.0)	91.5	108.4	(109.8)
1952.....	75.9	(78.8)	125.1	(126.9)	91.2	114.1	(115.7)
1953.....	91.0	(90.3)	109.9	(110.7)	88.5	97.3	(98.0)
1954.....	88.5	(88.1)	113.0	(113.6)	88.5	100.0	(100.5)
1955.....	89.3	(89.4)	112.0	(111.9)	90.8	101.7	(101.6)
1956.....	94.8	(94.6)	105.5	(105.7)	92.4	97.5	(97.7)
1957.....	102.1	(102.0)	97.9	(98.0)	97.1	95.1	(95.2)
1958.....	98.8	(98.8)	101.2	(101.2)	101.2	102.4	(102.4)
1959.....	99.2	(99.3)	100.8	(100.7)	101.7	102.5	(102.4)
1960.....	101.4	(102.5)	98.6	(97.6)	103.6	102.2	(101.1)
1961.....	105.5	(112.3)	91.3	(89.0)	104.9	95.8	(93.4)
1962.....	116.2	(120.1)	86.0	(83.3)	105.3	90.6	(87.7)
1963.....	130.5	(135.1)	76.4	(74.0)	103.9	79.4	(76.9)
1964.....	132.7	(136.5)	75.4	(73.3)	104.4	78.7	(76.5)
1965.....	132.3	(136.6)	75.6	(73.2)	99.6	75.3	(72.9)
1966 ⁴	140.1	(145.4)	71.4	(68.8)	100.3	71.6	(69.0)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.7	(3.0)	-2.6	(-2.9)	0.3	-2.1	(-2.5)
1957-66.....	4.4	(4.9)	-4.2	(-4.7)	0.2	-4.1	(-4.5)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.
² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.
³ Not available.
⁴ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 25. BEET SUGAR SIC 2063
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-66
(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	72.6		(¹)
1947.....	59.3	60.2	168.7	166.1	77.2	130.2	128.2
1948.....	(¹)	(¹)	(¹)	(¹)	57.5	(¹)	(¹)
1949.....	60.4	66.9	165.4	149.5	65.1	107.7	97.3
1950.....	67.1	73.7	149.0	135.6	82.3	122.6	111.6
1951.....	57.8	63.5	172.9	157.5	65.0	112.4	102.4
1952.....	60.7	65.9	164.7	151.8	62.3	102.6	94.6
1953.....	69.0	72.7	145.0	137.5	75.1	108.9	103.3
1954.....	76.4	81.6	131.0	122.5	81.7	107.0	100.1
1955.....	(¹)	(¹)	(¹)	(¹)	74.6	(¹)	(¹)
1956.....	(¹)	(¹)	(¹)	(¹)	85.1	(¹)	(¹)
1957.....	(¹)	(¹)	(¹)	(¹)	95.0	(¹)	(¹)
1958.....	96.9	98.1	100.1	101.9	100.1	100.2	102.0
1959.....	102.5	103.7	97.5	96.5	104.9	102.3	101.2
1960.....	105.7	109.1	91.2	91.7	109.0	99.4	99.9
1961.....	101.6	105.0	98.4	95.2	109.0	107.3	103.8
1962.....	108.2	113.6	92.4	88.0	114.9	106.2	101.1
1963.....	122.0	130.0	82.0	76.9	133.8	109.7	102.9
1964.....	122.8	126.9	81.4	78.8	143.8	117.1	113.3
1965.....	111.2	124.0	89.9	80.6	132.7	119.3	107.0
1966 ²	112.4	128.2	89.0	78.0	128.8	114.6	100.5
AVERAGE ANNUAL RATES (PER CENT)							
1947-66.....	4.5	4.5	-4.3	-4.3	4.5	-0.2	-0.2
1958-66.....	1.9	3.6	-1.9	-3.5	4.2	2.3	0.6

¹Not available.

²Preliminary.

Source: Output based on data from the Commodity Stabilization Service, U.S. Department of Agriculture, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 26. BEET SUGAR SIC 2063
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	64.1	65.8	155.9	152.1	72.6	113.2	110.4
1947.....	60.0	61.2	166.6	163.5	77.2	128.6	126.2
1948.....	(2)	(2)	(2)	(2)	57.5	(2)	(2)
1949.....	60.3	67.7	165.9	147.6	65.1	108.0	96.1
1950.....	67.7	75.4	147.6	132.7	82.3	121.5	109.2
1951.....	58.8	65.3	170.0	153.2	65.0	110.5	99.6
1952.....	63.8	69.8	156.7	143.2	62.3	97.6	89.2
1953.....	70.6	74.8	141.7	133.7	75.1	106.4	100.4
1954.....	78.4	84.3	127.5	118.6	81.7	104.2	96.9
1955.....	(2)	(2)	(2)	(2)	74.6	(2)	(2)
1956.....	(2)	(2)	(2)	(2)	85.1	(2)	(2)
1957.....	(2)	(2)	(2)	(2)	95.0	(2)	(2)
1958.....	100.2	98.1	99.8	101.9	100.1	99.9	102.0
1959.....	102.6	103.9	97.4	96.3	104.9	102.2	101.0
1960.....	109.3	108.7	91.5	92.0	109.0	99.7	100.3
1961.....	101.4	105.0	98.6	95.2	109.0	107.5	103.8
1962.....	107.3	113.1	93.2	88.4	114.9	107.1	101.6
1963.....	120.0	128.7	83.3	77.7	132.8	111.5	104.0
1964.....	121.0	125.5	82.6	75.7	143.8	118.8	114.6
1965.....	109.5	123.4	91.3	81.0	132.7	121.2	107.5
1966 ³	114.0	131.3	87.7	76.2	128.8	113.0	98.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.3	4.3	-4.2	-4.1	4.5	-0.1	0.0
1958-66.....	1.8	3.7	-1.8	-3.6	4.2	2.3	0.5

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Commodity Stabilization Service, U.S. Department of Agriculture, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 27. BEET SUGAR SIC 2063
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(3)	(3)	(3)	(3)	72.6	(3)	(3)
1947.....	54.4	(53.3)	183.7	(187.6)	77.2	141.8	(144.8)
1948.....	(3)	(0.0)	(3)	(3)	57.5	(3)	(3)
1949.....	61.5	(60.7)	162.5	(164.7)	65.1	105.8	(107.2)
1950.....	62.9	(62.3)	158.9	(160.5)	82.3	130.8	(132.1)
1951.....	51.8	(51.1)	193.2	(195.5)	65.0	125.6	(127.1)
1952.....	44.9	(44.3)	222.8	(225.8)	62.3	138.8	(140.7)
1953.....	59.1	(58.8)	169.1	(170.2)	75.1	127.0	(127.8)
1954.....	64.5	(64.2)	155.0	(155.7)	81.7	126.6	(127.2)
1955.....	(3)	(3)	(3)	(3)	74.6	(3)	(3)
1956.....	(3)	(3)	(3)	(3)	85.1	(3)	(3)
1957.....	(3)	(3)	(3)	(3)	95.0	(3)	(3)
1958.....	97.5	(97.5)	102.6	(102.6)	100.1	102.7	(102.7)
1959.....	101.5	(101.5)	98.5	(98.5)	104.9	103.3	(103.3)
1960.....	111.9	(113.1)	89.4	(88.4)	109.0	57.4	(96.4)
1961.....	102.8	(105.4)	97.2	(94.9)	109.0	106.0	(103.4)
1962.....	115.0	(118.7)	86.9	(84.2)	114.9	99.9	(96.8)
1963.....	138.8	(143.3)	72.0	(69.8)	133.8	56.4	(93.4)
1964.....	136.8	(140.7)	73.1	(71.1)	143.8	105.1	(102.2)
1965.....	126.0	(130.1)	79.4	(76.9)	132.7	105.3	(102.0)
1966 ⁴	102.4	(106.1)	97.7	(94.3)	126.8	125.8	(121.4)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66....	5.7	(6.0)	-5.4	(-5.7)	4.5	-1.3	(-1.6)
1958-66....	2.6	(3.1)	-2.5	(-3.0)	4.2	1.6	(1.1)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Commodity Stabilization Service, U.S. Department of Agriculture, and The Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 28. CANDY AND OTHER CONFECTIONERY PRODUCTS SIC 2071
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	58.0	(¹)	(¹)
1947.....	77.6	75.2	128.9	133.0	88.7	114.3	118.0
1948.....	(¹)	(¹)	(¹)	(¹)	88.7	(¹)	(¹)
1949.....	73.8	72.0	135.5	138.9	85.4	115.7	118.6
1950.....	71.8	70.6	139.3	141.7	88.5	123.3	125.4
1951.....	84.3	81.4	118.6	122.8	85.9	101.9	105.5
1952.....	84.2	80.4	118.7	124.4	88.6	105.2	110.2
1953.....	86.2	85.2	116.1	117.4	89.0	103.3	104.5
1954.....	85.3	85.1	117.2	117.5	86.7	101.6	101.9
1955.....	87.6	87.8	114.1	113.9	90.8	103.6	103.4
1956.....	89.5	88.7	111.7	112.7	93.8	104.8	105.7
1957.....	96.1	96.4	104.1	103.8	97.7	101.7	101.4
1958.....	99.9	100.7	100.1	99.3	100.4	100.5	99.7
1959.....	104.2	103.0	96.0	97.1	101.9	97.8	98.9
1960.....	108.8	107.7	91.9	92.8	106.1	97.5	98.5
1961.....	108.7	107.5	92.0	93.0	107.5	98.9	100.0
1962.....	110.8	109.5	90.3	91.4	110.0	99.3	100.5
1963.....	119.9	121.0	83.4	82.7	115.3	96.2	95.3
1964.....	121.9	123.5	82.0	81.0	120.8	99.1	97.8
1965.....	127.7	128.7	78.3	77.7	125.9	98.6	97.8
1966 ²	131.3	134.2	76.2	74.5	132.2	100.7	98.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.2	3.5	-3.1	-3.3	2.2	-0.9	-1.1
1957-66.....	3.5	3.7	-3.3	-3.6	3.3	-0.1	-0.3

¹Not available.

²Preliminary.

Source: Output based on data from the Business and Defense Services Administration and the Bureau of the Census, both of the U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

**TABLE 29. CANDY AND OTHER CONFECTIONERY PRODUCTS SIC 2071
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-66**

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	61.9	62.7	161.6	159.5	58.0	93.7	92.5
1947.....	72.6	70.2	137.8	142.5	88.7	122.2	126.4
1948.....	(²)	(²)	(²)	(²)	88.7	(²)	(²)
1949.....	72.0	70.1	138.9	142.6	85.4	118.6	121.8
1950.....	73.0	71.7	136.9	139.5	88.5	121.2	123.5
1951.....	83.0	79.8	120.5	125.4	85.9	103.5	107.7
1952.....	84.5	80.0	118.4	125.1	88.6	104.9	110.8
1953.....	83.3	82.3	120.0	121.6	89.0	106.8	108.2
1954.....	83.4	83.0	120.0	120.4	86.7	104.0	104.4
1955.....	87.8	88.0	113.9	113.7	90.8	103.4	103.2
1956.....	91.2	90.4	109.6	110.7	93.8	102.8	103.8
1957.....	97.4	97.8	102.7	102.3	97.7	100.3	99.9
1958.....	98.7	99.7	101.3	100.3	100.4	101.7	100.7
1959.....	104.0	102.5	96.2	97.5	101.9	98.0	99.4
1960.....	109.0	107.4	91.7	93.1	106.1	97.3	98.8
1961.....	108.6	106.5	92.1	93.9	107.5	99.0	100.9
1962.....	111.0	108.6	90.1	92.1	110.0	99.1	101.3
1963.....	116.8	117.3	85.6	85.3	115.3	98.7	98.3
1964.....	118.4	119.6	84.4	83.6	120.8	102.0	101.0
1965.....	123.1	123.6	81.3	80.9	125.9	102.3	101.9
1966 ³	126.9	129.4	78.8	77.3	132.2	104.2	102.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.2	3.4	-3.1	-3.3	2.2	-0.9	-1.1
1957-66.....	3.0	3.1	-2.9	-3.0	3.3	0.4	0.2

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Business and Defense Services Administration and the Bureau of the Census, both of the U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 30. CANDY AND OTHER CONFECTIONERY PRODUCTS SIC 2071
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	58.0	(³)	(³)
1947.....	109.5	(107.1)	91.3	(93.3)	88.7	81.0	(82.8)
1948.....	(³)	(³)	(³)	(³)	88.7	(³)	(³)
1949.....	82.3	(81.2)	121.5	(123.2)	85.4	103.8	(105.2)
1950.....	66.5	(66.2)	149.4	(151.0)	88.5	132.2	(133.6)
1951.....	90.6	(89.5)	110.4	(111.8)	85.9	94.8	(96.0)
1952.....	83.3	(82.1)	120.1	(121.8)	88.6	106.4	(107.9)
1953.....	100.6	(99.9)	99.4	(100.1)	89.0	88.5	(89.1)
1954.....	95.0	(94.7)	105.3	(105.7)	86.7	91.3	(91.6)
1955.....	87.1	(87.2)	114.8	(114.6)	90.8	104.2	(104.1)
1956.....	82.7	(82.5)	120.9	(121.2)	93.8	113.4	(113.7)
1957.....	90.7	(90.6)	110.2	(110.3)	57.7	107.7	(107.8)
1958.....	105.1	(105.1)	95.1	(95.1)	100.4	95.5	(95.5)
1959.....	105.2	(105.3)	95.1	(95.0)	101.9	96.9	(96.8)
1960.....	107.7	(108.9)	92.8	(91.8)	106.1	98.5	(97.4)
1961.....	109.0	(111.9)	91.7	(89.4)	107.5	98.6	(96.1)
1962.....	109.9	(113.5)	91.0	(88.1)	110.0	100.1	(96.9)
1963.....	134.7	(139.4)	74.2	(71.7)	115.3	85.6	(82.7)
1964.....	138.9	(143.1)	72.0	(69.9)	120.8	87.0	(84.4)
1965.....	151.1	(156.4)	66.2	(63.9)	125.9	83.3	(80.5)
1966 ⁴	153.4	(159.3)	65.2	(62.8)	132.2	86.2	(83.0)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.1	(3.4)	-3.0	(-3.3)	2.2	-0.8	(-1.1)
1957-66.....	5.8	(6.3)	-5.5	(-6.0)	3.3	-2.3	(-2.8)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Business and Defense Services Administration and the Bureau of the Census, both of the U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 31. MALT LIQUORS SIC 2082
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1935-66
 (INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1935.....	(¹)	(¹)	(¹)	(¹)	50.8	(¹)	(¹)
1947.....	80.2	71.5	124.7	135.8	90.4	112.7	126.4
1948.....	(¹)	(¹)	(¹)	(¹)	87.9	(¹)	(¹)
1949.....	83.3	78.9	120.1	126.8	89.5	107.5	113.5
1950.....	81.4	78.2	122.8	127.8	90.3	110.9	115.4
1951.....	83.1	79.4	120.3	125.9	93.1	112.0	117.2
1952.....	85.6	82.5	116.9	121.3	94.9	110.9	115.1
1953.....	84.6	81.9	118.3	122.0	98.0	115.9	119.6
1954.....	85.8	84.1	116.6	118.9	95.3	111.1	113.3
1955.....	88.8	87.7	112.6	114.0	97.6	109.9	111.3
1956.....	90.7	89.3	110.3	112.0	98.4	108.5	110.2
1957.....	92.8	92.2	107.7	108.5	98.1	105.7	106.4
1958.....	101.5	102.0	98.5	96.1	99.2	97.7	97.3
1959.....	106.4	106.7	94.0	93.7	102.8	96.6	96.3
1960.....	105.3	110.9	91.5	90.2	103.9	95.1	93.7
1961.....	114.3	116.3	87.5	86.0	106.1	92.8	91.2
1962.....	120.9	122.3	82.7	81.8	108.7	89.9	88.9
1963.....	132.9	134.4	75.2	74.4	113.4	85.3	84.4
1964.....	141.8	143.1	70.5	69.9	119.5	84.3	83.5
1965.....	148.7	149.5	67.2	66.9	122.4	82.3	81.9
1966 ²	155.7	156.1	64.2	64.1	128.3	82.4	82.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.8	4.3	-3.6	-4.1	1.8	-1.9	-2.4
1957-66.....	5.9	5.9	-5.5	-5.6	3.0	-2.7	-2.7

¹Not available.

²Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 32. MALT LIQUORS SIC 2082
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	57.0	55.3	175.4	180.7	50.8	89.1	91.8
1947.....	75.1	64.7	133.1	154.5	90.4	120.3	139.7
1948.....	(²)	(²)	(²)	(²)	87.9	(²)	(²)
1949.....	81.8	76.1	122.2	131.4	85.5	109.4	117.6
1950.....	82.3	77.8	121.5	128.5	90.3	109.7	116.0
1951.....	82.9	78.0	120.6	128.1	93.1	112.3	119.3
1952.....	84.7	80.7	118.1	123.9	94.9	112.1	117.6
1953.....	84.3	80.7	118.7	123.9	98.0	116.3	121.4
1954.....	87.0	84.6	115.0	118.2	95.3	109.6	112.6
1955.....	85.1	87.2	112.3	114.7	97.6	109.6	111.9
1956.....	51.5	89.5	109.2	111.7	98.4	107.5	109.9
1957.....	93.9	93.1	106.5	107.4	98.1	104.5	105.4
1958.....	101.4	102.1	98.6	98.0	99.2	97.8	97.2
1959.....	105.2	105.5	95.0	94.7	102.8	97.7	97.4
1960.....	107.0	108.9	93.5	91.8	103.9	97.1	95.4
1961.....	112.8	114.3	88.7	87.5	106.1	94.1	92.8
1962.....	119.2	119.3	83.9	83.8	108.7	91.2	91.1
1963.....	130.5	130.6	76.6	76.5	113.4	86.9	86.8
1964.....	135.6	139.8	71.6	71.5	119.5	85.6	85.5
1965.....	146.2	146.8	67.5	68.1	122.4	82.6	83.4
1966 ³	156.5	154.2	63.9	64.8	128.3	82.0	83.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.8	4.4	-3.7	-4.2	1.8	-2.0	-2.5
1957-66.....	5.8	5.7	-5.5	-5.4	3.0	-2.6	-2.5

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 33. MALT LIQUORS SIC 2082
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	50.8	(³)	(³)
1947.....	52.8	(50.5)	107.7	(110.1)	90.4	97.4	(99.5)
1948.....	(³)	(³)	(³)	(³)	87.9	(³)	(³)
1949.....	66.3	(65.2)	115.9	(117.3)	89.5	103.7	(105.0)
1950.....	75.8	(75.0)	125.4	(126.6)	90.3	113.2	(114.3)
1951.....	83.5	(82.5)	119.8	(121.3)	93.1	111.5	(112.9)
1952.....	87.5	(86.4)	114.2	(115.8)	94.9	108.4	(109.9)
1953.....	85.1	(84.6)	117.4	(116.2)	98.0	115.1	(115.8)
1954.....	83.5	(83.2)	119.8	(120.3)	95.3	114.2	(114.6)
1955.....	88.5	(88.6)	113.0	(112.9)	97.6	110.3	(110.2)
1956.....	85.0	(88.9)	112.3	(112.5)	98.4	110.5	(110.7)
1957.....	90.6	(90.5)	110.4	(110.5)	98.1	108.3	(108.4)
1958.....	101.7	(101.8)	98.3	(98.2)	99.2	97.5	(97.4)
1959.....	109.0	(109.1)	91.7	(91.6)	102.8	94.3	(94.2)
1960.....	114.1	(115.3)	87.7	(86.7)	103.9	91.1	(90.1)
1961.....	117.5	(120.4)	85.1	(83.0)	106.1	90.3	(88.1)
1962.....	124.7	(128.6)	80.2	(77.7)	108.7	87.2	(84.5)
1963.....	138.1	(142.6)	72.4	(70.1)	113.4	82.1	(79.5)
1964.....	146.3	(150.3)	68.4	(66.5)	119.5	81.7	(79.5)
1965.....	150.0	(154.9)	66.7	(64.5)	122.4	81.6	(79.0)
1966.....	154.2	(160.0)	64.8	(62.5)	128.3	83.2	(80.2)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.6	(3.9)	-3.5	(-3.8)	1.8	-1.8	(-2.1)
1957-66.....	6.0	(6.5)	-5.7	(-6.1)	3.0	-2.8	(-3.2)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 34. TOBACCO PRODUCTS-TOTAL¹ SIC 211,212,213
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1935-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	49.7	(²)	201.0	(²)	68.0	136.7	(²)
1947.....	68.6	67.7	145.8	147.6	83.8	122.2	123.7
1948.....	72.8	73.3	137.4	136.4	86.9	119.4	118.5
1949.....	73.2	75.2	136.7	133.1	85.3	116.6	113.5
1950.....	78.2	81.2	127.9	123.1	85.7	109.6	105.5
1951.....	81.6	84.0	122.5	119.0	89.4	109.5	106.4
1952.....	84.5	86.2	118.4	116.0	92.9	110.0	107.8
1953.....	82.6	83.9	121.1	119.1	92.5	112.0	110.2
1954.....	83.3	84.4	120.1	118.4	90.1	108.2	106.7
1955.....	83.5	84.2	119.7	118.8	90.9	108.8	108.0
1956.....	88.4	89.4	113.1	111.8	91.5	103.5	102.3
1957.....	92.7	93.7	107.8	106.8	94.4	101.8	100.8
1958.....	100.9	100.7	99.1	99.3	99.8	98.9	99.1
1959.....	106.4	105.7	93.9	94.6	105.7	99.3	100.0
1960.....	113.2	112.9	88.4	88.6	106.3	95.7	95.9
1961.....	118.0	116.8	84.8	85.6	107.7	91.3	92.2
1962.....	121.8	120.3	82.1	83.1	107.9	88.6	89.7
1963.....	128.4	126.9	77.9	78.8	110.3	85.9	86.9
1964.....	133.3	129.4	75.0	77.3	119.3	89.5	92.2
1965.....	132.0	133.7	75.7	74.8	115.4	87.4	86.3
1966 ³	133.5	133.7	74.9	74.8	112.7	84.4	84.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66....	3.8	3.6	-3.7	-3.5	1.8	-1.9	-1.7
1957-66....	4.1	4.1	-4.0	-3.9	2.0	-2.1	-2.0

¹Includes industries 211, 212, and 213 in the Standard Industrial Classification.

²Not available.

³Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 35. TOBACCO PRODUCTS-TOTAL¹ SIC 211,212,213
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ²	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	45.8	53.3	200.7	187.5	68.0	136.5	127.5
1947.....	67.3	66.6	148.6	150.1	63.8	124.5	125.8
1948.....	71.5	72.2	135.9	138.6	66.5	121.6	120.4
1949.....	71.9	74.1	135.2	134.9	65.3	118.7	115.1
1950.....	77.0	80.4	129.9	124.4	65.7	111.3	106.6
1951.....	80.8	83.5	123.8	119.8	65.4	110.7	107.1
1952.....	83.5	85.5	119.8	117.0	62.9	111.3	108.7
1953.....	82.0	83.5	121.9	119.8	62.5	112.8	110.8
1954.....	82.3	83.5	121.5	119.8	60.1	109.5	107.9
1955.....	82.6	83.2	121.1	120.1	60.9	110.1	109.2
1956.....	87.4	88.6	114.4	112.9	61.5	104.7	103.3
1957.....	91.9	92.8	108.8	107.7	64.4	102.7	101.7
1958.....	100.9	100.7	99.1	99.3	65.8	98.9	99.1
1959.....	107.4	106.6	93.1	93.9	105.7	98.4	99.2
1960.....	114.4	114.0	87.4	87.7	106.3	94.7	95.0
1961.....	120.1	118.9	83.3	84.1	107.7	89.7	90.6
1962.....	124.7	123.2	80.2	81.2	107.9	86.5	87.6
1963.....	130.8	129.3	76.4	77.3	110.3	84.3	85.3
1964.....	134.8	130.7	74.2	76.5	119.3	88.5	91.3
1965.....	134.2	136.2	74.5	73.4	115.4	86.0	84.7
1966 ³	135.9	136.1	73.6	73.5	112.7	82.9	82.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.0	3.9	-3.9	-3.7	1.8	-2.1	-1.9
1957-66.....	4.4	4.3	-4.2	-4.2	2.0	-2.3	-2.2

¹Includes industries 211, 212, and 213 in the Standard Industrial Classification.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 36. TOBACCO PRODUCTS-TOTAL¹ SIC 211,212,213
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ²	OUTPUT ³	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ²
1939.....	45.2	(⁴)	203.4	(⁴)	68.0	138.3	(⁴)
1947.....	84.6	(82.7)	118.1	(120.9)	83.8	95.0	(101.3)
1948.....	85.6	(87.5)	111.6	(114.3)	86.5	97.0	(99.3)
1949.....	89.7	(88.5)	111.5	(113.0)	85.3	95.1	(96.4)
1950.....	92.6	(91.8)	107.9	(109.0)	85.7	92.5	(93.4)
1951.....	91.5	(90.4)	109.3	(110.6)	89.4	97.7	(98.9)
1952.....	96.3	(94.9)	103.9	(105.4)	92.9	96.5	(97.9)
1953.....	85.6	(89.0)	111.6	(112.3)	92.5	103.2	(103.9)
1954.....	95.5	(95.1)	104.7	(105.1)	90.1	94.3	(94.7)
1955.....	95.2	(95.2)	105.1	(105.1)	90.9	95.5	(95.5)
1956.....	100.4	(100.2)	99.6	(99.8)	91.5	91.1	(91.3)
1957.....	103.1	(102.9)	97.0	(97.1)	94.4	91.6	(91.7)
1958.....	100.2	(100.2)	99.8	(99.8)	99.8	99.6	(99.6)
1959.....	97.1	(97.2)	103.0	(102.9)	105.7	108.9	(108.8)
1960.....	102.8	(102.6)	97.3	(97.5)	108.3	105.4	(105.6)
1961.....	95.3	(99.2)	100.7	(100.8)	107.7	108.5	(108.6)
1962.....	97.4	(96.6)	102.7	(103.5)	107.9	110.8	(111.7)
1963.....	107.3	(106.5)	93.2	(93.9)	110.3	102.8	(103.6)
1964.....	115.7	(118.2)	83.6	(84.6)	119.3	99.7	(100.9)
1965.....	113.1	(112.3)	88.4	(89.1)	115.4	102.0	(102.8)
1966 ⁵	112.6	(112.1)	88.8	(89.2)	112.7	100.1	(100.5)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.3	(1.4)	-1.3	(-1.4)	1.8	0.5	(0.4)
1957-66.....	1.7	(1.6)	-1.7	(-1.6)	2.0	0.3	(0.4)

¹Includes industries 211, 212, and 213 in the Standard Industrial Classification.

²The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

³The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

⁴Not available.

⁵Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 37. CIGARETTES, CHEWING AND SMOKING TOBACCO SIC 211,213
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1935-66

(INDEXES, 1957-59 = 100)

YEAR	CUTPUT PER--		UNIT LABCR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1935.....	53.0	(1)	188.8	(1)	55.3	104.4	(1)
1947.....	84.7	84.1	118.0	118.9	82.2	97.0	97.7
1948.....	85.1	90.2	112.3	110.9	85.5	96.0	94.8
1949.....	85.6	92.6	111.6	108.0	85.1	95.0	91.9
1950.....	94.9	96.4	105.3	103.7	86.4	91.0	89.6
1951.....	99.9	101.0	100.1	99.0	90.5	90.6	89.6
1952.....	100.5	101.5	99.5	98.5	93.2	92.7	91.8
1953.....	95.3	97.4	105.0	102.6	90.6	95.1	93.0
1954.....	92.9	94.0	107.7	106.4	87.1	93.8	92.7
1955.....	93.4	92.9	107.1	107.6	89.3	95.6	96.1
1956.....	95.8	95.6	104.4	104.6	90.8	94.8	95.0
1957.....	98.1	98.2	101.9	101.8	94.3	96.1	96.0
1958.....	99.6	99.6	100.4	100.4	100.0	100.4	100.4
1959.....	102.2	102.0	97.8	98.0	105.7	103.4	103.6
1960.....	106.0	106.5	94.4	93.9	108.4	102.3	101.6
1961.....	108.6	108.6	92.1	92.1	110.7	101.9	101.9
1962.....	110.2	109.2	90.8	91.6	110.4	100.2	101.1
1963.....	114.8	114.0	87.1	87.7	113.7	99.0	99.7
1964.....	111.2	110.6	89.9	90.4	110.9	99.7	100.3
1965.....	110.6	114.3	90.4	87.5	111.6	100.9	97.6
1966 ²	113.4	114.7	88.2	87.2	113.2	99.8	98.7
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.4	1.3	-1.4	-1.3	1.9	0.5	0.5
1957-66.....	1.7	1.8	-1.6	-1.8	1.7	0.0	-0.1

¹Not available.

²Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 38. CIGARETTES, CHEWING AND SMOKING TOBACCO SIC 211,213
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	54.6	58.3	183.2	171.4	55.3	101.3	94.8
1947.....	84.2	83.8	118.7	115.3	82.2	97.6	98.1
1948.....	86.3	89.8	113.2	111.3	85.5	96.8	95.2
1949.....	88.7	92.1	112.7	108.6	85.1	95.9	92.4
1950.....	94.5	96.2	105.8	103.9	86.4	91.4	89.8
1951.....	100.2	101.7	99.8	98.3	90.5	90.3	89.0
1952.....	101.0	102.3	99.0	97.7	93.2	92.3	91.1
1953.....	95.1	97.5	105.2	102.5	90.6	95.3	92.9
1954.....	92.3	93.5	108.4	107.0	87.1	94.4	93.2
1955.....	92.6	92.2	108.0	108.5	89.3	96.4	96.9
1956.....	94.8	94.6	105.5	105.7	90.8	95.8	96.0
1957.....	97.2	97.3	102.9	102.8	94.3	97.0	96.9
1958.....	99.4	99.5	100.6	100.5	100.0	100.6	100.5
1959.....	103.2	103.0	96.9	97.1	105.7	102.4	102.6
1960.....	107.2	107.8	93.3	92.8	108.4	101.1	100.6
1961.....	110.6	110.5	90.4	90.5	110.7	100.1	100.2
1962.....	113.2	112.0	88.3	89.3	110.4	97.5	98.6
1963.....	117.2	116.3	85.3	86.0	113.7	97.0	97.8
1964.....	113.4	112.6	88.2	86.8	110.9	97.8	98.5
1965.....	112.6	116.9	88.8	85.6	111.6	99.1	95.5
1966 ²	116.2	117.7	86.0	85.0	113.2	97.4	96.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.6	1.5	-1.5	-1.5	1.9	0.3	0.4
1957-66.....	2.0	2.2	-1.9	-2.1	1.7	-0.3	-0.4

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 39. CIGARETTES, CHEWING AND SMOKING TOBACCO SIC 211.213
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	41.5	(³)	241.0	(³)	55.3	133.3	(³)
1947.....	85.7	(87.8)	111.4	(113.9)	62.2	91.0	(93.0)
1948.....	96.3	(94.0)	103.9	(106.4)	85.5	88.8	(91.0)
1949.....	98.6	(97.4)	101.4	(102.7)	85.1	86.3	(87.4)
1950.....	99.7	(98.5)	100.3	(101.5)	86.4	86.7	(87.7)
1951.....	96.3	(95.1)	103.9	(105.2)	90.5	94.0	(95.2)
1952.....	95.9	(94.5)	104.3	(105.8)	93.2	97.2	(98.6)
1953.....	97.0	(96.3)	103.1	(103.9)	90.6	93.4	(94.1)
1954.....	95.3	(98.9)	100.7	(101.1)	87.1	87.7	(88.1)
1955.....	101.2	(101.4)	98.8	(98.7)	89.3	88.2	(88.1)
1956.....	106.4	(106.2)	93.9	(94.2)	90.8	85.3	(85.5)
1957.....	107.0	(106.9)	93.4	(93.5)	94.3	88.1	(86.2)
1958.....	100.9	(100.9)	99.1	(99.1)	100.0	99.1	(99.1)
1959.....	93.7	(93.8)	106.7	(106.6)	105.7	112.8	(112.7)
1960.....	95.7	(95.8)	104.5	(104.4)	108.4	113.3	(113.2)
1961.....	93.7	(94.1)	106.7	(106.2)	110.7	118.1	(117.6)
1962.....	88.2	(88.2)	113.3	(113.3)	110.4	125.1	(125.1)
1963.....	96.3	(96.4)	103.9	(103.8)	113.7	118.1	(118.0)
1964.....	94.1	(93.8)	106.3	(106.6)	110.9	117.9	(118.2)
1965.....	94.6	(94.7)	105.7	(105.6)	111.6	118.0	(117.9)
1966 ⁴	92.1	(92.6)	108.6	(108.0)	113.2	122.9	(122.3)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	-0.2	(-0.1)	0.2	(0.1)	1.9	2.1	(1.9)
1957-66.....	-1.1	(-1.1)	1.1	(1.1)	1.7	2.8	(2.8)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 40. CIGARS SIC 212
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1939-66
 (INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	46.1	(¹)	217.1	(¹)	82.6	179.3	(¹)
1947.....	55.3	53.8	180.9	185.8	86.0	155.6	159.8
1948.....	55.1	58.6	169.2	170.5	88.9	150.4	151.6
1949.....	55.4	60.0	168.4	166.6	86.2	145.2	143.6
1950.....	63.7	67.0	157.1	149.2	85.5	134.3	127.6
1951.....	66.4	68.7	150.6	145.5	89.3	134.5	129.9
1952.....	70.4	71.8	142.1	139.2	92.4	132.7	130.0
1953.....	70.9	70.9	141.1	141.1	95.1	134.2	134.2
1954.....	73.7	74.3	135.6	134.6	93.8	127.2	126.3
1955.....	73.7	74.9	135.6	133.6	93.2	126.4	124.5
1956.....	80.7	82.6	123.9	121.1	92.8	115.0	112.4
1957.....	86.8	88.2	115.2	113.4	94.8	109.2	107.5
1958.....	102.7	102.3	97.4	97.8	95.6	97.0	97.4
1959.....	112.6	111.0	88.8	90.1	105.6	93.8	95.1
1960.....	123.8	122.7	80.8	81.5	107.7	87.0	87.8
1961.....	132.2	130.0	75.7	76.9	102.3	77.4	78.7
1962.....	140.6	139.2	71.1	71.8	102.9	73.2	73.9
1963.....	151.1	149.8	66.2	66.8	103.5	68.5	69.1
1964.....	177.1	166.6	56.5	60.0	134.6	76.0	80.8
1965.....	175.1	172.6	57.1	57.9	121.7	69.5	70.5
1966 ²	172.5	171.7	58.0	58.2	110.4	64.0	64.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	6.9	6.7	-6.5	-6.3	1.8	-4.8	-4.6
1957-66.....	8.1	7.8	-7.5	-7.2	2.4	-5.3	-5.0

¹Not available.

²Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 41. CIGARS SIC 212
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	45.4	48.0	220.3	206.4	82.6	182.0	172.1
1947.....	54.0	52.6	185.1	190.2	86.0	159.2	163.6
1948.....	57.9	57.4	172.8	174.1	88.9	153.6	154.8
1949.....	58.2	59.0	171.8	169.6	86.2	148.1	146.2
1950.....	62.5	66.0	160.1	151.6	85.5	136.9	129.6
1951.....	65.2	67.7	153.4	147.8	89.3	137.0	132.0
1952.....	68.8	70.4	145.4	142.1	93.4	135.8	132.7
1953.....	70.2	70.3	142.4	142.3	95.1	135.4	135.3
1954.....	72.7	73.3	137.5	136.5	93.8	129.0	128.0
1955.....	72.9	74.0	137.2	135.1	93.2	127.9	125.9
1956.....	79.9	81.8	125.1	122.2	92.8	116.1	113.4
1957.....	86.0	87.5	116.2	114.2	94.8	110.2	108.3
1958.....	103.0	102.5	97.1	97.6	99.6	96.7	97.2
1959.....	113.4	111.7	88.2	89.5	105.6	93.1	94.5
1960.....	124.4	123.4	80.4	81.1	107.7	86.6	67.3
1961.....	134.3	132.2	74.5	75.7	102.3	76.2	77.4
1962.....	142.7	141.7	70.1	70.6	102.9	72.1	72.6
1963.....	152.7	151.5	65.5	66.0	103.5	67.8	68.3
1964.....	175.9	165.0	56.8	60.6	134.6	76.5	81.6
1965.....	176.1	174.1	56.8	57.4	121.7	69.1	69.9
1966.....	172.0	171.7	58.2	58.2	110.4	64.2	64.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	7.1	6.9	-6.6	-6.4	1.8	-5.0	-4.8
1957-66.....	8.1	7.8	-7.5	-7.2	2.4	-5.3	-5.0

- 49 -

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 42. CIGARS SIC 212
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	56.3	(?)	177.6	(?)	82.6	146.7	(?)
1947.....	77.2	(75.5)	129.5	(132.4)	86.0	111.4	(113.9)
1948.....	80.3	(78.4)	124.5	(127.6)	88.9	110.7	(113.4)
1949.....	78.4	(77.4)	127.5	(129.1)	86.2	109.9	(111.3)
1950.....	83.7	(82.8)	119.5	(120.7)	85.5	102.2	(103.2)
1951.....	66.0	(85.0)	116.2	(117.7)	89.3	103.8	(105.1)
1952.....	57.9	(56.5)	102.1	(103.6)	93.4	95.4	(96.8)
1953.....	75.4	(78.9)	125.9	(126.8)	95.1	119.7	(120.6)
1954.....	85.0	(88.7)	112.4	(112.8)	93.8	105.4	(105.8)
1955.....	66.4	(66.5)	115.8	(115.6)	93.2	107.9	(107.7)
1956.....	91.9	(91.7)	108.8	(109.1)	92.8	101.0	(101.2)
1957.....	57.3	(97.2)	102.7	(102.8)	94.8	97.4	(97.5)
1958.....	59.2	(59.2)	100.8	(100.8)	95.6	100.4	(100.4)
1959.....	103.3	(103.4)	96.8	(56.7)	105.6	102.2	(102.1)
1960.....	116.8	(115.6)	85.6	(86.5)	107.7	92.2	(93.2)
1961.....	111.0	(108.9)	90.1	(91.8)	102.3	92.2	(93.9)
1962.....	118.8	(114.7)	84.2	(87.2)	102.9	86.6	(89.7)
1963.....	134.8	(130.4)	74.2	(76.7)	103.5	76.8	(79.4)
1964.....	154.8	(187.5)	51.3	(53.3)	134.6	69.1	(71.8)
1965.....	161.8	(156.4)	61.8	(63.9)	121.7	75.2	(77.8)
1966 ⁴	178.6	(173.3)	56.0	(57.7)	110.4	61.8	(63.7)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.3	(4.2)	-4.1	(-4.1)	1.8	-2.4	(-2.4)
1957-66.....	7.9	(7.4)	-7.3	(-6.9)	2.4	-5.1	(-4.7)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 43. HOSIERY SIC 2251,2252
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	70.2	67.3	142.4	148.6	87.3	124.3	129.7
1948.....	(¹)	(¹)	(¹)	(¹)	87.5	(¹)	(¹)
1949.....	71.4	70.1	140.0	142.7	86.9	121.7	124.0
1950.....	75.7	74.0	132.1	135.2	97.1	128.3	131.3
1951.....	77.4	77.6	129.1	128.8	95.1	122.8	122.5
1952.....	85.9	83.7	116.4	119.5	100.7	117.2	120.3
1953.....	82.1	81.2	121.6	123.1	99.5	121.2	122.5
1954.....	85.1	85.2	117.6	117.4	96.8	113.8	113.6
1955.....	84.1	83.9	118.9	119.2	98.1	116.6	116.9
1956.....	85.7	85.7	116.7	116.7	95.9	111.9	111.9
1957.....	89.5	89.7	111.7	111.5	95.9	107.1	106.9
1958.....	104.5	106.0	95.7	94.4	95.4	95.1	93.8
1959.....	107.0	105.3	93.5	94.9	104.6	97.8	99.3
1960.....	109.2	108.1	91.6	92.5	104.3	95.5	96.5
1961.....	120.0	118.1	83.4	84.7	114.2	95.2	96.7
1962.....	124.4	122.4	80.4	81.7	117.3	94.3	95.8
1963.....	138.9	138.3	72.0	72.3	121.4	87.4	87.8
1964.....	152.4	148.0	65.6	67.6	129.2	84.8	87.3
1965.....	151.3	147.7	66.1	67.7	136.0	89.9	92.1
1966 ²	167.8	162.0	59.6	61.7	149.7	89.2	92.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.8	4.8	-4.5	-4.5	2.3	-2.3	-2.3
1957-66.....	6.7	6.3	-6.3	-5.9	4.8	-1.8	-1.4

¹ Not available.
² Preliminary.

Source: Output based on data from the National Association of Hosiery Manufacturers, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 44. HOSIERY SIC 2251,2252
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	68.6	65.7	145.4	152.1	87.3	126.9	132.8
1948.....	(²)	(²)	(²)	(²)	87.5	(²)	(²)
1949.....	71.3	69.9	140.3	143.0	86.5	121.9	124.3
1950.....	74.8	72.9	133.7	137.2	97.1	129.8	133.2
1951.....	77.7	78.0	128.7	128.3	95.1	122.4	122.0
1952.....	86.7	84.5	115.3	118.4	100.7	116.1	119.2
1953.....	82.2	81.3	121.7	123.0	99.5	121.1	122.4
1954.....	84.2	84.3	118.8	118.6	96.8	115.0	114.8
1955.....	83.6	83.3	119.7	120.1	98.1	117.4	117.8
1956.....	85.2	85.2	117.4	117.4	95.9	112.6	112.6
1957.....	89.4	89.5	111.9	111.7	95.9	107.3	107.1
1958.....	104.9	106.4	95.4	94.0	95.4	94.8	93.4
1959.....	107.0	105.1	93.5	95.1	104.6	97.8	99.5
1960.....	105.0	107.7	91.8	92.8	104.3	95.7	96.8
1961.....	120.5	118.5	83.0	84.4	114.2	94.8	96.4
1962.....	125.1	123.0	80.0	81.3	117.3	93.8	95.4
1963.....	138.9	138.1	72.0	72.4	121.4	87.4	87.9
1964.....	152.4	147.5	65.6	67.8	129.2	84.8	87.6
1965.....	151.3	147.3	66.1	67.9	136.0	89.9	92.3
1966.....	168.6	162.2	59.3	61.7	149.7	88.8	92.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.8	4.8	-4.6	-4.6	2.3	-2.3	-2.3
1957-66.....	6.8	6.3	-6.3	-5.9	4.8	-1.8	-1.4

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the National Association of Hosiery Manufacturers, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 45. HOSIERY SIC 2251,2252
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	92.1	(90.4)	108.6	(110.7)	87.3	94.8	(96.6)
1948.....	(³)	(³)	(³)	(³)	87.5	(³)	(³)
1949.....	72.7	(71.9)	137.6	(139.1)	86.9	119.6	(120.9)
1950.....	87.6	(87.0)	114.1	(114.9)	97.1	110.8	(111.6)
1951.....	74.9	(74.2)	133.4	(134.7)	95.1	126.9	(128.1)
1952.....	77.6	(76.8)	128.8	(130.2)	100.7	129.7	(131.1)
1953.....	80.8	(80.5)	123.7	(124.2)	99.5	123.1	(123.6)
1954.....	96.7	(96.5)	103.4	(103.6)	96.8	100.1	(100.3)
1955.....	91.1	(91.3)	109.8	(109.6)	98.1	107.7	(107.5)
1956.....	91.8	(91.7)	109.0	(109.1)	95.9	104.5	(104.6)
1957.....	91.5	(91.5)	109.3	(109.3)	95.9	104.8	(104.8)
1958.....	101.7	(101.7)	98.3	(98.3)	99.4	97.7	(97.7)
1959.....	107.3	(107.4)	93.2	(93.1)	104.6	97.5	(97.4)
1960.....	111.7	(111.4)	89.5	(89.7)	104.3	93.4	(93.6)
1961.....	113.5	(114.0)	88.1	(87.7)	114.2	100.6	(100.2)
1962.....	116.9	(117.2)	85.5	(85.3)	117.3	100.3	(100.1)
1963.....	139.4	(139.7)	71.7	(71.6)	121.4	87.1	(86.9)
1964.....	152.7	(152.4)	65.5	(65.6)	129.2	84.6	(84.8)
1965.....	151.6	(152.0)	66.0	(65.8)	136.0	89.7	(89.5)
1966 ⁴	159.1	(160.1)	62.9	(62.5)	149.7	94.1	(93.5)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.9	(4.0)	-3.8	(-3.9)	2.3	-1.5	(-1.6)
1957-66.....	6.4	(6.4)	-6.0	(-6.1)	4.8	-1.5	(-1.5)

¹ The figures shown in parentheses are subject to a wider margin of error than other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from the National Association of Hosiery Manufacturers, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 46. PAPER, PAPERBOARD AND PULP MILLS SIC 261, 262, 263, 266
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,

ALL EMPLOYEES, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	41.0	(¹)	(¹)
1947.....	72.8	69.3	137.4	144.3	63.6	87.4	91.8
1948.....	(¹)	(¹)	(¹)	(¹)	66.2	(¹)	(¹)
1949.....	72.7	72.4	137.5	138.1	61.6	84.7	85.1
1950.....	84.5	81.5	118.3	122.7	73.6	87.1	90.3
1951.....	87.8	85.0	113.8	117.7	80.2	91.3	94.4
1952.....	84.7	83.3	118.1	120.1	76.3	90.1	91.6
1953.....	84.5	83.2	117.8	120.1	81.4	95.9	97.8
1954.....	86.8	86.3	115.2	115.9	82.9	95.5	96.1
1955.....	94.5	92.4	105.4	108.3	93.0	98.0	100.7
1956.....	98.5	96.5	101.5	103.6	98.7	100.2	102.3
1957.....	96.1	96.4	104.1	103.7	96.1	100.0	99.7
1958.....	97.9	98.8	102.2	101.2	96.5	98.6	97.7
1959.....	105.5	104.6	94.4	95.6	107.4	101.4	102.7
1960.....	108.2	108.2	92.4	92.4	105.9	101.6	101.6
1961.....	114.9	115.1	87.0	86.9	113.4	98.7	98.5
1962.....	119.7	119.7	83.6	83.6	119.3	99.7	99.7
1963.....	126.8	126.6	78.8	79.0	125.7	99.1	99.3
1964.....	134.7	133.3	74.2	75.0	133.8	99.3	100.4
1965.....	140.5	140.0	71.0	71.4	141.7	100.6	101.2
1966 ²	148.8	147.0	67.2	68.0	152.7	102.6	103.9
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.7	3.9	-3.6	-3.7	4.6	0.9	0.7
1957-66.....	5.1	4.9	-4.9	-4.7	5.2	0.1	0.3

¹Not available.

²Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 47. PAPER, PAPERBOARD AND PULP MILLS SIC 261, 262, 263, 266
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	68.4	71.8	146.1	139.3	41.0	59.9	57.1
1947.....	68.7	65.8	145.6	152.0	63.6	92.6	96.7
1948.....	(²)	(²)	(²)	(²)	66.2	(²)	(²)
1949.....	69.9	70.2	143.0	142.5	61.6	88.1	87.8
1950.....	81.1	78.4	123.4	127.6	73.6	50.8	93.9
1951.....	85.0	82.3	117.7	121.4	80.2	94.4	97.4
1952.....	82.5	81.3	121.2	122.9	76.3	92.5	93.8
1953.....	82.9	81.3	120.6	123.0	81.4	98.2	100.1
1954.....	85.2	84.9	117.4	117.9	82.9	97.3	97.7
1955.....	93.0	90.4	107.5	110.6	93.0	100.0	102.9
1956.....	97.5	95.3	102.5	105.0	98.7	101.2	103.6
1957.....	95.7	96.1	104.5	104.1	96.1	100.4	100.0
1958.....	97.7	98.8	102.4	101.2	96.5	98.8	97.7
1959.....	106.5	104.9	93.9	95.3	107.4	100.8	102.4
1960.....	109.7	109.5	91.2	91.4	109.9	100.2	100.4
1961.....	117.1	117.0	85.4	85.4	113.4	96.8	96.9
1962.....	121.7	121.4	82.1	82.1	119.3	98.0	98.3
1963.....	129.3	128.5	77.3	77.8	125.7	97.2	97.8
1964.....	127.2	135.2	72.9	74.0	133.8	97.5	99.0
1965.....	144.3	142.7	69.3	70.1	141.7	98.2	99.3
1966 ³	152.9	149.9	65.4	66.7	152.7	99.9	101.9
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.1	4.3	-4.0	-4.1	4.6	0.4	0.3
1957-66.....	5.4	5.2	-5.2	-4.9	5.2	-0.2	0.0

- 55 -

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 48. PAPER, PAPERBOARD AND PULP MILLS SIC 261, 262, 263, 266
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	41.0	(³)	(³)
1947.....	102.4	(100.2)	97.6	(99.8)	63.6	62.1	(63.5)
1948.....	(³)	(³)	(³)	(³)	66.2	(³)	(³)
1949.....	90.1	(88.9)	111.0	(112.5)	61.6	68.4	(69.3)
1950.....	107.1	(106.1)	93.3	(94.3)	73.6	68.7	(69.4)
1951.....	105.7	(104.3)	94.6	(95.9)	80.2	75.9	(76.5)
1952.....	97.5	(96.7)	102.1	(103.4)	76.3	77.9	(78.9)
1953.....	96.2	(95.5)	103.9	(104.7)	81.4	84.6	(85.2)
1954.....	95.7	(95.3)	104.5	(104.9)	82.9	86.6	(87.0)
1955.....	105.6	(105.7)	94.7	(94.6)	93.0	88.1	(88.0)
1956.....	103.5	(103.8)	96.3	(96.4)	96.7	95.0	(95.1)
1957.....	98.1	(98.0)	102.0	(102.1)	96.1	98.0	(98.1)
1958.....	98.8	(98.8)	101.2	(101.2)	96.5	97.7	(97.7)
1959.....	103.0	(103.1)	97.1	(97.0)	107.4	104.3	(104.2)
1960.....	101.3	(101.4)	98.7	(98.6)	109.9	108.5	(108.4)
1961.....	105.2	(105.7)	95.1	(94.6)	113.4	107.8	(107.3)
1962.....	110.7	(110.8)	90.4	(90.3)	119.3	107.8	(107.7)
1963.....	116.1	(116.3)	86.2	(86.0)	125.7	108.3	(108.1)
1964.....	124.1	(123.8)	80.6	(80.8)	133.8	107.8	(108.1)
1965.....	126.2	(126.4)	79.3	(79.1)	141.7	112.3	(112.1)
1966 ⁴	131.5	(132.3)	76.0	(75.0)	152.7	116.1	(115.4)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.3	(1.4)	-1.3	(-1.4)	4.6	3.3	(3.1)
1957-66.....	3.5	(3.6)	-3.4	(-3.5)	5.2	1.6	(1.6)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 49. MAN-MADE FIBERS SIC 2823,2824
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1957-66
(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1957.....	97.3	98.0	102.8	102.0	99.9	102.7	101.9
1958.....	94.2	94.0	106.1	106.4	91.2	96.8	97.0
1959.....	108.4	107.7	92.3	92.8	108.9	100.5	101.1
1960.....	101.9	103.0	98.1	97.1	102.5	100.6	99.5
1961.....	110.1	110.7	90.8	90.4	107.8	97.9	97.4
1962.....	121.8	121.5	82.1	82.3	128.7	105.7	105.9
1963.....	121.9	120.6	82.0	82.9	137.6	112.9	114.1
1964.....	131.1	128.3	76.3	77.9	157.7	120.3	122.9
1965.....	133.9	132.4	74.7	75.5	180.6	134.9	136.4
1966 ¹	133.6	133.2	74.8	75.1	197.1	147.5	148.0
AVERAGE ANNUAL RATES (PERCENT)							
1957-66.....	4.3	4.1	-4.1	-3.9	8.7	4.3	4.5

¹Preliminary.

Source: Output based on data from the Textile Economics Bureau, Inc. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 50. MAN-MADE FIBERS SIC 2823, 2824
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1957-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1957.....	96.1	97.1	104.1	103.0	99.9	104.0	102.9
1958.....	97.0	96.5	103.1	103.6	91.2	94.0	94.5
1959.....	106.8	106.1	93.7	94.2	108.9	102.0	102.6
1960.....	102.0	103.4	98.0	96.7	102.5	100.5	99.1
1961.....	111.4	111.8	89.8	89.4	107.8	96.8	96.4
1962.....	121.0	120.3	82.7	83.1	128.7	106.4	107.0
1963.....	124.8	122.3	80.2	81.8	137.6	110.3	112.5
1964.....	133.3	129.3	75.0	77.4	157.7	118.3	122.0
1965.....	134.7	132.2	74.3	75.6	180.6	134.1	136.6
1966.....	137.4	136.0	72.8	73.5	157.1	143.4	144.9
AVERAGE ANNUAL RATES (PERCENT)							
1957-66.....	4.5	4.2	-4.3	-4.0	8.7	4.0	4.3

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output based on data from the Textile Economics Bureau, Inc. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 51. MAN-MADE FIBERS SIC 2823, 2824
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1957-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1957.....	101.2	(101.0)	98.8	(99.0)	99.9	58.7	(98.9)
1958.....	86.8	(86.8)	115.2	(115.2)	91.2	105.1	(105.1)
1959.....	113.2	(113.3)	88.3	(88.2)	108.9	96.2	(96.1)
1960.....	101.4	(101.8)	98.6	(98.2)	102.5	101.1	(100.7)
1961.....	106.2	(107.3)	94.2	(93.2)	107.8	101.5	(100.5)
1962.....	124.6	(125.8)	80.3	(79.5)	128.7	103.3	(102.3)
1963.....	114.0	(115.1)	87.7	(86.8)	137.6	120.7	(119.5)
1964.....	124.8	(125.5)	80.2	(79.7)	157.7	126.4	(125.7)
1965.....	131.4	(132.8)	76.1	(75.3)	180.6	137.4	(136.0)
1966 ³	123.3	(125.1)	81.1	(79.9)	197.1	159.8	(157.5)
AVERAGE ANNUAL RATES (PERCENT)							
1957-66.....	3.5	(3.7)	-3.4	(-3.5)	8.7	5.0	(4.9)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Preliminary.

Source: Output based on data from the Textile Economics Bureau, Inc. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 52 PETROLEUM REFINING SIC 2911
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1935-66
 (INDEXES, 1957-55 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1935.....	60.4	(¹)	165.5	(¹)	42.0	69.5	(¹)
1947.....	60.8	57.5	164.4	174.1	60.9	100.1	106.0
1948.....	(¹)	(¹)	(¹)	(¹)	66.9	(¹)	(¹)
1949.....	65.7	63.8	152.2	156.8	65.0	98.9	101.9
1950.....	73.9	71.4	135.3	140.1	70.6	95.5	98.9
1951.....	77.0	74.5	129.9	134.3	80.0	103.9	107.4
1952.....	77.8	76.4	128.5	130.9	81.8	105.1	107.1
1953.....	78.4	77.9	127.5	128.3	85.9	109.5	110.2
1954.....	81.9	81.8	122.1	122.3	86.1	105.1	105.3
1955.....	90.0	89.3	111.2	111.9	93.1	103.5	104.2
1956.....	93.9	93.2	106.5	107.3	99.2	105.6	106.4
1957.....	94.1	93.4	106.2	107.0	99.4	105.6	106.4
1958.....	97.4	98.0	102.7	102.0	97.6	100.2	99.6
1959.....	110.1	110.1	90.8	90.8	103.6	94.1	94.1
1960.....	115.4	114.8	86.6	87.1	106.9	92.6	93.1
1961.....	123.9	123.5	80.7	81.0	109.4	88.3	88.6
1962.....	135.2	134.6	74.0	74.3	114.1	84.4	84.8
1963.....	142.9	144.3	70.0	69.3	117.0	81.9	81.1
1964.....	153.9	152.3	65.0	65.6	120.2	78.1	78.9
1965.....	163.7	164.4	61.1	60.8	123.3	75.3	75.0
1966 ²	177.2	177.2	56.4	56.4	129.5	73.1	73.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	5.6	5.9	-5.3	-5.6	3.8	-1.8	-2.0
1957-66.....	7.4	7.4	-6.9	-6.9	3.1	-4.0	-4.0

¹Not available.

²Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 53. PETROLEUM REFINING SIC 2911
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	55.0	55.9	181.7	178.8	42.0	76.3	75.1
1947.....	57.0	53.5	175.5	186.9	60.9	106.9	113.8
1948.....	(²)	(²)	(²)	(²)	66.9	(²)	(²)
1949.....	60.9	59.1	164.3	169.1	65.0	106.8	109.9
1950.....	71.2	68.3	140.5	146.3	70.6	59.2	103.3
1951.....	74.6	71.8	134.1	139.3	80.0	107.3	111.4
1952.....	76.0	74.6	131.7	134.1	81.8	107.7	109.7
1953.....	76.6	76.4	130.3	130.8	85.9	111.9	112.4
1954.....	80.5	80.5	124.2	124.2	86.1	106.9	106.9
1955.....	88.5	87.8	113.0	113.9	93.1	105.2	106.0
1956.....	92.5	91.7	108.2	109.1	99.2	107.3	108.2
1957.....	94.0	93.2	106.3	107.2	99.4	105.7	106.6
1958.....	97.2	98.1	102.9	101.9	97.6	100.4	99.5
1959.....	110.2	110.3	90.7	90.6	103.6	94.0	93.9
1960.....	117.1	115.9	85.4	86.2	106.9	91.3	92.2
1961.....	126.2	125.3	79.3	79.8	109.4	86.7	87.3
1962.....	138.5	137.3	72.2	72.8	114.1	82.4	83.1
1963.....	145.0	146.8	69.0	68.1	117.0	80.7	79.7
1964.....	156.9	154.7	63.7	64.6	120.2	76.6	77.7
1965.....	166.8	167.3	59.9	59.8	123.3	73.9	73.7
1966 ³	180.9	180.4	55.3	55.4	129.5	71.6	71.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	6.2	6.4	-5.8	-6.0	3.8	-2.2	-2.5
1957-66.....	7.7	7.7	-7.1	-7.1	3.1	-4.2	-4.2

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 54. PETROLEUM REFINING SIC 2911
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	82.4	(3)	121.4	(3)	42.0	51.0	(3)
1947.....	74.7	(73.0)	133.8	(136.5)	60.9	81.5	(83.4)
1948.....	(3)	(3)	(3)	(3)	66.9	(3)	(3)
1949.....	83.7	(82.6)	119.5	(121.1)	65.0	77.7	(78.7)
1950.....	82.6	(81.7)	121.1	(122.4)	70.6	85.5	(86.4)
1951.....	84.5	(83.3)	118.4	(120.0)	80.0	94.7	(96.0)
1952.....	83.3	(82.1)	120.0	(121.8)	81.8	98.2	(99.6)
1953.....	83.3	(82.8)	120.0	(120.8)	85.9	103.1	(103.8)
1954.....	86.0	(85.6)	116.3	(116.8)	86.1	100.1	(100.6)
1955.....	94.1	(94.3)	106.2	(106.0)	93.1	98.9	(98.7)
1956.....	98.3	(98.1)	101.7	(101.9)	99.2	100.9	(101.1)
1957.....	94.1	(94.0)	106.2	(106.3)	99.4	105.6	(105.7)
1958.....	97.8	(97.8)	102.3	(102.3)	97.6	99.8	(99.8)
1959.....	109.5	(109.6)	91.3	(91.2)	103.6	94.6	(94.5)
1960.....	111.5	(111.6)	89.7	(89.6)	106.9	95.9	(95.8)
1961.....	116.0	(118.7)	84.7	(84.3)	109.4	92.7	(92.2)
1962.....	127.2	(127.3)	78.6	(78.5)	114.1	89.7	(89.6)
1963.....	137.5	(137.6)	72.7	(72.6)	117.0	85.1	(85.0)
1964.....	146.6	(146.2)	68.2	(68.4)	120.2	82.0	(82.2)
1965.....	156.3	(156.5)	64.0	(63.9)	123.3	78.9	(78.8)
1966 ⁴	167.7	(168.6)	59.6	(59.3)	129.5	77.2	(76.8)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.2	(4.3)	-4.0	(-4.1)	3.8	-0.4	(-0.5)
1957-66.....	6.7	(6.7)	-6.2	(-6.3)	3.1	-3.3	(-3.3)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 55. TIRES AND INNER TUBES SIC 3011
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-66

(INDEXES, 1957-55 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	71.2	69.7	140.4	143.5	89.4	125.5	128.3
1948.....	(¹)	(¹)	(¹)	(¹)	77.6	(¹)	(¹)
1949.....	73.6	76.8	135.6	130.3	69.7	94.5	90.8
1950.....	88.5	66.5	113.0	115.6	85.9	97.1	99.3
1951.....	66.0	63.3	116.3	120.0	66.1	100.1	103.3
1952.....	82.0	80.2	121.9	124.7	67.1	106.2	108.6
1953.....	85.4	84.3	117.1	118.6	89.9	105.3	106.6
1954.....	81.6	63.8	122.5	119.4	82.1	100.6	98.0
1955.....	95.6	89.2	104.6	112.1	102.4	107.1	114.8
1956.....	88.8	89.2	112.6	112.1	94.7	106.6	106.2
1957.....	94.3	93.9	106.1	106.5	99.1	105.1	105.5
1958.....	96.6	97.8	103.5	102.3	91.5	94.7	93.6
1959.....	109.2	108.4	91.6	92.2	109.4	100.2	100.9
1960.....	111.3	111.1	89.9	90.0	108.4	97.4	97.6
1961.....	114.9	114.6	87.0	87.2	104.9	91.3	91.5
1962.....	131.0	126.3	76.4	79.2	119.7	91.4	94.6
1963.....	137.9	135.6	72.5	73.7	124.5	90.3	91.8
1964.....	155.9	149.2	64.1	67.0	141.7	90.9	95.0
1965.....	161.4	153.6	61.9	65.1	151.6	93.9	98.7
1966.....	166.3	158.0	60.1	63.3	164.0	98.6	103.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.5	4.3	-4.3	-4.1	3.5	-0.9	-0.7
1957-66.....	7.1	6.3	-6.6	-6.0	6.2	-0.8	-0.1

¹Not available.

²Preliminary.

Source: Output based on data from the Rubber Manufacturers Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 56. TIRES AND INNER TUBES SIC 3011
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	65.3	67.8	144.3	147.5	89.4	129.0	131.9
1948.....	(2)	(2)	(2)	(2)	77.6	(2)	(2)
1949.....	71.5	75.4	139.9	132.7	69.7	57.5	92.5
1950.....	84.6	82.7	118.2	121.0	85.9	101.5	103.9
1951.....	82.8	79.9	120.8	125.1	86.1	104.0	107.7
1952.....	79.3	77.6	126.1	128.9	87.1	109.8	112.3
1953.....	82.6	81.7	121.0	122.5	89.9	108.8	110.1
1954.....	80.8	83.7	123.8	119.5	82.1	101.6	98.1
1955.....	93.9	86.2	106.5	116.0	102.4	109.1	118.8
1956.....	88.2	88.7	113.4	112.8	94.7	107.4	106.8
1957.....	94.1	93.8	106.3	106.7	99.1	105.3	105.7
1958.....	97.5	99.0	102.5	101.0	91.5	93.8	92.4
1959.....	108.4	107.4	92.2	93.1	109.4	100.9	101.9
1960.....	112.1	111.5	89.2	89.7	108.4	96.7	97.2
1961.....	118.0	116.9	84.7	85.5	104.9	88.9	89.7
1962.....	132.1	125.5	75.7	79.7	119.7	90.6	95.4
1963.....	140.2	136.4	71.3	73.3	124.5	68.8	91.3
1964.....	155.2	149.6	62.8	66.8	141.7	89.0	94.7
1965.....	165.9	154.5	60.3	64.7	151.6	91.4	98.1
1966.....	176.5	158.3	58.7	63.2	164.0	96.2	103.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.9	4.6	-4.7	-4.4	3.5	-1.3	-1.0
1957-66.....	7.4	6.4	-6.9	-6.0	6.2	-1.1	-0.2

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Rubber Manufacturers Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 57. TIRES AND INNER TUBES SIC 3011.
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	75.6	(77.9)	125.6	(128.4)	89.4	112.3	(114.8)
1948.....	(³)	(³)	(³)	(³)	77.6	(³)	(³)
1949.....	84.1	(83.0)	118.9	(120.5)	69.7	82.9	(84.0)
1950.....	106.4	(105.3)	93.9	(55.0)	85.9	80.7	(81.6)
1951.....	100.9	(99.8)	99.1	(100.2)	86.1	85.3	(86.3)
1952.....	93.8	(92.5)	106.7	(108.2)	87.1	92.9	(94.2)
1953.....	97.5	(96.5)	102.6	(103.2)	89.9	92.2	(92.8)
1954.....	84.6	(84.3)	118.1	(118.6)	82.1	97.0	(97.4)
1955.....	103.0	(103.2)	97.1	(96.9)	102.4	99.4	(99.2)
1956.....	91.3	(91.1)	109.5	(109.7)	94.7	103.7	(103.9)
1957.....	94.7	(94.7)	105.5	(105.7)	99.1	104.6	(104.7)
1958.....	93.3	(93.3)	107.2	(107.2)	91.5	98.1	(98.1)
1959.....	112.4	(112.6)	88.9	(88.8)	109.4	97.3	(97.2)
1960.....	106.3	(109.2)	92.3	(91.6)	108.4	100.1	(99.3)
1961.....	104.6	(106.7)	95.6	(93.7)	104.9	100.3	(98.3)
1962.....	126.5	(129.1)	79.0	(77.4)	119.7	94.6	(92.7)
1963.....	130.0	(132.7)	76.9	(75.3)	124.5	95.8	(93.8)
1964.....	144.4	(147.0)	69.2	(68.0)	141.7	98.1	(96.4)
1965.....	146.6	(149.8)	68.2	(66.8)	151.6	103.4	(101.2)
1966 ⁴	152.6	(156.6)	65.5	(63.8)	164.0	107.5	(104.7)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.9	(3.2)	-2.8	(-3.1)	3.5	0.6	(0.4)
1957-66.....	5.9	(6.2)	-5.6	(-5.9)	6.2	0.3	(0.0)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Rubber Manufacturers Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 58. FOOTWEAR SIC 3141, 3142
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	78.2	74.6	127.8	133.7	81.3	103.9	108.7
1948.....	(¹)	(¹)	(¹)	(¹)	80.3	(¹)	(¹)
1949.....	75.6	78.7	132.4	127.1	78.5	103.9	99.8
1950.....	83.1	85.0	120.3	117.7	86.6	104.2	101.9
1951.....	83.7	87.1	119.5	114.8	80.9	96.7	92.9
1952.....	89.1	89.0	112.2	112.4	89.0	99.9	100.0
1953.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)
1954.....	87.9	89.3	113.7	112.0	87.5	99.5	98.0
1955.....	95.2	93.4	105.0	107.1	96.2	101.0	103.0
1956.....	95.6	95.0	104.6	105.2	97.5	102.0	102.6
1957.....	96.5	96.8	103.7	103.3	98.0	101.6	101.2
1958.....	98.1	99.0	102.0	101.0	96.2	98.1	97.2
1959.....	105.4	104.1	94.9	96.0	105.8	100.4	101.6
1960.....	102.5	103.0	97.5	97.1	100.9	98.4	98.0
1961.....	102.5	103.4	97.5	96.7	101.3	98.8	98.0
1962.....	104.9	104.6	95.3	95.6	103.2	98.4	98.7
1963.....	109.0	108.4	91.7	92.2	100.3	92.0	92.5
1964.....	110.7	107.9	90.3	92.7	102.2	92.3	94.7
1965.....	109.4	107.3	91.4	93.2	103.1	94.2	96.1
1966 ³	111.4	108.6	89.8	92.1	105.8	95.0	97.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.1	1.9	-2.0	-1.9	1.6	-0.5	-0.4
1957-66.....	1.5	1.2	-1.5	-1.2	0.6	-0.9	-0.6

¹ Not available.

² Indexes for 1953 are not shown since Census data for that year may not be fully comparable with data for other years, possibly due to sampling error.

³ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 59. FOOTWEAR SIC 3141, 3142
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	77.0	73.3	129.9	136.4	81.3	105.6	110.9
1948.....	(²)	(²)	(²)	(²)	80.3	(²)	(²)
1949.....	74.6	78.0	134.0	128.2	78.5	105.2	100.6
1950.....	82.3	84.4	121.5	116.5	86.6	105.2	102.6
1951.....	83.5	87.3	119.8	114.6	80.9	96.9	92.7
1952.....	88.5	88.9	112.5	112.5	89.0	100.1	100.1
1953.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)
1954.....	87.2	88.7	114.6	112.8	87.5	100.3	98.7
1955.....	94.8	92.7	105.5	107.9	96.2	101.5	103.8
1956.....	95.3	94.7	104.9	105.6	97.5	102.3	103.0
1957.....	96.5	96.8	103.7	103.3	98.0	101.6	101.2
1958.....	98.3	99.3	101.8	100.7	96.2	97.9	96.9
1959.....	105.3	103.8	95.0	96.3	105.8	100.5	101.9
1960.....	102.7	103.2	97.3	96.9	100.9	98.2	97.8
1961.....	102.7	103.5	97.3	96.6	101.3	98.6	97.9
1962.....	104.7	104.1	95.5	96.0	103.2	98.6	99.1
1963.....	106.7	107.7	92.0	92.8	100.3	92.3	93.1
1964.....	110.2	106.9	90.7	93.5	102.2	92.7	95.6
1965.....	105.0	106.4	91.8	94.0	103.1	94.6	96.9
1966 ⁴	111.4	108.0	89.8	92.6	105.8	95.0	98.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.1	1.9	-2.1	-1.9	1.6	-0.6	-0.4
1957-66.....	1.5	1.1	-1.5	-1.1	0.6	-0.9	-0.4

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Indexes for 1953 are not shown since Census data for that year may not be fully comparable with data for other years, possibly due to sampling error.

⁴ Preliminary.

Source: Output, employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 60. FOOTWEAR SIC 3141, 3142
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	52.9	(91.5)	107.6	(109.3)	81.3	87.5	(88.9)
1948.....	(³)	(³)	(³)	(³)	80.3	(³)	(³)
1949.....	66.0	(85.2)	116.3	(117.3)	78.5	91.3	(92.1)
1950.....	91.0	(90.4)	109.9	(110.6)	86.6	95.2	(95.8)
1951.....	85.6	(84.9)	116.8	(117.8)	80.9	94.5	(95.3)
1952.....	90.5	(89.5)	110.4	(111.7)	89.0	98.3	(99.4)
1953.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
1954.....	55.1	(54.9)	105.1	(105.4)	87.5	92.0	(92.2)
1955.....	59.3	(59.6)	100.7	(100.4)	96.2	96.9	(96.6)
1956.....	58.6	(58.5)	101.4	(101.5)	97.5	98.9	(99.0)
1957.....	56.6	(56.6)	103.6	(103.6)	98.0	101.5	(101.5)
1958.....	56.7	(56.7)	103.4	(103.4)	96.2	99.5	(99.5)
1959.....	106.9	(106.9)	93.6	(93.6)	105.8	99.0	(99.0)
1960.....	100.2	(100.8)	99.8	(99.2)	100.9	100.7	(100.1)
1961.....	100.4	(102.0)	99.6	(98.0)	101.3	100.9	(99.3)
1962.....	106.6	(108.5)	93.8	(92.2)	103.2	96.8	(95.1)
1963.....	112.8	(114.9)	88.6	(87.0)	100.3	88.9	(87.3)
1964.....	115.6	(117.2)	86.5	(85.3)	102.2	88.4	(87.2)
1965.....	113.5	(115.6)	88.1	(86.5)	103.1	90.8	(89.2)
1966 ⁵	112.6	(115.0)	88.8	(87.0)	105.8	94.0	(92.0)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.5	(1.7)	-1.5	(-1.7)	1.6	0.0	(-0.1)
1957-66.....	2.0	(2.3)	-2.0	(-2.2)	0.6	-1.4	(-1.6)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Indexes for 1953 are not shown since Census data for that year may not be fully comparable with data for other years, possibly due to sampling error.

⁵ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 61. GLASS CONTAINERS SIC 3221
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	69.2	(¹)	144.6	(¹)	36.8	53.2	(¹)
1947.....	95.2	95.2	100.8	105.1	84.8	85.5	89.1
1948.....	(¹)	(¹)	(¹)	(¹)	71.4	(¹)	(¹)
1949.....	88.8	86.8	112.6	115.3	64.9	73.1	74.8
1950.....	98.2	96.7	101.9	103.5	75.3	76.7	77.9
1951.....	93.7	93.0	106.7	107.6	81.8	87.3	88.0
1952.....	93.0	92.0	107.5	108.7	80.3	86.3	87.3
1953.....	96.9	97.5	103.1	102.6	89.0	91.8	91.3
1954.....	96.1	96.3	104.1	103.8	86.1	89.6	89.4
1955.....	101.2	100.4	98.8	99.6	93.8	92.7	93.4
1956.....	102.4	100.6	97.6	99.4	96.2	93.9	95.6
1957.....	100.9	100.2	99.1	99.8	95.3	98.4	99.1
1958.....	97.4	96.9	102.7	103.2	97.0	99.6	100.1
1959.....	101.8	102.9	98.3	97.2	103.8	102.0	100.9
1960.....	100.6	100.4	99.3	99.6	106.9	106.1	106.5
1961.....	101.7	102.3	98.3	97.7	111.0	109.1	108.5
1962.....	106.5	106.2	93.9	94.1	116.0	108.9	109.2
1963.....	110.2	110.0	90.7	90.9	119.9	108.8	109.0
1964.....	113.5	112.2	88.1	89.1	124.4	109.6	110.9
1965.....	118.1	118.5	84.7	84.4	131.8	111.6	111.2
1966 ²	116.0	117.7	84.7	84.9	138.0	116.9	117.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.2	1.3	-1.2	-1.3	3.4	2.2	2.1
1957-66.....	2.2	2.2	-2.2	-2.2	4.0	1.7	1.7

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 62. GLASS CONTAINERS SIC 3221
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	70.1	73.3	142.7	136.4	36.8	52.5	50.2
1947.....	95.2	94.9	100.8	105.4	84.8	85.5	89.4
1948.....	(²)	(²)	(²)	(²)	71.4	(²)	(²)
1949.....	87.8	85.7	113.9	116.6	64.9	73.9	75.7
1950.....	96.7	95.1	103.5	105.2	75.3	77.9	79.2
1951.....	92.2	91.6	108.4	109.2	81.8	88.7	89.3
1952.....	91.8	90.7	109.0	110.2	80.3	87.5	88.5
1953.....	96.4	97.1	103.7	103.0	89.0	92.3	91.7
1954.....	95.9	96.2	104.3	103.9	86.1	89.8	89.5
1955.....	100.5	99.7	99.5	100.3	93.8	93.3	94.1
1956.....	102.0	100.0	98.0	100.0	96.2	94.3	96.2
1957.....	100.6	99.8	95.4	100.2	95.3	98.7	99.5
1958.....	97.9	97.3	102.2	102.8	97.0	99.1	99.7
1959.....	101.7	102.9	98.4	97.2	103.8	102.1	100.9
1960.....	100.8	100.4	99.2	99.6	106.9	106.0	106.5
1961.....	101.5	102.0	98.6	98.0	111.0	109.4	108.8
1962.....	106.7	106.2	93.7	94.1	116.0	108.7	109.2
1963.....	110.0	109.7	90.9	91.2	119.9	109.0	109.3
1964.....	113.5	112.0	88.1	89.3	124.4	109.6	111.1
1965.....	118.0	118.4	84.7	84.4	121.8	111.7	111.3
1966.....	117.8	117.4	84.9	85.1	138.0	117.1	117.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.2	1.4	-1.2	-1.3	3.4	2.1	2.0
1957-66.....	2.2	2.2	-2.2	-2.1	4.0	1.7	1.7

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 63. GLASS CONTAINERS SIC 2221
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	CUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	62.1	(³)	161.1	(³)	36.8	59.3	(³)
1947.....	99.4	(97.1)	100.6	(102.9)	84.8	85.3	(87.3)
1948.....	(³)	(³)	(³)	(³)	71.4	(³)	(³)
1949.....	97.2	(95.9)	102.9	(104.3)	64.9	66.8	(67.7)
1950.....	113.2	(112.1)	88.3	(89.2)	75.3	66.5	(67.2)
1951.....	107.6	(106.4)	92.9	(94.0)	81.8	76.0	(76.9)
1952.....	105.4	(104.0)	94.9	(96.1)	80.3	76.2	(77.2)
1953.....	102.1	(101.4)	98.0	(98.7)	89.0	87.2	(87.8)
1954.....	98.2	(97.7)	101.9	(102.3)	86.1	87.7	(88.1)
1955.....	106.2	(106.3)	94.1	(94.0)	93.8	88.3	(88.2)
1956.....	106.4	(106.2)	94.0	(94.2)	96.2	90.4	(90.6)
1957.....	104.0	(103.9)	96.2	(96.3)	99.3	95.5	(95.6)
1958.....	93.5	(93.5)	106.5	(106.9)	97.0	103.7	(103.7)
1959.....	103.0	(103.1)	97.1	(97.0)	103.8	100.8	(100.7)
1960.....	99.9	(100.1)	100.1	(99.9)	106.9	107.0	(106.8)
1961.....	102.8	(104.5)	96.3	(95.7)	111.0	106.9	(106.2)
1962.....	105.5	(105.8)	94.8	(94.5)	116.0	110.0	(109.6)
1963.....	112.0	(112.5)	89.3	(88.9)	119.9	107.1	(106.6)
1964.....	113.8	(113.8)	87.9	(87.9)	124.4	109.3	(109.3)
1965.....	119.0	(119.4)	84.1	(83.8)	131.8	110.8	(110.4)
1966 ⁴	119.3	(120.3)	83.8	(83.1)	138.0	115.7	(114.7)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	0.6	(0.7)	-0.6	(-0.7)	3.4	2.8	(2.6)
1957-66.....	2.3	(2.4)	-2.3	(-2.3)	4.0	1.6	(1.5)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 64. CEMENT, HYDRAULIC SIC 3241
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1935-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	60.2	(¹)	166.1	(¹)	41.3	68.6	(¹)
1947.....	65.2	60.4	153.4	165.5	63.7	97.7	105.4
1948.....	(¹)	(¹)	(¹)	(¹)	65.8	(¹)	(¹)
1949.....	72.2	68.5	138.5	145.9	70.1	97.1	102.3
1950.....	72.6	69.2	137.7	144.5	75.5	104.0	109.1
1951.....	74.5	71.3	134.2	140.2	80.3	107.8	112.6
1952.....	76.0	72.2	131.6	138.5	81.1	106.7	112.3
1953.....	84.0	79.6	119.0	125.7	85.7	102.0	107.7
1954.....	91.9	88.6	108.8	112.9	88.6	96.4	100.0
1955.....	97.4	93.5	102.7	107.0	96.2	98.8	102.9
1956.....	101.0	98.4	99.0	101.7	101.4	100.4	103.1
1957.....	93.9	95.5	106.4	104.8	94.6	100.7	99.1
1958.....	98.7	98.6	101.3	101.4	98.3	99.6	99.7
1959.....	107.4	105.8	93.1	94.5	107.1	99.7	101.2
1960.....	105.1	104.7	95.1	95.5	100.3	95.4	95.8
1961.....	115.0	115.9	87.0	86.3	101.4	88.2	87.5
1962.....	122.3	122.9	81.8	81.4	105.3	86.1	85.7
1963.....	130.2	130.0	76.8	76.9	110.0	84.5	84.6
1964.....	136.5	134.6	73.2	74.3	114.7	84.0	85.2
1965.....	138.6	138.8	72.2	72.1	116.0	83.7	83.6
1966 ²	147.1	145.5	68.0	68.7	119.6	81.3	82.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.3	4.7	-4.1	-4.5	3.0	-1.3	-1.6
1957-66.....	5.2	5.0	-4.9	-4.8	2.4	-2.6	-2.5

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 65. CEMENT, HYDRAULIC SIC 3241
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER—		UNIT LABOR REQUIREMENTS IN TERMS OF—		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	60.8	61.6	164.4	162.2	41.3	67.9	67.0
1947.....	63.5	58.5	157.5	170.8	63.7	100.3	108.8
1948.....	(²)	(²)	(²)	(²)	69.8	(²)	(²)
1949.....	71.0	67.1	140.8	149.1	70.1	98.7	104.5
1950.....	71.2	67.5	140.5	148.1	75.5	106.1	111.8
1951.....	73.5	70.2	136.0	142.5	80.3	109.2	114.4
1952.....	75.1	71.0	133.2	140.8	81.1	108.0	114.2
1953.....	83.6	78.6	119.6	127.3	85.7	102.5	109.1
1954.....	91.7	87.9	109.0	113.8	88.6	96.6	100.8
1955.....	96.5	92.1	103.6	108.5	96.2	99.7	104.4
1956.....	99.8	96.8	100.2	103.4	101.4	101.6	104.8
1957.....	92.9	94.8	107.6	105.5	94.6	101.8	99.8
1958.....	99.6	99.5	100.4	100.5	98.3	98.7	98.8
1959.....	107.6	105.7	92.9	94.6	107.1	99.5	101.3
1960.....	106.3	105.7	94.1	94.6	100.3	94.4	94.9
1961.....	117.0	117.8	85.5	84.9	101.4	86.7	86.1
1962.....	124.9	125.4	80.1	79.8	105.3	84.3	84.0
1963.....	135.0	134.3	74.1	74.5	110.0	81.5	81.9
1964.....	144.5	141.4	69.2	70.7	114.7	79.4	81.1
1965.....	146.5	145.9	68.3	68.5	116.0	79.2	79.5
1966 ³	156.5	153.5	63.9	65.1	119.6	76.4	77.9
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.8	5.2	-4.6	-4.9	3.0	-1.7	-2.1
1957-66.....	6.0	5.8	-5.7	-5.5	2.4	-3.4	-3.2

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 66. CEMENT, HYDRAULIC SIC 3241
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	CUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	56.6	(³)	176.0	(³)	41.3	72.7	(³)
1947.....	76.7	(74.9)	130.5	(133.4)	63.7	83.1	(85.0)
1948.....	(³)	(³)	(³)	(³)	65.8	(³)	(³)
1949.....	80.2	(79.0)	124.7	(126.5)	70.1	87.4	(88.7)
1950.....	82.5	(81.6)	121.2	(122.5)	75.5	91.5	(92.5)
1951.....	80.4	(79.3)	124.4	(126.0)	80.3	99.9	(101.2)
1952.....	81.6	(80.5)	122.6	(124.3)	81.1	99.4	(100.8)
1953.....	86.6	(86.0)	115.5	(116.3)	85.7	99.0	(99.7)
1954.....	93.5	(93.0)	107.0	(107.6)	88.6	94.8	(95.3)
1955.....	102.5	(103.0)	97.2	(97.1)	96.2	93.5	(93.4)
1956.....	105.0	(108.8)	91.7	(91.9)	101.4	93.0	(93.2)
1957.....	100.4	(100.3)	99.6	(99.7)	94.6	94.2	(94.3)
1958.....	93.6	(93.6)	106.8	(106.8)	98.3	105.0	(105.0)
1959.....	106.3	(106.4)	94.1	(94.0)	107.1	100.8	(100.7)
1960.....	99.3	(99.4)	100.7	(100.6)	100.3	101.0	(100.9)
1961.....	104.6	(105.3)	95.6	(95.0)	101.4	96.9	(96.3)
1962.....	109.3	(109.7)	91.5	(91.2)	105.3	96.3	(96.0)
1963.....	108.3	(108.7)	92.4	(92.0)	110.0	101.6	(101.2)
1964.....	104.0	(103.9)	96.2	(96.3)	114.7	110.3	(110.4)
1965.....	105.7	(106.1)	94.6	(94.2)	116.0	109.7	(109.3)
1966 ⁴	109.0	(109.5)	91.7	(91.0)	119.6	109.7	(108.8)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.9	(2.1)	-1.9	(-2.0)	3.0	1.0	(0.9)
1957-66.....	1.1	(1.2)	-1.1	(-1.1)	2.4	1.3	(1.2)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 67. CONCRETE PRODUCTS SIC 3271, 3272
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	61.0	58.3	163.8	171.4	40.9	67.0	70.1
1948.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
1949.....	68.7	66.4	145.6	150.7	52.9	77.0	79.7
1950.....	77.3	74.8	129.4	133.7	67.3	87.1	90.0
1951.....	83.5	78.5	119.2	127.4	78.2	93.2	95.6
1952.....	88.7	84.5	112.7	118.4	84.4	95.1	99.9
1953.....	88.6	86.6	113.7	115.4	74.5	84.7	86.0
1954.....	88.5	88.7	112.5	112.7	76.9	86.5	86.7
1955.....	93.6	94.0	106.9	106.4	88.8	94.9	94.5
1956.....	104.0	102.6	96.2	97.5	104.2	100.2	101.6
1957.....	100.6	100.4	99.4	99.6	100.6	100.0	100.2
1958.....	97.2	98.9	102.9	101.1	96.0	98.8	97.1
1959.....	102.1	100.5	98.0	99.5	103.3	101.2	102.8
1960.....	100.7	96.2	99.3	103.9	104.5	103.8	108.6
1961.....	102.9	98.2	97.1	101.8	104.8	101.8	106.7
1962.....	105.8	100.2	94.6	99.6	106.4	102.5	108.2
1963.....	110.9	108.4	90.1	92.2	120.8	108.9	111.4
1964.....	115.7	112.6	86.4	88.8	129.0	111.5	114.6
1965.....	118.8	117.7	84.1	85.0	141.3	118.9	120.1
1966 ²	122.8	123.9	81.4	80.7	149.3	121.6	120.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.0	3.2	-2.9	-3.1	5.4	2.3	2.2
1957-66.....	2.5	2.5	-2.5	-2.4	4.9	2.3	2.3

¹ Not available.

² Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 68. CONCRETE PRODUCTS SIC 3271, 3272
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-66
 (INDEXES, 1957-59 = 100).

YEAR	UNIT LABOR REQUIREMENTS IN TERMS OF--				RELATED DATA		
	OUTPUT PER-- PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	53.1	51.2	188.3	195.4	40.9	77.0	79.9
1948.....	(2)	(2)	(2)	(2)	(2)	(2)	(2)
1949.....	64.4	62.2	155.4	160.7	52.9	82.2	85.0
1950.....	74.5	72.1	134.2	138.8	67.3	90.3	93.4
1951.....	81.5	75.6	122.6	132.4	78.2	95.9	103.5
1952.....	85.0	80.6	117.7	124.1	84.4	99.3	104.7
1953.....	84.2	83.1	118.8	120.4	74.5	88.5	89.7
1954.....	88.9	88.6	112.5	112.9	76.9	86.5	86.8
1955.....	92.6	93.2	108.0	107.3	88.8	95.9	95.3
1956.....	103.6	101.9	96.5	98.2	104.2	100.6	102.3
1957.....	101.1	100.8	98.9	99.2	100.6	99.5	99.8
1958.....	98.3	100.4	101.8	99.6	96.0	97.7	95.6
1959.....	100.5	98.7	99.5	101.4	103.3	102.8	104.7
1960.....	95.5	94.1	100.5	106.2	104.5	105.0	111.0
1961.....	102.6	96.6	97.4	103.5	104.8	102.1	108.5
1962.....	105.1	98.2	95.1	101.8	108.4	103.1	110.4
1963.....	112.7	109.1	88.7	91.6	120.8	107.2	110.7
1964.....	118.5	114.1	84.4	87.7	129.0	108.9	113.1
1965.....	126.4	118.6	83.1	84.3	141.3	117.4	119.1
1966.....	126.2	127.2	79.2	78.6	149.3	118.3	117.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.6	3.7	-3.5	-3.5	5.4	1.8	1.7
1957-66.....	2.8	2.7	-2.8	-2.7	4.9	2.0	2.1

¹ The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

² Not available.

³ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 69. CONCRETE PRODUCTS SIC 3271, 3272
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	123.6	(120.6)	80.9	(82.9)	40.9	33.1	(33.9)
1948.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)
1949.....	86.9	(87.7)	112.5	(114.0)	52.9	59.5	(60.3)
1950.....	87.7	(86.8)	114.0	(115.2)	67.3	76.7	(77.5)
1951.....	92.9	(91.7)	107.7	(109.1)	78.2	84.2	(85.3)
1952.....	104.2	(102.8)	96.0	(97.3)	84.4	81.0	(82.1)
1953.....	103.6	(102.9)	96.5	(97.2)	74.5	71.9	(72.4)
1954.....	89.2	(88.8)	112.1	(112.6)	76.9	86.2	(86.6)
1955.....	97.0	(97.2)	103.0	(102.9)	88.8	91.5	(91.4)
1956.....	105.6	(105.4)	94.7	(94.9)	104.2	98.7	(98.9)
1957.....	99.1	(98.9)	100.9	(101.1)	100.6	101.5	(101.7)
1958.....	93.5	(93.4)	107.0	(107.1)	96.0	102.7	(102.8)
1959.....	107.8	(107.9)	92.7	(92.6)	103.3	95.8	(95.7)
1960.....	104.5	(104.7)	95.7	(95.5)	104.5	100.0	(99.8)
1961.....	103.8	(104.4)	96.4	(95.8)	104.8	101.0	(100.4)
1962.....	107.9	(108.2)	92.7	(92.4)	108.4	100.5	(100.2)
1963.....	105.5	(106.0)	94.8	(94.4)	120.8	114.5	(114.0)
1964.....	107.3	(107.3)	93.2	(93.2)	129.0	120.2	(120.2)
1965.....	113.7	(114.2)	88.0	(87.5)	141.3	124.3	(123.7)
1966 ⁴	112.4	(113.4)	86.9	(88.1)	149.3	132.8	(131.6)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	0.7	(0.8)	-0.7	(-0.8)	5.4	4.8	(4.6)
1957-66.....	1.6	(1.6)	-1.5	(-1.6)	4.9	3.3	(3.2)

¹ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 70. STEEL SIC 331
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-67
 (INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	84.4	84.3	118.5	118.6	87.0	103.1	103.2
1948.....	85.8	84.8	116.5	117.9	91.6	106.7	108.0
1949.....	83.9	85.3	119.1	117.3	80.5	95.9	94.4
1950.....	95.9	93.9	104.2	106.5	101.7	106.0	108.3
1951.....	98.5	94.4	101.5	106.0	110.6	112.3	117.2
1952.....	97.2	95.0	102.9	105.2	97.5	100.3	102.6
1953.....	100.4	97.0	99.7	103.1	114.5	114.1	118.0
1954.....	90.3	92.6	110.7	108.0	91.7	101.5	99.0
1955.....	108.8	105.2	91.9	95.0	120.9	111.1	114.9
1956.....	107.1	103.7	93.4	96.5	119.0	111.1	114.8
1957.....	101.4	101.1	98.6	99.0	114.8	113.2	113.6
1958.....	90.8	93.5	110.1	107.0	85.8	94.5	91.8
1959.....	107.6	105.0	93.0	95.3	99.3	92.3	94.6
1960.....	97.2	98.6	102.9	101.4	99.5	102.4	100.9
1961.....	101.7	101.7	98.3	98.3	95.2	93.6	93.6
1962.....	107.5	106.9	93.0	93.5	100.2	93.2	93.7
1963.....	114.7	111.8	87.2	89.5	106.3	92.7	95.1
1964.....	122.0	116.6	81.9	85.7	120.7	98.9	103.5
1965.....	127.1	121.3	78.7	82.4	131.3	103.3	108.2
1966.....	128.9	123.7	77.6	80.8	132.1	102.5	106.8
1967 ¹	123.1	119.5	81.2	83.4	122.9	99.8	102.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	1.8	1.7	-1.8	-1.7	1.4	-0.4	-0.3
1957-67.....	3.2	2.6	-3.1	-2.5	3.1	0.0	0.5

¹Preliminary.

Source: Output based on data from the American Iron and Steel Institute and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 71. STEEL SIC 331
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-67
 (INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	78.6	78.4	127.2	127.6	87.0	110.7	111.0
1948.....	80.1	78.8	124.9	126.9	91.6	114.4	116.2
1949.....	75.3	80.8	126.1	123.7	80.5	101.5	99.6
1950.....	90.0	87.7	111.1	114.0	101.7	113.0	115.9
1951.....	92.6	88.1	108.0	113.6	110.6	119.5	125.6
1952.....	93.5	90.9	107.0	110.1	97.5	104.3	107.3
1953.....	95.8	92.0	104.4	108.6	114.5	119.5	124.4
1954.....	87.2	89.7	114.7	111.5	91.7	105.2	102.2
1955.....	103.9	99.8	96.3	100.2	120.9	116.4	121.2
1956.....	103.7	99.7	96.4	100.3	119.0	114.7	119.4
1957.....	99.3	98.8	100.7	101.2	114.8	115.6	116.2
1958.....	91.6	95.0	109.2	105.2	85.8	93.7	90.3
1959.....	109.5	106.2	91.3	94.2	99.3	90.7	93.5
1960.....	97.7	99.6	102.3	100.4	99.5	101.8	99.9
1961.....	103.4	103.3	96.7	96.8	95.2	92.1	92.2
1962.....	109.3	108.4	91.5	92.2	100.2	91.7	92.4
1963.....	115.2	111.5	86.8	89.7	106.3	92.3	95.3
1964.....	121.6	114.7	82.3	87.2	120.7	99.3	105.2
1965.....	126.6	119.6	79.0	83.6	131.3	103.7	109.8
1966.....	129.1	122.7	77.4	81.5	132.1	102.3	107.7
1967 ²	125.3	121.1	79.8	82.6	122.9	98.1	101.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	2.3	2.2	-2.3	-2.1	1.4	-0.9	-0.8
1957-67.....	3.2	2.5	-3.1	-2.5	3.1	-0.1	0.6

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output based on data from the American Iron and Steel Institute and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 72. STEEL SIC 331
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	125.9	(124.8)	79.4	(80.1)	87.0	69.1	(69.7)
1948.....	126.3	(125.5)	79.1	(79.7)	91.6	72.5	(73.0)
1949.....	112.9	(112.3)	88.6	(85.1)	80.5	71.3	(71.7)
1950.....	135.8	(135.1)	73.6	(74.0)	101.7	74.9	(75.3)
1951.....	137.2	(136.7)	72.9	(73.1)	110.6	80.6	(80.9)
1952.....	118.2	(117.9)	84.6	(84.8)	57.5	82.5	(82.7)
1953.....	126.7	(126.5)	79.0	(75.0)	114.5	50.4	(90.5)
1954.....	107.9	(107.9)	92.7	(92.7)	91.7	85.0	(85.0)
1955.....	138.0	(138.0)	72.5	(72.5)	120.9	87.6	(87.6)
1956.....	125.1	(125.1)	79.9	(79.9)	119.0	95.1	(95.1)
1957.....	112.0	(112.0)	89.3	(89.3)	114.8	102.5	(102.5)
1958.....	87.6	(87.6)	114.2	(114.2)	85.8	98.0	(98.0)
1959.....	99.8	(99.8)	100.2	(100.2)	99.3	99.5	(99.5)
1960.....	94.6	(94.8)	105.7	(105.5)	99.5	105.2	(105.0)
1961.....	95.0	(95.5)	105.3	(104.7)	95.2	100.2	(99.7)
1962.....	100.5	(101.2)	99.5	(98.8)	100.2	99.7	(99.0)
1963.....	112.1	(112.8)	89.2	(88.6)	106.3	94.8	(94.2)
1964.....	124.2	(125.1)	80.5	(80.0)	120.7	57.2	(96.5)
1965.....	129.1	(130.0)	77.5	(76.9)	131.3	101.7	(101.0)
1966.....	127.6	(128.5)	78.3	(77.8)	132.1	103.5	(102.8)
1967 ³	114.3	(115.1)	87.5	(86.9)	122.9	107.5	(106.8)
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	-0.6	(-0.6)	0.7	(0.6)	1.4	2.0	(2.0)
1957-67.....	2.9	(2.9)	-2.8	(-2.9)	3.1	0.3	(0.2)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Preliminary.

Source: Output based on data from the American Iron and Steel Institute and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

**TABLE 73. PRIMARY COPPER, LEAD AND ZINC SIC 3331, 3332, 3333
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1939-66**

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	(¹)	(¹)	(¹)	(¹)	74.7	(¹)	(¹)
1947.....	82.4	76.2	121.3	131.2	95.7	116.1	125.6
1948.....	(¹)	(¹)	(¹)	(¹)	93.6	(¹)	(¹)
1949.....	83.1	79.9	120.4	125.1	91.2	109.8	114.1
1950.....	92.8	88.5	107.7	113.0	102.2	110.1	115.5
1951.....	95.5	90.0	104.7	111.2	101.3	106.1	112.6
1952.....	97.7	91.8	102.3	108.9	103.0	105.4	112.2
1953.....	97.2	91.4	102.9	109.4	104.7	107.7	114.5
1954.....	90.2	90.6	110.9	110.4	96.4	106.9	106.4
1955.....	103.3	101.0	96.8	99.0	109.7	106.2	108.6
1956.....	106.1	102.5	94.3	97.6	119.0	112.2	116.1
1957.....	104.5	103.0	95.7	97.1	116.2	111.2	112.8
1958.....	100.9	101.0	99.1	99.0	100.5	99.6	99.5
1959.....	93.4	95.0	107.1	105.3	83.3	89.2	87.7
1960.....	107.7	106.0	92.9	94.4	108.2	100.5	102.1
1961.....	113.4	110.8	88.2	90.3	109.8	96.8	99.1
1962.....	120.2	117.7	83.2	85.0	115.3	95.9	98.0
1963.....	121.8	120.4	82.1	83.1	114.1	93.7	94.8
1964.....	125.3	125.1	79.8	80.0	119.8	95.6	95.6
1965.....	131.6	129.1	76.0	77.5	126.6	96.2	98.1
1966.....	131.3	127.4	76.2	78.5	130.2	99.2	102.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.3	2.6	-2.3	-2.6	1.3	-1.0	-1.3
1957-66.....	3.6	3.4	-3.5	-3.2	2.9	-0.7	-0.5

¹Not available.

²Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 74. PRIMARY COPPER, LEAD AND ZINC SIC 3331, 3332, 3333
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	69.9	68.7	143.0	145.6	74.7	106.8	108.8
1947.....	76.6	70.6	130.6	141.7	95.7	125.0	135.6
1948.....	(²)	(²)	(²)	(²)	93.6	(²)	(²)
1949.....	80.4	77.2	124.5	129.6	91.2	113.5	118.2
1950.....	88.9	84.5	112.4	118.4	102.2	114.9	121.0
1951.....	92.9	86.9	107.7	115.1	101.3	109.1	116.6
1952.....	94.9	88.6	105.3	112.9	103.0	108.5	116.3
1953.....	93.6	87.5	106.8	114.2	104.7	111.8	119.6
1954.....	89.3	85.8	112.0	111.3	96.4	108.0	107.3
1955.....	101.3	98.7	98.7	101.4	109.7	108.3	111.2
1956.....	103.1	99.2	97.0	100.8	119.0	115.4	119.9
1957.....	102.6	101.0	97.5	99.0	116.2	113.3	115.0
1958.....	101.8	101.8	98.2	98.2	100.5	98.7	98.7
1959.....	94.7	96.5	105.6	103.6	83.3	88.0	86.3
1960.....	107.1	105.2	93.3	95.1	108.2	101.0	102.9
1961.....	113.4	110.2	88.2	90.7	109.8	96.8	99.6
1962.....	119.6	116.7	83.6	85.7	115.3	96.4	98.8
1963.....	120.1	118.5	83.3	84.4	114.1	95.0	96.3
1964.....	122.6	122.6	81.6	81.6	119.8	97.7	97.7
1965.....	128.7	126.0	77.7	79.4	126.6	98.4	100.5
1966 ³	128.7	124.4	77.7	80.4	130.2	101.2	104.7
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	2.6	2.9	-2.5	-2.8	1.3	-1.2	1.5
1957-66.....	3.3	3.1	-3.2	-3.0	2.9	-0.4	-0.2

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

**TABLE 75. PRIMARY COPPER, LEAD AND ZINC SIC 3331, 3332,3333
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-66**

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRDUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRDUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1939.....	(³)	(³)	(³)	(³)	74.7	(³)	(³)
1947.....	125.1	(126.3)	77.4	(75.2)	95.7	74.1	(75.8)
1948.....	(³)	(³)	(³)	(³)	93.6	(³)	(³)
1949.....	98.4	(97.3)	101.6	(102.7)	91.2	92.7	(93.7)
1950.....	117.1	(115.9)	85.4	(86.3)	102.2	87.3	(88.2)
1951.....	110.5	(109.0)	90.5	(91.7)	101.3	91.7	(92.9)
1952.....	113.3	(111.8)	88.3	(89.4)	103.0	90.9	(92.1)
1953.....	118.3	(117.5)	84.5	(85.1)	104.7	88.5	(89.1)
1954.....	95.0	(94.5)	105.3	(105.8)	96.4	101.5	(102.0)
1955.....	114.0	(114.3)	87.7	(87.5)	109.7	96.2	(96.0)
1956.....	122.6	(122.4)	81.6	(81.7)	115.0	97.1	(97.2)
1957.....	114.1	(114.0)	87.6	(87.7)	116.2	101.8	(101.9)
1958.....	97.1	(97.1)	103.0	(103.0)	100.5	103.5	(103.5)
1959.....	88.0	(88.1)	113.7	(113.6)	83.3	94.7	(94.6)
1960.....	110.2	(110.2)	90.8	(90.8)	108.2	98.2	(98.2)
1961.....	113.5	(113.8)	88.1	(87.9)	105.8	96.7	(96.5)
1962.....	123.2	(122.8)	81.2	(81.4)	115.3	93.6	(93.9)
1963.....	130.4	(130.1)	76.7	(76.9)	114.1	87.5	(87.7)
1964.....	139.6	(138.7)	71.6	(72.1)	119.8	85.8	(86.4)
1965.....	147.2	(146.7)	67.9	(68.2)	126.6	86.0	(86.3)
1966 ⁴	145.0	(145.2)	69.0	(68.9)	130.2	89.8	(89.7)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	1.1	(1.2)	-1.1	(-1.1)	1.3	0.2	(0.2)
1957-66.....	4.9	(4.9)	-4.7	(-4.7)	2.9	-2.0	(-1.9)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 76. PRIMARY ALUMINUM SIC 3334
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1947.....	68.1	64.6	146.9	154.9	32.6	47.9	50.5
1948.....	(¹)	(¹)	(¹)	(¹)	35.7	(¹)	(¹)
1949.....	72.4	66.1	138.0	151.3	34.7	47.9	52.5
1950.....	72.6	72.4	137.8	138.1	41.5	57.2	57.3
1951.....	74.3	70.8	134.6	141.2	48.5	65.3	68.5
1952.....	71.3	69.3	140.3	144.3	54.6	76.6	78.8
1953.....	69.6	69.8	143.6	143.2	73.2	105.1	104.8
1954.....	77.4	76.7	129.2	130.5	85.7	110.7	111.8
1955.....	85.2	85.0	117.4	117.7	91.6	107.5	107.8
1956.....	86.4	87.3	115.7	114.6	98.0	113.4	112.3
1957.....	87.1	87.7	114.8	114.0	95.9	110.1	109.3
1958.....	87.3	87.5	102.8	102.5	90.8	93.3	93.1
1959.....	117.3	116.1	85.3	86.1	113.3	96.6	97.6
1960.....	121.3	121.4	82.4	82.4	116.2	95.8	95.7
1961.....	125.7	126.2	79.5	79.3	109.4	87.0	86.7
1962.....	131.1	132.4	76.3	75.5	121.3	92.5	91.6
1963.....	135.5	136.9	73.8	73.0	132.0	97.4	96.4
1964.....	133.4	141.3	74.9	70.8	145.7	109.2	103.1
1965.....	141.7	145.2	70.5	68.9	157.2	110.9	108.3
1966 ²	145.3	150.8	67.0	66.3	165.4	113.5	112.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	4.9	5.3	-4.7	-5.1	8.9	3.7	3.3
1957-66.....	5.3	5.6	-5.0	-5.3	6.7	1.3	1.0

¹Not available.
²Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 77. PRIMARY ALUMINUM SIC 3334
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1947.....	65.3	61.9	153.1	161.7	32.6	49.9	52.7
1948.....	(²)	(²)	(²)	(²)	35.7	(²)	(²)
1949.....	65.8	62.9	143.2	155.1	34.7	49.7	55.2
1950.....	68.8	69.3	145.3	144.3	41.5	60.3	59.9
1951.....	70.4	67.1	142.1	145.1	48.5	68.9	72.3
1952.....	68.4	66.6	146.2	150.2	54.6	79.8	82.0
1953.....	64.4	65.1	155.3	153.7	73.2	113.7	112.5
1954.....	74.2	73.7	134.8	135.7	85.7	115.5	116.3
1955.....	82.2	82.2	121.6	121.7	91.6	111.4	111.5
1956.....	84.6	85.7	118.3	116.6	98.0	115.9	114.3
1957.....	86.4	87.2	115.7	114.7	95.9	111.0	110.0
1958.....	99.5	99.5	100.6	100.6	90.8	91.3	91.3
1959.....	116.0	114.7	86.2	87.2	113.3	97.7	98.8
1960.....	121.0	121.3	82.6	82.4	116.2	96.0	95.8
1961.....	127.2	127.5	78.6	78.4	109.4	86.0	85.8
1962.....	130.4	132.0	76.7	75.8	121.3	93.0	91.9
1963.....	134.3	136.1	74.5	73.5	132.0	98.3	97.0
1964.....	128.3	138.2	78.0	72.3	145.7	113.6	105.4
1965.....	137.8	142.4	72.6	70.2	157.2	114.1	110.4
1966 ³	146.2	148.3	68.4	67.4	169.4	115.9	114.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	5.1	5.6	-4.9	-5.3	8.9	3.5	3.0
1957-66.....	4.9	5.4	-4.6	-5.1	6.7	1.7	1.3

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Not available.

³Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 78. PRIMARY ALUMINUM SIC 3334
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1947-66

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1947.....	80.7	(78.9)	123.9	(126.7)	32.6	40.4	(41.3)
1948.....	(³)	(³)	(³)	(³)	35.7	(³)	(³)
1949.....	84.2	(83.2)	118.7	(120.2)	34.7	41.2	(41.7)
1950.....	90.6	(89.8)	110.4	(111.3)	41.5	45.8	(46.2)
1951.....	93.6	(92.6)	106.8	(108.0)	48.5	51.8	(52.4)
1952.....	84.4	(83.2)	118.5	(120.1)	54.6	64.7	(65.6)
1953.....	101.0	(100.3)	99.0	(99.7)	73.2	72.5	(73.0)
1954.....	92.2	(91.9)	108.5	(108.9)	85.7	93.0	(93.3)
1955.....	98.7	(98.9)	101.3	(101.1)	91.6	92.8	(92.6)
1956.....	94.3	(94.1)	106.0	(106.2)	98.0	103.9	(104.1)
1957.....	90.0	(90.0)	111.1	(111.2)	95.9	106.5	(106.6)
1958.....	90.1	(90.1)	111.0	(111.0)	90.8	100.8	(100.8)
1959.....	122.2	(122.4)	81.8	(81.7)	113.3	92.7	(92.6)
1960.....	122.2	(122.2)	81.8	(81.8)	116.2	95.1	(95.1)
1961.....	120.8	(121.0)	82.8	(82.6)	109.4	90.6	(90.4)
1962.....	134.2	(133.7)	74.5	(74.8)	121.3	90.4	(90.7)
1963.....	140.5	(140.4)	71.0	(71.2)	132.0	93.7	(94.0)
1964.....	157.3	(156.2)	63.6	(64.0)	145.7	92.6	(93.3)
1965.....	158.3	(157.8)	63.2	(63.4)	157.2	99.3	(99.6)
1966 ⁴	162.4	(162.6)	61.6	(61.5)	165.4	104.3	(104.2)
AVERAGE ANNUAL RATES (PERCENT)							
1947-66.....	3.8	(3.9)	-3.7	(-3.8)	8.9	4.7	(4.7)
1957-66.....	6.9	(6.9)	-6.5	(-6.4)	6.7	-0.2	(-0.2)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Not available.

⁴Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 79. ALUMINUM ROLLING AND DRAWING SIC 3352
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1958-66
 (INDEXES, 1958 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1958.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1959.....	110.2	107.9	90.7	92.7	130.2	118.1	120.7
1960.....	103.8	102.3	96.3	97.8	116.6	112.3	114.0
1961.....	114.7	112.4	87.2	88.9	127.4	111.1	113.3
1962.....	123.6	122.0	80.9	82.0	143.5	116.1	117.6
1963.....	137.4	135.4	72.8	73.9	159.1	115.8	117.5
1964.....	150.0	147.0	66.6	68.0	179.6	119.7	122.2
1965.....	171.0	165.0	58.5	60.6	210.0	122.8	127.3
1966 ¹	175.9	169.7	56.9	58.9	237.8	135.2	140.1
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	7.8	7.4	-7.2	-6.9	10.5	2.5	2.8

¹Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 80. ALUMINUM ROLLING AND DRAWING SIC 3352
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 PRODUCTION WORKERS, 1958-66

(INDEXES, 1958= 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1958.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1959.....	107.0	104.4	93.5	55.8	130.2	121.7	124.7
1960.....	103.9	102.0	96.2	98.0	116.6	112.2	114.3
1961.....	114.0	111.3	87.8	89.9	127.4	111.8	114.5
1962.....	122.2	120.6	81.8	82.9	143.5	117.4	119.0
1963.....	135.6	133.4	73.7	75.0	159.1	117.3	119.3
1964.....	147.9	144.6	67.6	69.2	179.6	121.4	124.2
1965.....	168.1	161.2	59.5	62.0	210.0	124.9	130.3
1966 ²	170.8	163.8	58.5	61.1	237.8	139.2	145.2
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	7.6	7.2	-7.0	-6.7	10.5	2.7	3.1

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output, employment, and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 81. ALUMINUM ROLLING AND DRAWING SIC 3352
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1958-66

(INDEXES, 1958= 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1958.....	100.0	(100.0)	100.0	(100.0)	100.0	100.0	(100.0)
1959.....	123.2	(123.3)	81.2	(81.1)	130.2	105.7	(105.6)
1960.....	103.6	(103.6)	96.6	(96.6)	116.6	112.6	(112.6)
1961.....	116.9	(117.1)	85.6	(85.4)	127.4	109.0	(108.8)
1962.....	128.7	(128.2)	77.7	(78.0)	143.5	111.5	(111.9)
1963.....	144.2	(143.7)	69.3	(69.6)	159.1	110.3	(110.7)
1964.....	157.8	(156.7)	63.4	(63.8)	179.6	113.8	(114.6)
1965.....	182.1	(181.7)	54.9	(55.0)	210.0	115.3	(115.6)
1966.....	196.7	(196.9)	50.8	(50.8)	237.8	120.9	(120.8)
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	8.6	(8.5)	-7.9	(-7.9)	10.5	1.8	(1.8)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method of estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 82. RADIO AND TELEVISION RECEIVING SETS SIC 3651
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 ALL EMPLOYEES, 1958-66

(INDEXES, 1958 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
	1958.....	100.0	100.0	100.0	100.0	100.0	100.0
1959.....	106.9	106.9	93.5	93.5	120.4	112.6	112.6
1960.....	109.3	109.6	91.5	91.3	117.9	107.9	107.6
1961.....	109.6	112.1	91.2	89.2	126.6	115.5	112.9
1962.....	124.5	125.0	86.3	86.0	155.3	124.7	124.2
1963.....	138.7	138.9	72.1	72.0	169.5	122.2	122.0
1964.....	142.9	140.6	70.0	71.1	185.5	130.1	132.2
1965.....	160.8	156.4	62.2	64.0	242.2	150.6	154.9
1966.....	163.4	162.3	61.2	61.6	319.8	195.7	197.1
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	6.8	6.5	-6.4	-6.1	14.2	6.9	7.2

¹Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 83. RADIO AND TELEVISION RECEIVING SETS SIC 3651
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1958-66
 (INDEXES, 1958 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
	1958.....	100.0	100.0	100.0	100.0	100.0	100.0
1959.....	104.2	104.2	96.0	96.0	120.4	115.6	115.6
1960.....	109.1	109.3	91.7	91.5	117.9	108.1	107.9
1961.....	110.7	113.5	90.4	88.1	126.6	114.4	111.5
1962.....	122.4	122.7	81.7	81.5	155.3	126.9	126.6
1963.....	132.6	132.6	75.4	75.4	169.5	127.8	127.8
1964.....	136.5	133.6	73.3	74.8	185.9	136.2	139.1
1965.....	151.7	146.4	65.9	68.3	242.2	159.7	165.4
1966 ²	151.6	150.2	65.9	66.6	319.6	210.9	212.9
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	5.9	5.5	-5.5	-5.2	14.2	7.8	8.2

¹The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

²Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 84. RADIO AND TELEVISION RECEIVING SETS SIC 3651
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
 NONPRODUCTION WORKERS, 1958-66

(INDEXES, 1958 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR ¹	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS ¹
1958.....	100.0	(100.0)	100.0	(100.0)	100.0	100.0	(100.0)
1959.....	116.4	(118.5)	84.5	(84.4)	120.4	101.7	(101.6)
1960.....	110.2	(110.8)	90.8	(90.2)	117.9	107.0	(106.4)
1961.....	105.9	(107.4)	94.4	(93.1)	126.6	119.5	(117.9)
1962.....	132.6	(134.8)	75.3	(74.2)	155.3	116.9	(115.2)
1963.....	166.3	(169.0)	60.1	(59.2)	165.5	101.9	(100.3)
1964.....	172.0	(173.9)	58.1	(57.5)	185.9	108.1	(106.9)
1965.....	205.6	(208.8)	48.6	(47.5)	242.2	117.8	(116.0)
1966.....	226.8	(231.2)	44.1	(43.2)	319.6	141.0	(138.3)
AVERAGE ANNUAL RATES (PERCENT)							
1958-66.....	11.0	(11.3)	-9.9	(-10.1)	14.2	2.8	(2.6)

¹The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

²The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and man-hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

**TABLE 85. RAILROAD TRANSPORTATION-REVENUE TRAFFIC¹ SIC 401
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,**

ALL EMPLOYEES, 1935-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	54.5	48.4	183.3	206.7	60.0	110.0	124.0
1947.....	78.3	66.4	127.6	150.6	118.3	151.0	178.2
1948.....	77.0	65.3	129.9	153.2	114.2	148.3	174.9
1949.....	70.8	63.7	141.2	157.0	94.6	133.6	148.5
1950.....	75.5	72.8	132.4	137.4	103.5	137.0	142.2
1951.....	79.3	77.1	126.1	129.8	113.6	143.3	147.4
1952.....	76.5	77.2	127.4	129.5	108.3	138.0	140.2
1953.....	78.2	77.7	127.9	128.7	106.2	135.8	136.7
1954.....	80.4	80.9	124.4	123.6	96.5	120.0	119.3
1955.....	90.6	89.4	110.4	111.8	108.1	119.3	120.9
1956.....	94.7	93.7	105.6	106.7	111.8	118.1	119.3
1957.....	95.1	95.1	105.2	105.2	106.5	112.0	112.0
1958.....	95.7	99.9	100.3	100.1	95.1	95.4	95.2
1959.....	106.4	106.1	94.0	94.2	98.5	92.6	92.8
1960.....	110.1	110.4	90.8	90.6	97.7	88.7	88.5
1961.....	117.8	118.2	84.9	84.6	96.0	81.5	81.2
1962.....	126.5	125.9	79.0	79.4	100.6	79.5	79.9
1963.....	135.6	133.9	73.7	74.7	104.7	77.2	78.2
1964.....	146.4	142.5	68.3	70.2	110.4	75.4	77.5
1965.....	161.2	157.5	62.0	63.5	116.2	72.1	73.8
1966.....	172.8	169.2	57.9	59.1	122.5	70.9	72.4
1967 ²	173.4	173.4	57.7	57.7	118.8	68.5	68.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	4.6	5.2	-4.4	-4.9	0.2	-4.3	-4.8
1957-67.....	6.7	6.5	-6.3	-6.1	2.2	-4.2	-4.0

¹ Class I railroads and Class I switching and terminal companies.

² Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 86. RAILROAD TRANSPORTATION—REVENUE TRAFFIC¹ SIC 401
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER—		UNIT LABOR REQUIREMENTS IN TERMS OF—		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ²	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	54.1	47.8	185.0	209.2	60.0	111.0	125.5
1947.....	76.6	64.4	130.6	155.3	118.3	154.5	183.7
1948.....	75.3	63.4	132.7	157.6	114.2	151.6	180.0
1949.....	69.7	62.4	143.4	160.3	94.6	135.7	151.6
1950.....	74.2	71.1	134.7	140.7	103.5	139.4	145.6
1951.....	77.6	75.1	128.8	133.1	113.6	146.3	151.2
1952.....	77.1	75.5	129.7	132.4	108.3	140.5	143.4
1953.....	76.9	76.1	130.0	131.5	106.2	138.1	139.6
1954.....	79.7	79.9	125.5	125.2	96.5	121.1	120.8
1955.....	89.7	88.3	111.5	113.2	108.1	120.5	122.4
1956.....	93.8	92.7	106.6	107.9	111.8	119.2	120.6
1957.....	94.5	94.4	105.8	105.9	106.5	112.7	112.8
1958.....	100.0	100.2	100.0	99.8	95.1	95.1	94.9
1959.....	106.8	106.6	93.6	93.8	98.5	92.2	92.4
1960.....	110.8	111.1	90.3	90.0	97.7	88.2	87.9
1961.....	119.0	119.7	84.1	83.5	96.0	80.7	80.2
1962.....	128.0	127.2	78.1	78.6	100.6	78.6	79.1
1963.....	137.2	135.3	72.9	73.9	104.7	76.3	77.4
1964.....	148.2	143.9	67.5	69.5	110.4	74.5	76.7
1965.....	163.7	159.8	61.1	62.6	116.2	71.0	72.7
1966.....	176.0	171.6	56.8	58.3	122.5	69.6	71.4
1967.....	177.3	175.7	56.4	56.9	118.8	67.0	67.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	4.9	5.4	-4.7	-5.2	0.2	-4.5	-5.0
1957-67.....	7.0	6.7	-6.5	-6.3	2.2	-4.5	-4.2

¹ Class I railroads and Class I switching and terminal companies.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Preliminary.

Source: Based on Interstate Commerce Commission data.

- 94 -

**TABLE 87. RAILROAD TRANSPORTATION-REVENUE TRAFFIC¹ SIC 401
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67**

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS
1939.....	60.4	54.4	165.7	163.8	60.0	99.4	110.3
1947.....	102.8	92.9	97.3	107.6	118.3	115.1	127.3
1948.....	99.2	89.5	100.8	111.7	114.2	115.1	127.6
1949.....	83.6	79.0	119.6	126.5	94.6	113.1	119.7
1950.....	91.8	93.7	109.0	106.8	103.5	112.8	110.5
1951.....	100.4	101.8	99.6	98.2	113.6	113.2	111.6
1952.....	96.1	97.8	104.1	102.2	108.3	112.7	110.7
1953.....	94.6	96.4	105.7	103.8	106.2	112.3	110.2
1954.....	86.2	91.1	113.4	109.7	96.5	109.4	105.9
1955.....	100.8	100.9	99.2	99.1	108.1	107.2	107.1
1956.....	104.3	104.1	95.9	96.1	111.8	107.2	107.4
1957.....	101.5	101.5	98.5	98.5	106.5	104.9	104.9
1958.....	96.3	96.3	103.9	103.9	95.1	98.8	98.8
1959.....	102.4	102.3	97.7	97.8	98.5	96.2	96.3
1960.....	103.5	103.7	96.6	96.4	97.7	94.4	94.2
1961.....	106.2	106.8	94.2	93.6	96.0	90.4	89.9
1962.....	114.3	114.7	87.5	87.2	100.6	88.0	87.7
1963.....	121.5	122.0	82.3	81.9	104.7	86.2	85.8
1964.....	130.0	129.6	76.9	77.2	110.4	84.9	85.2
1965.....	139.0	138.8	71.9	72.0	116.2	83.6	83.7
1966.....	146.7	150.3	68.2	66.5	122.5	83.5	81.5
1967 ³	142.8	154.7	70.0	64.6	118.8	83.2	76.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	2.1	2.5	-2.1	-2.5	0.2	-1.9	-2.3
1957-67.....	4.6	5.0	-4.4	-4.8	2.2	-2.3	-2.7

¹ Class I railroads and Class I switching and terminal companies.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 88. RAILROAD TRANSPORTATION—CAR-MILES¹ SIC 401
 OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,

ALL EMPLOYEES, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	71.5	63.4	139.9	157.8	78.6	110.0	124.0
1947.....	75.7	64.1	132.1	155.9	114.3	151.0	178.2
1948.....	75.4	63.9	132.6	156.4	111.8	148.3	174.9
1949.....	74.9	67.4	133.5	148.4	100.1	133.6	148.5
1950.....	76.9	74.1	130.1	135.0	105.3	137.0	142.2
1951.....	76.7	74.6	130.4	134.1	109.9	143.3	147.4
1952.....	78.1	76.9	128.0	130.1	107.8	138.0	140.2
1953.....	79.6	79.1	125.6	126.5	108.1	135.8	136.7
1954.....	84.2	84.7	118.8	118.1	101.0	120.0	119.3
1955.....	90.7	89.5	110.3	111.7	108.2	119.3	120.9
1956.....	92.5	91.5	108.2	109.2	109.2	118.1	119.3
1957.....	94.3	94.3	106.1	106.1	105.6	112.0	112.0
1958.....	101.2	101.4	98.9	96.7	96.5	95.4	95.2
1959.....	105.6	105.4	94.7	94.9	97.8	92.6	92.8
1960.....	108.2	108.5	92.4	92.2	96.0	88.7	88.5
1961.....	113.6	114.0	88.0	87.7	92.6	81.5	81.2
1962.....	118.5	117.9	84.4	84.8	94.2	79.5	79.9
1963.....	123.3	121.7	81.1	82.1	95.2	77.2	78.2
1964.....	129.2	125.7	77.4	79.6	97.4	75.4	77.5
1965.....	136.5	133.3	73.3	75.0	98.4	72.1	73.8
1966.....	142.9	139.9	70.0	71.5	101.3	70.9	72.4
1967.....	143.6	143.6	69.6	69.6	98.4	68.5	68.5
	AVERAGE ANNUAL RATES (PERCENT)						
1947-67.....	3.7	4.2	-3.6	-4.1	-0.7	-4.3	-4.8
1957-67.....	4.4	4.1	-4.2	-4.0	-0.1	-4.2	-4.0

¹ Class I railroads and Class I switching and terminal companies.

² Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 89. RAILROAD TRANSPORTATION - CAR-MILES¹ SIC 401
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER—		UNIT LABOR REQUIREMENTS IN TERMS OF—		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS	OUTPUT ²	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS
1939.....	76.8	62.6	141.2	155.7	78.6	111.0	125.5
1947.....	74.0	62.2	135.2	160.7	114.3	154.5	183.7
1948.....	73.7	62.1	135.6	161.0	111.8	151.6	180.0
1949.....	73.8	66.0	135.6	151.4	100.1	135.7	151.6
1950.....	75.5	72.3	132.4	138.3	105.3	139.4	145.6
1951.....	75.1	72.7	133.1	137.6	109.9	146.3	151.2
1952.....	76.7	75.2	130.3	133.0	107.8	140.5	143.4
1953.....	78.3	77.4	127.8	129.1	108.1	138.1	139.6
1954.....	83.4	83.6	119.9	119.6	101.0	121.1	120.8
1955.....	89.8	88.4	111.4	113.1	108.2	120.5	122.4
1956.....	91.6	90.5	109.2	110.4	109.2	119.2	120.6
1957.....	93.7	93.6	106.7	106.8	105.6	112.7	112.8
1958.....	101.5	101.7	98.5	98.3	96.5	95.1	94.9
1959.....	106.1	105.8	94.3	94.5	97.8	92.2	92.4
1960.....	108.8	109.2	91.9	91.6	96.0	88.2	87.9
1961.....	114.7	115.5	87.1	86.6	92.6	80.7	80.2
1962.....	115.8	119.1	83.4	84.0	94.2	78.6	79.1
1963.....	124.8	123.0	80.1	81.3	95.2	76.3	77.4
1964.....	130.7	127.0	76.5	78.7	97.4	74.5	76.7
1965.....	138.6	135.4	72.2	73.9	98.4	71.0	72.7
1966.....	145.5	141.9	68.7	70.5	101.3	69.6	71.4
1967.....	146.9	145.6	68.1	68.7	98.4	67.0	67.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	4.0	4.5	-3.8	-4.3	-0.7	-4.5	-5.0
1957-67.....	4.6	4.3	-4.4	-4.1	-0.1	-4.5	-4.2

¹ Class I railroads and Class I switching and terminal companies.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 90. RAILROAD TRANSPORTATION - CAR-MILES¹ SIC 401
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
NONPRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	NON- PRODUCTION WORKER	NON- PRODUCTION WORKER MAN-HOUR	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS	OUTPUT ²	NON- PRODUCTION WORKERS	NON- PRODUCTION WORKER MAN-HOURS
1939.....	79.1	71.3	126.5	140.3	78.6	99.4	110.3
1947.....	95.3	89.8	100.7	111.4	114.3	115.1	127.3
1948.....	97.1	87.6	103.0	114.1	111.8	115.1	127.6
1949.....	88.5	83.6	113.0	119.6	100.1	113.1	119.7
1950.....	93.4	95.3	107.1	104.9	105.3	112.8	110.5
1951.....	97.1	98.5	103.0	101.5	109.9	113.2	111.6
1952.....	95.7	97.4	104.5	102.7	107.8	112.7	110.7
1953.....	96.3	98.1	103.9	101.9	108.1	112.3	110.2
1954.....	92.3	95.4	108.3	104.9	101.0	109.4	105.9
1955.....	100.9	101.0	99.1	99.0	108.2	107.2	107.1
1956.....	101.9	101.7	98.2	98.4	109.2	107.2	107.4
1957.....	100.7	100.7	99.3	99.3	105.6	104.9	104.9
1958.....	97.7	97.7	102.4	102.4	96.5	98.8	98.8
1959.....	101.7	101.6	98.4	98.5	97.8	96.2	96.3
1960.....	101.7	101.9	98.3	98.1	96.0	94.4	94.2
1961.....	102.4	103.0	97.6	97.1	92.6	90.4	89.9
1962.....	107.0	107.4	93.4	93.1	94.2	88.0	87.7
1963.....	110.4	111.0	90.5	90.1	95.2	86.2	85.8
1964.....	114.7	114.3	87.2	87.5	97.4	84.9	85.2
1965.....	117.7	117.6	85.0	85.1	98.4	83.6	83.7
1966.....	121.3	124.3	82.4	80.5	101.3	83.5	81.5
1967 ³	118.3	128.1	84.6	78.0	98.4	83.2	76.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	1.2	1.6	-1.2	-1.6	-0.7	-1.9	-2.3
1957-67.....	2.2	2.7	-2.2	-2.6	-0.1	-2.3	-2.7

¹ Class I railroads and Class I switching and terminal companies.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 91. AIR TRANSPORTATION SIC 451
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1947-67
(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER ALL EMPLOYEE	UNIT LABOR REQUIREMENTS IN TERMS OF ALL EMPLOYEES	RELATED DATA	
			OUTPUT	ALL EMPLOYEES
1947.....	37.4	267.4	22.7	60.7
1948.....	41.6	240.4	23.5	56.5
1949.....	47.8	209.1	26.4	55.2
1950.....	55.7	179.6	31.4	56.4
1951.....	64.0	156.3	39.8	62.2
1952.....	66.5	150.4	46.4	69.8
1953.....	71.8	139.3	53.5	74.5
1954.....	75.5	125.8	60.4	76.0
1955.....	89.5	111.7	71.9	80.3
1956.....	92.0	108.7	83.1	90.3
1957.....	55.1	105.2	94.1	99.0
1958.....	58.5	101.6	95.6	97.1
1959.....	106.2	94.2	110.3	103.9
1960.....	107.1	93.4	117.3	109.5
1961.....	113.4	88.2	124.1	109.4
1962.....	126.2	79.2	140.2	111.1
1963.....	139.4	71.7	158.8	113.9
1964.....	153.2	65.3	184.8	120.6
1965.....	171.1	58.4	223.5	130.6
1966.....	151.9	52.1	274.1	142.8
1967 ¹	204.5	48.9	347.6	170.0
AVERAGE ANNUAL RATES (PERCENT)				
1947-67.....	8.0	-7.4	13.7	5.3
1957-67.....	8.4	-7.7	13.6	4.8

¹ Preliminary.

Source: Based on Civil Aeronautics Board data.

TABLE 92. GAS AND ELECTRIC UTILITIES SIC 491,492, 493
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
ALL EMPLOYEES, 1935-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	ALL EMPLOYEE	ALL EMPLOYEE MAN-HOUR	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS	OUTPUT	ALL EMPLOYEES	ALL EMPLOYEE MAN-HOURS
1939.....	26.7	27.6	374.5	362.2	19.6	73.4	71.0
1947.....	46.8	45.8	213.5	218.5	37.8	80.7	82.6
1948.....	49.1	48.1	203.8	208.1	42.0	85.6	87.4
1949.....	49.8	49.2	200.7	203.4	44.1	88.5	89.7
1950.....	55.6	54.6	179.7	183.1	50.3	90.4	92.1
1951.....	62.2	60.6	160.9	164.9	57.0	91.7	94.0
1952.....	65.8	64.7	151.9	154.6	61.5	93.4	95.1
1953.....	70.3	69.3	142.2	144.3	66.8	95.0	96.4
1954.....	74.7	74.0	133.8	135.2	71.6	95.8	96.8
1955.....	83.4	82.5	119.9	121.2	80.6	96.6	97.7
1956.....	90.3	89.4	110.7	111.8	88.7	98.2	99.2
1957.....	94.1	93.7	106.3	106.7	94.1	100.0	100.4
1958.....	98.2	98.6	101.8	101.4	98.2	100.0	99.6
1959.....	107.7	107.6	92.9	92.9	107.7	100.0	100.1
1960.....	114.8	114.7	87.1	87.2	114.9	100.1	100.2
1961.....	121.2	121.4	82.5	82.4	120.7	99.6	99.4
1962.....	131.3	130.8	76.2	76.5	129.6	98.7	99.1
1963.....	139.9	139.0	71.5	71.9	137.9	98.6	99.2
1964.....	150.3	149.5	66.6	66.9	148.9	99.1	99.6
1965.....	157.7	156.0	63.4	64.1	158.0	100.2	101.3
1966.....	169.6	167.4	59.0	59.7	171.3	101.0	102.3
1967 ¹	176.7	174.5	56.6	57.3	182.0	103.0	104.3
	AVERAGE ANNUAL RATES (PERCENT)						
1947-67.....	7.1	7.2	-6.6	-6.7	8.1	0.9	0.8
1957-67.....	6.7	6.6	-6.3	-6.2	6.9	0.1	0.3

¹ Preliminary.

Source: Output based on data from the American Gas Association, Federal Power Commission, Rural Electrification Administration of U.S. Department of Agriculture, and Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 93. GAS AND ELECTRIC UTILITIES SIC 491,492, 493
OUTPUT PER MAN-HOUR, UNIT LABOR REQUIREMENTS, AND RELATED DATA,
PRODUCTION WORKERS, 1939-67

(INDEXES, 1957-59 = 100)

YEAR	OUTPUT PER--		UNIT LABOR REQUIREMENTS IN TERMS OF--		RELATED DATA		
	PRODUCTION WORKER	PRODUCTION WORKER MAN-HOUR ¹	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS ¹	OUTPUT ²	PRODUCTION WORKERS	PRODUCTION WORKER MAN-HOURS ¹
1939.....	(3)	(3)	(3)	(3)	19.6	(3)	(3)
1947.....	44.1	43.1	227.0	232.0	37.8	85.8	87.7
1948.....	46.4	45.5	215.5	219.8	42.0	90.5	92.3
1949.....	47.4	46.8	211.1	213.8	44.1	93.1	94.3
1950.....	53.2	52.3	187.9	191.3	50.3	94.5	96.2
1951.....	59.6	58.1	167.7	172.1	57.0	95.6	98.1
1952.....	63.3	62.2	158.0	160.8	61.5	97.2	98.9
1953.....	68.2	67.2	146.6	148.8	66.8	97.9	99.4
1954.....	73.2	72.5	136.6	138.0	71.6	97.8	98.8
1955.....	82.2	81.3	121.7	123.0	80.6	98.1	99.1
1956.....	89.5	88.5	111.7	113.0	88.7	99.1	100.2
1957.....	93.6	93.3	106.8	107.2	94.1	100.5	100.9
1958.....	98.2	98.6	101.8	101.4	98.2	100.0	99.6
1959.....	108.2	108.1	92.4	92.5	107.7	99.5	99.6
1960.....	115.8	115.7	86.3	86.4	114.9	99.2	99.3
1961.....	122.8	123.0	81.4	81.3	120.7	98.3	98.1
1962.....	133.6	133.1	74.8	75.2	129.6	97.0	97.4
1963.....	143.2	142.5	69.8	70.2	137.9	96.3	96.8
1964.....	154.5	153.7	64.7	65.1	148.9	96.4	96.9
1965.....	162.2	160.4	61.6	62.3	158.0	97.4	98.5
1966.....	175.2	172.9	57.1	57.9	171.3	97.8	99.1
1967 ⁴	183.3	180.9	54.6	55.3	182.0	99.3	100.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-67.....	7.7	7.7	-7.1	-7.2	8.1	0.4	0.3
1957-67.....	7.2	7.0	-6.7	-6.6	6.9	-0.8	-0.1

¹ Represents nonsupervisory workers.

² The measures of output used in this table represent the total production of the industry resulting from all employees and do not represent the specific output of any single group of employees.

³ Not available.

⁴ Preliminary.

Source: Output based on data from the American Gas Association, Federal Power Commission, Rural Electrification Administration of U.S. Department of Agriculture, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

OTHER RECENT BLS PUBLICATIONS ON PRODUCTIVITY
AND AUTOMATION

Indexes of Output Per Man-Hour--

- Air Transportation Industry, 1947-64 (Report 308). August 1966. 14 pp. (Free).
Aluminum Rolling and Drawing Industry, 1958-65 (Report 314). December 1966. 20 pp. (Free).
Concrete Products Industry, 1947-63 (Report 300). November 1965. 20 pp. (Free).
Footwear Industry, 1947-63. July 1965. 17 pp. (Free).
Gas and Electric Utilities Industry, 1932-62. April 1964. 19 pp. (Free).
Hosiery Industry, 1947-64. (Report 307). June 1966. 22 pp. (Free).
Man-Made Fibers Industry, 1957-63. October 1965. 20 pp. (Free).
Primary Aluminum Industry, 1947-62. September 1964. 15 pp. (Free).

- Labor Productivity of the Steel Industry in the United States (Report 310). July 1966. 36 pp. (Free).
Productivity: A Bibliography, July 1966. (Bulletin 1514). 129 pp., 65 cents.
Industry Productivity Projections, A Methodological Study. 1966. 5 pp. (Free).
Indexes of Output Per Man-Hour, Hourly Compensation, and Unit Labor Costs in the Manufacturing Sector, 1947-66. June 1967. 2 pp. (Free).

- Indexes of Output Per Man-Hour for the Private Economy, 1947-67. March 1968. 5 pp. (Free).

- Indexes of Output Per Man-Hour, Hourly Compensation, and Unit Labor Costs in the Private Sector of the Economy and the Nonfarm Sector, 1947-67. May 1968. 4 pp. (Free).

Implications of Automation and Other Technological Developments

- Technology and Manpower in the Textile Industry of the 1970's (Bulletin 1578, 1968). 79 pp., 60 cents.
Manpower Planning for Technological Change: Case Studies of Telephone Operators (Bulletin 1574, 1968). 34 pp., 30 cents.
Job Redesign for Older Workers, Ten Case Studies (Bulletin 1523, 1967). 63 pp., 40 cents.
Technological Trends in Major American Industries (Bulletin 1474, 1966). 269 pp. \$1.50.

(Continued on inside back cover)

Technological Change and Disemployment of Labor at the Establishment Level. 1966. 17 pp. (Free).

Impact of Office Automation in the Insurance Industry (Bulletin 1468, 1966). 71 pp., 45 cents.

Manpower Planning to Adapt to New Technology at an Electric and Gas Utility (Report 293, 1965). 25 pp. (Free).

Outlook for Numerical Control of Machine Tools: A Study of a Key Technological Development in Metalworking Industries (Bulletin 1437, 1965). 63 pp., 40 cents.

Labor and Material Requirements for--

School Construction (Bulletin 1586, 1968). 23 pp., 30 cents.

Private One-Family House Construction (Bulletin 1404, 1964). 37 pp., 30 cents.

Public Housing Construction (Bulletin 1402, 1964). 42 pp., 30 cents.

College Housing Construction (Bulletin 1441, 1965). 34 pp., 30 cents.

Sewer Works Construction (Bulletin 1490, 1966). 31 pp., 30 cents.

Construction of Federally Aided Highways, 1958, 1961, and 1964. (Report 299, 1966). 17 pp. (Free).

Sales publications may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from regional offices of the Bureau of Labor Statistics at the addresses shown below. Free publications are available, as long as the supply lasts, from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

Regional Offices

Region I
Federal Building
Room 1603-A
Government Center
Boston, Mass. 02203
Tele: 617-223-6727

Region II
341 Ninth Ave.
New York, N.Y. 10001
Tele: 212-971-5401

Region III
Penn Square Building
Room 406
1317 Filbert Street
Philadelphia, Pa. 19107
Tele: 215-597-7796

Region IV
1371 Peachtree St., NE
Suite 540
Atlanta, Ga. 30309
Tele: 404-526-5416

Region V
219 South Dearborn St.
Chicago, Ill. 60604
Tele: 312-353-7226

Region VI
911 Walnut St.
10th Floor
Kansas City, Mo. 64106
Tele: 816-374-2378

Region VII
Mayflower Building
Room 337
411 North Akard St.
Dallas, Texas 75201
Tele: 214-749-3641

Region VIII
450 Golden Gate Ave.
Box 36017
San Francisco, Calif. 94102
Tele: 415-556-3178

**U.S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
WASHINGTON, D.C. 20212**

OFFICIAL BUSINESS

**POSTAGE AND FEES PAID
U.S. DEPARTMENT OF LABOR**

THIRD CLASS MAIL