UNITED STATES DEPARTMENT OF LABOR

Frances Perkins, Secretary

BURBAU OF LABOR STATISTICS Isador Lubin, Commissioner (on leave) A. F. Hinrichs, Acting Commissioner

Earnings in Cotton-Goods Manufacture During the War Years



Bulletin No. 798

[Reprinted from the Monthly Labor Review October 1944]

Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., October 20, 1944.

The SECRETARY OF LABOR:

I have the honor to transmit herewith a report on earnings in cotton-goods manufacture during the war years. This report was prepared by Clara F. Schloss of the Bureau's Division of Employment Statistics, Alexander Sturges, Acting Chief, and Toivo P. Kanninen of the Bureau's Division of Wage Analysis, Robert J. Myers, Chief.

A. F. HINRICHS, Acting Commissioner.

Hon. Frances Perkins, Secretary of Labor.

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Bulletin No. 798 of the

United States Bureau of Labor Statistics

[Reprinted from the MONTHLY LABOR REVIEW, October 1944]

Earnings in Cotton-Goods Manufacture During the War Years

Summary

THE cotton-textile worker is still among the lower-paid American factory workers, in spite of substantial wage increases in cotton mills since the outbreak of the war. Hourly earnings, which averaged 38.4 cents in April 1939, rose to 62.3 cents in April 1944, an increase of 62.2 percent. Straight-time average hourly earnings, that is, earnings after eliminating extra pay for overtime worked, increased from 38.4 cents to 59.9 cents during the same period, or by 56.0 percent.

Average hourly earnings in northern mills exceeded those in southern mills by 21 percent in April 1939, and 20 percent in April 1944. Since March 1944, a slight narrowing of this difference has occurred, caused in part by wage orders permitting wage increases in the South.

The extent of the recent wage changes has varied from area to area within regions, as well as between the North and South, because of varying hours of work, products manufactured, bidding for workers by other industries, and other economic pressures. Increases in average hourly earnings in 18 wage areas in the North ranged from 0.6 cents to 7.1 cents; in 48 southern wage areas the changes ranged from a decrease of 0.5 cents per hour to an increase of 7.9 cents per hour.

Of 20 key occupational groups studied by the Bureau of Labor Statistics in certain selected areas in the North and South, in the spring and summer of 1943, class-A maintenance electricians, the highest-paid group, averaged 99 cents per hour in the North and 79 cents in the South. Janitors and janitresses each averaged 52 cents per hour in the North and 44 and 43 cents respectively in the South. Among jobs that are particularly representative of the industry, the respective northern and southern averages were as follows: Loom fixers, other than Jacquard, 98 and 75 cents; male weavers, other than Jacquard, 75 and 62 cents; female spinners, 63 and 52 cents; and female yarn winders, 63 and 52 cents.

Scope of the Industry

The cotton-goods industry is composed of establishments primarily engaged in manufacturing cotton yarn and thread, and woven goods over 12 inches in width. Cotton woven goods include a variety of fabrics such as duck, sheeting, print cloth, colored cotton goods, towel-

ing, upholstered and drapery materials, and pile fabrics. Establishments primarily engaged in dyeing or finishing cotton yarn or fabrics, or in manufacturing cotton woven goods 12 inches or less in width,

are considered to be in separate industries.

Broad woven goods are produced in integrated spinning and weaving mills which carry on all the operations necessary to transform ginned cotton into cotton fabric, and in independent weaving mills which are generally engaged in producing specialty fabrics; the latter account for only a minor part of cotton-goods production. Cotton thread and yarn are produced for sale as such in independent spinning mills, in thread-finishing mills, in yarn-winding and yarn-twisting mills which prepare specialty yarns from purchased yarns, and to a minor extent as a part of the operations of integrated spinning and weaving mills.

Employment in the Industry

Establishments engaged in the manufacture of cotton textiles (except cotton small wares) employed about 450,000 wage earners in the early months of 1944, or approximately 3½ percent of all manufacturing wage earners in the United States. Only the major metalworking industries, such as the airframe, shipbuilding, automobile, machinery, and electrical-equipment manufacturing industries, employed a larger number of workers. The cotton-textile industry employs at least a seventh of the manufacturing wage earners in the South Atlantic and South Central States.

In response to expanded consumer demand and the need of the armed forces for cotton fabrics, the number of wage earners in the cotton-goods industry rose during the early years of the war to a level in excess of previous peak employment. The increase between June 1939 and December 1942, the lowest and highest months in recent years, amounted to 36.6 percent, or from 373,400 to 510,300 employees. In 1943, however, the number of wage earners in the industry began to decline, as a result of losses to the armed forces and to other industries. By April 1944, despite continuing urgent need for textiles, employment was only 445, 300, or 65,000 below the earlier peak level. The proportion of women working in the industry increased from 38 per 100 in October 1939 to 47 per 100 in April 1944, largely as a result of this increased demand and the loss of male employees.

Shift Operation and Incentive Pay

Two- and three-shift operation is now common in the cotton-textile industry. Over three-quarters of the mills surveyed by the Bureau in the spring and summer of 1943 were operating more than one shift; about three-fifths were working three shifts. Only about one-fifth of the mills operating more than one shift reported premium rates of pay for work on the late shifts.

Incentive pay, which is prevalent in the manufacture of cotton goods, is found somewhat more commonly in the North than in the South. Incentive workers constitute over three-quarters of the weavers, yarn winders, spinners, and doffers in the North, and about two-thirds of all workers in these occupations in the South.

¹ A further decrease of 9,500 employees occurred between April and June 1944.

Wartime Wage Trends

Average hourly earnings of workers in the cotton-goods industry amounted to 62.3 cents in April 1944—an increase of 62.2 percent over April 1939, when wages averaged 38.4 cents per hour. Eliminating from these averages the extra pay received for overtime worked, the increase was 56.0 percent, or from 38.4 cents per hour in April 1939 to 59.9 cents in April 1944. This latter increase may be contrasted with an estimated increase of 38.6 percent for all manufacturing industries in straight-time hourly earnings, from 62.2 cents in April 1939 to 86.2 cents in April 1944, after correction for overtime pay and interindustry shifts of employment.

Among the manufacturing industries for which the Bureau of Labor Statistics regularly collects wage data, only a few, such as the workshirt and handkerchief industries, report lower average hourly earnings than are found in the manufacture of cotton textiles. The relatively low level of wages in cotton mills is accentuated somewhat by the location of a large part of the industry in lower-wage sections of the country, by the relatively low proportion of skilled workers employed, and by the large proportion of women workers in the industry.

Because of the competitive nature of the cotton-textile industry and the importance of wage differences in explaining the industry's southward trend, the relative level of wages in northern and southern mills is a matter of particular interest. Wage rates in the North have consistently exceeded southern rates, although the amount of difference has varied.

Between April 1939 and April 1944 average hourly earnings, including premium pay for overtime and work on extra shifts, increased from 44.4 cents to 72.0 cents in the North and from 36.7 cents to 60.1 cents in the South (table 1). This increase amounted to 62.2 percent in the North and 63.8 percent in the South. At the same time, the pay margin between the two regions increased from 7.7 to 11.9 cents per hour.²

The difference in average hourly earnings as between the North and South is influenced not only by differences in wage rates but also by differences in the type of products manufactured. Product differences influence the proportion of workers employed at the various levels of skill. Hence, it is probable that the absolute amount of the regional difference in wages, in the case of a given type of goods, might vary considerably from the gross difference that has been indicated.

In each of the two broad regions the increase in earnings reflects, among other things, the competition with the war industries for workers, and the various rulings or wage orders issued by Governmental agencies. An example of this latter type of increase was the establishment of the 32½-cent minimum under the Fair Labor Standards Act; this action was followed by increases of 2.5 cents per hour in the North and 2.6 cents per hour in the South, between October and December 1939. Subsequent orders were issued under the Fair Labor Standards Act, and by the National Defense Mediation Board. By the end of 1941, average hourly earnings had increased to 57.9 cents in the North and 48.3 cents in the South.

² Average hourly earnings for cotton-textile manufacturing are calculated for both the North and the South each month by the Division of Employment Statistics, and are available upon request.

Table 1.—Average Hourly Earnings 1 in the Cotton-Goods Industry, 1939-44

	Average hourly earnings (in cents)											
Month	1939 1940		1941		1942		1943		1944			
_	North	South	North	South	North	South	North	South	North	South	North	South
January February March April May June July August September November December	44. 4 44. 4 44. 6 44. 7 44. 6 44. 7 44. 6 44. 7 46. 8 47. 2	36. 6 36. 7 36. 7 36. 8 36. 4 36. 2 36. 2 36. 3 36. 3	47. 1 47. 1 47. 3 47. 3 47. 6 47. 6 47. 7 47. 5 47. 3 47. 3	39. 2 39. 2 39. 2 39. 4 39. 3 39. 4 39. 6 40. 0 39. 6 39. 6 39. 9	47. 5 47. 6 48. 1 51. 8 52. 3 52. 6 53. 2 53. 0 57. 1 58. 0 58. 1 57. 9	40. 3 40. 2 40. 6 42. 6 43. 1 43. 1 45. 4 45. 6 45. 8 48. 2 48. 1 48. 3	58. 4 58. 8 59. 0 59. 1 59. 9 60. 1 60. 7 67. 3 67. 7 67. 8	48. 4 48. 7 48. 9 49. 2 50. 9 50. 8 53. 4 55. 1 55. 1 55. 2	68. 4 68. 6 68. 8 69. 7 70. 3 70. 1 70. 3 71. 1 70. 8 71. 1	55. 9 55. 8 56. 0 56. 2 56. 4 56. 0 57. 3 56. 6 56. 7	71. 2 71. 8 71. 9 72. 0 72. 5	57. 3 57. 2 57. 8 60. 1 3 61. 4

¹ Including premium pay for overtime and work on late shifts.
² Preliminary.

The next major increase, amounting to 7.6 cents per hour in the North and 4.3 cents per hour in the South, occurred between July and September of 1942, following a National War Labor Board order for a 7½-cent increase in hourly wage rates for certain specific mills.

In March 1944 the Atlanta Regional War Labor Board gave southern mills permission to make application for a 50-cent minimum wage, with additional adjustments permitted in wage rates above the minimum level. Although the effect of this latter increase is probably not fully reflected by the most recently collected wage-rate data, preliminary figures for May 1944 indicate that average hourly earnings in the Southern States amounted to 61.4 cents, an increase of 3.6 cents over the average for March 1944.

In June 1944, bracket rates for key textile occupations were established for New England by the Boston Regional War Labor Board. The stabilized rate for common labor was determined to be 52 cents Mills paying less than the stabilized rates may, upon proper application, receive permission to increase their wage rates to the permitted levels. Wage data are not yet available, to measure the effect of this order.

TABLE 2.—Average Weekly Hours in the Cotton-Goods Industry, 1939-44

Month	Month 1939		1940		1941		1942		1943		1944	
	North	South	North	South	North	South	North	South	North	South	North	South
January February March April May June July August September October November December	37. 8 38. 0 37. 7 37. 0 35. 9 36. 6 37. 6 37. 3 38. 5 38. 5	36. 1 36. 0 36. 1 35. 2 35. 5 36. 7 36. 4 37. 5 38. 1 37. 1	37. 6 36. 4 36. 1 35. 3 34. 9 33. 7 36. 4 36. 6 37. 3 38. 1 36. 3 39. 0	36. 5 36. 2 35. 4 35. 0 34. 4 34. 6 35. 2 36. 2 36. 9 37. 1 37. 8	38. 2 39. 0 39. 6 39. 3 40. 1 40. 0 39. 6 40. 0 39. 9 39. 0 37. 8 40. 4	37. 0 38. 2 38. 6 39. 3 39. 4 39. 5 38. 5 39. 2 39. 6 39. 5 39. 5 40. 2	41. 3 41. 6 41. 9 41. 6 42. 1 41. 6 41. 9 42. 0 40. 6 42. 0 41. 6 42. 5	40, 1 40, 7 40, 8 40, 9 40, 8 40, 1 40, 5 40, 2 40, 3 40, 8 41, 1	42.7 42.7 42.9 43.2 43.4 42.8 43.4 43.1 43.1 43.6	41.0 41.2 41.3 41.5 41.7 40.9 40.5 40.6 41.1 41.5	43. 2 43. 4 43. 6 43. 1 1 43. 3	41. 0 41. 4 41. 4 40. 9 1 41. 2

¹Preliminary.

The average hourly earnings shown in table 1 are gross averages that is, they include earnings from overtime pay. These comparisons have a tendency to exaggerate the difference in the average between the regions, since mills in the North averaged somewhat longer hours than mills in the South. In April 1944, northern mills averaged 2.2 hours more work per employee per week than southern mills (table 2).

A refinement of the measure of regional differences can be obtained by eliminating premium payments for overtime work. The results of this elimination are shown in table 3, which gives the actual difference (in cents) in average hourly earnings between the North and The greatest differences between the gross and the straighttime averages will be found in the more recent months, after the amount of overtime worked had increased. Before 1942, the amount of extra pay resulting from overtime work was negligible.

TABLE 3.—Straight-Time Average Hourly Earnings 1 in the Cotton-Goods Industry, 1939-44

Month	North	South	North minus South	Month	North	South	North minus South
1939:	Cents	Cents	Cents	1941—Continued.	Cents	Cents	Cents
January	43.7	36, 2	7.5	October	56.7	47.0	9. 7
February	43.7	36. 2	7.5	November	57. 2	46.9	10. 3
March	43. 9	36. 3	7.6	December	56. 2	46.9	9. 3
April	43.8	36.7	7.1	1942:			
May	44.8	36.8	8.0	January	56, 3	47.0	9. 2
June	44. 2	36.4	7.8	February	56. 4	47.1	9.3
July	43.9	36. 2	7.7	March	56. 5	47.3	9. 2
August September	44.1	35.8	8.3	April	56. 7	47.5	9. 2
September	43.8	35, 8	8.0	May	57. 3	49.2	8.1
October	44.0	35. 7	8.3	June	57.7	49.2	8.5
November	46.0	38.4	7.6	July	57. 5	49.4	8. 1
December	46. 4	38. 4	8.0	August	58.1	51.7	6.4
1940:			3.1	September	65. 1	53. 5	11.6
January	46.4	38.7	7.7	October	64. 8	53.4	11.4
February	46.5	38.8	7.7	November	65. 1	53. 4	11.7
March	46.6	39. 2	7.4	December	64.6	53.4	11. 2
April	47.3	39. 2	8. 1	1943:	02.0		
Мау	47.3	39.4	7.9	January	65.0	53. 9	11.1
June	47.6	39. 3	8.3	February	65. 2	53.7	11. 5
July	47.0	39.4	7.6	March	65. 3	53.9	11.4
August	47.1	39.6	7.5	April	65. 7	54.0	11.7
September	46.8	39.6	7.2	May	65. 9	54.3	11.6
October	46.8	39.1	7. 7	June	66.4	54.3	12. 1
November	46.8	39. 1	7.7	July	66.6	54.7	11. 9
December	46.5	39.3	7.2	August	66.4	54. 3	12. 1
1941:			• •	September	67. 3	55. 5	11.8
January	46.7	39.8	6.9	October	66. 9	54.6	12. 3
February	46. 5	39. 5	7.0	November	67. 3	54.5	12.8
March.	46. 9	39.8	7.1	December	67. 6	54.9	12. 7
April	50.6	41.6	9.0	1944:			
Мау	50.8	42.0	8.8	January	67. 4	55.3	12. 1
June	51.1	42.0	9.1	February	67. 9	55.0	12. 9
July	51.8	44.5	7.3	March	67. 9	55. 5	12. 4
August	51.5	44.5	7.0	April	68. 2	58.1	10. 1
September	55.6	44.6	1i.ŏ	May	² 68. 5	2 59. 1	3 9. 4

¹ Excluding premium pay for overtime. ² Preliminary.

Straight-time average hourly earnings increased from 43.8 cents to 68.2 cents, or 55.7 percent, in the North, and from 36.7 cents to 58.1 cents, or 58.3 percent, in the South, between April 1939 and the same month of 1944. Nearly half (48.6 percent) of the increase in the North, and 45.8 percent of the increase in the South, occurred prior to October 1942 when the National War Labor Board was given

legal responsibility for wage stabilization. Since the summer of 1943, the time of the Bureau's study of occupational wage rates which is discussed later in this article, straight-time hourly earnings have risen 5 percent. Most of this increase occurred in the South during the early months of 1944, following the previously mentioned decision of the War Labor Board.

Weekly earnings in the cotton-goods industry averaged \$26.34 in This is considerably below the all-manufacturing average of \$46.13 and below the \$37.04 average for the nondurable-goods group of industries. In spite of the relatively low level of earnings in the cotton-goods industry in 1944, the May figure represents a doubling of the prevailing earnings in 1939.

The average weekly earnings in the cotton-goods industry as a whole tend to conceal the wide difference in earnings between the North and South. For example, in May 1944 the earnings in the Northern States averaged \$31.39, and in the Southern States, \$25.30 (table 4). As has been indicated, in each of these regions the weekly earnings reflect the increased hourly earnings necessitated by competition with the war industries in order to attract or retain labor.

Table 4.—Average Weekly Earnings 1 in the Cotton-Goods Industry, 1939-44

	1939		1940		1941		1942		1943		1944	
Month	North	South	North	South	North	South	North	South	North	South	North	South
January February March April May June July August September October November	\$16. 78 16. 87 16. 81 16. 43 16. 08 16. 36 16. 77 16. 67 17. 17 16. 90 17. 92 18. 17	\$13. 21 13. 18 13. 25 12. 92 13. 10 12. 92 12. 92 13. 18 13. 61 13. 83 14. 43 14. 55	\$17. 71 17. 14 17. 00 16. 70 16. 51 16. 04 17. 33 17. 46 17. 72 18. 14 17. 17 18. 49	\$14. 31 14. 19 13. 88 13. 72 13. 55 13. 63 13. 94 14. 48 14. 61 14. 69 15. 08	\$18. 15 18. 56 19. 05 20. 36 20. 97 21. 04 21. 07 21. 20 22. 78 22. 62 21. 96 23. 39	\$14. 91 15. 36 15. 67 16. 74 16. 98 17. 02 17. 48 17. 88 18. 14 19. 04 19. 00 19. 42	\$24. 12 24. 46 24. 72 24. 59 25. 22 25. 00 25. 18 25. 49 27. 32 28. 43 28. 20 28. 86	\$19. 41 19. 82 19. 95 20. 12 20. 77 20. 77 21. 63 22. 15 22. 21 22. 52 22. 77	\$29. 21 29. 29 29. 52 29. 98 30. 11 30. 51 30. 60 30. 64 30. 73 30. 64 30. 25	\$22. 92 22. 99 23. 13 23. 32 23. 60 22. 99 22. 84 22. 68 23. 26 23. 26 23. 53 23. 70	\$30. 76 31. 16 31. 35 31. 03 231. 39	\$23. 49 23. 68 23. 93 24. 58 25. 30

¹ Including premium pay for overtime and work on late shifts.
² Preliminary.

Variation in Average Hourly Earnings Within Regions

The general averages of hourly earnings for the North and South, just cited, fail to reveal the wide variations in the averages for the several areas included in each region. A special study of 12 Southern States shows that Mississippi had the lowest average hourly earnings, 49.4 cents, in May 1944, while South Carolina, Kentucky, and Tennessee headed the list with 64.5 cents, 62.5 cents, and 61.6 cents, respectively. These State averages do not necessarily indicate comparable differences in wages paid for specific occupations. For example the presence of a large proportion of yarn mills within a given area may reduce the average of hourly earnings solely because of differences in the composition of the labor force.

The Bureau has just completed an analysis of 66 separate areas important in the cotton-textile manufacturing industry. Eighteen of these areas are in the North and 48 in the South. The results of a part of this analysis are shown in tables 5 and 6. In order to determine the extent of recent wage increases, a comparison of average hourly earnings for identical establishments has been made for the months of April 1943 and April 1944.

Table 5.—Average Hourly Earnings and Employment in 18 Northern Areas of the Cotton-Textile Industry, in Identical Mills, April 1943 and April 1944 1

	Average earni		Increase in	Employs thous	
Area	April 1943	April 1944	average hourly earnings	April 1943	April 1944
Pennsylvania (except Philadelphia)	61. 5 62. 4 63. 1 65. 8 66. 4 66. 7 68. 0 68. 3 68. 8 70. 0 70. 7 70. 7	62. 8 67. 2 64. 9 70. 9 67. 6 68. 7 73. 7 69. 8 71. 0 70. 4 72. 2 72. 2 72. 3 72. 3 73. 0 77. 1 82. 3	Cents 5.7 2.8 8 1.2 3 7.0 8 2.7 6 2.2 2.7 7 1.5 8 4.4 0 4.8	0.9 2.9 2.25 7.6 1.09 9.52 13.5 11.0 1.28 9.3 3.3	0.7 .64 .24 .22 .3.5 .99 8.1 1.9 11.4 1.3 9.5 1.1 7.6 3.0

Data are from the Bureau's report, Employment, Hours, and Earnings, and Turnover Rates in Cotton Goods, by Areas, January 1942-April 1944.
 Including overtime pay at premium rates and shift differentials.
 Covers areas not elsewhere listed.

Increases in average hourly earnings ranged from 0.8 cents to 7.8 cents per hour in the northern areas represented, the smallest increase occurring in Connecticut, and the greatest in the case of a limited number of workers in Illinois.

The areas in the South showed increases in average hourly earnings ranging from 0.1 cents to 8.5 cents. As is the case in the broader areas previously discussed, the difference between areas is caused by variation in the number of hours worked, the type of product manufactured, and local competition for labor by other industries.

Denotes an area covered in the study based upon occupational wage rates, to be found in the following

TABLE 6.—Average Hourly Earnings and Employment in 48 Southern Areas of the Cotton-Textile Industry, in Identical Mills, April 1943 and April 19441

		ourly earn- cents) ²	Increase in	Employs thous	
Area	April 1943	April 1944	average hourly earnings	April 1943	April 1944
Newnan, Ga	. 40 X	49. 6 50. 4 50. 9 56. 9	Cents 0. 7 . 6 1. 1 5. 9	3. 2 2. 0 . 9 2. 0	2. 9 1. 9 . 7
Dallas, Tex. Albemarle-Troy, N. C. Granite Falls-Lenoir, N. C. Virginia 4. Georgia 4. Laurinburg, N. CDillon, S. C.	51.9 52.5 52.5	59. 4 54. 6 57. 0 53. 0 53. 1	7.8 2.9 5.1 .5	4.8 3.6 2.1 4.6 4.1	4.6 3.5 2.2 4.0 3.8
Fayetteville, N. C. Lanett, AlaLaGrange, Ga. Rockingham, N. C. Macon-Forsyth, Ga.* Athens-Gainesville, Ga.	52. 6 52. 8 52. 9 53. 0 53. 0	52. 8 58. 1 56. 3 53. 6 56. 5	. 2 5. 3 3. 4 . 6 3. 5	1. 1 19. 2 3. 6 3. 5 4. 8	1. 0 17. 7 3. 2 3. 2 4. 9
Texas.4 Monroe, Ga. Gaffney, S. CShelby, N. C. Winston-Salem-Lexington, N. C.3 North Carolina 4	53.7 54.2 54.4 54.4	55. 4 55. 2 55. 1 59. 3 56. 4	2. 2 1. 5 . 9 4. 9 2. 0	3. 0 3. 4 8. 5 2. 6 8. 6	2, 7 3, 3 8, 5 2, 2 8, 1
Columbus, Ga. Alabama 4 Lincolnton-Newton N. C. Gastonia, N. C. Sylacauga-Talladega, Ala.	55. 1 55. 1	55. 9 56. 2 58. 6 61. 7 55. 5	1. 2 1. 1 3. 5 6. 5	12. 6 18. 9 2. 6 18. 3 7. 8	10. 8 17. 8 2. 4 16. 8 6. 8
Sylacauga-Talladega, Ala Statesville-Salisbury, N. C. ² Rome-Cartersville-Cedartown, Ga Roanoke Rapids-Warrenton, N. C. ³ Atlanta, Ga. ³ Rock Hill-Chester, S. C	55. 6 56. 2 56. 4	62. 1 62. 5 58. 7 62. 9 59. 7	6.7 7.0 3.1 6.7 3.3	4. 8 14. 9 4. 6 7. 2 5. 6	4. 13. 9 4. 5. 5
Tennessee 4 Lancaster, S. CMonroe, N. C. Huntsville, Ala.3 Anderson, S. C. Walhalla-Pickens, S. C.	57. 1 57. 4 57. 5	60. 4 61. 0 57. 2 62. 4 60. 6	3.9 4.4 .1 5.0 3.1	6.8 11.0 3.0 9.7 4.3	5.4 10.1 2.6 9.4 4.3
Anniston-Gadsden, Ala. Griffin-Thomaston, Ga. Greenwood-Newberry, S. C. South Carolina (Chattanoga, Tenn.	57. 6 57. 8 57. 9 58. 0	58. 3 64. 3 62. 5 58. 3 60. 8	.7 6.7 4.7 .4 2.8	5. 8 10. 0 10. 5 1. 6 5. 3	5. 9. (10. (1, (4. 1
Charlotte, N. C. 3 Burlington-Hillsboro-Durham, N. C. Augusta. GaGraniteville, S. C. Reidsville, N. CDanville, Va. 4 Columbia, S. C.	58.8 59.6	63. 6 60. 7 60. 7 63. 9 64. 5	5. 3 2. 3 1. 9 4. 3 4. 6	4. 4 9. 4 6. 7 17. 7 7. 5	3. 9 8. 0 5. 14. 6.
Greenville, S. C. ³ . Spartanburg, S. C. ³ . Greensboro, N. C. ³ . Concord, N. C. ³ .	60. 1 60. 2 61. 4	64. 7 62. 3 69. 3 70. 2	4.6 2.1 7.9 8.5	8. 0 15. 0 7. 1 22. 1	7. 13. 6. 19.

Data are from the Bureau's report, Employment, Hours and Earnings, and Turnover Rates in Cotton Goods, by Areas, January 1942-April 1944.
 Including overtime pay at punitive rates, and shift differentials.
 Denotes an area covered in the study based upon occupational wage rates, to be found in the following pages.

Occupational Wage Rates

Method of study.—In the summer of 1943, as part of the Bureau's nation-wide study of occupational wage rates, hourly rates and straight-time hourly earnings in the cotton-goods industry were obtained for 6 northern and 10 southern areas. The study covered the various types of mills engaged in the manufacture of cotton broad woven goods 3 and cotton yarn. Thread mills, situated principally in the northern States, were excluded.

The wage data were compiled from pay rolls of 233 mills by field representatives of the Bureau of Labor Statistics, who visited the

^{*} Except in one northern and two southern areas the survey excluded establishments primarily engaged in the manufacture of pile fabrics. Wages in mills manufacturing this product in these areas did not differ appreciably from those in other mills in the same area.

individual establishments and classified the workers in accordance with the Bureau's standard job descriptions.

The occupational data relate to a July 1943 pay-roll period in the case of two northern areas (Maine, and Utica-Gloversville, N. Y.) and all of the southern areas except Atlanta, Ga. The latter city and the remainder of the northern areas were surveyed in April 1943.

The information obtained consisted of average hourly earnings including incentive payments but excluding premium payments for overtime or late-shift work. Average hourly earnings were obtained for 20 selected key occupational classifications, including half of the wage earners in the mills. Because of the greater concentration of workers in relatively few occupations in yarn mills, the proportion of workers covered in such establishments was somewhat greater

than in broad-goods mills.

Representativeness of areas studied.—The information on occupational wage rates presented at this time is limited primarily to cities of 25,000 or more and to their immediately surrounding communities. Since this particular field study was intended mainly to provide information on a wage-area (community) basis, it is emphasized that the data do not represent those segments of the industry that are in relatively isolated, small communities. The survey provides a somewhat poorer representation of southern than of northern textile mills. Thus, in Alabama, Georgia, and South Carolina, where much of the industry is scattered in communities of less than 25,000, the coverage of the study is less adequate than that obtained in North Carolina or Virginia.

Comparison of the average hourly earnings of wage earners in the areas surveyed with the level of earnings for wage earners in the entire industry reveals that wage levels in the communities studied were somewhat higher than in the industry as a whole (tables 5 and 6). Since the overstatement of wage levels was slightly greater in the South than in the North, the data also understate slightly the differences in wage levels between northern and southern communities. Within each region the variations in wage levels were also less pronounced among the areas surveyed than those which would be found

in a survey covering all wage areas in the industry.

In July 1943, the straight-time earnings of the workers in the six selected northern areas averaged 67.7 cents, or 1.1 cents more than the average wage for all northern cotton-textile wage earners as a group. The cotton-textile workers in the selected southern areas averaged 56.9 cents, or 2.2 cents above the corresponding figure for all wage earners in the cotton-textile industry in the South. Recent wage increases which have taken place would tend to make the occupational averages more representative of the entire South, although somewhat below those now found in the specific areas covered.

Unionization in plants studied.—One-fourth of the mills included in the Bureau's study of wage rates were operating under the terms of union agreements. Unionization was much more extensive in the North than in the South; 43 of the 58 mills surveyed in the New England-New York State region had entered into agreements with unions, whereas only 17 of the 175 southern mills had done so.

Unionization in the South had made greater progress among the integrated mills than among the independent weaving and independent yarn mills. Since the former are typically larger, the proportion of

wage earners covered by union agreements, 1 out of 5, was considerably greater than would be indicated by the number of mills with such Although one or more unionized mills were found in 6 of the 10 southern wage areas studied, the workers covered by agreements in the mills studied in that region were largely concentrated in three areas: Danville, Va.; Greenville and Spartanburg, S. C.; and the Tennessee Valley area of northern Alabama. Of 118 mills studied in North Carolina, only 4 had union contracts. All of the 15 mills surveyed in the 3 Georgia areas were nonunion.

OCCUPATIONAL VARIATIONS

A summary of the occupational wage-rate study is presented in table 7. These data, as has been mentioned, represent wage levels during the spring and summer of 1943, and do not reflect subsequent upward adjustments which have been of importance primarily in The figures presented for the northern and southern regions represent weighted averages of the data for only the individual areas studied.

Table 7.—Average Hourly Earnings 1 in Selected Occupations in Cotton-Goods Manufacture in Northern and Southern Wage Areas, Spring and Summer, 1943

	6 northe	rn areas	10 south	ern areas	Excess o	
Sex and occupation of worker	Number of workers 2	Average hourly earnings	Number of workers 2	Average hourly earnings	Amount	Percent
Male workers:						
Card grinders	263	\$0.75	1, 119	\$0.65	\$0.10	15
Card tenders and strippers	775	.63	3,717	. 51	. 12	24
Uarnenters, class A	1 49	. 93	109	.70	. 23	33
Carpenters, class B. Doffers, spinning frame	110	. 82	350	.60		37
Doffers, spinning frame	805	.74	6, 868	. 57		
Electricians, class A	48	. 99	79	. 79	. 20	25
Electricians, class A Electricians, class B Inspectors, cloth, hand Inspectors, eloth, machine Janitors 4	39	88	142	.67		31
Inspectors, cloth, hand	(3)	(3)	246			
Inspectors, cloth, machine	(3)	(3)	205			
Janitors 4	358	`.52	2, 241	.44		
Loom fixers, other than Jacquard Machinists, class A. Machinists, class B.	1,694	.98	3,796	. 75	. 23	
Machinists, class A	104	. 95	239			
Machinists, class B	98 590	. 81	348	. 65	.16	
Second hands	413	. 97	3,000		. 24	3
Spinners, ring frame	130	. 67	187	.53		
Stock cierks	624	. 59	569			
Truckers, hand	229	.55	2, 133 981	. 45		2
Watchmen	229	.58		.47		1 2
weavers, other than Jacquard	2, 648 107	.80	4, 292 207	.64		2
Winders, yarn Female workers:	107	.66	207	. 51	. 15	2:
remale workers:	525	.64	431	.49	. 15	3
Doffers, spinning frame Inspectors, cloth, hand Inspectors, cloth, machine	992	.53	1,347	.49	.04	
Inspectors, cloth, nanu	577	.52		.56	\$.04	
Inspectors, cloth, machine	76	.52	1,650 423	. 43		2
Janitresses 4	3, 294	.63	16,886	.52	1 .11	
Spinners, ring frame	3, 294	.03	77	. 49		
Stock clerks Truckers, hand	48	.54	(3) "	(3) 49	.05	1 1
Weavers, other than Jacquard	2,790	.75	6.372	6,62	. 13	2
Winders, yarn	3,006	.63	10, 435	52	113	2
w muers, yarn	0,000	, .03	j 10,400	1 .02	, ,11	1 2

It is of interest that none of the key occupations covered in this survey paid an average wage as high as \$1 per hour. The highest wages were paid to maintenance workers. Class A maintenance electricians averaged 99 cents in the North and 79 cents in the South. Class A maintenance machinists in the South also averaged 79 cents.

Excluding premium payments for overtime and for work on second or third shifts.
 Represents estimated total employment in all mills in areas covered by survey.
 Number of establishments and/or workerstoo small to justify presentation of data.
 Including cleaners and sweepers.
 Excess of South over North.

The lowest-paid workers were janitors and janitresses, each of whom earned 52 cents in the North and 44 and 43 cents, respectively, in the South. Loom fixers and second hands were the highest-paid workers whose jobs are characteristic of the industry. Watchmen and hand truckers received a few cents more on the average than did janitors. Among the numerically most important occupational classifications, male weavers showed earnings of 80 cents in the North and 64 cents in the South, female weavers averaged 75 cents in the North and 62 cents in the South, and female spinners earned 63 cents in the North and 52 cents in the South. All occupations in the North and all male occupational categories in the South, except janitors, watchmen, and hand truckers, averaged more than 50 cents an hour.

Although wages in the North were higher than those in the South in every category, the difference varied by occupation. The smallest differences were found in the occupations of female cloth inspectors and stock clerks, while the largest were found among carpenters, second hands, Class B electricians, loom fixers, and doffers. The differential was, in general, larger among the skilled jobs than among the unskilled. The median difference (unweighted) was about 23.5 percent.⁴

Table 8.—Indexes of Hourly Earnings 1 in Selected Occupations in Cotton-Goods Manufacture in Northern and Southern Wage Areas, Spring and Summer of 1943

	ings (m	ve earn- ale hand rs=100)		Relativings (ma trucker	
Sex and occupation of worker	Six north- ern areas	Ten south- ern areas	Sex and occupation of worker	Six north- ern areas	Ten south- ern areas
Males: Loom fixers, other than Jacquard Second hands Weavers, other than Jacquard Card grinders Doffers, spinning frame Card tenders and strippers Stock clerks. Watchmen	178 176 145 136 135 115 107 105	167 162 142 144 127 113 116	Males—Continued. Janitors Truckers, hand Females: Weavers, other than Jacquard Spinners, ring frame. Winders, yarn Inspectors, cloth, hand Inspectors, cloth, machine	95 100 136 115 115 96 95	98 100 138 116 116 109 124

¹ Earnings exclude premium payments for overtime or for work on second or third shifts.

The variation in earnings among the numerically most important occupations is shown in relative form in table 8, which expresses the average wage rate for each job in terms of the earnings for male hand truckers. This occupation was selected as the base because of its wage stability and because it is one of the lower-paid occupations in the industry, which employs relatively large numbers of workers. Analysis of table 8 indicates that the variation in earnings among these important occupational classifications was relatively consistent

⁴ Part of the variation in hourly earnings between the North and South may be attributed to the concentration of cotton-yarn mills in southern textile areas. Wage materials collected in this and previous studies of the wage structure of the cotton-goods industry indicate that wage rates for a given occupation are generally lower in independent yarn mills than in integrated mills. In the Bureau's mimeographed release entitled "Cotton Broad Woven Goods and Yarn Mills: Five Southeastern States, Straight-Time Average Hourly Earnings, Selected Occupations, July 1943," occupational earnings are presented separately for integrated and for yarn mills. These differences are also discussed in the earlier report on the industry, Wages in Cotton-Goods Manufacturing (Bulletin 663), and in Hours and Earnings in Manufacture of Cotton Goods, September 1940 and April 1941 (Serial No. R. 1414).

in the North and South among most of the lower-paid job categories, female cloth inspectors being a notable exception to this statement. There was somewhat less consistency in the case of the higher-paid occupations. The relative earnings of the two highest-paid major jobs—those of loom fixers and second hands—were distinctly higher in the North than in the South, the relatives being 178 and 176, respectively, in the North, as compared with 167 and 162 in the South. Doffers also had somewhat higher relative earnings in the North, resulting in part from the greater importance of incentive pay for this occupation in the North. The rates paid to card grinders in the North appear to have been relatively low.

OCCUPATIONAL RATES, BY WAGE AREA

Occupational averages for the individual wage areas are presented in table 9. It is apparent from this table that the variations among the individual areas surveyed within the same region are in general less pronounced than the North-South wage differences noted above. Somewhat greater differences between the wage levels within each of the two major regions might have been shown if the survey had included cotton mills located in relatively isolated small communities.

Table 9.—Average Hourly Earnings 1 in Selected Occupations in Cotton-Goods Manufacture in 16 Wage Areas, Spring and Summer of 1943

	L		Northe	rn areas			Souther	n areas
Sex and occupation of worker	Nor- wich- Daniel- son (Conn.) area	Maine area	Fali River (Mass.) area	New Bed- ford (Mass.) area	Utica- Glov- ersville (N. Y.) area 2	Providence (R. I.) area	Ten- nessee Valley area of north- ern Ala- bama	Atlanta (Ga.) area
Males								
Card grinders Card tenders and strippers Carpenters, maintenance, class A Carpenters, maintenance, class B Doffers, spinning frame Electricians, maintenance, class B Inspectors, cloth, hand Inspectors, cloth, machine Janitors Loom fixers, other than Jacquard Machinists, maintenance, class B Second hands Second hands Spinners, ring frame Stock clerks Truckers, hand Watchmen Weavers, other than Jacquard Wanders, yarn	. 81 . 61 1. 04 . 86 . 63 . 52 . 92 . 91 . 77 . 78 . 62 . 60 . 55	\$0. 77 . 59 . 98 . 87 . 65 1. 01 . 88 . 99 . 99 . 88 1. 02 . 72 . 63 . 52 . 62 . 78	\$0.79 .65 1.01 .78 .76 1.12 .92 (3) .98 .98 .92 .61 .51 .54 .79	\$0. 73 .63 .94 .90 .76 .97 .54 .53 .98 .95 .88 1. 00 .76 .58 .54 .60 .79	\$0.70 .59 (*) .98 .78 1.03 .51 1.05 1.08 .86 (*)	\$0. 74 . 67 . 94 . 77 . 74 . 94 . 84 (2) . 56 1. C0 . 93 . 79 . 94 . 59 . 59 . 59 . 59	\$0.63 .56 .58 .69 .49 .49 .49 .48 .60	\$0. 62 .48 .57 .64 .48 .47 .43 .67 .89 .64 .74 .45 .45 .53
Females								
Doffers, spinning frame	.51 .52 .61 .52 .60	. 65 . 53 . 52 (3) . 64 . 73 . 59	. 52 . 52 . 58	. 67 . 54 . 52 . 53 . 66 . 55 . 54 . 76 . 67	.60 .52 .66	.68 .51 .52 .52 .67	(3) . 48 . 53 . 47 . 55 . 55	(3) . 50 (4)

See footnotes at end of table.

TABLE 9.—Average Hourly Earnings 1 in Selected Occupations in Cotton-Goods Manufacture in 16 Wage Areas, Spring and Summer of 1943-Continued

			Sout	hern area	s—Conti	nued		
Sex and occupation of worker	Augus- ta (Ga.) area	Macon (Ga.) area	Bur- lington- Win- ton- Salem (N. C.) area	lotte (N. C.)	Rocky Mount (N. C.) area ³	States- ville (N. C.) area	Green- ville- Spar- tanburg (8. C.) area ²	Dan- ville (Va.) area
Males								
Card grinders Card tenders and strippers Carpenters, maintenance, class A. Carpenters, maintenance, class B. Doffers, spinning frame Electricians, maintenance, class A.	. 70 . 59	\$0.58 .49 .48	\$0.66 .53 .67 .57 .62 .73	\$0.64 .49 .66 .54 .54	\$0.66 .47 (3) .64 .57	\$0.59 .49 .85 .55 .55	\$0.69 .50 .70 .60 .59	\$0.65 .54 .75 .70 .57
Electricians, maintenance, class B Inspectors, cloth, hand Inspectors, cloth, machine Janitors 4 Loom fixers, other than Jacquard Machinists, maintenance, class A	. 41 . 75	. 40 . 63 1. 25 . 65	. 59 . 59 . 50 . 47 . 77 . 76 . 58	.62 .52 .65 .42 .79 .77	(*) . 43 . 71 . 76 . 63	. 47 . 51 . 45 . 77 . 86 . 61	.65 .51 .50 .45 .74	.72 .59 .48 .45 .77
Machinists, maintenance, class B Second hands Spinners, ring frame Stock clerks Truckers, hand	. 86 . 59 . 42	. 65 . 46 . 44	.78 .53 .47	. 66 . 50 . 58 . 43	.70 .55 .42	. 66 . 57 . 49 . 45	.68 .83 .53 .46	.76 .78 .52 .46
Watchmen Weavers, other than Jacquard Winders, yarn Females	. 62	.42	. 49 . 65 . 48	. 43 . 68	. 46 . 61 . 52	. 44 . 66 . 50	.49 .66	. 49
Doffers, spinning frame	.50	. 47	. 56 . 48 . 49	. 52 . 47 . 66 . 43 . 51	(3) • 46 • 40 • 49 • 54	.51 .45 .52 .43 .49	. 49 . 51 . 45 . 52	. 42 . 52 . 53 . 42 . 54
Truckers, hand Weavers, other than Jacquard Winders, yarn	l	. 61 . 53	. 62 . 54	. 67 . 52	. 58	. 42 . 64 . 48	. 63 . 51	. 58

No one area either in the North or in the South consistently paid the lowest or highest rates in its region. In general, however, wage rates in the North appear to have been highest in the Providence area and lowest in the Norwich-Davielson and Fall River areas. In the South the highest general levels prevailed in the Burlington-Winston-Salem area and the lowest in the Atlanta and Rocky Mount Areas. Weighted averages based on 11 occupational categories common to all areas are presented below:

-	Average 1	A	verage 1
North:	_	South—Continued.	•
Norwich-Danielson, Conn	. \$0, 65	Augusta, Ga	\$0. 55
Maine		Macon, Ga	. 53
Fall River, Mass	65	Burlington-Winston-Salem,	
New Bedford, Mass		N. Č	. 57
Utica-Gloversville, N. Y	69	Charlotte, N. C	. 55
Providence, R. I.	71	Rocky Mount, N. C	.52
South:		Statesville, N. C.	. 53
Tennessee Valley of Ala	-	Greenville - Spartanburg,	
bama	55	S. C.	. 55
Atlanta, Ga	52	Danville, Va	. 56

¹ Weighted averages, based on rates in the following occupational categories: Card grinders, male; card tenders and strippers, male; doffers, spinning frame, male; janitors, male; loom fixers, other than Jacquard, male; stock clerks, male; truckers, hand, male; weathmen; spinners, ring frame, female; weavers, other than Jacquard, female; and winders, yarn, female. Uniform occupational weights were used in all areas.

Excluding premium payments for overtime and for work on second or third shifts.
 Includes establishments primarily engaged in manufacturing pile fabrics. Data for other areas do not over such establishments.

Number of establishments and/or workers too small to justify the computation of an average.

Including cleaners and sweepers.

