
UNITED STATES DEPARTMENT OF LABOR

Frances Perkins, *Secretary*

BUREAU OF LABOR STATISTICS

Isador Lubin, *Commissioner*

in cooperation with
WORK PROJECTS ADMINISTRATION

+

Salaries and Hours of Labor
in Municipal Fire Departments,
July 1, 1938

VOLUME V

South Atlantic Cities

+

Prepared by the

DIVISION OF CONSTRUCTION AND
PUBLIC EMPLOYMENT

Herman B. Byer, Chief



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JESSE M. HADLEY, *Director*

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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., September 25, 1940.

The SECRETARY OF LABOR:

I have the honor to transmit herewith the fifth of a series of nine reports on Salaries and Hours of Labor in Municipal Fire Departments. This report covers cities in the South Atlantic States. An explanation of the purposes of the survey was given in the preface to the first report, Volume I, New England Cities.

ISADOR LUBIN, *Commissioner.*

Hon. FRANCES PERKINS,
Secretary of Labor.

v

Salaries and Hours of Labor in Fire Departments of 39 South Atlantic Cities, July 1, 1938¹

Summary

On July 1, 1938, the fire departments ² of 39 South Atlantic Division cities ³ employed 5,818 people whose annual salaries totaled about \$11,104,000.

Of every 100 employees 95 were in the fire-fighting divisions and 5 were in the fire-prevention, apparatus, fire-alarm, and clerical divisions. Of the 95 in the fire-fighting divisions, 74 were privates, fire-engine engineers, and drivers; 16 were captains, lieutenants, and sergeants; 3 were chiefs, battalion chiefs, and assistants to the chiefs; and 2 were in other occupations.

One out of every 5 employees was an officer or held a supervisory position of some kind.

On the basis of the United States census of population for 1930, the large cities had a relatively greater number of firemen than the small cities. For every 10,000 inhabitants the group of the 9 largest cities in the South Atlantic Division had 17 fire-department employees, the group of the 14 medium-sized cities had 14 fire-department employees, and the group of the 16 small cities had 13 fire-department employees.

The annual salaries of all the employees in the 39 fire departments did not show the wide variations found in private industry. The annual salaries ranged between \$900 and \$8,000 but 84 percent of the employees received between \$1,550 and \$2,450 a year. This

¹ Analysis and presentation by Arthur Dadian. Editing and tabulation of data by Mahlon B. Buckman. Carol P. Brainerd, technical adviser.

² Relatively little general information is available on employment and salaries in city fire departments, in spite of the importance of their functions and the considerable number of their employees. A study of salaries and working conditions of fire department employees in 1934 was made by the Bureau of Labor Statistics and was published in the *Monthly Labor Review* for November 1935. In the present study the Bureau of Labor Statistics, in cooperation with the Work Projects Administration, undertook to compile this information, as of July 1, 1938, for cities in the United States having a population of 25,000 or more. This report for 39 South Atlantic Division cities is one of a series which is being issued by geographic divisions.

³ This report covers only cities having a population of 25,000 or more, the United States census of population for 1930 being used to determine the size of the cities. See appendix for list of the States in the South Atlantic Division and the cities included in this bulletin.

concentration was due mostly to the small differences between the salaries of officers or those holding supervisory positions and the rest of the employees.

The supervisory employees, who constituted 20 percent of all employees, received 23 percent of the total salaries, a ratio of only 1.00 to 1.16.

Of every \$100 spent in salaries \$95 went to the fire-fighting divisions. Of this \$95, \$71 went to privates, drivers, and fire-engine engineers; \$18 went to captains, lieutenants, and sergeants; \$4 went to chiefs, assistants to the chiefs, and battalion chiefs; and \$2, to those in other occupations.

The annual salaries were higher in the large than in the small cities. This was especially so among the higher-ranking occupations which entailed greater responsibility in the large cities.

Because of the higher salaries and the relatively greater number of firemen in the large cities, the per capita salary cost of fire protection was higher in the large than the small cities. The actual per capita cost was \$3.43 for the 9 largest cities, \$2.29 for the 14 medium-sized cities, and \$2.06 for the 16 small cities.

The annual salaries of firemen are affected by such factors as vacations with pay, payments for uniforms, injuries resulting in incapacity, and the promotion policy of fire departments.

The 39 fire departments gave their employees an average of 16 days of vacation with pay. Many of the 39 cities supplied their firemen with uniforms and other items such as rubber boots and rubber coats.

In this study data were obtained regarding promotions only for the lower-grade privates. Of the 39 fire departments 3 had no promotion system for their lower-grade privates while 32 promoted their lower-grade privates after a specified period of service and 4 after civil-service examination.

Of the 39 fire departments, 4 operated under the single-platoon system of assignment of men on duty, 34 operated under the 2-platoon system, and 1 city had a volunteer fire department.

The single-platoon system included 3 percent and the 2-platoon system included 92 percent of all employees. The remaining 5 percent of the employees did not work under any platoon system, less than 1 percent of them were on continuous duty and the rest had other working hours prevailing in the other city departments.

Under the single-platoon system the firemen were on duty, on the average, between 112 and 134 hours per week. Under the 2-platoon system, 76 percent of all employees were on duty an average of 84

hours per week, 15 percent an average of 72 hours per week, and 1 percent 81 hours. The employees having the hours prevailing in the other city departments worked an average of 52 hours per week.

The average number of hours on duty was lower in the large than in the small cities mostly because none of the large cities operated under the single-platoon system and none of the small cities operated under the variation of the 2-platoon system which averaged 72 hours on duty per week.

The average number of days on duty per week varied between 4.7 and 5.6 days under the single-platoon system and between 3.4 and 7.0 days under the 2-platoon system. Under the 2-platoon system the averages of 3.5, 6.1, and 6.5 days on duty per week predominated and included 30, 25, and 11 percent of all employees, respectively.

Some small cities in the United States still have volunteer fire departments and "call" men who receive a nominal remuneration. Among the 39 South Atlantic Division cities only 1 small city had a volunteer fire department with 14 full-time engineers, and 1 small city had 41 call men in addition to its 35 regular, full-time employees.

Annual Salaries

General Level of Salaries

Annual salaries in the fire departments of the 39 South Atlantic cities did not show wide variations. Forty-nine percent of all employees received between \$1,550 and \$1,850, 34 percent between \$1,850 and \$2,450, 11 percent under \$1,550, and 6 percent \$2,450 and over. In the large cities the annual salaries were considerably higher than in the small cities.⁴ In cities having a population of 100,000 or more, only 12 percent of the fire department employees received less than \$1,750, compared with 83 percent in cities having a population of 50,000 and under 100,000, and 87 percent in cities having a population of 25,000 and under 50,000.

For the sake of brevity and comparability with other reports in this series, the group of largest cities mentioned above will be here designated as Group I,⁵ the medium-sized cities as Group II, and the smaller cities as Group III.

⁴ Usually the difference in annual salaries between large and small cities is not so great. The unusual difference in South Atlantic Division was due mostly to the comparatively high salaries in Washington, D. C., which had 15 percent of all the employees in the division.

⁵ Baltimore, Md., with a population of 804,874, has been included in this group because it was the only city in the South Atlantic Division with a population over 500,000 and the data for it did not vary sufficiently from the data for the other cities in Group I to justify a separate treatment.

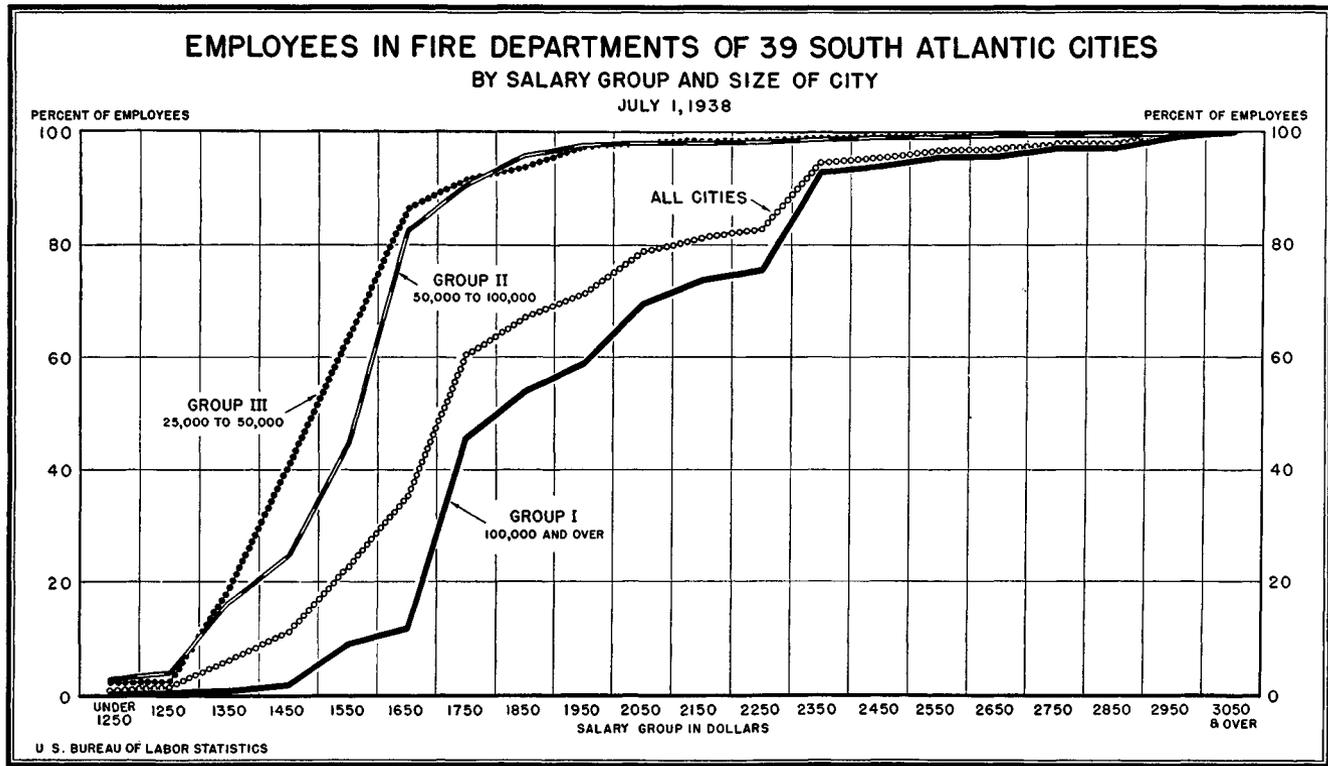


TABLE 1.—*Distribution of employees in fire departments of 39 South Atlantic cities, by salary group and size of city, July 1, 1938*

Salary group	Number				Percent			
	All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III
All groups.....	2 5, 818	3, 903	1, 238	677	100.0	100.0	100.0	100.0
Under \$1,250.....	48	2	32	14	0.8	0.1	2.6	2.1
\$1,250 and under \$1,350.....	30	12	16	2	.5	.3	1.3	.3
\$1,350 and under \$1,450.....	277	11	154	112	4.8	.3	12.4	16.5
\$1,450 and under \$1,550.....	293	37	105	151	5.0	.9	8.5	22.3
\$1,550 and under \$1,650.....	684	283	248	153	11.8	7.3	20.0	22.6
\$1,650 and under \$1,750.....	722	100	468	154	12.4	2.6	37.8	22.7
\$1,750 and under \$1,850.....	1, 462	1, 330	98	34	25.1	34.1	7.9	5.0
\$1,850 and under \$1,950.....	403	321	66	16	6.9	8.2	5.3	2.3
\$1,950 and under \$2,050.....	239	192	22	25	4.1	4.9	1.8	3.7
\$2,050 and under \$2,150.....	429	422	4	3	7.4	10.8	.3	.4
\$2,150 and under \$2,250.....	144	142	1	1	2.5	3.6	.1	.2
\$2,250 and under \$2,350.....	96	93	2	1	1.6	2.4	.2	.2
\$2,350 and under \$2,450.....	684	676	5	3	11.8	17.3	.4	.4
\$2,450 and under \$2,550.....	44	38	4	2	.8	1.0	.3	.3
\$2,550 and under \$2,650.....	64	63	1		1.1	1.6	.1	
\$2,650 and under \$2,750.....	17	12	2	3	.3	.3	.2	.4
\$2,750 and under \$2,850.....	51	49	1	1	.9	1.3	.1	.2
\$2,850 and under \$2,950.....	1	1			(²)	(²)		
\$2,950 and under \$3,050.....	84	79	4	1	1.4	2.0	.3	.2
\$3,050 and over.....	46	40	5	6	.8	1.0	.4	.2

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Includes only regular full-time employees.

³ Less than a tenth of 1 percent.

⁴ Includes 1 at \$3,066, 2 at \$3,087, 1 at \$3,120, 1 at \$3,200, 2 at \$3,300, 1 at \$3,500, 2 at \$3,600, 1 at \$3,875, 5 at \$4,000, 1 at \$4,200, 15 at \$4,500, 5 at \$5,000, 1 at \$5,040, 1 at \$5,600, and 1 at \$8,000.

⁵ Includes 1 at \$3,110, 3 at \$3,300, and 1 at \$3,392.

⁶ Includes 1 at \$3,300.

Salaries in Selected Occupations

The annual salaries for the various occupations within the same fire department did not show large differences. When the annual salaries for every occupation were averaged it was found that the average annual salary of the chiefs, the highest-paid officers, was only \$1,347 higher than the average annual salary of first-grade privates. In the case of lower-ranking occupations the differences were much less. The average annual salary of captains was only \$240 more than that of first-grade privates. These differences were somewhat greater in the large than in the small cities. This was especially so among the supervisory occupations which entailed greater responsibilities in the large cities. The difference between the average annual salaries of chiefs and first-grade privates in Group I cities was \$2,774, compared with a difference of \$1,332 in Group II cities and \$942 in Group III

cities. Similarly, the differences between the average annual salaries of captains and first-grade privates were \$349 in Group I cities, \$179 in Group II cities, and \$202 in Group III cities.

On the whole, the annual salaries for the same occupation were higher in the large than in the small cities, the differences being more pronounced among the higher-ranking occupations. The average annual salary of chiefs in Group I cities, for example, was \$1,790 above that of chiefs in Group II cities and \$2,112 above that of chiefs in Group III cities. The differences in the salary of the bulk of the employees were not so great. In Group I cities the average annual salary of first-grade privates was only \$348 above that of first-grade privates in Group II cities, and \$380 above that of first-grade privates in Group III cities.

TABLE 2.—*Distribution of fire-department employees in 39 South Atlantic cities, by selected occupations and salary group, July 1, 1938*

Salary group	All occupations				Chiefs			Assistant or deputy chiefs				
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
Number of cities reporting.....	39	9	14	16	38	9	14	15	31	7	13	11
Total number of employees ³	5,818	3,903	1,238	677	38	9	14	15	43	12	18	13
Under \$1,250.....	48	2	32	14								
\$1,250 and under \$1,350.....	30	12	16	2								
\$1,350 and under \$1,450.....	277	11	154	112								
\$1,450 and under \$1,550.....	293	37	105	151								
\$1,550 and under \$1,650.....	684	283	248	153								
\$1,650 and under \$1,750.....	722	100	468	154					2			2
\$1,750 and under \$1,850.....	1,462	1,330	98	34					3			3
\$1,850 and under \$1,950.....	403	321	66	16					10		5	5
\$1,950 and under \$2,050.....	239	192	22	25	1			1	3		2	1
\$2,050 and under \$2,150.....	429	422	4	3	2			2	3		2	1
\$2,150 and under \$2,250.....	144	142	1	1	1			1				
\$2,250 and under \$2,350.....	96	93	2	1	1			1	2		2	
\$2,350 and under \$2,450.....	684	676	5	3	3		1	2	4		3	1
\$2,450 and under \$2,550.....	44	38	4	2	4		2	2	2		2	
\$2,550 and under \$2,650.....	64	63	1		1		1					
\$2,650 and under \$2,750.....	17	12	2	3	3			3	4	2	2	
\$2,750 and under \$2,850.....	51	49	1	1	2		1	1	1	1		
\$2,850 and under \$2,950.....	1	1										
\$2,950 and under \$3,050.....	84	79	4	1	5		4	1	1	1		
\$3,050 and over.....	46	40	5	1	15	6	7	5	8	8		
Average annual salary.....	\$1,908	\$2,041	\$1,651	\$1,615	\$3,194	\$4,727	\$2,937	\$2,515	\$2,529	\$3,683	\$2,214	\$1,899

See footnotes at end of table.

TABLE 2.—Distribution of fire-department employees in 39 South Atlantic cities, by selected occupations and salary group, July 1, 1938—Continued

Salary group	Assistant deputy chiefs				Battalion chiefs				Captains			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
Number of cities reporting.....	8	4	2	2	11	6	3	2	35	9	14	12
Total number of employees ²	10	6	2	2	66	56	6	4	506	297	141	68
Under \$1,250.....												
\$1,250 and under \$1,350.....												
\$1,350 and under \$1,450.....												
\$1,450 and under \$1,550.....									16		12	4
\$1,550 and under \$1,650.....									31		19	12
\$1,650 and under \$1,750.....					2			2	28		5	23
\$1,750 and under \$1,850.....	2			2	2		2		62		55	7
\$1,850 and under \$1,950.....	1		1		4		2	2	63	25	38	
\$1,950 and under \$2,050.....	1		1		1		1		46	12	12	22
\$2,050 and under \$2,150.....	1				1		1		130	130		
\$2,150 and under \$2,250.....												
\$2,250 and under \$2,350.....									9		9	
\$2,350 and under \$2,450.....					8	8			56	56		
\$2,450 and under \$2,550.....					6	6			18	18		
\$2,550 and under \$2,650.....	1	1										
\$2,650 and under \$2,750.....	1	1			4	4						
\$2,750 and under \$2,850.....												
\$2,850 and under \$2,950.....												
\$2,950 and under \$3,050.....	1	1			24	24			47	47		
\$3,050 and over.....	3	10	3		14	11	14					
Average annual salary.....	\$2,638	\$3,156	\$1,940	\$1,785	\$3,014	\$3,220	\$1,915	\$1,780	\$2,087	\$2,302	\$1,784	\$1,775

Salary group	Lieutenants				Engineers, fire engine				Drivers			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
Number of cities reporting.....	30	8	11	11	19	7	5	7	16	4	8	4
Total number of employees ²	439	292	91	56	426	273	86	67	182	55	114	13
Under \$1,250.....												
\$1,250 and under \$1,350.....												
\$1,350 and under \$1,450.....	6			6	31		8	23	13		6	7
\$1,450 and under \$1,550.....	27		27		45		17	28				
\$1,550 and under \$1,650.....	21			21	19		9	10	26		20	6
\$1,650 and under \$1,750.....	47		25	22	57		52	5	88		88	
\$1,750 and under \$1,850.....	31		31		47	46		1	29	29		
\$1,850 and under \$1,950.....	48	33	8	7	82	82						
\$1,950 and under \$2,050.....	95	95			1	1						
\$2,050 and under \$2,150.....	21	21			56	56						
\$2,150 and under \$2,250.....	11	11			64	64						
\$2,250 and under \$2,350.....					24	24			18	18		
\$2,350 and under \$2,450.....	36	36							8	8		
\$2,450 and under \$2,550.....												
\$2,550 and under \$2,650.....	49	49										
\$2,650 and under \$2,750.....												
\$2,750 and under \$2,850.....	47	47										
\$2,850 and under \$2,950.....												
\$2,950 and under \$3,050.....												
\$3,050 and over.....												
Average annual salary.....	\$2,006	\$2,216	\$1,694	\$1,655	\$1,864	\$2,023	\$1,628	\$1,516	\$1,758	\$2,028	\$1,658	\$1,491

See footnotes at end of table.

TABLE 2.—Distribution of fire-department employees in 39 South Atlantic cities, by selected occupations and salary group, July 1, 1938—Continued

Salary group	Privates, all grades				Auto mechanics				Fire-alarm operators			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
Number of cities reporting.....	38	9	14	15	17	5	6	6	14	6	6	2
Total number of employees ²	3,721	2,625	690	406	23	9	7	7	69	47	16	6
Under \$1,250.....	37	30	7	7	1			1	3			3
\$1,250 and under \$1,350.....	28	10	16	2								
\$1,350 and under \$1,450.....	209	1	132	76					11	8	3	
\$1,450 and under \$1,550.....	182	24	42	116					3			3
\$1,550 and under \$1,650.....	569	277	193	99	1			1	3		3	
\$1,650 and under \$1,750.....	458	89	277	92	4	2	1	1	13	3	10	
\$1,750 and under \$1,850.....	1,228	1,214		14	6	2	2	2	11	11		
\$1,850 and under \$1,950.....	142	142			4		3	1	6	6		
\$1,950 and under \$2,050.....	67	67			2		1	1	6	6		
\$2,050 and under \$2,150.....	175	175			3	3						
\$2,150 and under \$2,250.....	50	50										
\$2,250 and under \$2,350.....	37	37										
\$2,350 and under \$2,450.....	539	539			2	2			13	13		
\$2,450 and under \$2,550.....												
\$2,550 and under \$2,650.....												
\$2,650 and under \$2,750.....												
\$2,750 and under \$2,850.....												
\$2,850 and under \$2,950.....												
\$2,950 and under \$3,050.....												
\$3,050 and over.....												
Average annual salary.....	\$1,829	\$1,939	\$1,570	\$1,561	\$1,875	\$2,002	\$1,855	\$1,731	\$1,794	\$1,927	\$1,624	\$1,224

Salary group	Electricians				Linemen				Others			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
Number of cities reporting.....	4	2	1	1	7	3	3	1	33	9	14	10
Total number of employees ²	7	3	3	1	26	20	5	1	262	199	45	18
Under \$1,250.....	1		1						6	2	1	3
\$1,250 and under \$1,350.....									2	2		
\$1,350 and under \$1,450.....									7	2	5	
\$1,450 and under \$1,550.....	1		1						19	13	6	
\$1,550 and under \$1,650.....	2		1	1					12	6	3	3
\$1,650 and under \$1,750.....					11	5	5	1	12	1	5	6
\$1,750 and under \$1,850.....					4	4			37	24	8	5
\$1,850 and under \$1,950.....	2	2							41	31	9	1
\$1,950 and under \$2,050.....									16	11	5	
\$2,050 and under \$2,150.....					11	11			27	26	1	
\$2,150 and under \$2,250.....									18	17	1	
\$2,250 and under \$2,350.....									5	5		
\$2,350 and under \$2,450.....	1	1							14	13	1	
\$2,450 and under \$2,550.....									14	14		
\$2,550 and under \$2,650.....									13	13		
\$2,650 and under \$2,750.....									5	5		
\$2,750 and under \$2,850.....									1	1		
\$2,850 and under \$2,950.....									1	1		
\$2,950 and under \$3,050.....									6	6		
\$3,050 and over.....									6	12	6	
Average annual salary.....	\$1,654	\$1,900	\$1,420	\$1,620	\$1,894	\$1,950	\$1,713	\$1,680	(13)	(13)	(13)	(13)

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² The fire department of Hagerstown, Md., is a volunteer organization with the exception of 14 paid engineers.

³ Includes only regular, full-time employees.

⁴ Includes 49 sergeants at \$2,600 in Washington, D. C. ⁵ Includes 1 chief fire-alarm operator at \$1,920.

⁶ Includes 1 at \$3,500, 2 at \$3,600, 1 at \$4,000, 1 at \$4,200, 1 at \$5,000, 1 at \$5,040, 1 at \$5,600, and 1 at \$8,000.

⁷ Includes 1 at \$3,110, 3 at \$3,300, and 1 at \$3,392. ⁸ Includes 1 at \$3,300.

⁹ Includes 1 at \$3,066, 1 at \$3,873, 4 at \$4,000, and 2 at \$5,000. ¹⁰ Includes 2 at \$3,087 and 1 at \$4,500.

¹¹ Includes 14 at \$4,500. ¹² Includes 1 at \$3,120, 1 at \$3,200, 2 at \$3,300, and 2 at \$5,000.

¹³ No averages computed because such a heterogeneous group.

Salaries of Privates

In the fire departments of 38 South Atlantic cities which reported privates, these officers constituted 64 percent of all employees and received 61 percent of the total salaries. Some cities do not distinguish among privates, engineers, and drivers, but classify them all as privates. Of the 38 cities 19 reported engineers and 16 reported drivers. For purposes of comparison, therefore, these 3 occupations should be combined. Usually these 3 occupations include approximately three-fourths of all employees in a fire department. In the South Atlantic Division they constituted exactly 75 percent of all the employees.

Eighty-four percent of all privates were "first-grade" privates, 6 percent were in the second grade, and the rest were scattered between the third and seventh grades. Because of their large numbers of privates, the large cities maintained a greater number of grades of privates than the small cities. In many instances, however, the lower-grade privates in the large cities received higher salaries than first-grade privates in the small cities. Sixth-grade privates in Washington, D. C., for example, received more than the first-grade privates in all but 2 of the 38 cities.

On the whole, the annual salaries of privates did not vary greatly. Seventy-one percent of the privates received between \$1,350 and \$1,850 a year; 27 percent received between \$1,850 and \$2,450; and 2 percent, between \$1,050 and \$1,350. The annual salaries of privates were noticeably higher in the large than in the small cities.⁶ Eighty-five percent of the privates in Group I cities received \$1,750 or more, as compared with only 3 percent in Group III cities, and none in Group II.

⁶ Because of the relatively higher salaries in Washington, D. C., the differences resulting from the size of the cities were more pronounced in the South Atlantic Division than in most other geographic divisions.

TABLE 3.—*Distribution of privates in fire departments of 38 South Atlantic Division cities by salary group and grade, July 1, 1933*

Salary group	All grades							
	Number				Percent			
	All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III
All groups.....	3,721	2,625	690	406	100.0	100.0	100.0	100.0
\$1,050 and under \$1,150.....	5	4	1	1	.1	.6	.2	
\$1,150 and under \$1,250.....	32	26	6	9	.9	3.8	1.5	
\$1,250 and under \$1,350.....	28	10	16	2	.8	2.3	.5	
\$1,350 and under \$1,450.....	209	1	132	76	5.6	(?) 19.1	18.7	
\$1,450 and under \$1,550.....	182	24	42	116	4.9	.9 6.1	28.6	
\$1,550 and under \$1,650.....	569	277	193	99	15.3	10.6 28.0	24.4	
\$1,650 and under \$1,750.....	458	89	277	92	12.3	3.4 40.1	22.7	
\$1,750 and under \$1,850.....	1,228	1,214	14	14	33.0	46.2	3.4	
\$1,850 and under \$1,950.....	142	142			3.8	5.4		
\$1,950 and under \$2,050.....	67	67			1.8	2.6		
\$2,050 and under \$2,150.....	175	175			4.7	6.7		
\$2,150 and under \$2,250.....	50	50			1.3	1.9		
\$2,250 and under \$2,350.....	37	37			1.0	1.4		
\$2,350 and under \$2,450.....	539	539			14.5	20.5		

Salary group	Number of privates in specified grade							
	First				Second			
	All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III
All groups.....	3,143	2,216	600	327	231	163	36	32
\$1,050 and under \$1,150.....					4			4
\$1,150 and under \$1,250.....					6			1
\$1,250 and under \$1,350.....					25		5	7
\$1,350 and under \$1,450.....	158		101	57	25		18	
\$1,450 and under \$1,550.....	128		34	94	24	16	8	
\$1,550 and under \$1,650.....	506	220	191	95	13	11	2	
\$1,650 and under \$1,750.....	341		274	67	101	78	3	20
\$1,750 and under \$1,850.....	1,222	1,208	14	14				
\$1,850 and under \$1,950.....	106	106						
\$1,950 and under \$2,050.....					9	9		
\$2,050 and under \$2,150.....	122	122						
\$2,150 and under \$2,250.....					33	33		
\$2,250 and under \$2,350.....					16	16		
\$2,350 and under \$2,450.....	21	21						
\$2,350 and under \$2,450.....	539	539						

See footnotes at end of table.

TABLE 3.—*Distribution of privates in fire departments of 38 South Atlantic Division cities by salary group and grade, July 1, 1938—Continued*

Salary group	Number of privates in specified grade—Continued											
	Third				Fourth				Fifth through seventh			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III
All groups.....	131	107	14	10	82	53	21	8	134	86	19	29
\$1,050 and under \$1,150.....	1	-----	-----	1	-----	-----	-----	-----	4	-----	4	-----
\$1,150 and under \$1,250.....	1	-----	1	-----	10	-----	10	-----	17	-----	15	2
\$1,250 and under \$1,350.....	11	10	-----	1	11	-----	11	-----	-----	-----	-----	-----
\$1,350 and under \$1,450.....	13	-----	13	-----	-----	-----	-----	-----	13	1	-----	12
\$1,450 and under \$1,550.....	3	-----	-----	3	12	8	-----	4	15	-----	-----	15
\$1,550 and under \$1,650.....	44	44	-----	-----	6	2	-----	4	-----	-----	-----	-----
\$1,650 and under \$1,750.....	5	-----	-----	5	-----	-----	-----	-----	11	11	-----	-----
\$1,750 and under \$1,850.....	-----	-----	-----	-----	6	6	-----	-----	-----	-----	-----	-----
\$1,850 and under \$1,950.....	10	10	-----	-----	-----	-----	-----	-----	26	26	-----	-----
\$1,950 and under \$2,050.....	-----	-----	-----	-----	10	10	-----	-----	48	48	-----	-----
\$2,050 and under \$2,150.....	26	26	-----	-----	27	27	-----	-----	-----	-----	-----	-----
\$2,150 and under \$2,250.....	17	17	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$2,250 and under \$2,350.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$2,350 and under \$2,450.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Less than a tenth of 1 percent.

Hours and Working Conditions

Average Hours and Days on Duty per Week

A large majority of the employees in a fire department, in fact all of the uniformed men except a few officers, work under a platoon system of assignment. The rest of the employees are either on "continuous" duty or have the working hours prevailing in the other city bureaus.

A platoon is a system whereby the hours of duty of the firemen are so arranged as to insure protection to the city at all times. It is analogous to the shift systems in industries operating 24 hours a day. There are 3 different types of platoon systems: (1) Single-platoon system, (2) 2-platoon system, and (3) 3-platoon system.

Under the single-platoon system each fireman stays on duty continuously for two or more days, depending upon the variation of the system in use in the particular locality, and then has a day off. The off days are so arranged that the fire department is equally staffed at all hours.

The length of the period on duty between off days determines the average weekly number of hours and days on duty under the single-platoon system. The shorter the period on duty the shorter the average weekly hours and days on duty. The shortest average hours and days on duty noted under the single-platoon system is the one with 2 days on and third day off. It averages 112 hours, or 4.7 days on duty per week. In no instance, however, does the single-platoon system ever reach 168 hours or 7 days of duty per week because under all variations of the single-platoon system the firemen are given a day off duty at regular intervals.

The single-platoon system used to be the most prevalent system. At present a majority of the cities operate under the two-platoon system.

Under the two-platoon system the firemen are divided into two groups and work in two shifts. While one group is at work the other is off duty. The firemen, however, do not work on the same shift constantly but change from day to night shift at regular intervals. Usually, before shifting from day to night duty, or vice versa, the men on duty stay on for 24 hours while those off duty remain off for 24 hours. Thus, the full day off duty is balanced by a full day on duty every shift period. Hence, even with a full day off every other shift period, each group stays on duty an average of 12 hours a day, or 84 hours a week.

In some fire departments, however, the firemen are given additional time off duty which is not compensated for by a like period on duty. In those fire departments the average hours on duty per week is less than 84, usually 72.

The interval of time between the shifts, or the frequency of the shifts, is not the same in all cities operating under the 2-platoon system of assignment. In some cities shifts occur as frequently as every 24 hours, whereas in others they occur as seldom as every 30 days. The frequency of the shifts does not affect the average hours on duty per week under the 2-platoon system because under all variations of the 2-platoon system the firemen average 12 hours a day, except in cities that give additional time off duty. The frequency of the shifts under the 2-platoon system, however, does affect and determine the average number of days on duty per week in the given fire department. The more frequent shifts result in a fewer number of average days on duty per week. The shift with 24 hours on and 24 hours off averages the least number of days on duty per

week, $3\frac{1}{2}$ days, and the shift with no full 24-hour day off duty averages the most, 7 days. Thus, the different cities operating under the 2-platoon system and having the same average number of hours on duty per week, 84 hours if no additional time off duty is given, may have a different average number of days on duty per week, between $3\frac{1}{2}$ and 7 days.

In a very few fire departments a small number of the officers work under a different platoon system than the rest of the firemen, which fact results in a combination of two types of platoons in the same fire department. However, such cases are rare. Almost every fire department operates wholly under either one of the three platoon systems (single-platoon, 2-platoon, or 3-platoon).

Almost every fire department has a small number of employees not included under the platoon system. These employees fall into two groups—those on “continuous” duty and “other.” In most of the fire departments the chief and a few of his immediate assistants, including those in charge of the various divisions within the fire departments, such as the superintendent of fire-alarm division, are subject to call any moment and are therefore considered to be on duty continuously. The “other” group includes mostly nonuniformed employees such as clerks and maintenance men who are not required to fight fires. These employees usually have the working hours prevalent in private industry or in the other departments of the city government.

The single-platoon system included 3 percent and the 2-platoon system included 92 percent of all employees. The remaining 5 percent of the employees did not work under any platoon system but were either on continuous duty or had other hours prevailing in the other departments of the city government.

Under the single-platoon system the firemen were on duty between an average of 112 and 134 hours per week. Under the 2-platoon system they were on duty between an average of 72 and 84 hours per week. Those having “other” hours were on duty an average of 52 hours per week.

There were two types of 2-platoon systems—the regular type, and the one under which the firemen received additional time off duty.

The regular 2-platoon system with an average of 84 hours on duty per week included 76 percent of all the employees. The 2-platoon system with additional time off duty included 16 percent of all employees, 1 percent of whom were on duty an average of 81 hours a week and 15 percent were on duty an average of 72 hours per week.

The average number of hours on duty per week were shorter in the large than in the small cities. This was due to three facts: (1) None of the Group I cities operated under the single-platoon system, whereas one Group II and three Group III cities did operate under the single-platoon system, (2) none of the Group III cities operated under the variation of the 2-platoon system with additional time off duty, and (3) continuous duty included only 0.3 percent of all employees in Group I cities, as compared with 0.7 percent in Group II cities, and 1.8 percent in Group III cities.

The average number of days on duty per week ranged between 4.7 and 5.6 days under the single-platoon system and between 3.4 and 7.0 days under the 2-platoon system.

Under the regular 2-platoon system 3.5, 6.1, and 6.5 days predominated and included 30, 25, and 11 percent of all employees, respectively. Under the 2-platoon system with additional time off duty an average of 5.5 days per week predominated and included 15 percent of all employees.

The most popular platoon system was the variation of the regular 2-platoon system with 24 hours on duty followed by 24 hours off duty. Seventeen of the 39 fire departments and 30 percent of all the employees operated under this variation. Under this variation the second platoon comes on duty when the first goes off duty so that the city has the same number of firemen on duty at all hours.

In addition to the 17 fire departments mentioned above, another fire department operated under the variation of the 2-platoon system, with 24 hours on and 24 hours off duty. However, that city gave an additional 0.2 day off duty per week. With this additional time off duty the men under this variation were on duty an average of 81 hours and 3.4 days per week.

The 24 hours of continuous duty is the least desirable feature of this type of 2-platoon system. This disadvantage, however, is partly compensated for by the fact that the average number of days on duty per week under this system is shorter than under any other system.

TABLE 4.—Average hours and days on duty per week in fire departments of 39 South Atlantic Division cities, July 1, 1938

System of operation	Average hours on duty per week	Average days on duty per week	Number of cities reporting			Number of employees				Percent of employees				
			All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
				I	II	III		I	II	III		I	II	III
All systems.....						25,818	3,903	1,238	677	100.0	100.0	100.0	100.0	
Continuous duty.....	168	7.0	25	6	8	11	32	11	9	12	.6	.3	.7	1.8
Single platoon ²			4		1	3	175		46	129	3.0		3.7	19.0
On 2 days, off 1 day.....	112	4.7	1			1	55			55	.9			8.1
On 3 days, off 1 day.....	126	5.3	1			1	40			40	.7			5.9
On 4 days, off 1 day.....	134	5.6	2		1	1	80		46	34	1.4		3.7	5.0
Two-platoon—regular ⁴			32	7	11	14	4,413	2,853	1,043	517	75.8	73.1	84.2	76.4
On 24 hours, off 24 hours.....	84	3.5	17	5	6	6	1,757	1,003	506	248	30.2	25.7	40.9	36.6
Shift 3rd day.....	84	5.8	1			1	146	146			2.5	3.8		
Shift 4th day.....	84	6.1	2	1		1	1,450	1,398		52	24.9	35.8		7.7
Shift 5th day.....	84	6.3	1		1		63		63		1.1		5.1	
Shift 7th day.....	84	6.5	6	1	2	3	637	306	258	73	10.9	7.8	20.8	10.8
Shift each week.....	84	7.0	5			2	360		216	144	6.2		17.4	21.3
Two-platoon—with additional time off duty ⁵			2	1	1		920	840	80		15.8	21.5	6.5	
Shift 7th day, off 1 day per week.....	72	5.5	1	1			840	840			14.4	21.5		
On 24 hours, off 24 hours—off 0.2 day per week.....	81	3.4	1		1		80		80		1.4		6.5	
Other ⁶	52	6.0	27	9	11	7	278	199	60	19	4.8	5.1	4.9	2.8

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Includes only regular full-time employees.

³ The average number of hours on duty per week for employees in each variation of the single-platoon system is arrived at by dividing the total number of hours on duty per year for each variation by 52.143. The average number of days on duty per week for each variation is arrived at by dividing the total number of days on duty per year by 52.143.

⁴ Under each variation of the regular 2-platoon system the employees work in 2 groups, 1 group is on duty while the other is off duty. Over a period of days, therefore, each group is on duty as many hours as the other, or an average of 12 hours a day and 84 hours a week. Each variation of the 2-platoon system, however, spreads these 84 hours into different numbers of days on duty per week. The average number of days on duty per week for each variation is arrived at by dividing the number of days on duty per year by 52.143.

⁵ Under the 2-platoon system with additional time off duty the employees are on duty less than an average of 84 hours per week. The average number of hours on duty per week under this system is arrived at by deducting the number of additional weekly hours off duty from 84. The average number of days on duty per week is arrived at by dividing the number of days on duty per year by 52.143.

⁶ The average number of working hours and days per week is arrived at by dividing the total number of weekly man-hours and man-days by the total number of employees under "other."

Perquisites Supplied to Firemen

All the 39 cities supplied sleeping quarters, and 15 of them supplied the necessary beds, bedding, linen, and laundry. Twenty-two cities supplied full uniforms and 3 supplied the cloth and trimmings for uniforms. Some cities supplied other items such as rubber boots, helmets, and rubber coats. The small cities, as a rule, supplied more items than the large cities.

TABLE 5.—Perquisites supplied to firemen in 39 South Atlantic Division cities, July 1, 1938

City group ¹	Number of cities	Number of cities supplying—						
		Sleeping quarters for men on night duty	Beds, bedding, linen, laundry	Helmets	Rubber coats	Rubber boots	Uniforms	Minor items
All cities.....	39	39	15	15	14	16	25	20
Group I.....	9	9	1	3	4	2	5	6
Group II.....	14	14	5	3	5	7	8	5
Group III.....	16	16	9	9	5	7	12	9

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² 1 Group I city and 2 Group III cities supplied only the cloth and trimmings for uniforms.

Vacations With Pay

Almost all the employees, 5,803 out of 5,818, in the fire departments of the 39 cities received vacations with pay. For those receiving paid vacations, the average vacation period was little over 16 days (16.4) a year. Vacation periods of 14, 15, and 26 days predominated and included 31, 29, and 15 percent of the employees, respectively.

In spite of the fact that the large cities paid higher salaries than the small cities, the paid vacation periods were longer in the large than in the small cities. Group I cities gave paid vacations of an average of 18 days a year compared with 14 and 13 days for Group II and Group III cities, respectively. Vacation periods in Group II and Group III cities ranged between 10 and 15 days while the vacation periods in Group I cities ranged between 10 and 26 days, 23 percent of the employees receiving 26 days.

TABLE 6.—Number of employees receiving specified vacation with pay in fire departments of 39 South Atlantic Division cities, July 1, 1938

City group ¹	Number of cities	Total number of employees	Number of employees having—												
			No vacation	10 days	12 days	14 days	15 days	16 days	18 days	19 days	20 days	21 days	26 days	30 days	31 days
All cities.....	39	5,818	15	488	166	1,830	1,702	191	27	1	333	172	886	6	1
Group I.....	9	3,903	---	10	---	1,391	896	191	27	---	329	172	886	---	1
Group II.....	14	1,238	1	280	47	242	658	---	---	---	4	---	---	6	---
Group III.....	16	677	14	198	119	197	148	---	---	1	---	---	---	---	---

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Includes only regular full-time employees.

Promotions of Lower-Grade Privates

Thirty-two of the thirty-eight fire departments having paid privates automatically promoted their lower-grade firemen after a specified period of service, after 6 months in 6 cities, and after 1 year in 26 cities. In 4 cities promotions were by civil-service examination. Only 2 cities had no promotion system.

TABLE 7.—*Promotion of lower-grade privates in fire departments of 38 South Atlantic Division cities, July 1, 1938*

City group ¹	Number of cities	Total number of privates	Number of cities with promotion after—			No promotion system
			6 months	1 year	Civil-service examination	
All cities.....	38	3,721	6	26	4	2
Group I.....	9	2,625	1	6	1	1
Group II.....	14	690	2	10	1	1
Group III.....	15	406	3	10	2	—

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Newport News, Va., up to third grade, 6 months; third to second grade, 2 years; second to first grade, 5 years.

Percentage Distribution of Employees and Salaries

All Employees

Ninety-five percent of all employees in the fire departments of the 39 South Atlantic cities were in the fire-fighting divisions⁷ and the rest were in the fire-prevention, apparatus, fire-alarm, and clerical divisions. Of the 95 percent in the fire-fighting division, 75 percent were privates, drivers, engineers⁸; 16 percent were captains and lieutenants; 3 percent were battalion chiefs, chiefs, and their assistants; and 1 percent miscellaneous.

The higher-ranking occupations constituted a smaller percentage of the employees in the large than in the small cities. In Group I cities, chiefs formed 0.2 percent of all employees compared with 1.1 and 2.2 percent in Group II and Group III cities, respectively. Captains and lieutenants constituted 15, 19, and 18 percent of the employees in Group I, II, and III cities, respectively. On the other hand, a greater proportion of the employees were privates, drivers, and engineers in

⁷ All fire departments assign men from the fire-fighting division to the other divisions and carry these assigned men on the fire-fighting division list. This is done to provide the fire department with a reserve for cases of emergency. As a result of this method of assignment, the fire-fighting division is always shown to be larger than it actually is on a routine day. Some other factors are also responsible for the small size of the non-fire-fighting divisions. In some cities, the maintenance work is let to private contractors; part of the fire-prevention work is done by the building inspector's office; and the fire-alarm work is sometimes done by the local telephone company or by a separate city bureau.

⁸ These 3 occupations (privates, drivers, and engineers) are combined because some of the cities classify all 3 as privates.

the large than in the small cities, 76 percent in Group I cities and 72 percent in Group II and III cities.

Ninety-five percent of the total salaries went to the fire-fighting division and the remaining 5 percent, to the other divisions in almost the same proportion as the distribution of the employees in those divisions. Although the percentage of all employees in the fire-fighting division and the percentage of total salaries received by them were almost identical, the percentages varied for the different occupations within the division, the higher-ranking occupations receiving a percentage of salaries higher than their percentage of numbers. Chiefs constituted 0.7 percent of the employees and received 1.1 percent of total salaries. Captains and lieutenants formed 16 percent of employees and received 18 percent of total salaries. Privates, on the other hand, constituted 64 percent of all employees and received 61 percent of the total salaries. These characteristic differences were more pronounced in the large than in the small cities. In the large cities the chiefs received a smaller proportion of the total salaries and privates received a greater proportion of total salaries than in the small cities.

TABLE 8.—Percentage distributions of employees and salaries in specified divisions in fire departments of 39 South Atlantic region cities, July 1, 1933

Division ¹ and occupation	Percent of employees				Percent of salaries			
	All cities	City group ²			All cities	City group ²		
		I	II	III		I	II	III
All divisions.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fire fighting.....	94.7	94.8	94.2	95.4	94.6	94.6	94.0	95.5
Chiefs.....	.7	.2	1.1	2.2	1.1	.5	2.0	3.4
Assistant or deputy chiefs.....	.7	.3	1.5	1.9	1.0	.6	1.9	2.2
Assistant deputy chiefs.....	.2	.2	.2	.3	.2	.2	.2	.3
Battalion chiefs.....	1.1	1.4	.5	.6	1.8	2.3	.6	.7
Captains.....	8.7	7.6	11.4	10.0	9.5	8.6	12.3	11.0
Lieutenants.....	6.7	6.2	7.4	8.3	7.0	6.7	7.5	8.5
Sergeants.....	.8	1.3	-----	-----	1.1	1.6	-----	-----
Pilots.....	.1	.1	-----	-----	.1	.1	-----	-----
First mates.....	.2	.3	-----	-----	.2	.3	-----	-----
Engineers, fire-engine.....	7.3	7.0	6.9	9.9	7.1	6.9	6.9	9.3
Engineers, marine.....	.4	.6	-----	-----	.5	.6	-----	-----
Drivers.....	3.1	1.4	9.2	1.9	2.9	1.4	9.3	1.8
Privates.....	64.0	67.3	55.7	60.0	61.3	63.9	53.0	58.0
Miscellaneous.....	.7	.9	.3	.3	.8	.9	.3	.3
Fire prevention.....	.9	1.0	1.0	.7	1.0	1.1	.9	.8
Apparatus.....	1.3	1.2	1.4	1.5	1.4	1.4	1.6	1.6
Fire alarm.....	2.6	2.6	2.7	1.9	2.5	2.5	2.8	1.7
Clerical.....	.5	.4	.7	.5	.5	.4	.7	.4

¹ All fire departments assign men from the fire-fighting division to the other divisions and carry these assigned men on the fire-fighting division list. This is done to provide the fire department with a reserve for cases of emergency. As a result of this method of assignment, the fire-fighting division is always shown to be larger than it actually is on a routine day. Some other factors are also responsible for the small size of the non-fire-fighting divisions. In some cities, for example, the maintenance work is let to private contractors; part of the fire-prevention work is done by the building inspector's office; and the fire-alarm work is done by the local telephone company or by a separate city bureau.

² Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

³ Includes only regular full-time employees.

Supervisory Employees

The comparative ratio of the total number and salary of supervisory employees is worthy of note. Supervisory employees constituted 20 percent of all employees and received only 23 percent of the total salaries.

The differences were less in the small than in the large cities as shown in table 10.

TABLE 9.—*Number and salaries of supervisory employees¹ as percent of total fire-department employees and total salaries, in 39 South Atlantic Division cities, July 1, 1938*

Item	All cities	City group ²		
		I	II	III
Supervisory employees as percent of all employees.....	20.0	18.2	23.4	24.5
Supervisory salaries as percent of total salaries.....	23.1	21.7	26.2	27.4
Ratio of salaries to employees.....	1.16	1.19	1.12	1.12

¹ Supervisory employees are those employees who have others working under them. The group includes the chiefs, assistant chiefs, assistant deputy chiefs, battalion chiefs, captains, lieutenants, sergeants, marshals or wardens, superintendents, chief fire-alarm operators, assistants to these officers and others who direct other employees.

² Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000, and Group III, cities having a population of 25,000 and under 50,000 based on United States census of population for 1930.

Per Capita Salary Cost of Fire Protection and Distribution of Employees

In proportion to their population the large cities had more firemen than the small cities. Group I cities had a fire-department employee for every 595 inhabitants; Group II cities, for every 722 inhabitants; and Group III cities, for every 860 inhabitants.

Similarly, the per capita salary costs of fire protection were higher in the large than in the small cities. The per capita salary cost was \$3.43 in Group I cities, \$2.29 in Group II cities, and \$2.06 in Group III cities. This was due to two factors—the proportionately greater number of firemen employed by the large cities, and the relatively higher salaries paid by the fire departments of the large cities.

Appendix

The listing of the 1930 populations of the cities covered by this report, along with the ratios of employees to population and per capita costs, is shown in table A. The South Atlantic Division includes the States of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, and the District of Columbia.

TABLE A.—*Fire department employees and salary costs in relation to population in cities with a population of 25,000¹ or more in South Atlantic States, July 1, 1938*

City	Population ²	Em- ploy- ees per 10,000	Per capita salary cost	City	Popula- tion ²	Em- ploy- ees per 10,000	Per capita salary cost
All cities.....	3,767,926	16	\$2.97	Group II—cities of 50,000 and under 100,000—Con.			
Group I—cities of 100,000 and over.....	2,322,692	17	3.43	Macon, Ga.....	53,829	14	\$2.41
Atlanta, Ga.....	270,366	12	2.66	Roanoke, Va.....	69,208	17	2.92
Baltimore, Md.....	804,874	18	3.42	Savannah, Ga.....	85,024	16	2.29
Jacksonville, Fla.....	129,549	15	3.48	Wheeling, W. Va.....	61,659	13	2.32
Miami, Fla.....	110,637	15	2.98	Winston-Salem, N. C.....	75,274	11	1.85
Norfolk, Va.....	129,710	19	3.50	Group III—cities of 25,000 and under 50,000.....	551,600	13	\$2.06
Richmond, Va.....	182,929	20	3.34	Clarksburg, W. Va.....	28,866	9	1.43
Tampa, Fla.....	101,161	9	1.67	Columbus, Ga.....	43,131	14	2.30
Washington, D. C.....	486,869	18	4.46	Cumberland, Md.....	37,747	9	1.56
Wilmington, Del.....	106,597	15	2.86	Greenville, S. C.....	29,154	14	2.16
Group II—cities of 50,000 and under 100,000.....	893,634	14	2.29	Hagerstown, Md. ⁴	30,861	-----	-----
Asheville, N. C.....	50,193	13	2.25	High Point, N. C.....	36,745	10	1.61
Augusta, Ga.....	60,342	16	2.36	Lynchburg, Va.....	40,661	17	2.94
Charleston, S. C.....	62,265	15	2.21	Newport News, Va.....	34,417	12	2.29
Charleston, W. Va.....	60,408	12	1.99	Orlando, Fla.....	27,330	14	2.16
Charlotte, N. C.....	82,675	19	3.37	Parkersburg, W. Va.....	29,623	9	1.45
Columbia, S. C.....	51,581	12	1.99	Petersburg, Va.....	28,564	14	2.00
Durham, N. C.....	52,037	12	2.03	Portsmouth, Va.....	45,704	8	1.46
Greensboro, N. C.....	53,569	9	1.58	Raleigh, N. C.....	37,379	14	2.21
Huntington, W. Va.....	75,572	12	2.00	St. Petersburg, Fla.....	40,425	12	1.94
				Spartanburg, S. C.....	28,723	16	2.54
				Wilmington, N. C.....	32,270	19	2.87

¹ Includes all South Atlantic cities of 25,000 or more except Pensacola, Fla. (31,579), and West Palm Beach, Fla. (26,610), for which data were not available.

² Based on United States census of population for 1930.

³ Data for Hagerstown not included in calculation.

⁴ Small full-time staff, supplemented by volunteers. Full-time staff included in this study.

TABLE B.—Distribution of salaries and employees in fire departments of each of 39 July 1,

Division and occupation		9 Group I cities (population of 100,000 or over)								
		Total number of employees	Delaware		District of Columbia		Florida			
			Wilmington		Washington		Jacksonville		Miami	
			No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate
1	All occupations.....	3,903	157		886		195		167	
2	Fire fighting:									
	Chiefs.....	9	1	\$3,600	1	\$8,000	1	\$5,040	1	\$4,000
3	Assistant or deputy chiefs.....	12	2	2,725	2	5,000	1	3,875		
4	Assistant deputy chiefs.....	6			1	4,500	{ 1 2,992 2 3,087 }			
5	Battalion or district chiefs.....	56			14	4,500			6	2,520
6	Captains.....	297	14	2,400	47	3,000	18	2,520	9	2,280
7	Lieutenants.....	243	11	2,165	47	2,840	18	2,363	21	2,100
8	Sergeants.....	49			49	2,600				
9	Pilots.....	3			2	2,600	1	2,961		
10	First mates.....	11					1	2,677		
11	Engineers, fire-engine.....	213	10	1,825			24	2,299	1	1,980
12	Engineers, assistant fire-engine.....	60			{ 2 2,460 2 2,600 }		1 2,647 1 2,709			
13	Engineers, marine.....	24					18 2,299			
14	Drivers.....	55	4	1,815						
	Privates—									
15	1st grade.....	2,216	105	1,815	539	2,400	21	2,268	106	1,920
16	2d grade.....	163			16	2,300	33	2,172	11	1,620
17	3d grade.....	107			17	2,200	26	2,079		
18	4th grade.....	53			27	2,100	10	1,984		
19	5th grade.....	60			48	2,000				
20	6th grade.....	26			26	1,900				
21	7th grade.....									
	Miscellaneous:									
22	Deckhands.....	4					{ 1 2,173 3 2,268 }			
23	Drillmasters.....	2					1 2,520			
24	Pipemen.....	2					2 2,551			
25	Stokers.....	18			2	2,100				
26	Tillermen.....	10					2 2,205			
27	Physicians.....		³ 1	1,815			³ 1 600			
28	Helpers.....									
	Fire prevention:									
29	Marshals or wardens.....	6	1	2,725	1	5,000	1	2,615		
30	Assistant marshals.....	3	1	2,165	1	3,000				
31	Chief inspectors.....	3					1 2,520			(*)
32	Inspectors.....	24	5	1,815	7	2,460	{ 1 2,173 1 2,268 }			
33	Fire investigators.....	1								

See footnotes at end of table.

South Atlantic Division cities with population of 25,000 or over,¹ by occupations, 1938

9 Group I cities (population of 100,000 or over)										14 Group II cities (population of 50,000 and under 100,000)							
Florida-- Con.		Georgia		Mary- land		Virginia				Total num- ber of em- ploy- ees	Georgia						
Tampa		Atlanta		Baltimore		Norfolk		Rich- mond			Augusta		Macon		Savannah		
No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate		No.	Salary rate	No.	Salary rate	No.	Salary rate	
93		329		1,468		248		360		1,238	96		77		134		1
1	\$4,200	1	\$5,000	1	\$5,600	1	\$3,600	1	\$3,500	14	1	\$2,460	1	\$2,500	1	\$3,300	2
1	3,000	1	3,066	4	4,000			1	2,800	18	2	1,860	1	2,280			3
1	2,580	1	2,688							2							4
		4	2,688	24	3,000	4	2,436	4	2,424	6							5
12	2,000	42	2,373	96	2,100	34	2,056	25	1,920	141	12	1,530	8	1,800	10	1,620	6
8	1,900	18	2,352	95	1,975			25	1,860	91	8	1,480	8	1,680	10	1,512	7
				10	1,900												8
		64	2,226	56	2,050	22	1,860	36	1,800	60					9	1,566	9
				60	1,900					26					9	1,458	10
				14	1,900												11
				4	2,065												12
25	1,764	8	2,352							114			22	1,680			13
7	1,800	122	2,100	936	1,800	160	1,763	220	1,620	600	58	1,440	34	1,620	34	1,458	14
21	1,700	9	2,000	53	1,700	4	1,689	16	1,500	36	5	1,380			13	1,404	15
5	1,620	10	1,900	34	1,600			5	1,616	10	1	1,200			11	1,350	16
8	1,524	6	1,800					2	1,554						11	1,296	17
1	1,392	11	1,700												11	1,242	18
															2	1,188	19
															4	1,080	20
																	21
																	22
		1	2,352								1		1	1,800			23
				1	1,600												24
				15	1,800												25
		8	2,226														26
																	27
																	28
										3							29
1	2,100	1	2,352	1	3,000					1							30
		1	2,352														31
		2	2,352										1	1,800			32
		1	2,100	4	2,100	1	2,056	4	1,620	9	1	1,440	1	1,680	3	1,458	33
		1	2,352														34

TABLE B.—Distribution of salaries and employees in fire departments of each of 39 July 1,

Division and occupation		9 Group I cities (population of 100,000 or over)							
		Total number of employees	Delaware		District of Columbia		Florida		
			Wilmington		Washington		Jacksonville		Miami
			No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate
34	Apparatus:								
	Superintendents of machinery		6		1	5,000	1	2,709	
35	Assistant superintendents of machinery		5		1	3,000	1	2,520	
36	Machinists		16		3	2,371			
37	Auto mechanics		9	2 1,815	1	2,454			
					2	2,371			
	General mechanics:								
38	Blacksmiths		3						1 1,980
39	Carpenters		3						1 1,980
40	Mechanics		1						1 1,980
41	Molders		1		1	2,080			
42	Painters		1		1	2,080			
43	Plumbers								
	Miscellaneous:								
44	Engineers, high-pressure		2				1 2,646		
45	Hydrant inspectors		1				1 2,709		
	Fire alarm:								
46	Superintendents		7	1 2,500	1	3,200			
47	Assistant superintendents		6		1	2,600			
48	Chief fire-alarm operators		1		1	1,920			
49	Operators, fire-alarm		46		11	1,440 to 1,860			6 1,980
50	Operators, telephone								
51	Inspectors		3		1	2,000			
52	Electricians		3						1 1,980
53	Linemen		20						
54	Linemen's helpers		10						
	Miscellaneous:								
55	Battery testers		1		1	1,320			
56	Box testers		1		1	1,440			
57	Painters		1						
	Repairmen								
58	Repairmen		3		3	1,440 to 1,860			
59	Assistant repairmen		1		1	1,320			
	Clerical:								
60	Secretaries		3				1 2,929		
61	Clerks		9		1	1,620			1 1,200
62	Stenographers		4		1	2,000			1 1,500

See footnotes at end of table.

South Atlantic Division cities with population of 25,000 or over,¹ by occupations, 1938—Continued

9 Group I cities (population of 100,000 or over)										14 Group II cities (population of 50,000 and under 100,000)							
Florida— Con.		Georgia		Mary- land		Virginia				Total number of em- ploy- ees	Georgia						
Tampa		Atlanta		Balrimore		Norfolk		Rich- mond			Qugusta		Macon		Savannah		
No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate		No.	Salary rate	No.	Salary rate	No.	Salary rate	
		1	2,625	1	3,000	1	2,436	1	2,280	5	1	2,160			1	1,890	34
		1	2,226	1	2,600	1	2,056			1					1	1,782	35
				{	5	1,900			1	1,950	3	1	1,740				36
				6	2,050				1	1,680	7						37
1	2,100	2	2,100														
				{	1	1,900											38
				1	2,050												39
		2	2,220														40
																	41
											1	1	1,480				42
											1	1	1,480				43
																	44
		1	2,100														45
1	2,100	1	2,625	1	3,300	1	2,844	1	3,120	7							46
		1	2,373	{	1	2,400			1	2,240	2						47
				1	3,000												48
		6	2,352	{	7	1,800			3	1,444	{	3	1,680				49
				7	2,400						3	1,920					50
		1	2,373								1	2,040					51
								2	1,860								52
						11	2,100	4	1,800	5	1,740						53
				10	1,460												54
																	55
						1	2,008										56
																	57
																	58
																	59
																	60
{	(*)	1	1,500	1	3,300	1	1,224	1	2,000	7	1	1,860	{	(*)	1	1,500	61
				1	1,800	1	1,518			2							62
				1	2,100												
				3	1,800												

TABLE B.—Distribution of salaries and employees in fire departments of each of July 1,

Division and occupation		14 group II cities (population									
		North Carolina									
		Ashville		Charlotte		Durham		Greensboro		Winston-Salem	
		No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate
1	All occupations.....	65		156		65		47		80	
	Fire fighting:										
2	Chiefs.....	1	\$3,000	1	\$3,300	1	\$3,300	1	\$3,000	1	\$3,000
3	Assistant or deputy chiefs.....	1	2,400	2	2,700	1	2,400	2	2,100	1	2,400
4	Assistant deputy chiefs.....										
5	Battalion or district chiefs.....										
6	Captains.....	8	1,920	14	1,920	3	1,800	6	1,980	6	1,980
7	Lieutenants.....	8	1,800	10	1,836	6	1,680	8	1,800	8	1,860
11	Engineers, fire engine.....			24	1,740						
12	Engineers, assistant fire engine.....										
14	Drivers.....			4	1,740	{	7 1,665				
	Privates—					7	1,680				
15	1st grade.....	35	1,680	90	1,740	23	1,620	27	1,680	61	1,680
16	2nd grade.....	7	1,512	3	1,680	1	1,500				
17	3rd grade.....					2	1,410				
18	4th grade.....					10	1,242				
19	5th grade.....									2	1,200
20	6th grade.....										
21	7th grade.....										
22	8th grade.....										
	Miscellaneous:										
23	Drillmasters.....										
28	Helpers.....										
	Fire prevention:										
29	Marshals or wardens.....			1	1,920	{				{	
31	Chief inspectors.....	{	(*)			{				{	(*)
32	Inspectors.....										
	Apparatus:										
34	Superintendents of machinery.....							1	1,980		
35	Assistant superintendents of machinery.....										
36	Machinists.....	2	1,920								
37	Auto mechanics.....			{	(*)		1 1,680			1	1,920
	General mechanics:						1 1,800				
42	Painters.....										
43	Plumbers.....										
44	Assistant mechanics.....										
	Fire alarm:										
46	Superintendents.....	1	1,920	1	1,920			1	1,980		
47	Assistant superintendents.....										
49	Operators, fire alarm.....			3	1,740	1	1,680				
50	Operators, telephone.....										{
52	Electricians.....										{
53	Linemen.....	1	1,680	3	1,740	1	1,665				{
	Clerical:										
60	Secretaries.....	1	900	{	(*)			1	1,980	{	(*)
61	Clerks.....					{	(*)				

See footnotes at end of table.

TABLE B.—Distribution of salaries and employees in fire departments of each by occupations,

Division and occupation		16 Group III cities (population of 25,000 and under 50,000)											
		Georgia		Maryland				North Carolina					
		Columbus		Cumber-land		Hagers-town		High Point		Raleigh		Wilmington	
		No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate
1	All occupations.....	61		34		¹⁰ 14		35		53		62	
2	Fire fighting:												
	Chiefs.....	1	\$3,300	1	\$2,100			1	\$2,820	1	\$2,700	1	\$2,400
3	Assistant or deputy chiefs.....			1	1,800			1	1,920	1	1,860		
4	Assistant deputy chiefs.....									1	1,800		
5	Battalion or district chiefs.....											1	1,660
6	Captains.....	6	1,980	4	1,740			5	1,740	6	1,620	6	1,600
7	Lieutenants.....	6	1,740	4	1,740			6	1,680	6	1,560	4	1,560
11	Engineers, fire engine.....	{	5 1,560			14	1,500			1	1,800		20 1,440
14	Drivers.....	{	5 1,620										6 1,440
	Privates—												
15	1st grade.....	9	1,548	22	1,740			19	1,620	34	1,500	20	1,440
16	2d grade.....			1	1,200			1	1,260	3	1,440		
17	3d grade.....	3	1,500										
18	4th grade.....	4	1,476										
19	5th grade.....												
20	6th grade.....	3	1,428										
21	7th grade.....	7	1,404										
22	8th grade.....	2	1,380										
	Miscellaneous:												
23	Drillmasters.....												
	Fire prevention:												
29	Marshals or wardens.....							(⁴)					
32	Inspectors.....	(⁴)		{	1 1,740							1	1,600
	Apparatus:												
34	Superintendents of machinery.....												
35	Assistant superintendents of machinery.....												
37	Auto mechanics.....	1	1,980	(⁴)				1	1,920			1	1,200
	Fire alarm:												
46	Superintendents.....	1	1,920					{	1 1,740			{	1 1,800
49	Operators, fire-alarm.....	3	1,548	(⁴)		(⁵)							
52	Electricians.....												
53	Linemen.....	1	1,680										
	Clerical:												
60	Secretaries.....												(⁴)
61	Clerks.....												

¹ Based on United States census of population for 1930.

² Totals include only the regular, full-time employees. Totals do not include part-time employees, call men, or volunteers.

³ Call men.

⁴ Men from uniformed force assigned to this work.

⁵ Work performed by a separate city bureau.

⁶ Includes 5 at \$1,440, 4 at \$1,800, and 2 at \$1,860.

⁷ Includes 1 at \$1,440, 1 at \$1,680, and 1 at \$1,860.

⁸ Part-time employee.

⁹ Work performed by a separate city bureau or private company.

¹⁰ Volunteer fire department, except for 14 paid engineers.

of 39 South Atlantic Division cities with population of 25,000 or over,¹
 July 1, 1938—Continued

16 Group III cities (population of 23,000 and under 50,000)—Continued																
South Carolina				Virginia						West Virginia						
Greenville		Spartansburg		Lynchburg		Newport News		Petersburg		Portsmouth		Clarksburg		Parkersburg		
No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	No.	Salary rate	
41	-----	45	-----	70	-----	43	-----	40	-----	38	-----	27	-----	26	-----	1
1	\$2,520	1	\$2,280	1	\$2,700	1	\$3,000	1	\$2,500	1	\$2,205	1	\$2,000	1	\$2,100	2
1	1,890	2	1,860	1	2,100	1	2,400	1	1,800	2	1,680	2	1,680	-----	-----	3
1	1,770	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4
-----	-----	2	1,860	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5
-----	-----	8	1,650	5	1,980	11	1,980	2	1,500	7	1,809	2	1,500	-----	-----	6
5	1,620	-----	-----	7	1,890	-----	-----	3	1,380	-----	-----	-----	-----	2	1,740	7
-----	-----	-----	-----	-----	-----	-----	-----	3	1,440	-----	-----	-----	-----	-----	-----	-----
8	1,500	-----	-----	-----	-----	-----	-----	3	1,440	5	1,744	-----	-----	-----	-----	11
-----	-----	2	1,560	-----	-----	-----	-----	6	1,500	-----	-----	-----	-----	-----	-----	14
-----	-----	-----	-----	-----	-----	-----	-----	1	1,380	-----	-----	-----	-----	-----	-----	-----
21	1,440	30	1,560	14	1,770	23	1,740	16	1,380	22	1,704	22	1,500	19	1,620	15
1	1,200	-----	-----	14	1,710	6	1,680	2	1,236	-----	-----	-----	-----	-----	-----	16
-----	-----	-----	-----	5	1,650	-----	-----	1	1,080	-----	-----	-----	-----	-----	-----	17
-----	-----	-----	-----	3	1,560	1	1,560	-----	-----	-----	-----	-----	-----	-----	-----	18
-----	-----	-----	-----	15	1,530	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	19
-----	-----	-----	-----	2	1,170	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	20
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	21
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	22
1	1,680	-----	-----	-----	-----	-----	-----	-----	-----	1	1,809	-----	-----	-----	-----	23
-----	-----	(*)	-----	(*)	-----	(*)	-----	(*)	-----	1	1,809	(*)	-----	2	1,620	29
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	32
1	1,770	-----	-----	-----	-----	-----	-----	-----	-----	1	1,809	-----	-----	-----	-----	34
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	(*)	-----	-----	-----	35
-----	-----	-----	-----	2	1,830	-----	-----	(*)	-----	-----	-----	-----	-----	1	1,620	37
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	(*)	-----	(*)	-----	(*)	-----	1	960	(*)	-----	-----	-----	-----	-----	46
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1	1,620	49
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	52
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	53
{	1	1,740	-----	-----	-----	(*)	-----	(*)	-----	(*)	-----	-----	-----	-----	-----	60
-----	-----	-----	-----	1	1,200	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61

TABLE C.—Average hours and days on duty per week in fire departments of 39 South Atlantic Division cities, by functional divisions, July 1, 1938

System of operation	Average hours on duty per week	Average days on duty per week	Number of employees working under specified systems in—							
			All divisions				Fire-fighting division			
			All cities	City group ¹			All cities	City group ¹		
				I	II	III		I	II	III
All systems.....			² 5,818	3,903	1,238	677	5,511	3,699	1,166	646
Continuous duty.....	168	7.0	32	11	9	12	32	³ 11	⁴ 9	⁵ 12
Single platoon ⁶			175		46	129	168		43	125
On 2 days, off 1 day.....	112	4.7	55			55	54			54
On 3 days, off 1 day.....	126	5.3	40			40	39			39
On 4 days, off 1 day.....	134	5.6	80			46	34	75	43	32
2-platoon—regular ⁷			4,413	2,853	1,043	517	4,383	2,844	1,031	508
On 24 hours, off 24 hours.....	84	3.5	1,757	1,003	506	248	1,742	994	506	242
Shift third day.....	84	5.8	146	146			146	146		
Shift fourth day.....	84	6.1	1,450	1,398		52	1,450	1,398		52
Shift fifth day.....	84	6.3	63		63		59		59	
Shift seventh day.....	84	6.5	637	306	258	73	636	306	258	72
Shift each week.....	84	7.0	360		216	144	350		208	142
2-platoon—with additional time off duty ⁸			920	840	80		920	840	80	
Shift seventh day, off 1 day per week.....	72	5.5	840	840			840	840		
On 24 hours, off 24 hours—off 0.2 day per week.....	81	3.4	80		80		80		80	
Other ⁹	52	6.0	278	199	60	19	8	4	3	1

See footnotes at end of table.

TABLE C.—Average hours and days on duty per week in fire departments of 39 South Atlantic Division cities, by functional divisions, July 1, 1938—Continued.

System of operation	Number of employees working under specified systems in—															
	Fire-prevention division				Apparatus division				Fire-alarm division				Clerical division			
	All cities	City group ¹			All cities	City group ¹			All cities	City group ¹			All cities	City group ¹		
		I	II	III		I	II	III		I	II	III		I	II	III
All systems.....	54	37	12	5	76	48	18	10	150	103	34	13	27	16	8	3
Continuous duty.....																
Single platoon ⁶					2		1	1	4		1	3	1		1	
On 2 days, off 1 day.....									1			1				
On 3 days, off 1 day.....									1			1				
On 4 days, off 1 day.....					2		1	1	2		1	1	1		1	
2-platoon—regular ⁷	5	3		2	13	4	4	5	11	2	8	1	1			1
On 24 hours, off 24 hours.....	4	3		1	8	4		4	3	2		1				
Shift third day.....																
Shift fourth day.....																
Shift fifth day.....					2		2		2		2					
Shift seventh day.....	1			1												
Shift each week.....					3		2	1	6		6		1			1
2-platoon—with additional time off duty ⁸																
Shift seventh day, off 1 day per week.....																
On 24 hours, off 24 hours—off 0.2 day per week.....																
Other ⁹	49	34	12	3	61	44	13	4	135	101	25	9	25	16	7	2

¹ Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000, based on United States census of population for 1930.

² Includes only regular full-time employees.

³ Includes 6 chiefs and 5 assistant chiefs.

⁴ Includes 8 chiefs and 1 assistant chief.

⁵ Includes 11 chiefs and 1 assistant chief.

⁶ The average number of hours on duty per week for employees in each variation of the single-platoon system is arrived at by dividing the total number of hours on duty per year for each variation by 52.143. The average number of days on duty per week for each variation is arrived at by dividing the total number of days on duty per year by 52.143.

⁷ Under each variation of the regular 2-platoon system the employees work in 2 groups, 1 group is on duty while the other is off duty. Over a period of days, therefore, each group is on duty as many hours as the other, or 12 hours a day and 84 hours a week. Each variation of the 2-platoon system, however, spreads these 84 hours into different numbers of days on duty per week. The average number of days on duty per week for each variation is arrived at by dividing the number of days on duty per year by 52.143.

⁸ Under the 2-platoon system with additional time off duty the employees are on duty less than an average of 84 hours per week. The average number of hours on duty per week under this system is arrived at by deducting the number of additional weekly hours off duty from 84. The average number of days on duty per week is arrived at by dividing the number of days on duty per year by 52.143.

⁹ The average number of working hours and days per week is arrived at by dividing the total number of weekly man-hours, and man-days by the total number of employees under "other."

TABLE D.—Total salaries and total number of employees of fire departments in 39 South Atlantic cities, July 1, 1938

Division and occupation ¹	Total number of employees				Total salaries			
	All cities	City group ²			All cities	City group ²		
		I	II	III		I	II	III
All occupations.....	5,818	3,903	1,238	677	Dollars 11,103,610	Dollars 7,965,844	Dollars 2,044,433	Dollars 1,093,333
Fire fighting.....	5,511	3,699	1,166	646	10,507,284	7,541,329	1,921,346	1,044,609
Chiefs.....	38	9	14	15	121,387	42,540	41,122	37,725
Assistant or deputy chiefs.....	43	12	18	13	108,727	44,191	39,846	24,690
Assistant deputy chiefs.....	10	6	2	2	26,384	18,934	3,580	3,670
Battalion chiefs.....	66	56	6	4	198,920	180,312	11,488	7,120
Captains.....	506	297	141	68	1,055,929	683,650	251,580	120,899
Lieutenants.....	390	243	91	56	782,429	535,590	154,169	92,670
Sergeants.....	49	49	.....	.....	127,400	.....	.....	.....
Pilots.....	3	3	.....	.....	8,161	8,161	.....	.....
First mates.....	11	11	.....	.....	21,677	21,677	.....	.....
Engineers, fire engine ⁴	426	273	86	67	793,974	552,390	140,044	101,540
Engineers, marine.....	24	24	.....	.....	50,336	50,336	.....	.....
Drivers.....	182	55	114	13	319,950	111,558	189,012	19,380
Privates, all grades.....	3,721	2,625	690	406	6,807,532	5,090,621	1,083,185	633,726
1st grade.....	3,143	2,216	600	327	5,804,836	4,327,403	963,185	514,248
2d grade.....	231	163	36	32	402,540	300,852	51,696	49,992
3d grade.....	131	107	14	10	228,194	194,234	18,870	15,090
4th grade.....	82	53	21	8	141,550	102,640	26,676	12,234
5th grade and below.....	134	86	19	29	230,412	165,492	22,758	42,162
Miscellaneous.....	42	36	4	2	84,478	73,969	7,020	3,489
Fire prevention.....	54	37	12	5	112,186	84,657	19,140	8,389
Marshals or wardens.....	7	6	1	.....	19,712	17,792	1,920	.....
Assistant marshals or wardens.....	3	3	.....	.....	7,517	7,517	.....	.....
Chief inspectors.....	5	3	2	.....	10,616	7,224	3,392	.....
Inspectors.....	38	24	9	5	71,989	49,772	13,828	8,389
Miscellaneous.....	1	1	.....	.....	2,352	2,352	.....	.....
Apparatus.....	76	48	18	10	158,355	107,720	33,220	17,415
Superintendents of machinery.....	13	6	5	2	31,539	18,050	9,910	3,579
Assistant superintendents of machinery.....	7	5	1	1	15,900	12,402	1,782	1,716
Machinists.....	19	16	3	.....	38,897	33,317	5,580	.....
Auto mechanics.....	23	9	7	7	43,124	18,016	12,988	12,120
General mechanics.....	11	9	2	.....	21,450	18,490	2,960	.....
Miscellaneous.....	3	3	.....	.....	7,445	7,445	.....	.....
Fire alarm.....	149	103	33	13	277,188	202,047	56,361	18,780
Superintendents.....	19	7	7	5	41,913	19,689	14,088	8,136
Assistant superintendents.....	8	6	2	.....	18,481	15,013	3,468	.....
Chief fire alarm operators.....	1	1	.....	.....	1,920	1,920	.....	.....
Operators, fire alarm ⁵	68	46	16	6	121,968	88,644	25,980	7,344
Inspectors.....	3	3	.....	.....	6,413	6,413	.....	.....
Electricians.....	7	3	3	1	11,580	5,700	4,260	1,620
Linemen.....	26	20	5	1	49,245	39,000	8,565	1,680
Helpers, linemen's.....	10	10	.....	.....	14,600	14,600	.....	.....
Miscellaneous.....	7	7	.....	.....	11,068	11,068	.....	.....
Clerical.....	28	16	9	3	48,597	30,091	14,366	4,140
Secretaries.....	12	3	7	2	22,279	7,729	11,610	2,940
Clerks and bookkeepers.....	12	9	2	1	18,918	14,962	2,756	1,200
Stenographers and typists.....	4	4	.....	.....	7,400	7,400	.....	.....

¹ All fire departments assign men from the fire-fighting division to the other divisions and carry these assigned men on the fire-fighting division list. This is done to provide the fire department with a reserve for cases of emergency. As a result of this method of assignment, the fire-fighting division is always shown to be larger than it actually is on a routine day. Some other factors are also responsible for the small size of the non-fire-fighting divisions. In some cities, the maintenance work is let to private contractors; part of the fire-prevention work is done by the building inspector's office; and the fire-alarm work is done by the local telephone company or by a separate city bureau.

² Group I includes cities having a population of 100,000 or more; Group II, cities having a population of 50,000 and under 100,000; and Group III, cities having a population of 25,000 and under 50,000. Based on United States census of population for 1930.

³ Includes only regular, full-time employees.

⁴ Includes 60 assistant engineers in City Group I and 26 in City Group II. The rest are senior engineers.

⁵ Includes 3 telephone operators in City Group II.

