
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 Police Departments
July 1, 1938

VOLUME VIII

Mountain Division Cities

+

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HERMAN B. BYER, Chief



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FRANCES PERKINS, *Secretary*



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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., November 15, 1940.

The SECRETARY OF LABOR:

I have the honor to transmit herewith the eighth of a series of nine reports on Salaries and Hours of Labor in Municipal Police Departments. This report covers cities in the Mountain Division States. An explanation of the purposes of the survey was given in the preface to the first report which covered the New England cities.

ISADOR LUBIN, *Commissioner.*

HON. FRANCES PERKINS,
Secretary of Labor.

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*Bulletin 685 (Vol. VIII) of the
United States Bureau of Labor Statistics*

**Salaries and Hours of Labor in Police Departments
of 10 Mountain Division Cities,¹ July 1, 1938**

Summary

On July 1, 1938, the police departments of the 10 Mountain Division cities² having populations of 25,000 or over in 1930 employed 919 persons with annual salaries amounting to \$1,803,000.

The cities studied varied in size from Denver, Colo., with a population of 288,000, to Albuquerque, N. Mex., with 26,600. Denver's department ranked first in size with 418 persons, or 15 per 10,000 inhabitants; and Great Falls, Mont., had the smallest department—31 persons, or 11 per 10,000. The city with the largest number of police in proportion to population was Phoenix, Ariz., which employed 21 for every 10,000 residents. Per capita salaries for police protection were \$2.85 for Denver, \$2.14 for Great Falls, Mont., and \$4.31 for Phoenix, Ariz. Averages for the 10 cities were \$2.48 per capita and 13 persons per 10,000 of population.

Individual salaries ranged from \$4,200 to \$684, but 81 percent of all employees received salaries between \$1,750 and \$2,250. Police chiefs in the 2 largest cities and in 5 of the 7 smallest cities received salaries of \$3,050 or more and the rest, salaries under \$2,750. Half of the 582 patrolmen were paid salaries between \$1,850 and \$1,950, and about a fifth received salaries higher than that range.

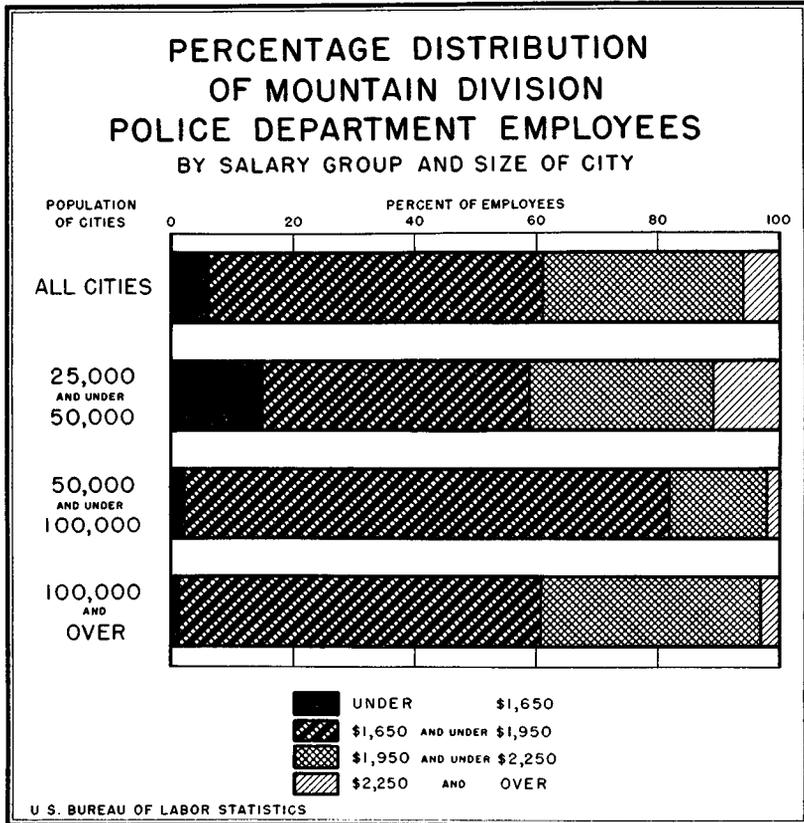
Three-fourths of the patrolmen in the 10 cities were in the first grade, five of the cities reporting only first-grade patrolmen. In 5 cities promotion was automatic after 6 months of service; and in 2 promotion was automatic after 1 or 2 years. Advancement of patrolmen from one grade to another was on a civil service basis in only one city.

¹ Analysis and presentation by Gerald M. Whitright and M. F. Thurston. Collection and tabulation of data by Mahlon B. Buckman. Carol P. Brainerd, technical adviser.

² These include all cities in the Mountain Division which had populations of 25,000 or over in 1930. For the sake of uniformity with the reports for other divisions, these cities have been divided into three size groups, designated as groups I, II, and III. The first group includes 2 cities of over 100,000 population; the second, 1 city (Pueblo, Colo.) with a population of 50,096, and the third, 7 cities of 25,000 to 50,000. See appendix table A for a complete list of cities and their populations.

Ninety-five percent of all police employees worked under some form of the three-platoon system, and had a workweek of 48 to 52 hours.

This report presents data collected by the Bureau of Labor Statistics in cooperation with the Work Projects Administration, in a study of employment, salaries, and working conditions as of July 1, 1938, in the police departments of cities in the United States having



populations of 25,000 or more in 1930. The present report is one of a series of reports for the various geographic divisions.

Employment and Salaries

Range of Salaries

Fifty-five percent of all employees had salaries between \$1,650 and \$1,950, and most of the rest had salaries between \$1,950 and \$2,250. The large proportion in the lower of these two ranges reflects mostly the salaries paid in Denver and Salt Lake City, where almost half of all salaries were between \$1,850 and \$1,950. The large number of

salaries between \$1,950 and \$2,250 was due primarily to the relatively high salaries paid patrolmen in Phoenix and Tucson, Ariz. Salaries averaged nearly as high in the seven smallest cities as in Denver and Salt Lake City, but the salaries in Pueblo, Colo., ranged considerably lower.

The chart on p. 2, which shows the percentage of employees receiving salaries in four main groupings, indicates clearly the concentration of salaries in the Mountain Division at a relatively high level. Details as to salaries for different occupations in the individual cities are shown in appendix table B.

TABLE 1.—Mountain Division police-department employees, by salary groups and size of city¹

Salary group	Number				Percentage			
	All cities	City group			All cities	City group		
		I	II	III		I	II	III
All employees.....	2 919	557	45	317	100.0	100.0	100.0	100.0
Under \$1,250.....	5	3 1	4 1	3	.5	.2	2.2	.9
\$1,250 to \$1,349.....	3			3	.3			.9
\$1,350 to \$1,449.....	15	3		12	1.6	.5		3.8
\$1,450 to \$1,549.....	25	2		23	2.7	.4		7.3
\$1,550 to \$1,649.....	7			7	.8			2.2
\$1,650 to \$1,749.....	64	38		26	7.0	6.8		8.2
\$1,750 to \$1,849.....	100	21	32	47	10.9	3.8	71.1	14.8
\$1,850 to \$1,949.....	344	275	4	65	37.4	49.4	8.9	20.5
\$1,950 to \$2,049.....	88	76	5	7	9.6	13.6	11.1	2.2
\$2,050 to \$2,149.....	98	88		10	10.7	15.8		3.2
\$2,150 to \$2,249.....	117	36	2	79	12.7	6.4	4.5	25.0
\$2,250 to \$2,349.....	14	1		13	1.5	.2		4.1
\$2,350 to \$2,449.....	12	4		8	1.3	.7		2.5
\$2,450 to \$2,549.....								
\$2,550 to \$2,649.....	6		1	5	.7		2.2	1.6
\$2,650 to \$2,749.....	11	8		3	1.2	1.4		.9
\$2,750 to \$2,849.....								
\$2,850 to \$2,949.....	1	1			.1	.2		
\$2,950 to \$3,049.....	2	1		1	.2	.2		.3
\$3,050 and over.....	7	2		5	.8	.4		1.6

¹ This and the following tables include data for 10 cities in the Mountain Division as of July 1, 1938 as follows: 2 cities in group I with a population of 100,000 or more; 1 city in group II with a population of 50,000 and under 100,000; and 7 cities in group III with a population of 25,000 and under 50,000, based on U. S. Census of Population for 1930.

² This and the following tables include only regular, full-time employees.

³ Receives \$1,140.

⁴ Receives \$1,200.

⁵ Includes employees with salaries ranging from \$684 to \$900.

⁶ Includes one employee with salary of \$3,600 and one with salary of \$4,200.

⁷ Includes employees with salaries ranging from \$3,120 to \$3,900.

Salaries in Various Occupations

Differences between the salaries paid for the same occupation, except that of chief, in the different cities were relatively narrow, and the spreads between salaries for different occupations in a single city were in most cases comparatively small.

Salary ranges were wider for the higher ranking officers than for others. Denver paid its chief \$4,200, Salt Lake City, \$3,600, and Pueblo, \$2,580, and the seven smallest cities paid salaries ranging from \$2,400 to \$3,900.

Eight out of nine police captains in the 2 largest cities had salaries of \$2,700. In the 7 smallest cities, 8 captains out of 12 were paid between \$2,350 and \$2,650, and the rest under \$2,150.

Two-thirds of the patrolmen in the two largest cities were paid \$1,900. Salaries paid patrolmen in the small cities had an exceptionally wide range, varying from \$1,320 to \$2,160.

TABLE 2.—Mountain Division police-department employees, by selected occupations and salary groups

Salary group	All occupations				Chiefs			Assistant chiefs			Inspectors			
	All cities	City group			All cities	City group		All cities ¹	City group		All cities ¹	City group		
		I	II	III		I	II		III	I		III	I	III
Number of cities reporting.....	10	2	1	7	10	2	1	7	4	1	3	2	1	1
All employees.....	919	557	45	317	10	2	1	7	4	1	3	2	1	1
Under \$1,250.....	5	1	1	3										
\$1,250 to \$1,349.....	3			3										
\$1,350 to \$1,449.....	15	3		12										
\$1,450 to \$1,549.....	25	2		23										
\$1,550 to \$1,649.....	7			7										
\$1,650 to \$1,749.....	64	38		26										
\$1,750 to \$1,849.....	100	21	32	47										
\$1,850 to \$1,949.....	344	275	4	65										
\$1,950 to \$2,049.....	88	76	5	7										
\$2,050 to \$2,149.....	98	88		10										
\$2,150 to \$2,249.....	117	36	2	79										
\$2,250 to \$2,349.....	14	1		13					1		1			
\$2,350 to \$2,449.....	12	4		8	1			1	1		1	1		1
\$2,450 to \$2,549.....														
\$2,550 to \$2,649.....	6		1	5	1		1							
\$2,650 to \$2,749.....	11	8		3	1			1		1				
\$2,750 to \$2,849.....														
\$2,850 to \$2,949.....	1	1										1	1	
\$2,950 to \$3,049.....	2	1		1					1	1				
\$3,050 and over.....	7	2		5	7	2		5						

¹ No persons in this occupation in city falling in group II.

TABLE 2.—Mountain Division police-department employees, by selected occupations and salary groups—Continued

Salary group	Captains				Lieutenants			Sergeants			Patrolmen, all grades			
	All cities	City group			All cities ¹	City group		All cities ¹	City group		All cities	City group		
		I	II	III		I	III		I	III		I	II	III
Number of cities reporting	7	2	1	4	2	1	1	7	2	5	10	2	1	7
All employees	22	9	1	12	3	1	2	57	41	16	582	371	29	182
Under \$1,250														
\$1,250 to \$1,349											1			1
\$1,350 to \$1,449											11			11
\$1,450 to \$1,549											21			21
\$1,550 to \$1,649											5			5
\$1,650 to \$1,749											57	36		21
\$1,750 to \$1,849								3		3	76	20	29	27
\$1,850 to \$1,949		3		3				3			293	252		41
\$1,950 to \$2,049								3		3	66	63		3
\$2,050 to \$2,149		1		1				12	11	1	2			2
\$2,150 to \$2,249		1		1		3	1	2	33	30	3			50
\$2,250 to \$2,349								6		6				
\$2,350 to \$2,449		5	1		4									
\$2,450 to \$2,549														
\$2,550 to \$2,649		4			4									
\$2,650 to \$2,749		8	8											
\$2,750 to \$2,849														
\$2,850 to \$2,949														
\$2,950 to \$3,049														
\$3,050 and over														

Salary group	Detective bureau				Fingerprint section				Operators, radio and telephone			Others			
	All cities	City group			All cities	City group			All cities ¹	City group		All cities	City group		
		I	II	III		I	II	III		I	III		I	II	III
Number of cities reporting	9	2	1	6	9	2	1	6	5	2	3	10	2	1	7
All employees	123	79	5	39	19	11	1	7	19	11	8	78	30	8	40
Under \$1,250												5	1	1	3
\$1,250 to \$1,349												2			2
\$1,350 to \$1,449					1	1						3	2		1
\$1,450 to \$1,549												4	2		2
\$1,550 to \$1,649					1			1				1			1
\$1,650 to \$1,749												7	2		5
\$1,750 to \$1,849		6		6								15	1	3	11
\$1,850 to \$1,949		6		6	9	8		1	14	9	5	19	6	4	9
\$1,950 to \$2,049		5		4	1	2	1	1				12	12		
\$2,050 to \$2,149		80	75	5	1	1		1	2	2					
\$2,150 to \$2,249		19	3	1	15	3		3	3		3	5	2		3
\$2,250 to \$2,349		3			3	2	1					2			2
\$2,350 to \$2,449		2	1		1			1				2	2		
\$2,450 to \$2,549															
\$2,550 to \$2,649		1			1										
\$2,650 to \$2,749												1			1
\$2,750 to \$2,849															
\$2,850 to \$2,949															
\$2,950 to \$3,049		1			1										
\$3,050 and over															

¹ No persons in this occupation in city falling in group II.
² Includes 6 motorcycle officers in Tucson, Ariz.

Five of the ten cities studied classified patrolmen into two or more grades, and the remainder had but one grade, the first. Seventy-eight percent of the 582 patrolmen were in the first grade. Only 20 percent of the patrolmen in the two large cities were in lower grades, as compared with 30 percent in the small cities. Salaries were lower and salary ranges narrower for the lower grades.

TABLE 3.—Salaries of Mountain Division police patrolmen

Salary group	All grades								Number of patrolmen by specified grade								
	Number				Percentage				First			Second					
	All cities	City group			All cities	City group			All cities	City group			All cities	City group			
		I	II	III		I	II	III		I	II	III		I	II	III	
All patrolmen	582	371	29	182	100.0	100.0	100.0	100.0	455	298	29 ¹	128	32	17	15		
\$1,250 to \$1,349	1			1	2			6									
\$1,350 to \$1,449	11			11	1.9			6.0									
\$1,450 to \$1,549	21			21	3.6			11.5									
\$1,550 to \$1,649	5			5	.9			2.8					5		5		
\$1,650 to \$1,749	57	36		21	9.8	9.7		11.5	21			21					
\$1,750 to \$1,849	76	20	29	27	13.1	5.4	100.0	14.8	50		29	21					
\$1,850 to \$1,949	293	252		41	50.3	67.9		22.5	269	235		34	24	17	7		
\$1,950 to \$2,049	66	63		3	11.3	17.0		1.7	63	63			3		3		
\$2,050 to \$2,149	2			2	.3			1.1	2			2					
\$2,150 to \$2,249	50			50	8.6			27.5	50			50					

Salary group	Number of patrolmen by specified grade															
	Third			Fourth				Fifth			Probationary					
	All cities	City group			All cities	City group			All cities	City group			All cities	City group		
		I	II	III		I	II	III		I	II	III		I	II	III
All patrolmen	42	31		11	27			27	1			1	25	25		
\$1,250 to \$1,349									1			1				
\$1,350 to \$1,449					11			11								
\$1,450 to \$1,549	5			5	16			16								
\$1,550 to \$1,649																
\$1,650 to \$1,749	11	11											25	25		
\$1,750 to \$1,849	26	20		6												
\$1,850 to \$1,949																
\$1,950 to \$2,049																
\$2,050 to \$2,149																
\$2,150 to \$2,249																

¹ Includes 6 motorcycle policemen in Tucson, Ariz.

Types of Duty for Patrolmen

A fourth of all patrolmen in the 10 cities were permanently assigned to traffic duty. However, Pueblo had no regular traffic division, and in the other cities, patrolmen regularly assigned to other duties assisted the traffic divisions in periods of peak traffic. Smaller cities had rela-

tively more men assigned to the traffic division, and a much larger proportion of these were on foot than in the larger cities.

Seventy-five men out of each hundred, on the average, were regularly working on other than traffic duty. Of these, 32 were assigned to automobile duty, 19 were on foot patrol, 1 on motorcycle duty, and 23 were assigned to other duties than patrol work. Almost 3 times as large a proportion were on foot patrol in the small cities as in the 2 largest cities, while only 2 percent were assigned to miscellaneous duties in the small cities as compared with 35 percent for the large cities. In Denver and Salt Lake City, a relatively large proportion of patrolmen were assigned to clerical and other duties not usually performed by the uniformed force. No mounted police were reported for either traffic or nontraffic duty.

TABLE 4.—Types of duty for patrolmen of Mountain Division police departments

Type of duty	Number				Percentage			
	All cities	City group			All cities	City group		
		I	II	III		I	II	III
All patrolmen.....	582	371	29	182	100.0	100.0	100.0	100.0
Traffic duty.....	145	94		51	24.9	25.3		28.0
Automobile.....	50	35		15	8.6	9.4		8.2
Foot.....	32	13		19	5.5	3.5		10.4
Motorcycle.....	50	33		17	8.6	8.9		9.4
Other assignments.....	13	13			2.2	3.5		
Other than traffic duty.....	437	277	29	131	75.1	74.7	100.0	72.0
Automobile.....	184	105	12	67	31.6	28.3	41.4	36.8
Foot.....	113	44	11	58	19.4	11.9	37.9	31.9
Motorcycle.....	4		2	2	.7		6.9	1.1
Other assignments.....	136	128	4	4	23.4	34.5	13.8	2.2

Comparison of Employment and Salaries in Various Occupations

The uniformed divisions of the police departments of the 10 Mountain Division cities included 78 out of every 100 employees and received \$78 out of every \$100 spent for police salaries. Of these 78 men, 63 were patrolmen, 11 were officers of higher rank, and 4 were plain-clothes men, patrol drivers, turnkeys, and others. The higher ranking officers accounted for a larger proportion of salaries than of personnel. Thus chiefs in the 2 larger cities constituted 0.3 percent of the persons employed, but received 0.7 percent of the salaries, and captains accounted for 1.6 percent of persons and 2.2 percent of salaries. In the 7 smallest cities the corresponding percentages for chiefs were 2.2 percent of personnel and 3.7 percent of salaries, and for captains the figures were 3.8 and 4.5 percent.

On the other hand, patrolmen, who constituted 63 percent of all employees in the 10 cities, received a somewhat smaller proportion of

salaries. Outside the uniformed division, the detective bureaus, with 13 percent of all employees, received 14 percent of the salaries.

TABLE 5.—Percentage distributions of employees and total salaries in Mountain Division police departments, by division

Division and occupation	Percentage of all employees				Percentage of total salaries			
	All cities	City group			All cities	City group		
		I	II	III		I	II	III
All divisions.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Uniformed division.....	78.3	78.3	84.5	77.7	77.7	77.7	84.1	76.9
Chiefs.....	1.1	.3	2.2	2.2	1.8	.7	3.1	3.7
Assistant chiefs.....	.4	.2	-----	1.0	.6	.3	-----	1.2
Inspectors.....	.2	.2	-----	.3	.3	.3	-----	.4
Captains.....	2.4	1.6	2.2	3.8	3.0	2.2	2.6	4.5
Lieutenant.....	.3	.2	-----	.6	.4	.2	-----	.7
Sergeants.....	6.2	7.4	-----	5.1	6.7	8.0	-----	5.4
Plain-clothes men.....	1.2	1.8	2.2	-----	1.2	1.8	2.2	-----
Patrolmen.....	63.3	66.6	64.5	57.4	60.8	64.2	62.8	54.4
Patrol drivers.....	1.0	-----	-----	2.8	.9	-----	-----	2.6
Turnkeys.....	.8	-----	6.7	1.3	.7	-----	6.5	1.2
Others.....	1.4	-----	6.7	3.2	1.3	-----	6.9	2.8
Detective bureau.....	13.4	14.2	11.1	12.3	14.4	15.1	12.1	13.4
Women's bureau.....	1.1	1.2	2.2	.6	.9	1.0	1.4	.5
Fingerprint section.....	2.1	2.0	2.2	2.2	2.1	1.9	2.4	2.3
Telephone and radio.....	2.5	2.1	-----	3.5	2.5	2.2	-----	3.6
Clerical division.....	2.2	2.0	-----	2.8	2.0	1.9	-----	2.6
Maintenance.....	.2	-----	-----	.6	.2	-----	-----	.6
Miscellaneous.....	.2	.2	-----	.3	.2	.2	-----	.1

Hours and Working Conditions

Primary factors affecting hours and working conditions are the size and financial condition of the city. Custom and local laws also affect working conditions; hours of work tend to be about the same for cities within local geographic areas, and many States prescribe maximum hours of duty. While there is need for continuous police protection, the need varies considerably over the 24 hours of the day, largely because of fluctuations in automobile and pedestrian traffic. Another factor which affects the size and the structure of police departments, and consequently the working conditions, is the need for sufficient flexibility of organization to take care of such events as parades, fairs, and conventions, and emergencies like riots and other disasters. Policies with regard to hours, vacations, and promotions are largely dependent upon the city's ability to pay for extensive and modern police protection.

Platoon Systems

The varying demands on the police department caused by daily changes in the traffic flow result in several different systems of operation. The uniformed division of a department is usually divided into groups of men called platoons. In the simpler systems a platoon is a

group of policemen who are on duty for a specific number of hours, when they are relieved by another platoon, which has been off duty.

In each of the 10 cities, a 3-platoon system was in effect with a basic structure of 3 equal groups of men working periods of 8 hours each. If these 3 groups never changed their hours the platoons would always begin work at the same time of day. For example, the first platoon would go on duty at 7 a. m., the second at 3 p. m., and the third at 11 p. m. In this case each policeman is on duty 8 hours and then has 16 hours of leave in a normal work day. However, most police departments operating under the 3-platoon system alternate their platoons in order that all members of the force may have an opportunity to work the different sets of hours. Because of the irregularities and complications introduced by alternating the 3 tours, the changes are in most cases made only once a month. The usual method of alternation for the 48-hour period during which shifts are made is illustrated below:

Day before change			Day after change				
7 a. m.	3 p. m.	11 p. m.	7 a. m.	3 p. m.	11 p. m.	7 a. m.	
AAAAAAAA			32-hour leave				AAAAAAAA
BBBBBBBB			BBBBBBBB				
CCCCCCCC			CCCCCCCC				

During the alternation period, the first platoon (A) receives 32 hours of leave before reporting to duty on the 11 p. m. shift; but the B platoon, changing from the 3 p. m. to the 7 a. m. shift, has only 8 hours off duty; and platoon C also makes the change with only 8 hours off. During the next two alternations the B and C platoons, respectively, receive a 32-hour period of leave. Five cities did not alternate the tours.

Hours of Duty

Daily and weekly hours of duty vary widely under different systems of operation, but the systems in use in the Mountain States departments provided employment of 8 hours a day and an average workweek varying from 6 to 6½ days, according to the amount of time off per week. One working day off in 7 reduces weekly working hours from 56 to 48. Fractional days worked are approximate, but they are correct to the nearest tenth of a day, and average hours are accurate to one-tenth of an hour. Both average days and average hours are based on a complete year of employment.

When 1 full day off each week is provided for, an attempt is usually made to arrange the schedule for each group in such a way that the days off rotate in regular order through the days of the week. To accomplish this the force is divided into seven groups, each of which starts the year with a different day off, and progresses through the

days of the week in regular order; and then repeats the cycle. The regular vacation with pay is in addition to weekly time off.

TABLE 6.—Average hours and days on duty per week in Mountain Division police departments

System of operation	Average hours on duty per week	Average days on duty per week	Number of cities reporting				
			All cities	City group			
				I	II	III	
Three-platoon.....			10	2	1		7
8-hour tours, off 2 days per month.....	52.3	6.5	5	1	1		3
8-hour tours, off 1 day per week.....	48.0	6.0	3	1			2
8-hour tours, off every 8th day.....	49.0	6.1	2				2
Other.....	49.2	6.1	10	2	1		7

System of operation	Number of employees				Percentage of employees			
	All cities	City group			All cities	City group		
		I	II	III		I	II	III
All employees.....	919	557	45	317	100.0	100.0	100.0	100.0
Three-platoon.....	876	543	43	290	95.3	97.5	95.6	91.5
8-hour tours, off 2 days per month.....	274	131	43	100	29.8	23.5	95.6	31.5
8-hour tours, off 1 day per week.....	540	412		128	58.8	74.0		40.1
8-hour tours, off every 8th day.....	62			62	6.7			19.6
Other.....	43	14	2	27	4.7	2.5	4.4	8.5

About 95 percent of all employees in the Mountain States police departments worked under some variation of the three-platoon system. The 5 percent employed on maintenance, clerical, and similar duties, worked about the same average number of hours weekly as those under a platoon system.

All three variations of the 3-platoon system shown provided for regular 8-hour shifts. The first variation shown on the table called for a workweek of 52.3 hours and 2 days off per month and was used by Salt Lake City, Utah, Pueblo, Colo., and 3 small cities. It accounted for nearly a third of all employees in the 10 cities. The second variation, with a 48-hour week, was used by Denver and 2 of the small cities, and accounted for 59 percent of all employees. The rest worked under a system which allowed 1 day off in 8, and required an average workweek of 49 hours.

Promotion of Patrolmen

All cities had some definite policy of promotion for their patrolmen. Five cities promoted members of the force after a 6-month probationary period and in one city a probationary period of 1 year was required. One city, which reported only one grade for patrolmen, gave promotion in the form of yearly salary increases for a stated number of years.

In Tucson the method of promotion was by civil-service examination, and in Albuquerque promotion was made by appointment. In the accompanying table, each city is classified in accordance with the method used in the first promotion received by a patrolman. For instance, in Phoenix civil-service examinations were given for entrance into the department, after which the patrolman received \$110 per month for the first 6 months, \$125 per month for the next 6 months, \$152.25 per month for the following year, \$160.65 per month for the third year, and after that received \$180 per month. This city was classified as having automatic promotion after 6 months. In Butte and Great Falls, patrolmen received \$1 per month advance in pay each year for a period of 10 years.

For promotion of patrolmen to positions of higher rank in the department, civil-service examinations were used in 3 of the 10 cities.

TABLE 7.—*Promotion of patrolmen in Mountain Division police departments*

City group	Total	Number of cities—					
		With automatic promotion after—			With promotion by—		With pay increase within grade
		6 months	1 year	2 years	Civil service	Appointment	
All cities.....	10	5	1	1	1	1	1
Group I.....	2	1	1				
Group II.....	1	1					
Group III.....	7	3		1	1	1	1

¹ Phoenix, Ariz., and Denver, Colo., gave pay increases yearly for 3 years after the first 6 months.

Vacations With Pay

Vacations with pay were received by all police-department employees except 40 in the small-city group. Denver and Salt Lake City allowed 15 days of vacation with pay. The 45 employees in Pueblo, and 108 out of the 317 employees in group III cities received 14 days.

TABLE 8.—*Days of vacation with pay for employees of Mountain Division police departments*

City group	Total number of employees	Number of employees having—		
		No vacation	14 days	15 days
All cities.....	919	40	153	726
Group I.....	557			557
Group II.....	45		45	
Group III.....	317	40	108	169

Items Supplied to the Uniformed Force

Comparatively few items were supplied free of charge to the uniformed forces of police departments in the Mountain States. Denver furnished cloth and trimmings for uniforms, while Salt Lake City and a few of the smaller cities supplied one or more items of equipment such as revolvers, holsters and belts, handcuffs or twisters, clubs, and badges.

TABLE 9.—*Items supplied the uniformed force in Mountain Division police departments*

City group	Number of cities in group	Number of cities supplying—							
		Cloth for uniforms	Trim-mings for uniforms	Revolv-ers	Holsters and belts	Hand-cuffs and twisters	Clubs and night-sticks	Badges	Minor items ¹
All cities.....	10	1	1	4	4	4	6	6	8
Group I.....	2	1	1	1	1	1	1	1	2
Group II.....	1					1		1	
Group III.....	7			3	3	2	5	4	6

¹ Whistles, flashlights, flashlight batteries, etc.

Appendix

The Mountain Division includes the States of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. It will be noted that no data are given in this study for the States of Idaho, Nevada, and Wyoming, the reason being that the Census of Population for 1930 showed no cities in these States having 25,000 population.

The cities in the Mountain Division which have a population of 25,000 or more are shown in table A. Table B gives the number of persons employed and the individual occupational salaries in each of the cities in groups I, II, and III. Table C summarizes total employment and total salaries in each division and occupation for all cities and for each size group. Table D shows average weekly hours and days on duty under various systems of operation, by division for all cities and for each size group. All data in the tables, except population, are as of July 1, 1938.

TABLE A.—*Police-department employees and salary costs in relation to population in Mountain Division cities with a population of 25,000 or more,¹ July 1, 1938*

City	Population	Employees per 10,000	Per capita salary cost
All cities.....	727, 281	13	\$2. 48
Group I—cities of 100,000 or more.....	428, 128	13	2. 57
Denver, Colo.....	287, 861	15	2. 85
Salt Lake City, Utah.....	140, 267	10	1. 99
Group II—cities of 50,000 to 100,000:			
Pueblo, Colo.....	50, 096	9	1. 66
Group III—cities of 25,000 to 50,000.....	249, 057	13	2. 49
Albuquerque, N. Mex.....	26, 570	14	2. 31
Butte, Mont.....	39, 532	9	1. 73
Colorado Springs, Colo.....	33, 237	11	2. 08
Great Falls, Mont.....	28, 822	11	2. 14
Ogden, Utah.....	40, 272	9	1. 60
Phoenix, Ariz.....	48, 118	21	4. 31
Tucson, Ariz.....	32, 506	13	2. 72

¹ Based on U. S. Census of Population for 1930.

TABLE B.—Number of employees and annual salaries in police departments of each of 10 Mountain Division cities with a population of 25,000 or over,¹ by occupations, July 1, 1938

Division and occupation	Group I				Group II		Group III														
	Cities of 100,000 or more				Cities of 50,000 to 100,000		Cities of 25,000 to 50,000														
	Colorado		Utah		Colorado		Arizona			Colorado		Montana			New Mexico		Utah				
	Denver		Salt Lake City		Pueblo		Phoenix		Tucson		Colorado Springs		Butte		Great Falls		Albuquerque		Ogden		
	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	Number	Salary rate	
All occupations ²	418		139		45		102		41		37		34		31		36		36		
Uniformed division:																					
Chiefs.....	1	4,200	1	3,600	1	2,580	1	3,600	1	3,120	1	3,600	1	3,600	1	2,700	1	3,900	1	2,400	
Assistant chiefs.....	1	3,000											1	2,400			1	2,700			
Inspectors.....			1	2,940																	
Captains.....	8	2,700	1	2,360	1	2,160	4	2,640	4	2,400							3	1,920	1	1,210	
Lieutenants.....			1	2,220											2	2,160					
Sergeants.....	30	2,160	11	2,100			6	2,250	3	2,160	3	1,800			1	2,100				3	1,995
Plain clothesmen.....			10	1,980	1	1,860															
Patrolmen:																					
1st grade.....	235	1,920	63	1,980	29	1,800	31	2,160	17	2,160	21	1,680	19	1,920	15	1,920	6	1,800	13	1,800	
2d grade.....	17	1,860					7	1,928	3	1,980							5	1,620			
3d grade.....	20	1,800	11	1,740			3	1,827	3	1,800							5	1,500			
4th grade.....							16	1,500									11	1,440			
5th grade.....							1	1,320													
Probationary.....	25	1,740																			
Other.....																					
Motorcycle officers.....									6	{1,800 to 2,160}											
Patrol drivers.....	(3)										3	1,680			3	1,920	1	1,920		2	1,800
Turnkeys.....	(3)				3	1,800								3	1,920				1	1,800	

TABLE C.—Total salaries and total number of employees in Mountain Division police departments, July 1, 1938

Division and occupation ¹	Number of employees				Total salaries			
	All cities	City group			All cities	City group		
		I	II	III		I	II	III
All occupations.....	919	557	45	317	\$1,803,208	\$1,099,640	\$83,220	\$620,348
Uniformed division.....	720	436	38	246	1,400,926	853,820	69,960	477,146
Chiefs.....	10	2	1	7	33,300	7,800	2,580	22,920
Assistant chiefs.....	4	1	---	3	10,380	3,000	---	7,380
Inspectors.....	2	1	---	1	5,340	2,940	---	2,400
Captains.....	22	9	1	12	54,140	23,960	2,160	28,020
Lieutenants.....	3	1	---	2	6,540	2,220	---	4,320
Sergeants.....	57	41	---	16	121,365	87,900	---	33,465
Plain clothesmen.....	11	10	1	---	21,660	19,800	1,860	---
Patrolmen:								
1st grade.....	449	298	29	122	866,580	575,940	52,200	238,440
2d grade.....	32	17	---	15	59,156	31,620	---	27,536
3d grade.....	42	31	---	11	73,521	55,140	---	18,381
4th grade.....	27	---	---	27	39,840	---	---	39,840
5th grade.....	1	---	---	1	1,320	---	---	1,320
Probationary.....	25	25	---	---	43,500	43,500	---	---
Motorcycle officers.....	6	---	---	6	12,120	---	---	12,120
Patrol drivers.....	9	---	---	9	16,320	---	---	16,320
Turnkeys.....	7	---	3	4	12,960	---	5,400	7,560
Miscellaneous.....	13	---	3	10	22,884	---	5,760	17,124
Detective bureau.....	123	79	5	39	259,484	166,340	10,080	83,064
Chiefs.....	3	---	1	2	6,900	---	2,160	4,740
Inspectors.....	2	---	---	2	5,040	---	---	5,040
Captains.....	1	1	---	---	2,360	2,360	---	---
Lieutenants.....	1	---	---	1	2,364	---	---	2,364
Sergeants.....	8	3	---	5	16,800	6,480	---	10,320
Detectives.....	106	75	4	27	221,460	157,500	7,920	56,040
Miscellaneous.....	2	---	---	2	4,560	---	---	4,560
Women's bureau.....	10	7	1	2	15,480	11,340	1,200	2,940
Policewomen.....	4	3	---	1	7,080	5,400	---	1,680
Matrons.....	6	4	1	1	8,400	5,940	1,200	1,260
Fingerprint section.....	19	11	1	7	37,620	21,120	1,980	14,520
Identification chiefs.....	6	1	1	4	12,540	2,340	1,980	8,220
Identification clerks.....	5	4	---	1	9,480	7,260	---	2,220
Fingerprint operators.....	8	6	---	2	15,600	11,520	---	4,080
Telephone and radio.....	23	12	---	11	46,020	23,700	---	22,320
Superintendents.....	3	1	---	2	6,480	2,220	---	4,260
Radio operators.....	13	5	---	8	26,220	9,960	---	16,260
Telephone operators.....	6	6	---	---	11,520	11,520	---	---
Miscellaneous.....	1	---	---	1	1,800	---	---	1,800
Clerical division.....	20	11	---	9	36,920	20,960	---	15,960
Chief clerks.....	1	---	---	1	2,340	---	---	2,340
Clerks and bookkeepers.....	8	6	---	2	15,120	11,640	---	3,480
Secretaries.....	4	2	---	2	8,480	4,520	---	3,960
Stenographers and typists.....	6	3	---	3	9,360	4,800	---	4,560
Miscellaneous.....	1	---	---	1	1,620	---	---	1,620
Maintenance.....	2	---	---	2	3,600	---	---	3,600
Electricians.....	1	---	---	1	2,700	---	---	2,700
Janitors.....	1	---	---	1	900	---	---	900
Miscellaneous.....	2	1	---	1	3,158	2,360	---	798
First-aid superintendents.....	1	1	---	---	2,360	2,360	---	---
Cooks.....	1	---	---	1	798	---	---	798

¹ Complete details on the number of employees and the range of salaries for each occupation are shown in appendix table B.

TABLE D.—Average hours and days on duty per week for employees in Mountain Division police departments, by divisions, July, 1, 1938

System of operation	Average hours on duty per week	Average days on duty per week	All divisions									Uniformed division								
			All divisions						Chiefs			Assistant chiefs			Other uniformed employees					
			All cities	City group			All cities	City group			All cities	City group			All cities	City group				
				I	II	III		I	II	III		I	II	III		I	II	III		
All employees.....			1 919	557	45	317	10	2	1	7	4	1	3	706	433	37	236			
3-platoon.....			876	543	43	290	7	2	1	4	3	1	2	705	432	37	236			
8-hour tours, off 2 days per month.....	52.3	6.5	274	131	43	100	3	1	1	1	1	1	2	224	97	37	90			
8-hour tours, off 1 day per week.....	48.0	6.0	540	412	-----	128	2	1	-----	1	1	-----	4	437	335	-----	102			
8-hour tours, off every 8th day.....	49.0	6.1	62	-----	-----	62	2	-----	-----	2	2	-----	2	44	-----	-----	44			
Others.....	49.2	6.1	1 43	14	2	27	3	-----	-----	3	1	-----	1	1	1	-----	-----			

System of operation	Detective bureau				Women's bureau				Fingerprint section				Telephone and radio division				Clerical division			
	All cities	City group			All cities	City group			All cities	City group			All cities	City group			All cities	City group		
		I	II	III		I	II	III		I	II	III		I	II	III		I	II	III
All employees.....	123	79	5	39	10	7	1	2	19	11	1	7	23	12	-----	11	20	11	-----	9
3-platoon.....	117	78	5	34	8	7	-----	1	14	11	-----	3	19	9	-----	10	3	3	-----	-----
8-hour tours, off 2 days per month.....	37	24	5	8	3	3	-----	-----	4	3	-----	1	-----	-----	-----	3	3	-----	-----	-----
8-hour tours, off 1 day per week.....	72	54	-----	18	5	4	-----	1	10	8	-----	2	13	9	-----	4	-----	-----	-----	-----
8-hour tours, off every 8th day.....	8	-----	-----	8	-----	-----	-----	-----	-----	-----	-----	-----	6	-----	6	-----	-----	-----	-----	-----
Others.....	6	1	-----	5	2	-----	1	1	5	-----	1	4	4	3	-----	1	17	8	-----	9

¹ Includes the following employees: 2 maintenance in a group III city; 2 miscellaneous—1 in group I, 1 in group III.