# COMPARISON OF WORKMEN'S COMPENSATION COSTS

BY

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### INTRODUCTION

The high cost of Workmen's Compensation Insurance, particularly in the State of New York, is a continuing problem which is confronting not only employers and the insurance industry, but state officials as well.

In his Annual Report for 1952 to Governor Dewey and the Legislature, Commissioner Harold Keller of the New York State Department of Commerce, stated:

"Higher costs of workmen's compensation insurance in New York State as compared with other leading industrial states continue to be one of the most serious problems facing the State in its efforts to attract new industry. The time has come for a courageous attack on the problem with a thoroughgoing examination of the factors causing higher costs in this State. This will mean a special investigation, constituted officially and expressly for this purpose . . . "

In her Annual Report for 1952 to Governor Dewey, Miss Mary Donlon, Chairman of the Workmen's Compensation Board, stated:

"The high cost of workmen's compensation insurance, a problem to which we directed attention in our Annual Report for 1951, again is in the forefront of discussion among both employers and workers in every part of the State. Employers cite high manual rates for workmen's compensation insurance. Workers point to the decline in indemnity benefits relative to wages, for the loss of which workmen's compensation is intended to compensate them. Since the problem is of obvious concern to all the people of the State and to several departments and agencies of State government, as well as the local governments, we recommended to the Joint Legislative Committee on Industrial and Labor Conditions, at its recent public hearing in the Assembly Chamber, that a study be made of the factors affecting the cost of workmen's compensation insurance in this State."

The purpose of this paper is not primarily to analyze the reasons why the cost of compensation insurance in New York is so much higher than in other large industrial states, but rather to discuss and justify a series of tables of Comparative Costs which were prepared by the writer and which have received a certain amount of publicity over the past few years.

#### THE PROBLEM

In an effort to produce a reasonably accurate measure of the differences in cost between states, various criteria were considered, but only one appeared to meet all of the necessary requirements. For example, a comparison of the ratios of earned premiums to payrolls, or the average collected rates, would be meaningless because of the wide variation in the distribution of hazardous industries between states. In some states there are many hazardous industries and in others practically none at all, which would affect the average collected rate far more than the basic variation in costs for which a measurement is being sought.

The criterion finally selected was the average manual rate, determined, not from all classifications but from 46 major classifications, each of which has a considerable exposure in each of the states involved in the study. If all classifications had been used, those classifications which are important in only a few states would not be accurately reflected in the average manual rates. It is interesting to note that the New York Insurance Department, in making a careful analysis of the July 1, 1951 exhibit, considered the possibility of using an additional 20 or 25 classes. Their test showed that the inclusion of these additional classes would actually widen the gap between New York and other states, so that the indicated variation in costs would have been even greater.

In selecting these 46 major classifications, later reduced to 45 by the elimination of the farming classification, it was necessary to use 13 which are in the category of New York Special classifications. In a majority of these, the only difference between the New York Special and the countrywide classification is a minor variation in the class wording, which affects neither the scope nor the hazard of the classification, so that they are comparable for all intents and purposes. In other cases, one or more New York Special classifications have been combined to equal the scope of a single countrywide classification. In one case, two countrywide classifications were combined to equal a single New York special.

Actually, there is nothing particularly actuarial in the determination of the average manual rates. Any statistical clerk, having available the manual rates for the states involved, could perform the necessary calculations.

## THE TABLES

The average manual rate for each state was determined by using the latest available New York payroll distribution for the 45 classifications. Tests were made which showed that it makes little difference as to which payroll distribution is used — as long as the same payroll distribution is used for all states, the results will bear a consistent relativity. If, on the other hand, the payroll distribution for each state is used in determining its own average rate, the answer would be

affected more by the payroll distribution than by the basic variation in costs which is to be measured.

This study was first made on July 15, 1948 and was repeated for the manual rates in effect on February 15, 1950; July 1, 1951; and July 1, 1952; and showed the following average manual rates:

	7/15/48	2/15/50	7/1/51	7/1/52
New York	\$1.312	\$1.280	\$1.500	\$1.505
Massachusetts	.785	.971	.990	1.103
New Jersey	.796	.639	.719	.823
Texas	.784	.730	.752	.778
California	688	.697	.695	.758
Wisconsin	.706	.644	.653	.741
Connecticut	.714	.703	.660	.720
Missouri	.628	.587	.588	.624
Maryland	.571	.532	.484	.539
Illinois	.492	.575	.489	.482
Michigan	.512	.521	.514	.444
Iowa	.460	.479	.460	.435
Indiana*		.462	.454	.433
Virginia	.419	.380	.334	.390
Alabama	.333	.338	.324	.356
Pennsylvania	.330	.353	.321	.320

<sup>\*</sup>not included in 7/15/48 study

Because of the fact that Pennsylvania has a broader classification system of its own, consisting of only about 200 classes, the average rates for Pennsylvania may not be truly comparable with New York and the other states. In each case, however, the best possible assignment was made, so that the result should have some significance.

## PUBLICITY

These figures were first published by the Insurance Department of the United States Chamber of Commerce in their Supplement to the 1948 Analysis of Provisions of Workmen's Compensation Laws and Discussion of Coverages.

More recently, they have been published by Associated Industries of New York State, Inc.

In a series of articles by George Horne which appeared in the New York Times on September 10, 11 and 12, 1951, the July 1, 1951 figures were quoted. Unfortunately, the author of those articles did not see fit to confer with the producer of the tables and a number of serious misstatements were made in connection with the data and their interpretation.

## THE PURPOSE OF THE TABLES

The purpose in compiling these average rates, as stated above, has been to make a comparison of workmen's compensation costs in the various states. The use of the average manual rates has been attacked as not being truly representative of relative costs. Admittedly, for an individual risk, particularly one large enough to be either self-rated or self-insured, the manual rate means very little. Most large risks are subject to experience rating and premium discount, and risks insured by mutual companies receive dividends, but since these elements affect the premium in each state in approximately the same manner, the average manual rate, while not an absolute measure, is deemed to be a valid index of relative cost, state by state.

Furthermore, while the method of making manual rates may vary slightly from state to state to reflect minor differences in state requirements, such as taxes, etc., the basic ratemaking procedure is the same in all of the states, and minor discrepancies or differences cannot

affect the overall picture.

In analyzing workmen's compensation costs, there are various items which account for the marked differences between states. Primarily, benefit provisions in the various compensation laws vary widely and account for a major portion of the difference. The inclusion, in some states, of the cost of administering the Workmen's Compensation Law in the manual rates may widen the gap slightly. And finally, liberality of administration of the Workmen's Compensation Law may increase costs far beyond any actual comparison of the benefits prescribed in the Law.

### NATIONAL COUNCIL BENEFIT INDEX

The National Council on Compensation Insurance periodically publishes a Comparative Benefit Table which shows, for 53 states and territories, a benefit index which has been built up as a cumulation of the various periodic law amendments. Admittedly, this table has many shortcomings, and refers only to indemnity losses. No similar data are available for medical benefits.

Because of its shortcomings, the following table is not quoted with any idea of using it as an adjustment in the average manual rates, but merely because it is interesting to see the figures side by side:

	National Council Benefit Index July 15, 1952	Average Manual Rate Index July 1, 1952	
New York	1.000	1.000	
Massachusetts	1.129	.733	
New Jersey	.940	.547	
Texas	.743	.517	
California	.867	.504	
Wisconsin	1.234	.492	
Connecticut	.872	.478	
Missouri	.905	.415	
Maryland	.904	.358	
Illinois	1.021	.320	
Michigan	.928	.295	
Iowa	.849	.289	
Indiana	.861	.288	
Virginia	.837	.259	
Alabama	.691	.237	
Pennsylvania	$.83\overline{0}$	.213	

### CRITICISMS

Two further criticisms have been leveled at the use of average manual rates as a means of comparing costs: (1) that the manual rates in effect on a given day do not reflect the same experience period, and (2) that some manual rates include provision for the expenses of administering the Workmen's Compensation Law, while some of them do not, such expense being subsidized by the state. Both of these statements are true, but it can easily be shown that they have only a very slight effect on the overall picture.

(1) The New York rates in effect on July 1, 1952 were those which became effective on January 1, 1952, for which the rate level was based on policy year 1949. For the other states, whose rates became effective at various times from September 1, 1950 to July 1, 1952, the rate level, depending on the revision date, was based on the two latest available policy years, either 1947-48 or 1948-49. In both New York and the states under National Council jurisdiction, the current ratemaking program further provides for the application of a Rate Level Adjustment Factor based on later calendar year experience. For the New York rates in effect on July 1, 1952, the Rate Level Adjustment Factor was based on the calendar year experience from July 1, 1950 to June 30, 1951, which had been obtained by a special call. For the other states, depending on its availability on the date of the revision, calendar experience ending either on December 31, 1950 or on December 31, 1951 was used. In at least six states, the rates more closely reflected current experience than did the New York rates.

In developing the Table of Comparative Costs, manual rates in

effect on July 1, 1952 were used regardless of the experience period to which they were keyed. Whether they were keyed to five-year old experience or were projected to a point five years in the future, they do represent rates paid by employers in July of 1952. Unless there were a significant trend in one direction or the other, differences in the experience period could hardly be considered as a factor in cost differentials between states.

(2) In New York, the expenses of the Workmen's Compensation Board relating to the administration of the Workmen's Compensation Law are included in the manual rates. The January 1, 1952 manual rates were higher by about  $3\frac{1}{2}\%$  by the inclusion of this item. Of the 15 other states shown in the Table, specific provision for administration expenses is made in three of them, as follows:

New Jersey — Workmen's Compensation Tax of 0.25%

Texas - 0.3% of gross Workmen's Compensation premiums

Maryland — a varying assessment per \$100 of payroll. (The latest available figure is \$.02 per \$100 of payroll.)

Similar expenses in other states are subsidized by the state, but the amounts in those states are relatively unimportant. The following expense figures were furnished to the writer by the Industrial Commission in each of the states involved:

	Calendar Year 1951 Earned Premium	Expense of Administering W. C. Law	Period Reported	Approximate Ratio of Expense to Premium
Alabama	\$ 4,746,875	\$ 10,726	10/1/51-52	.0023
California	115,239,572	1,091,612	50-51 fiscal	.0095
Connecticut	19,468,163	129,308	7/1/51-52	.0066
Indiana	17,586,371	109,292	7/1/51-52	.0062
Iowa	8,903,419	abt. 30,000		.0034
Massachusetts	51,457,473	610,515	7/1/51-52	.0119
Michigan	37,152,367	244,461	7/1/51-52	.0066
Missouri	18,987,208	286,995	7/1/51-52	.0151
Pennsylvania	29,358,574	772,554	6/1/50-51	.0263
Virginia	8,582,702	201,364	7/1/51-52	.0235
Wisconsin	23,723,392	190,318	7/1/51-52	.0080
Total	\$335,206,116	\$3,677,145		.0110

Presumably, if these costs were assessed against the carriers, some portion would be paid by self-insurers. The ratio to premium in each state would therefore be less than is indicated above.

One can readily see that the inclusion of an adjustment in the average manual rates of these states to reflect this item would have no appreciable effect on the overall picture of relative costs.

### CONCLUSION

As stated above, the actual preparation of these tables is more of a statistical proposition than an actuarial one. On the other hand, it is felt that the selection of appropriate classifications and the method of determining the weighted average rates require the use of some actuarial science.

It is to be hoped that, regardless of the reasons for the wide variation in costs between states, these tables will serve those who intend to investigate workmen's compensation costs as an accurate measure of the problem involved, and give them a possible starting point for their investigations.

The complete July 1, 1952 table including classifications and manual

rates by state follows: