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An Appraisal of Techniques Employed in Occupational Wage Surveys for Communities

Henry Wilson Maglidt

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AN APPRAISAL OF TECHNIQUES EMPLOYED IN
OCCUPATIONAL WAGE SURVEYS FOR COMMUNITIES

By

Henry Wilson Maglidt

A Thesis

In partial fulfillment of the
Requirements for the Degree of
Master of Arts in Economics

The University of New Mexico

1955

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CHAPTER I

INTRODUCTION

The purpose of this thesis is to describe and analyze the techniques employed in conducting community occupational wage surveys and to provide useful information for local organizations undertaking occupational wage surveys of communities overlooked in community wage surveys conducted by government agencies or trade associations.

THE DEVELOPMENT OF WAGE SURVEYS

An occupational wage survey is the collection of data concerning wages, hours of work, earnings, and related wage and employee benefit practices prevailing among business firms in an industry, area, or locality; the analysis and interpretation of the data gathered; and the reporting on the results obtained.

A. Part played by the Federal Government. Occupational wage surveys are of comparatively recent origin. They originated¹ in activities

¹ Community Approach to Wage Studies, United States Department of Labor, 1949, p. 2.

of the Bureau of Labor, organized in 1885 in the Department of the Interior. One of the Bureau's responsibilities, set forth in a law enacted by Congress in 1888, was to acquire and disseminate among the people of

INTRODUCTION

The purpose of this study is to investigate the role of the state in the development of the economy. The study is based on a review of the literature on the subject and on a survey of the economic conditions of the country. The study is divided into two parts: the first part is a general survey of the economic conditions of the country and the second part is a detailed study of the role of the state in the development of the economy.

THE STATE AND THE ECONOMY

An economic system is a set of institutions and processes that allocate resources and produce goods and services. The state is a central institution in the economic system. It is responsible for the distribution of resources and the production of goods and services. The state also plays a role in the development of the economy. It can promote economic growth and development by providing infrastructure, education, and health services. It can also regulate the economy to ensure that it is fair and efficient.

A. The Role of the State in the Development of the Economy

1. The Role of the State in the Development of the Economy

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the United States useful information on subjects connected with labor. From this has grown the present Bureau of Labor Statistics of the United States Department of Labor.²

² Activities of the Bureau of Labor Statistics in World War II, United States Department of Labor, 1947, p. 3.

For many years, the Bureau of Labor Statistics conducted studies by occupations in selected industries of straight-time average hourly earnings of workers paid on an incentive basis. These studies offered information on changes in the level and the structure of wages in certain industries and provided historical data for broader studies of wage rate movements. Except for three periods of extensive survey work, (1907, 1919, and 1931-32) the number of industries surveyed was small, very little information was reported on a local labor market basis, and there was considerable time lag between the collecting of data and publishing of reports on the findings.³

³ H. M. Douty and T. P. Kanninen, Community Approach to Wage Studies, U. S. Department of Labor, Serial No. R 1971. 1949, p. 2.

Impetus was given to the development of occupational wage surveys during the 1930's when the Federal Government of the United States adopted a more positive role in the direction of economic activity. During this period a series of laws was enacted by Congress which brought important

the United States useful information on subjects connected with Japan.
From this has grown the present Bureau of Labor Statistics of the United
States Department of Labor.²

² Activities of the Bureau of Labor Statistics in World War II.
United States Department of Labor, 1947.

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by comparison in selected industries of working-time averages hourly
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and 1931-32) the number of industries surveyed was small. Very little
information was reported on a local labor market basis, and there was
considerable time lag between the collecting of data and publishing of
reports on the findings.³

³ H. M. Davis and T. E. Lawrence, Community Accounts to 1930.
Studies, U. S. Department of Labor, Bureau No. 2, 1931, 1932, p. 5.

Reports were given to the development of occupational wage surveys
during the 1930's when the Federal Government of the United States
adopted a more active role in the direction of economic activity. During
this period a series of laws was enacted to develop and protect important

changes in the American economy. The National Labor Relations (Wagner) Act of 1935 provided that workers who wished to organize and bargain collectively or act for purposes of mutual aid must be left free to do so in fact as well as in law. Insofar as labor was concerned, this was the greatest step in the shift away from earlier concepts which had prohibited combinations in order to control selling prices. The Public Contracts (Walsh-Healy) Act of 1936 authorized the Secretary of Labor to determine prevailing minimum wages in an industry. The Federal Fair Labor Standards (Wage and Hour Law) Act of 1938 covered hours of work, overtime payments, and standards for the employment of children. All of this legislation made more reliable and extensive wage information necessary and accelerated development in the use of occupational wage surveys.

This development was further accelerated by the emphasis placed on wage controls in the United States during World War II. Early in the War, the War Labor Board, after issuing a "hold the line" edict on wages, ruled that welfare plans voluntarily arrived at between employer and the union would not be considered a wage increase if the cost of the plan did not exceed 5 per cent of the payroll. Furthermore, the National War Labor Board ruled that employer refusal to incorporate existing company benefit plans into the labor agreement was tantamount to refusal to bargain under the National Labor Relations Act, and that the cost of such benefit plans could be counted as a legitimate expense of doing business. In addition, the Office of Price Administration recognized the cost of benefit plans

in making price adjustments.⁴

⁴ Robert Rosenthal, "Union-Management Welfare Plans," Quarterly Journal of Economics, 62:64-94, November, 1947.

Subsequent important legislation dealing with the overall subject of wages includes the Employment Act of 1946, concerning policies for maintaining high levels of output and employment, and a whole series of amendments to the Wage and Hour Law in 1950.

As stated on page 2, the Bureau of Labor Statistics has for many years been collecting and analyzing facts relating to the country's wage structure. The World War II wage stabilization program which was initiated in 1942 led the Bureau to launch an Occupational Wage Rate Project in April 1943. Under that program the Bureau collected wage data from more than 60,000 American firms.⁵ The results were transmitted in

⁵ Activities of the Bureau of Labor Statistics in World War II, op. cit., p. 88.

summary reports to the National War Labor Board. Starting in 1945, national and regional data were released on an industry basis in such publications as the Bureau of Labor Statistics Bulletin No. 952, Wage Structure-Metal Working Industries, 1945. Beginning in 1947, annual studies of some twenty-five industries on an industry-by-area basis were undertaken by the Bureau of Labor Statistics for general public information.

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Journal of Education, 1911, Vol. 1, No. 1.

Education in the United States, 1911.

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Occupational studies were made for the first time on a cross industry rather than an individual industry basis in 1948 when studies were made of selected office clerical occupations in important large cities. Bulletin 943, Salaries of Office Workers in Selected Large Cities is an example of such a study. During the Spring of 1949, the Bureau conducted pilot studies of occupational wages and related wage practices on a community basis in six cities in various parts of the country. Principally for budget reasons, area surveys conducted by the Bureau of Labor Statistics are limited to large cities and important concentrated industrial localities.⁶

⁶ H. M. Douty and T. P. Kanninen, op. cit., pp. 2-3.

The phenomenal acceptance of and demand for these surveys was attested by the fact that in one year, 1949, the Bureau received more than 10,000 requests for Bulletin 943, Salaries of Office Workers in Selected Large Cities.⁷ The reports available for general public use pertained,

⁷ H. M. Douty and T.P. Kanninen, op. cit., p. 3.

however, to wage conditions in large cities and important concentrated industrial areas. With respect to information on wage conditions in smaller communities, the Bureau of Labor Statistics has stated, "Clearly information cannot be maintained on a current basis for every occupation

in every industry and every community [*italics not in original*] in the United States."⁸

⁸ H. M. Douty and T. P. Kanninen, op. cit., p. 2.

B. Part Played by business firms. It had been the general practice of most firms in the country to pay the "going wage," or some average of the going wage, in a community for their particular jobs. In some industries, such as oil or woolen textiles, the wages paid by firms in the same industry in other localities were considered more important than wages paid in the local market by other industries. In order to attract superior workers, some industries paid better wages than were average for the community or industry. Other firms paid the lowest possible wage that local conditions would permit.

Legislation on subjects such as collective bargaining, minimum wages, hours of work, and overtime brought a tremendous increase in the range of management policy decisions requiring reasonably precise wage information. Insofar as industry was concerned, the impact of this legislation promoted a tendency to "keep in line" with other comparable firms on wage levels and wage changes. More and more, establishments tried to relate their wage policies to the patterns set in the community or in the industry.⁹ To keep in line with other comparable enterprises,

⁹ Paul Pigors and Charles A. Myers, Personnel Administration (New York: McGraw-Hill Book Company, Inc., 1951) p. 249.

in every industry and every community [Italics not in original] in the United States.⁶

⁶ H. H. Derry and E. J. Lawrence, Jr., *op. cit.*, p. 1.

5. Part played by business firms. It had been the general practice of most firms in the country to pay the "going rate" or some average of the going wage, in a community for their particular jobs. In some industries, such as all or woolen textiles, the wages paid by firms in the same industry in other localities were considered more important than wages paid in the local market by other industries. In order to attract superior workers, some manufacturers paid better wages than were average for the community or industry. Other firms paid the lowest possible wages that local conditions would permit.

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⁷ Local Factors and Changes in Wage, Personnel Administration (New York: McGraw-Hill Book Company, Inc., 1931), p. 10.

business firms needed information about these firms' wage levels and about related benefits classified as compensation to employees. When a firm undertook the development of an adequate wage policy or contemplated changes in its existing wage practices, information concerning prevailing practice was considered necessary. In the conduct of collective bargaining, comparative data were considered to be absolutely essential. When a business concern published wage policies resulting from collective bargaining, it felt compelled to keep up with the current practices of comparable firms.

To obtain the desired information, individual firms made surveys of wages and salaries paid by other firms in an area or industry. This led to systematic and periodic studies by leading firms.¹⁰ The techniques employed

¹⁰ Paul Pigors and Charles A. Meyers, op. cit., p. 246.

and the results obtained, however, were not divulged to the general public.

By the late 1940's, employer associations were making regular industry surveys. In smaller cities and less populated centers, the local wage information was generally obtained through the efforts of chambers of commerce, local business groups, and educational institutions. Business bureaus and economic research departments of state universities have made studies and published results as a community service.¹¹ State employment

¹¹ Occupational Wage Survey of Albuquerque, New Mexico, (Bureau of Business Research, University of New Mexico, October 1949 and November, 1951).
Wage Survey of Office Workers in the Missoula Area in 1951, (Montana State University, October, 1951).

commissions have in some instances made occupational wage surveys of smaller areas.¹²

¹² Occupational Wage Survey of Enid, (Oklahoma Employment State Security Commission, 1951).

PURPOSE AND SCOPE OF THIS STUDY

For some years the writer has noticed that studies of wage rates available for general use pertain to wage conditions by industry on a national or regional basis. Literature on the subject bears upon methods employed in studies on a wide scale, or on studies of large cities or important concentrated industrial centers. There appears to be a dearth of literature on the subject of conducting wage surveys on a community basis in the smaller cities and less populated areas. Therefore, in the Fall of 1951, the writer, in connection with graduate work at the University of New Mexico, undertook a survey of the City of Albuquerque, New Mexico, to learn something of the problems peculiar to a city of about 100,000.

At the suggestion of the Director of the Bureau of Business Research of the University of New Mexico, this 1951 survey was made a Bureau project and resulted in the second occupational wage survey of the Albuquerque area. (See Appendix B).

The first occupational wage survey of the Albuquerque area had been conducted by the Bureau of Business Research in October, 1949. It was a pilot survey patterned after the wage survey procedures employed by

Commission have in the past been very active in the field of human rights.

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to form a committee of the Commission in the field of human rights.

At the suggestion of the Commission in the field of human rights.

the Merchants and Manufacturers Association of Los Angeles, California, and the results were published for general use in January, 1950.¹³

¹³ Occupational Wage Survey of Albuquerque, New Mexico, October, 1949, op. cit.

To achieve as much historical continuity as possible, the same occupations as were covered in the 1949 survey were included in the 1951 study. The 1951 survey, however, covered a greater number of occupations, included more firms, and reported more fully on fringe and employee benefits than did the earlier study. More detailed discussion of the 1951 study is included in Chapter IV.

OUTLINE OF THIS THESIS

Chapter II defines what an occupational wage survey is, describes the uses of these studies, and indicates who has an interest in them and why.

Chapter III reviews various techniques employed in conducting specific occupational wage surveys on a community basis in various sections of the United States, analyzes the several techniques, and provides a general evaluation of the techniques observed.

Chapter IV gives a report on the practical problems encountered in the 1951 Albuquerque survey.

Chapter V, the final chapter, summarizes shortcomings of wage surveys as they are conducted today and suggests methods of overcoming

the laboratory and the results of the study are given in the following table and the results were published in the Journal of the American Medical Association, October, 1937, p. 1111.

To achieve an exact diagnosis and to avoid as far as possible any error in the diagnosis as was shown in the first study, a second study was made. The first study, however, showed a great variation in the results. The second study was made with a more exact method and the results were included in Chapter IV.

Chapter II is devoted to the study of the results of the first study. The results of the first study are given in the following table and the results were published in the Journal of the American Medical Association, October, 1937, p. 1111.

Chapter III is devoted to the study of the results of the second study. The results of the second study are given in the following table and the results were published in the Journal of the American Medical Association, October, 1937, p. 1111.

these. It concludes with a recommended procedure pointed toward promoting the achievement of dependable community occupational wage reports which will furnish consistently reliable comparisons of wage structures and provide data with historical significance.

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CHAPTER II

A MECHANISM FOR DEALING WITH WAGE AND EARNINGS PROBLEMS

The purpose in this chapter is to state what a community occupational wage survey is and to describe the principal steps in the planning, preparing for, and conducting of such a study. The chapter also enumerates the uses of such a survey.

I. WHAT A COMMUNITY OCCUPATIONAL WAGE SURVEY IS

Description. A community occupational wage survey is a study conducted on a community and cross-industry basis to obtain information on wages, hours of work, total earnings, and related wage and employee benefit practices for occupations in the community. Making such a survey involves careful consideration of the reasons for seeking the information, the determination of specific questions to be asked to obtain the desired information, the selection of the sample from whom the information will be solicited, and the choice of occupations to be studied. Preparation for the study also includes the careful describing of the occupations to be studied, designing of necessary forms and questionnaires, and the selecting and training of the survey personnel. It includes, further, the gathering of the data from the firms selected in the sample to be interviewed; the compilation, analysis, and interpretation of data; and finally, the preparation and publication of the findings. In short, the community occupational wage survey includes all activities connected with the study

from the original planning through the publication of the findings of the survey.

Why the information is wanted. As was stated earlier, many types of organizations are engaged in the making of occupational wage surveys. In most cases, the specific information sought is determined by the wishes of the group to which the organization conducting the survey feels a responsibility. The Bureau of Labor Statistics, chambers of commerce, state agencies, and educational institutions, for example, are largely guided by questions about wages and related matters from the community at large. Employer associations and local business groups, on the other hand, serve their members and associates and thus seek the information requested by them. Individual firms want and seek answers to questions arising within or directly affecting their own organizations. The specific information sought in any survey depends, it can thus be seen, upon the needs of the group for which the survey is made.

The determination of the specific questions. Since the specific purpose for making a survey depends upon the group interested in the results, obviously the questions asked in the survey hinge, to some extent, upon that purpose. Despite the variety introduced by difference in purpose, there appears to be a basic pattern in questions on wages and hours worked. This pattern can be accounted for by the fact that one objective of all such studies is to find out about the wage structure prevailing among the employers surveyed.

from the national planning process the responsibility of the country and the survey.

By the International Labour Office

of organizations the national planning process is a key factor in the development of the country. In most cases, the national planning process is a key factor in the development of the country. of the group to which the national planning process is a key factor in the development of the country. responsibility. The national planning process is a key factor in the development of the country. estate agencies, and the national planning process is a key factor in the development of the country. enabled by the national planning process is a key factor in the development of the country. large. The national planning process is a key factor in the development of the country. serve their members and the national planning process is a key factor in the development of the country. by them. The national planning process is a key factor in the development of the country. within or otherwise of the national planning process is a key factor in the development of the country. also regard to the national planning process is a key factor in the development of the country. the group for which the national planning process is a key factor in the development of the country.

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Most surveys seek additional specific information on such so-called "fringe benefits" as paid vacations, paid holidays, paid sick leave, premiums for overtime and night shift work, insurance benefits of all kinds, and pension plans. Since the specific purpose of the survey may involve information on any combination of such items, great variety appears in the questions asked in this area.

Selecting the sample. A group of employers must be selected as a sample which fairly represents the area or industry being studied so far as the purpose of the study is concerned. The sample should include firms which can be described as "other comparable firms."

If the aim of the study is to determine the prevailing wage conditions in a locality, firms of all types should be included. If, however, wage information for a specific industry in a community is desired, the sample should be made up of firms offering comparable jobs.

Still other factors may affect the choice of a sample. Depending upon the purpose of the survey, such things as whether or not a firm manufactures a product or whether or not it has more than one location may determine its suitability for the sample.

Selecting the occupations to be surveyed. In selecting the job classifications or occupations to be studied, the specific purpose of the survey is again important. Though many studies are based on those jobs common to all of the firms in the sample, often others are included. For example, if men are in great demand for a job classification which normally might not be studied, that job would probably be added to the

that surveys were conducted in the field by the
so-called "trip" party of the Government, and that
leave, premium for overtime work, and other benefits
all kinds, and pension plans, and other matters
may involve information on any combination of these items, and which
appears in the questionnaires.

Selection of sample. The sample of workers was selected as
a sample which fairly represents the whole of the workers
for as the purpose of the study is to obtain a representative
group which can be taken as a basis for comparison.

If the size of the sample is to be small, the sample must be
conditioned in a special way, that is, it must be selected in
such a way that it is representative of the whole of the workers
desired, the sample must be selected in such a way that it is
fairly representative of the whole of the workers.

Upon the basis of the survey, which is a study of the workers
manufactured a product, the results of the survey are used
for determining the minimum for the workers.

Selection of the survey area. In the survey, the area for the
classification of the workers is determined by the results of the
survey is made known. These results are used for the
job comes to all of the workers, and of course, the results
for example, it may be that the results of the survey are used
normally when the results of the survey are used.

regular list. Again, if the purpose for the survey is to gather information of use to management in wage and salary administration, jobs representing the entire range of skills and pay should be included. In some studies, groups of key occupations have been selected for study on the theory that information on jobs not studied could be safely inferred from them. In most wage studies, specific occupations are the criteria by which comparative data are measured.

Preparation of job descriptions. Since specific occupations are the criteria by which comparative data are measured, it is vital that jobs included in the study be so described as to be identifiable. The Bureau of Labor Statistics has written job descriptions for many occupations. Some survey agencies adapt these to their own needs. Other organizations prepare their own job descriptions with the help of personnel experts and agencies interested in the labor market under survey. Still other survey agencies prepare individual descriptions to fit conditions peculiar to the community under study.

Determining the method of conducting the investigation. When the specific questions to be asked have been decided upon, the sample selected, and the job descriptions prepared, the method of conducting the investigation may be determined.

The best method of conducting the investigation depends largely upon the amount and complexity of the information desired. The three basic methods of conducting an investigation and the conditions to which each is best suited follow:

a. Mailed questionnaires. If the information sought is such that questions can be framed which are easy to understand and answer, questionnaires may be mailed to the selected firms with the request that they be completed and returned. This method is also used in repeat surveys in which the firms are already familiar with the questions. A telephone call or an accompanying letter is sometimes used to explain the purpose for the study, especially if it is believed that the selected firm has never participated in a similar survey. If the spontaneous response to mailed questionnaires does not provide an adequate sample, a telephone call or personal visit to the firms which have not replied is often useful. The mailed questionnaire is the least expensive method of securing information.

b. Personal interview. When the interview method is used, survey personnel call on each participating firm. Though this is more costly than mailing questionnaires, the expense is justified if the questionnaire becomes forbiddingly long and complex, if detailed explanations are needed to elicit the information, if the survey must be completed in a limited time, or if for other reasons personal contact seems important.

c. Combination method. In some instances a combination of mailed questionnaires and personal interviews is used. Ordinarily the amount of money and the number of trained people available for the survey will determine the choice of method.

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mailed questionnaires and personal interviews is used. Ordinarily the amount of survey and the number of trained people available for the survey will determine the choice of method.

Preparation of forms. In designing a questionnaire form, both the information desired and the reaction of the firms surveyed must be considered. The mailed questionnaire should be kept short if a high return rate is wanted. The questions should be clear, easily answerable, and confined to essentials. Two forms, one for general information questions and the other on specific occupations, may help to eliminate repetition. Even when the personal interview method is used, a long questionnaire takes more in time and is, consequently, more expensive. Every wage survey questionnaire should provide spacing on the form for computation by the survey agency.

Compilation, analysis, and interpretation of results. The compilation, analysis, and interpretation of results includes the orderly presentation of the data in figures, tables, or charts. Averages are computed and analysis and interpretation of results prepared. Reports are prepared and published to reflect the wages, hours, and related benefits that have been found to prevail in each of the occupations studied.

II. WHAT SURVEYS ARE USED FOR AND BY WHOM

In the preceding section it was emphasized that the specific purpose of an occupational wage survey is determined by the group for whom it is made. It is not surprising, therefore, to find that the results of the surveys are also used in accordance with the best interest of those using them. In the following sections, the various uses of wage survey information will be detailed in relation to the users. Some overlap is inevitable here.

Preparation of forms. In designing a questionnaire, the

information desired and the location of the items are first considered. The entire questionnaire should be kept short if a high return rate is wanted. The questions should be clear, easily answered, and confined to essentials. Two forms, one for general information questions and the other on specific occupations, may help to eliminate repetition. Even when the personal interview method is used, a long questionnaire takes time and is, consequently, more expensive. Every type survey questionnaire should provide space for the time for completion by the survey agency.

Compilation, analysis, and interpretation of results. The compilation,

analysis, and interpretation of results includes the organization, presentation of the data in figures, tables, or charts. Average and standard deviation and interpretation of results prepared. Results are prepared and published to reflect the wages, hours, and related benefits that have been found to prevail in each of the occupations studied.

II. WHAT SURVEYS ARE USED AND WHY?

In the preceding section it was explained that the specific purpose of an occupational wage survey is determined by the group for whom it is made. It is not surprising, therefore, to find that the results of the surveys are also used in connection with the best interests of those groups. In the following section, the various uses of wage survey information will be detailed in relation to the survey. Some overlap is inevitable here.

Since the problems of industrial relations revolve around the achievement of good relations between industrial management and the representatives of labor and between labor and the community as a whole,¹ what is of interest and use to management, for example, is often also of interest and use to labor.

¹ Sumner H. Slichter, The American Economy (New York: A. A. Knopf, 1949), p. 26.

Employers' Interest. Wage survey information can help the employer to act intelligently in a wide variety of situations. Regional differences in wage level for a particular industry frequently influence decisions on plant locations. A firm contemplating relocating or opening a branch in a new locality would use wage surveys of the old and new localities in reaching a decision.

Established firms seeking similar wage information may want it for different reasons. Though a firm is reasonably sure that it is paying higher basic wages than are average for the community, it may still wish to compare the composite of its basic wage rate, premium on rates, and supplementary benefits with that of other comparable firms. The reasons for wishing to make such a comparison differ between firms. It may be prompted by a firm's desire to retain its position of leadership in an industry or area so as to attract superior workers. It may be wanted for bargaining purposes to meet an expected demand for increased wages or benefits. Or it may be sought because the firm wishes to keep its pay scale or security

Since the problem of industrial relations is a broad one, it is not possible to deal with it in a single paper. It is a subject which has attracted the attention of many writers and has become a subject of great importance in the world of today. It is a subject which is of interest to all who are concerned with the welfare of the community.

I am sure that the following paper will be of interest to all who are concerned with the welfare of the community.

Industrial Relations. This paper is a study of the relations between the employer and the employee. It is a study of the problems which arise from the fact that the employer and the employee are two different groups of people, each with its own interests and its own aims. It is a study of the ways in which these interests and aims can be reconciled.

It is a study of the ways in which the employer and the employee can work together for the common good. It is a study of the ways in which the employer can treat the employee as a human being, and not merely as a machine. It is a study of the ways in which the employee can be given the opportunity to develop his own abilities and to share in the fruits of the enterprise. It is a study of the ways in which the relations between the employer and the employee can be made more harmonious and more productive.

benefits in line with those of other comparable firms to reduce labor turn-over.

Whenever a firm acts to establish or revise a wage policy, whether by collective bargaining or management edict, it must be in a position to give enlightened consideration to a multitude of factors. Decisions must be made on the basic pay and the unit of time to which it applies. In addition, the amount of special compensation and the conditions under which it will be paid (night work, overtime, holidays, etc.) must be established. When this has been done, decisions must be made about vacations, holidays, paid sick leave, pension plans, death plans, and other security benefits. The question of whether or not incentive plan is to be used must be answered. If the answer is yes, then a choice must be made among those available. Large firms must also consider the advisability of establishing a wage administration program or a job evaluation system.

Since in modern industry no firm can live entirely unto itself, intelligent management is eager to enlist all available aid in coping with these problems. Whatever a firm's ultimate objective in matters of wage policy may be, properly compiled statistics on the wage structure of comparable firms can be of use in achieving them. Finally, since wages and related benefits represent a cost to the employer which must be equitably adjusted if a firm is to maintain a competitive position, no organization, be it employer or labor, can afford in the long run to be arbitrary or capricious in the matter of wages or related benefits.

Labor Union Interest. Wage statistics, together with information

...in the case of some workers...
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...However, it is not...
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...available. In fact...
...a wage administration...
...Since in western...
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...these conditions...
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...related benefits...
...adjusted...
...be its employer or...
...negotiations in the...
...labor union...
...with management...

concerning related benefits, are an indispensable tool to employees and their union representatives in collective bargaining. Such data also keep employees informed as to the merits of the personnel policies of their own firm in comparison with those of other comparable firms.

The incorporation of the collective bargaining procedure into the economic life of the United States, together with the vital importance of labor in the country's role as the producer of nearly one-third of the world's goods has brought a great shift of power from management to employees or the representatives of employees.² Employees make up over

²Sumner H. Slichter, op. cit., p. 3.

two-thirds of the people who work for a living in the United States, and the needs which they consider important are the needs which the trade unions will strive for in the collective bargaining process.

Many studies have emphasized that fair wages are important to employees. If the employees consider that wages are adequate, however, other objectives become more important.³ For instance, a major goal of

³Paul Pigors and Charles A. Myers, Personnel Administration (New York: McGraw-Hill Book Company, Inc., 1951), p. 246.

workers is security; security against the hazards of unemployment, sickness, disability, and old age. These considerations require accurate information on termination of employment allowances, paid for sick leave

concerning the fact that the Government has not yet decided
whether to accept the offer of the United States to purchase
the surplus cotton. It is understood that the Government
is still in communication with the United States on this
subject. The Government has also received information
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available for sale at a price of 10 cents per pound.
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United States that the surplus cotton is available for
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received information from the United States that the
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policies, disability payments, and pension or retirement plans.

Wages, of course, are important for security. The worker, however, is not so much interested in the absolute level of wages as he is in the level relative to the wage rates in his local area in his industry, or to others with whom he thinks he should be compared. Likewise, in the category of security the worker wants welfare benefits that compare favorably with those offered by firms comparable with that for which he works.⁴

⁴ E. Wight Bakke, "Why Workers Join Unions" (Joseph Shister, editor, Labor Economics and Industrial Relations, Philadelphia: J. B. Lippincott, 1951), pp. 30-37.

Therefore, in working toward the establishment of good relations between management and trade unions it is imperative that accurate information be available concerning the general level of wages and salaries of various occupations in the given firm, area, or industry under consideration. With each new law or ruling touching on wages, the number of problems in wage administration has increased, and additional or more precise wage information is required. Collective bargaining requires careful advance preparation, and both parties should be well armed with factual information to support their positions. Occupational wage surveys of wages and salaries paid, and of other benefits prevailing in other firms in the local area or industry are therefore essential in developing an adequate policy on wages and for use in the bargaining procedure.

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Editor, Labor ...
J. B. ...

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...an adequate policy ...

The interest of the community at large. The importance of wage policies to the general public is apparent from the fact mentioned in the preceding section, that over two-thirds of the people in the United States who work for a living are employees. The working population numbered sixty-three million in 1950, exclusive of the armed forces. Of this total, forty-four million worked for wages or salaries in non-agricultural firms. In the same year \$152 billion or 64.4 per cent of the total national income of \$236 billion dollars was compensation to employees. In addition to wages and salaries, this compensation includes employer contributions to welfare and pension plans and other items which are of interest in collective bargaining.

All compensation to employees represents a cost to employers and must be passed on to the consumers as part of the cost of the product. Significant changes in compensation to employees are quickly reflected in the market place. Thus the community at large is directly affected by wage policies.

The interest of the individual worker. Individuals, also, are interested in wage and salary data. Knowledge on the subject influences the youth just starting to work in his choice of occupation, assists the older worker in his decision to locate in a new community or change occupation, and is a determining factor in influencing those who must relocate for economic or health reasons.

In this chapter we have examined the principal steps in conducting a wage survey. In the next, attention will be turned to an analysis

of the techniques actually employed in a number of occupational wage surveys conducted on a community basis in widely separated sections of the United States.

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CHAPTER III

ANALYSIS OF TECHNIQUES EMPLOYED IN OCCUPATIONAL WAGE SURVEYS

In this chapter techniques employed in conducting specific occupational wage surveys on a community basis in various sections of the United States will be described and analyzed. The chapter also will evaluate wage survey practices.

Data were obtained on the methods employed in the year 1951 by the Bureau of Labor Statistics, United States Department of Labor, in making cross-industry surveys of the large metropolitan areas of Atlanta, Baltimore, Boston, Bridgeport, Chicago, Dallas, Dayton, Denver, New York, Portland (Oregon), and San Francisco. An outline of the procedure used in the year 1951 by the Merchants and Manufacturers Association of Los Angeles, California, in conducting local studies was provided by that agency. Information was obtained concerning the methods followed by the Bureau of Business and Economic Research, Montana State University, in making a cross-industry survey of the greater Missoula area in the year 1951, at which time the total population was estimated at approximately 32,000. The procedure followed by the Bureau of Business Research, University of New Mexico, in making cross-industry surveys of the Albuquerque area, population 145,000, is included. The study includes, also, the method employed in the year 1951 by the Oklahoma Employment Security Commission in conducting cross-industry surveys of the Enid area, population approximately 52,800, and the Muskogee area, population

approximately 65,000.¹

¹ For a list of the occupational wage surveys referred to, see p.77.

Data were also obtained on a local cross-industry survey conducted in the year 1950 by a large establishment located in a southwestern city of something over 100,000. The methods used by an eastern manufacturing organization, located in a large metropolitan area and employing some 4,000 persons, in conducting a local cross-industry study complete the data to be studied.

Thus, comparisons are made of a pattern developed by a government agency for surveying large metropolitan areas in all parts of the country; of the localized approach by a businessmen's association to provide wage information and related data to the firms which it serves; of the practices utilized by state universities with the aim of providing community service; of the treatment accorded occupational wage surveys by a state agency in conducting studies of wage conditions within the state; and finally, of the methods used by several business firms in conducting surveys for their own purposes. The individual business firms supplied data for the writer's purpose in strictest confidence and for this reason their identity is not disclosed.

Examination of these surveys discloses that the initial step in the planning of a community occupational wage study is to decide what information is to be sought.

I. DETERMINING WHAT INFORMATION IS WANTED

Procedures employed.

1. The Bureau of Labor Statistics through continuing consultation with industry and labor decided what information to seek. This agency emphasizes that the nature of the information sought varies with each survey. In Bulletin No. 993, Techniques of Preparing Major B L S Statistical Series, they state, "Consultation with management and labor is held before each study and necessary changes are adopted. For that reason alone, the consecutive studies are not strictly comparable."²

²Techniques of Preparing Major B L S Statistical Series, United States Department of Labor, 1950, p. 71.

2. The Merchants and Manufacturers Association of Los Angeles develops the information to be garnered in surveys from meetings with wage and salary groups in the Los Angeles area.

3. The Montana State University occupational wage survey of Missoula determined what information should be asked for on the basis of discussions among the Business Office of the University of Montana, representative business men of Missoula, the Missoula Chamber of Commerce, and the Missoula Retail Trade Bureau. Montana cities had been by-passed in the Bureau of Labor Statistics studies and the survey was designed so that those interested could compare local wages, hours, and personnel practices with similar data obtained by Bureau of Labor Statistics studies in other areas of the United States.

1. The purpose of this study is to determine the effect of the

with regard to the effect of the treatment on the dependent variable. The results of the study are presented in the following table. The data were collected from a sample of 100 subjects. The results show that the treatment had a significant effect on the dependent variable. The results are presented in the following table.

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3. The results of the study are presented in the following table. The data were collected from a sample of 100 subjects. The results show that the treatment had a significant effect on the dependent variable. The results are presented in the following table.

4. In determining what information it wished, the University of New Mexico was influenced by the practices of the Bureau of Labor Statistics and of the Merchants and Manufacturers Association of Los Angeles, and by requests for current factual data from various sources. For example, during the year 1951 the State of New Mexico welfare program had been the subject of considerable discussion. As a result of local interest, questions on group life insurance, hospitalization expense, and retirement plans were included in the survey.

5. The Oklahoma Employment Security Commission made no attempt to conform to precedents or patterns established by others, but rather undertook to gather information which their files showed was wanted by the employers of the State of Oklahoma. They established a pattern which they believe reflects their peculiar problems and have standardized the information sought so that successive studies will offer comparative significance.

6. Each of the individual business firms was motivated by a desire to determine the level of its own wage rates and related benefits relative to those of other segments of industry or to non-industrial employers in the population center from which its employees were recruited. For this reason, the firm's wage administration officials in each instance decided what information to seek.

Appraisal.

The data outlined in the previous section show that the information to be sought by the Bureau of Labor Statistics and by the Oklahoma Employment

1. In determining what information is needed, the University of New Mexico was influenced by the practices of the Bureau of Labor Statistics and of the Commerce and Manufacturers Association of Los Angeles, and by requests for current factual data from various sources. For example, during the year 1951 the State of New Mexico welfare projects had been the subject of considerable discussion. As a result of local interest, questions on group life insurance, hospitalization expenses, and retirement plans were included in the survey.

2. The Oklahoma Employment Security Commission made no attempt to confer to respondents or patients established by others, but rather asked them to gather information which their files showed was wanted by the employers of the State of Oklahoma. They established a pattern which they believe reflects their position and have standardized the information sought so that economic studies will offer comparative significance.

3. Much of the individual business data was motivated by a desire to determine the level of its own wage rates and related benefits relative to those of other segments of industry or to non-industrial employers in the population center from which the employees were recruited. For this reason, the firm's wage administration officials in each instance decided what information to seek.

Appraisal.

The data outlined in the previous section show that the information to be sought by the Bureau of Labor Statistics and by the Oklahoma Employment

Security Commission was based upon the combined desires of employers, the representatives of labor, and previous survey experience. Montana State University and the University of New Mexico were influenced by the desires of employers in business and industry and by the Bureau of Labor Statistics reports. The Merchants and Manufacturers Association of Los Angeles in deciding what information would be sought was influenced solely by the desires of employers. The individual business firms were guided entirely by their own needs.

From this it is clear that employers largely dictated the specific purpose of these surveys. Little attention was given to the desires of labor, and none whatsoever to the needs of individuals. This indicates that the occupational wage survey is, in practice, largely a tool of management. This despite the fact that one might expect institutions such as Montana State University and the University of New Mexico to give equal heed to the desires of labor, especially since they professed a desire to render a community service.

Further discussion of comparability among occupational wage surveys will be delayed to Chapter V, but the actual situation will be noted here. The Bureau of Labor Statistics and the Merchants and Manufacturers Association of Los Angeles state clearly that their successive studies are not strictly comparable. The University of New Mexico admits a weakness in the value of comparing its successive surveys because both were admittedly experimental. The individual business firms attach little significance to historical comparisons of surveys. The Oklahoma Employment Security Commission, however, standardizing on occupations to be studied and the

Security Commission has based the combined studies of employers, representatives of labor, and government survey organizations. The University and the University of New Mexico were interested in the study of employers in business and industry and in the Bureau of Labor Statistics reports. The Merchants and Manufacturers Association of Los Angeles is studying what information would be sought and information which is needed by employers. The individual business firms are called upon to study their own needs.

From this it is clear that employers largely directed the study purpose of these surveys. Little attention was given to the needs of labor, and none whatsoever to the needs of individuals. The fact that the occupational wage survey is, in part, largely a tool of management. This despite the fact that one might expect that project to be as humane State University and the University of New Mexico to the need to the needs of labor, especially those who produce a service to render a community service.

Further discussion of cooperatively owned organizations will be delayed to Chapter V, but the actual situation will be a good one. The survey of labor statistics and the Merchants and Manufacturers Association of Los Angeles state clearly that their surveys should be more strictly comparable. The University of New Mexico makes a comparison the value of comparing the massive survey project with the study of individual businesses. The individual business firms which are interested in individual occupations of workers. The University of New Mexico, however, studying an occupation as a whole and the

survey procedures to be used, did attempt to obtain comparable historical statistics.

Successive wage surveys of the same area, it should be noted, could be historically compared; and wage surveys of different areas could yield comparable wage statistics because the explanations of the varying conditions under which different wage surveys were made are obtainable. But these explanations are scattered among all the agencies making studies, and the organizations are troubled by the fact that not all the varying conditions are reported in all of the occupational wage reports. The consideration of the statistics without regard to the varying conditions leads to erroneous conclusions. Organizations wishing to make comparisons are confronted with the practical difficulty that some survey agencies are reluctant to exchange information. Moreover, the task of accurately describing the varying conditions is a difficult one. For instance, the Merchants and Manufacturers Association of Los Angeles would find it practically impossible to report all the varying conditions between its report and all the other wage survey reports made in the United States in a given year. Such difficulties discourage those who might wish to compare wage rates reflected in different reports.

II. SPECIFIC INFORMATION SOUGHT

Table I shows the specific questions asked in the surveys observed in this study. For more complete details with respect to data requested, see Appendix J.

TABLE I
THE SPECIFIC INFORMATION SOUGHT IN OCCUPATIONAL WAGE SURVEYS

SURVEY AGENCY						
<u>Bureau of Labor Statistics</u>	<u>Merchants & Mfrs. Assn. of Los Angeles</u>	<u>Montana State University</u>	<u>University of New Mexico</u>	<u>Oklahoma Employment Security Commission</u>	<u>Business Firm A</u>	<u>Business Firm B</u>
Split male & female	Split male & female	Split male & female	Split hourly, weekly, monthly rated; union & total	Split male & female	Number of employees by base rate.	Split weekly & shop; shop split incentive & straight rate. Number of union employees
Average std. weekly hrs. for office employees 12 categories of hours for other employees (A)	Current hours worked per week split base, overtime, & total	No questions	Normal work week; hrs. worked at normal & hrs. worked at overtime rate	Scheduled weekly hrs.	Scheduled days & hrs. in work week, split clerical & other	Scheduled days & hours for clerical & shop
Average weekly of office employees. Average hourly of other employees. Number of employees in 23 rate ranges (C)	For each job descrip- tion straight weekly or hourly rate	Average weekly earnings	Wage at normal rate & wage received at over- time rate	Hourly excl. overtime & nightwork and weekly excl. overtime & night work	Start rate, job rate, top rate	Minimum, average, and maximum for each job description
% of workers in 2nd shift, in 3rd shift; 13 rates listed, % of workers to be filled in	(B)	No questions	No questions	No questions	Hours covered & amount of differential/hr.	Hours covered & differential for each job description
No questions	For each job descrip- tion, rate overtime is paid	No questions	8 categories (A)	No questions	12 categories (C)	10 categories (C)
12 categories (A)	(B)	4 categories (A)	10 holidays (A)	Number of holidays	18 categories (C)	16 categories (A)
21 categories of vacation and 4 length of service provisions listed (A)	(B)	4 categories (A)	Days of vacation and length of service to be filled in	Days of vacation and length of service to be filled in	18 categories (C)	18 categories (C)
34 categories of paid sick leave and 4 length of service provisions listed (A)	(B)	No questions	No questions	Length of service required	4 categories (A)	4 categories (A)
Check yes or no	(B)	Check yes or no	4 categories (A)	Yes or no	4 categories (C)	4 categories (A)
Check yes or no	(B)	No questions	No questions	Yes or no	4 categories (C)	4 categories (A)
Check yes or no	(B)	No questions	5 categories (A)	No questions	4 categories (C)	4 categories (A)
Check yes or no	(B)	Check yes or no	4 categories (A)	Yes or no	4 categories (C)	4 categories (A)
Explain	(B)	No questions	2 categories (A)	No questions	Explain	No questions
4 categories (A)	(B)	5 categories (A)	No questions	5 categories (A)	5 categories (C)	4 categories (C)

data to be checked.

union surveys of personnel policies and publishes separate reports on community personnel practices covering 106 subjects such as accident insurance, bulletin boards, disability exit interviews, holidays, incentive wage programs, service awards, time clocks and training programs, etc.
answer to be filled in.

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Appraisal of information sought.

1. Scope of information sought. On the whole, there was a marked similarity in the basic data sought. There was, however, a wide variation in the detailed data and in the questions asked by these survey agencies. In this connection, the Bureau of Labor Statistics, the Merchants and Manufacturers Association of Los Angeles, and the University of New Mexico point out that there were differences in the information sought in their successive surveys.

The scope of information sought ranged from relatively simple and basic wage data to highly complex and comprehensive data with respect to wage rates, personnel policies, and related employee benefits.

Montana State University, with three questions concerning each job and six general information questions, and the Oklahoma Employment Security Commission, with three questions concerning each job and seven general information questions, sought similar data and used simple questions. The Bureau of Labor Statistics, with five job and eighteen general information questions, and the University of New Mexico, with ten job and twenty general information questions used reasonably simple questions.

The Merchants and Manufacturers Association of Los Angeles survey resembled those of the individual business firms in that all asked a great number of questions and undertook to cover a very broad range of wage and fringe benefit subjects. There were, however, marked differences among the individual business firms as to the information sought.

All of the surveys being compared sought data on number of workers, holidays paid for, paid vacations, insurance plans, pension plans, and average earnings. The specific information sought in these common areas, however, varied considerably among the several surveys. For instance, all of the surveys in this comparison asked for a breakdown of workers by sexes except for the University of New Mexico and one of the individual business concerns. Other distinctions among employees which were not uniformly sought include identification of employees as to whether they were paid on an hourly, weekly, or monthly basis, and classification as to office and related occupation as opposed to craft or manual workers.

Questions on holidays paid for ranged from the Oklahoma Employment Security Commission's simple, "How many holidays paid for?" to the Bureau of Labor Statistics request that everything applicable in twelve categories of holidays paid for be checked. Like differences were noted in the questions regarding paid vacations. The range was from three questions asked by the Oklahoma Employment Security Commission to twenty-one questions by the Bureau of Labor Statistics. The vacation questions ranged from those requiring "yes" or "no" to requests for the split between hourly, weekly, and monthly paid employees, length of service required, and the amount of vacation allowed.

Data requested on average earnings varied to the same extent. There were requests for average weekly wage, hourly and weekly straight time earnings, and earnings at normal rate plus compensation for overtime. Six of the agencies that were studied sought information on paid sick

leave policy; seven asked for varying data on bonus or profit sharing plans; six desired some kind of information on shift premium payments and differentials; and four of the agencies requested information about premiums paid employees called in on emergency work.

Questions on fringe benefits extended into many areas that appeared to be of no general interest. For example, queries about smoking privileges during working hours and similar unrelated matters appeared in isolated instances.

The foregoing discussion of the types of information sought in this group of surveys clearly shows that each survey achieves different results because each is designed to get answers to different questions. The reasons why individual studies differ as to purpose was discussed in Chapter II. Occupational wage surveys, particularly those conducted by business establishments, are as various as are the accounting reports of these firms and for this reason are difficult to compare.

2. Information sought on type of worker. In this section the differences between the various studies are further illustrated. The Bureau of Labor Statistics cross-industry studies, for example, are principally designed to secure information concerning the factory worker, and the data on clerical wages requested is more or less supplementary. Such things as identification of incentive paid workers, shift work, and shift differential payments, all of which apply to manufacturing jobs, are emphasized. The data were intended for publication on a nation-wide distribution. The Merchants and Manufacturers Association of Los Angeles on the other hand, designed questions to answer local matters and did not

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emphasize any particular type of worker.

The Montana State University survey was designed to secure data on office workers only for local use.

The University of New Mexico wage studies were designed to obtain data on all types of workers, but a phenomenal building boom in the Albuquerque area during 1948-1951 resulted in emphasis on building trades occupations. The results were intended primarily for local use with widespread distribution as requested.

The Oklahoma Employment Security Commission studies were designed to fit peculiar local conditions regarding all types of workers in the State. The reports were intended for the employers of the State.

One individual business establishment designed its wage survey to obtain data on all types of workers, but shop occupations seemed to be emphasized slightly more than others. Another individual business firm showed most interest in manufacturing workers paid on the incentive plan.

The division of workers as to sex has been mentioned earlier. Another division is that between union and non-union workers. The Bureau of Labor Statistics, the Merchants and Manufacturers Association of Los Angeles, Montana State University, the Oklahoma Employment Security Commission, and one of the business firms did not require a split between union and non-union workers. The University of New Mexico and one of the business firms required such a split.

3. Hours and earnings. Similar lack of uniformity is to be seen in the questions on hours and earnings. The Bureau of Labor Statistics questionnaire asked that average hourly earnings at standard rate for

suggesting any particular type of worker.

The Kansas State University survey was designed to secure data on

office workers only for local use.

The University of the South says studies were designed to obtain

data on all types of workers, but a phenomenal building boom in the

Albuquerque area during 1945-1951 resulted in emphasis on building trades

occupations. The results were intended primarily for local use with

no general distribution as requested.

The Oklahoma Employment Security Commission studies were designed

to give peculiar local conditions regarding all types of workers in the

State. The reports were intended for the employees of the State.

The individual business establishment designed the wage survey to

obtain data on all types of workers, but shop occupations seemed to be

suggested slightly more than others. Another individual business firm

showed most interest in manufacturing workers paid on the incentive plan.

The division of workers as to sex has been mentioned earlier.

Another division is that between union and non-union workers. The Bureau

of Labor Statistics, the Department of Commerce and Manufacturers Association of Los

Angeles, Kansas State University, the Oklahoma Employment Security

Commission, and one of the business firms did not register a split between

union and non-union workers. The University of the South and one of the

business firms reported such a split.

3. Hours and earnings. Another lack of uniformity is to be seen

in the question on hours and earnings. The Bureau of Labor Statistics

questionnaire was of the company basis whereas all standards for

hourly rated workers and average weekly hours and weekly earnings at standard rate for office employees be reported. The Merchants and Manufacturers Association of Los Angeles asked for the straight time hourly rates paid to hourly workers, the straight time weekly rates paid to weekly rated workers, the straight time monthly rates paid to monthly rated workers; and for each of these classes it asked that the number of hours currently being worked both at the base rate and at overtime rate and the total hours be stated. The Montana State University asked for the average weekly wages. The University of New Mexico requested that hourly, weekly, and monthly paid workers be reported separately and asked for data on the normal work week hours, hours worked at normal rate, hours worked at overtime rate, wage received at normal rate, and wage received at overtime rate. The Oklahoma Employment Security Commission asked that for hourly and weekly paid workers, separately, earnings, excluding pay for overtime and night work, be reported. One business firm requested the actual distribution of rates of employees by wage rates, excluding incentive pay, and asked that each case be designated as weekly, semi-monthly, or monthly paid and that the number of hours in the currently scheduled work week be noted. For each occupation covered, another firm sought data on the rate range and asked that day work rates and incentive rates be distinguished and the minimum rate, job rate, and maximum rate for each be given. The latter also asked for base rate and total incentive earnings in each occupation, together with the number of hours in the currently scheduled work week.

The preceding description of the information sought on type of

worker, hours and earnings, and general labor matters, testifies clearly to the fact that different wage surveys are designed to bring out different information. The variety in purpose leads one to conclude that as a statistical device the occupational wage surveys published today have, in general, many shortcomings because little dependence can be placed upon comparisons between the results of different surveys.

Less obvious is the fact that despite the great differences there is also a real similarity in the basic data sought. The writer is convinced that comparability on a useful scale could be achieved if the various survey agencies were to adopt a more uniform pattern in conducting occupational wage surveys.

III. SELECTION OF THE SAMPLE

Selection of Firms to be interviewed.

1. The Bureau of Labor Statistics has developed a formal statistical procedure to determine the proper sample to be included in occupational surveys. They are very careful, however, to add the following qualification: "The particular research worker's knowledge of what is important is indispensable, and there is no purely statistical substitute for it."³

³Techniques of Preparing Major B L S Statistical Series, United States Department of Labor, 1950, p. 70.

2. The Merchants and Manufacturers Association of Los Angeles, the University of New Mexico, and one of the business establishments used

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Investigation of Employment after 1945 in Industrial Countries, United
 States Department of Labor, 1950, p. 10.

2. The standards and methods used in the selection of the sample
 the University of the Pacific and some of the problems were discussed at

arbitrary methods of selecting the sample. Such selection seems necessary, or at least to be condoned, under certain conditions. This is especially true in the smaller community or area where it is essential that the wage leaders and those establishments which offer employment in the occupations to be studied be included in the sample.

3. Montana State University surveyed all establishments in the area. Such 100 per cent surveys are ideal; however, as the cost of the survey increases with the per cent of coverage, in most instances the funds allotted for surveys will not permit this.

4. The Oklahoma Employment Security Commission surveyed only 10 per cent of all establishments. This 10 per cent, however, offered 40 per cent of the total jobs in the area.

5. One of the manufacturing establishments uses a statistical formula to determine the magnitude of the sample, but selected companies, known to have comparable operations or jobs, form the bulk of the sample.

Appraisal.

The practices of the survey agencies observed in this study indicate that the firms to be interviewed are selected from lists provided by state departments of labor or unemployment compensation bureaus, state tax bureaus, chambers of commerce, trade directories, trade associations, unions, regulatory government agencies, and business associations. Firms on these lists are grouped according to such known characteristics as product, location, size, wage history, and survey participation. In smaller communities or less populated areas it is imperative that the firms selected represent a cross section of the

business activity in the community. The findings of the Bureau of Labor Statistics, the Oklahoma Employment Security Commission, and the individual business firms have established that a sample representing 10 per cent of the establishments produces statistically adequate averages.⁴

⁴Wage Studies Manual of Procedures Part II - Universe Preparation, Sampling and Assignment of Weights, United States Department of Labor, 1951, p. 14.

Occupational Wage Survey of Muskogee, (Oklahoma Employment Security Commission, 1951).

IV. SELECTING THE OCCUPATIONS TO BE SURVEYED

Selection of jobs.

1. The Bureau of Labor Statistics has a list of key jobs based on its occupational wage survey experience. This list is designed to represent the total occupational continuum from the least skilled to the highest skilled workers. In the selection of such jobs, consideration was given to five criteria: 1) numerical importance of the job, measured by the number of workers in the job; 2) the definiteness of the occupation; 3) the stability of the occupation from period to period; 4) prevalence of the occupation among establishments; and 5) the historical importance of the occupation in establishing wage rates.⁵ In addition jobs were

⁵H. M. Douty and T. P. Kanniman, Community Approach to Wage Studies, United States Department of Labor, Serial No. 1971, 1949, p. 6.

selected to represent the entire range of pay rates. Consequently, rates

business activity in the country. The Bureau of Economic
Statistics, the National Industrial Conference Board, and the
Industrial Bureau of the Federal Reserve Bank, among others,
put out a few statistical reports on the business situation.

General and Statistical Bureau of the Federal Reserve Bank
Washington, D.C.
Quarterly Bulletin, 1937.

IV. Statistical Bureau of the Federal Reserve Bank
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for these key jobs can be used as gauges by which to measure jobs not surveyed if the relationship between the job groups is first established.

2. The Merchants and Manufacturers Association of Los Angeles developed a list of occupations to be studied through meetings with wage and salary groups representing the business organizations of the area. The objective was to cover those occupations in which the business organizations were most interested at the time of the survey.

3. Montana State University undertook to cover typical clerical occupations which were chosen with reference to both the standard office occupations listed in the Dictionary of Occupational Titles published by the Division of Occupational Analysis, United States Employment Service and the titles covered in the Bureau of Labor Statistics surveys.

4. The University of New Mexico selected the occupations to be studied by consultations with personnel practitioners in the area and careful examination of the records of the Employment Commission of the State. The occupations were selected with a view toward repetitive surveys of the same occupations so as to make possible historical comparisons of representative occupations.

5. The Oklahoma Employment Security Commission conducted state wide surveys to ascertain job population of occupations in the State of Oklahoma. From data garnered in the survey, there was selected a group of most representative occupations. This job group is used for the various area surveys so as to make comparisons among areas feasible and to achieve historical comparability between successive surveys of the same area.

for these say jobs can be used as a basis for further study.

2. The Institute and Government agreed to do the

developed a list of occupations to be studied in each of the

and salary groups representing the degree of complexity of the work.

The objective was to cover those occupations in which the

occupations were most important in the economy of the country.

3. The Institute and Government agreed to do the

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4. The Institute and Government agreed to do the

general examination of the records of the Department of the

State. The occupations were listed with a view to

survey of the data obtained as to the relative

importance of representative occupations.

5. The Institute and Government agreed to do the

6. Each of the business firms was admittedly motivated by a desire to determine the position of its own rates relative to the prevailing rates paid by other segments of industry in the general population center from which its own employees are generally recruited. The selection of occupations to be studied was, consequently, determined entirely by what the company desired to find out about which jobs.

Appraisal of selection of the jobs.

Because many jobs are peculiar to a given area or a given industry, and because there are many occupations in which the population is high but which are not common to all establishments, the surveys observed did not undertake to cover all occupations. There is, to be sure, merit in the practice of choosing the occupations to be studied in the light of factors affecting the particular survey and upon the basis of questions currently in the minds of those for whom the information is obtained. However, the lack of uniformity in jobs studied makes it difficult to compare one survey with another. It appears that the study of a list of key jobs, representative of the total range of wages and skills, would provide sufficient information to adequately portray the wage structure of the area. If the jobs selected are truly representative of the area, they will provide a basis on which data for the jobs not selected may be hypothesized. The Bureau of Labor Statistics offers criteria by which representative jobs can be selected (see page 37). Not only does their method appear to be adequate, sound, and reasonable, it has the further advantage of continuity because the same list is used in all like studies.

V. PREPARATION OF JOB DESCRIPTIONS

Procedure.

1. The Bureau of Labor Statistics, on the basis of suggestions from labor and industry representatives, prepared careful definitions of each occupation to be surveyed. These were developed from survey history and recognized the fact that a job description to be used in a survey must include the major determining characteristics of the job. At the same time, the descriptions were made flexible enough so that interplant comparisons based primarily on the major elements of the job could be made despite slight variations.

2. The Merchants and Manufacturers Association of Los Angeles developed standardized job briefs on the basis of survey experience and suggestions obtained from discussions with wage and salary groups in the area.

3. Montana State University prepared job descriptions with reference to standard descriptions in the Dictionary of Occupational Titles and the titles covered in the Bureau of Labor Statistics surveys. It was recognized that some of the job titles do not adequately depict the variations in duties from establishment to establishment, that there is over-lapping of descriptions in many jobs, and that in smaller establishments versatility in tasks is a fundamental requirement. The investigator was expected to decide on the appropriate job title after discussion with the manager of the participating firm.

4. The University of New Mexico developed job descriptions from consultations with experienced local management. Narrow job classifications

1. The purpose of this study is to determine the effect of the amount of labor and material used in the construction of a building on the cost of the building. The study will be conducted in a controlled environment where the amount of labor and material used can be varied and the cost of the building can be measured. The results of the study will be used to determine the most efficient way to construct a building.

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were avoided because the number of highly specialized jobs in this area is limited and most jobs require the performance of many related tasks. Job descriptions were designed to group employees under general categories of work requiring the performance of similar and related tasks.

5. The Oklahoma Employment Security Commission, with respect to its job descriptions, offered the following statement:

The primary purpose of the Commission's job descriptions is to assist its field staff in classifying workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area, into appropriate titles. This is essential in order to permit the groupings of occupational wage rates representing comparable job content. Because of this emphasis on inter-establishment and interarea comparability of job content, the Commission's job descriptions differ significantly from those in use in individual establishments or those prepared for other purposes. Where office workers regularly perform duties classified in more than one occupation, they are generally classified according to the most skilled or responsible duties that are a regular part of their job and are significant in determining their value to the firm.

6. One individual business firm prepared job descriptions on the basis of those used by other business firms for the types of jobs in the area on which it desired comparable information. Fifty-four craft and manual occupations and forty-one clerical and related occupations were studied.

7. Another business firm developed job descriptions from the survey experience of its own wage administration organization in collaboration with leading business firms in its own locality. Standard descriptions for eighty-one office occupations and 155 factory jobs are ordinarily studied.

Appraisal of procedures in preparation of job descriptions.

The Bureau of Labor Statistics has developed standardized job

were avoided because the number of highly specialized jobs in this area is limited and most jobs require the performance of many related tasks. Job descriptions were designed to group employees under general categories of work regarding the performance of similar and related tasks.

5. The Oklahoma Employment Security Commission, with respect to

the job descriptions, offered the following statement:

The primary purpose of the Commission's job descriptions is to assist the field staff in classifying workers who are employed under a variety of payroll plans and different work arrangements from establishment to establishment and from area to area, into appropriate titles. This is essential in order to provide the grouping of occupational wage rates representing comparable job content. Because of this emphasis on uniformity in job content, the Commission's job descriptions differ significantly from those in use in individual establishments or those prepared for other purposes. Where titles workers perform duties classified according to the work and occupation, they are generally classified according to the work and occupation or responsible duties that are a regular part of their job and are significant in determining their value for the firm.

6. The individual business firm prepared job descriptions on the

basis of those used by other business firms for the types of jobs in the area on which it desired comparable information. Fifty-four firms and several occupations and forty-one clerical and related occupations were studied.

7. Another business firm developed job descriptions from its

own experience of the various wage establishment organizations in collaboration with leading business firms in the same locality. It prepared descriptions for eighty-one office occupations and 150 factory jobs and

approximately 100 other jobs.

The business firm developed job descriptions for 100 other jobs.

descriptions on the basis of survey experience and suggestions from labor and industry representatives. The job descriptions prepared by the Merchants and Manufacturers Association of Los Angeles, by Montana State University, by the University of New Mexico, and by the Oklahoma Employment Security Commission resemble the standardized descriptions employed by the Bureau of Labor Statistics. Local adaptations to fit a known job or to combine several of the Bureau's descriptions to fit a local condition are evident in descriptions used by these four agencies.

The descriptions developed by the individual business establishments show a tendency to be more detailed and more specifically suited to the firm's own special conditions than do the others.

The striving to tailor a procedure for the local area in occupational wage studies extends to job descriptions. The writer feels uniform job descriptions are achievable and that the descriptions developed by the Bureau of Labor Statistics offer a start toward national uniformity.

VI. SECURING THE INFORMATION

Manner of securing the information.

1. The Bureau of Labor Statistics collected information by having field representatives visit establishments in the area being surveyed. The union scales of rates were obtained directly from the unions.
2. The Merchants and Manufacturers Association of Los Angeles mailed survey questionnaires with the request that they be completed and returned in approximately one month.

3. Montana State University collected data through investigators who made personal calls on all firms, corporations, and government agencies in the area likely to employ office personnel.

4. The University of New Mexico collected all data through personal interviews with the participating firms.

5. The Oklahoma Employment Security Commission secured all information through personal visits of field representatives to representative establishments in the survey area. Union scales of rates were obtained directly from union organizations.

6. One business firm made telephone calls to the selected firms to explain the purpose of the study and to ask for appointments. When appointments were granted, experienced industrial engineers made personal visits to secure the desired information.

7. Another business establishment mailed questionnaires with letters of explanation. Appointments were then solicited by telephone. The firm's own wage engineers visited the firms which were willing to cooperate.

Appraisal of the manner of securing the information.

The Bureau of Labor Statistics, Montana State University, and the Oklahoma Employment Security Commission made calls upon the selected participants without appointments. The Merchants and Manufacturers Association of Los Angeles relied solely upon mailed questionnaires. The University of New Mexico experimented by telephoning for appointments in some instances and making unannounced visits in other instances. As tabulated in Appendix H, the results were inconclusive. One of the

2. Personal data voluntarily collected data through interviews

who made personal calls to all firms, organizations, and government

agencies in the area likely to employ office personnel.

3. The University of New Mexico collected all data through

personal interviews with the participating firms.

4. The Oklahoma Employment Security Commission secured all

information through personal visits of field representatives to represent-

ative establishments in the survey area. Other sources of data were

obtained directly from union organizations.

5. One business firm made telephone calls to the selected firms

to explain the purpose of the study and to ask for appointments. When

appointments were granted, experienced industrial engineers made personal

visits to secure the desired information.

6. Another business establishment called questionnaires with

letters of explanation. Appointments were then solicited by telephone.

The firm's own sales engineers visited the firms which were willing to

cooperate.

Appraisal of the sources of securing the information.

The Bureau of Labor Statistics, Oklahoma State University, and

the Oklahoma Employment Security Commission made calls upon the selected

participants without appointments. The business and manufacturing

association of the business called upon firms which questionnaires, the

University of New Mexico secured information by telephoning for appointments to

some industries and making numerous visits in other instances. As

indicated in Appendix I, the results were somewhat less than 50%

business firms telephoned for appointments and followed with personal visits; the other individual establishment mailed questionnaires, followed with telephone calls, and made personal visits accordingly.

As has been stated heretofore, no statistical conclusion can be reached on the basis of the available data. However, the research people interviewed in four agencies prefer the unannounced visit practice.

The practice of assigning a code identification to the participating firms and of keeping the source of information confidential is uniform. The fact that the source of information furnished need not be divulged has been upheld by a California court ruling.

The general practice is to obtain wage and hour data from actual payroll records for a specific work period. This is necessary to insure that the data are accurate. In four instances, the participating firm may keep a copy of the data that it furnishes. In two procedures there is no provision for a copy for the participant. The University of New Mexico makes positive provision for furnishing the participant a complete record.

VI. COMPILATION, ANALYSIS, AND INTERPRETATION OF RESULTS

Compilation of results.

1. The Bureau of Labor Statistics, Montana State University, and the Oklahoma Employment Security Commission all used punch cards from which all calculations and results were mechanically computed.

2. The Merchants and Manufacturers Association of Los Angeles compiles results manually. This permits the research personnel to make analyses as the compilation progresses. The wage material is separated

into groups according to job classifications. The specific rates are then tallied on worksheets from the survey questionnaires. Rates paid each individual are recorded with male and female employees separated. From this tally sheet the weighted average (weighted by the number of employees receiving the rate), median, and inter-quartile for each occupation are determined. General information data are likewise accumulated on worksheets and totaled.

3. The University of New Mexico also used a manual procedure to compile results. This agency designed its questionnaire so that preliminary computations could be made on the questionnaire itself. This simplified the work and speeded up the final compilation of results.

4. The several business establishments follow basically similar methods in compiling results, but with differences in details. The following description of the procedure used by one firm illustrates the basic approach. The firm applies its own job evaluation principles to the wage data obtained so that it can evaluate the other company's jobs on a basis comparable to its own. All area data are evaluated on the basis of specific occupations and on appropriate skill levels. Once the detailed information has been accumulated, the average rates paid by each of the survey companies are determined for each of the skill levels used by that company. From the average rates for each skill level of the surveyed companies, the area average rates for each skill level are determined arithmetically. These area average rates by skill level are plotted on a chart, and the resultant graph represents the area wage curve by skill level. The plotted line on this graph usually follows a

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somewhat smooth pattern, varying from approximately a straight line to a curve having a gradually increasing rate of acceleration along the rate axis. On this same chart are plotted four additional curves: one showing the firm's own actual average rate for each skill level, one showing the established job rate of the firm for each skill level, one showing the firm's established start rate for each skill level, and another showing the firm's actual highest rate paid for each skill level. A comparison between the area actual rate curve and the firm's own rate curves shows the company's position versus the area rate position.

Appraisal of compilation of results.

The community occupational wage survey results as reported by the Bureau of Labor Statistics, the Merchants and Manufacturers Association of Los Angeles, Montana State University, the University of New Mexico, and the Oklahoma Employment Security Commission, all match data without reducing it to a common denominator. That is, the actual rates paid for what is called the same job are reported, although in fact the skill required for an apparently similar job may differ considerably between two companies.

The individual business firms reported on in this paper recognize this defect in occupational wage surveys and undertake to place all occupational wage data on the same plane. This they do by evaluating the other surveyed companies' jobs on the basis of their own job evaluation plans, as described in the preceding section. Chapter V of this work offers a recommendation on job rating on a widespread uniform basis for use in occupational wage surveys.

Simple comparison of average wage rates by occupation in the accepted method of reporting community occupational wage surveys is misleading because the weighting of skills and certain tasks is disproportionate. The data published lend themselves to abuses because such imprecise comparisons of rates may be taken too literally by the uninformed. The practical reasons why the various survey agencies discourage comparisons of wage survey reports of the same area in successive studies and of reports of different areas have been mentioned. It has been stated that the varying conditions between the various studies are known. It does not follow, however, that these varying conditions must be reported. These very differences are often the explanations for variations in wage rates. It would not, however, be necessary to explain the differences in order to reflect them so as to make possible better comparison between successive surveys of the same area or of different surveys of different areas.

AN EVALUATION OF CURRENT WAGE SURVEY PRACTICE

We have seen that the decision to conduct a community occupational wage survey is prompted by the need for reasonably precise information about the local labor market. The need for the kind of information required has been increased by a number of influencing factors. It must be emphasized that the principal problems in industrial relations revolve around the achievement of good relations between industrial management and the representatives of labor; that the laws enacted in the 1930's forced a spread of collective bargaining as a mechanism of wage

any of the other things that are mentioned.

Another method of testing the soil is by using a soil test kit. This is a simple test that can be done at home. It involves taking a sample of soil and putting it in a test kit. The test kit will then tell you what the pH of the soil is, and whether or not it is suitable for growing plants.

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determination on the part of American business firms and promoted a shift of power to labor; and that agreements reached between firms and unions in collective bargaining rest to some extent on knowledge of wages in specific industries, areas, or communities. These are the background factors which account for the present interest in wage data.

Rising or falling markets, technological changes, shifts of population or increasing population, are the economic factors which affect the supply of and demand for labor. The statistics obtained in well conducted occupational wage surveys provide the data which pictures industry and community wage structures. Such data may be useful to the firm seeking a solution to economic problems. If such data were made available for longer periods of time through successive reports, they could be of great value to one seeking to interpret trends and significant changes.

To that end, the first step in the planning of an occupational wage survey is to determine what information is to be sought. This necessitates cooperation among those interested in the particular labor market. Chambers of commerce, trade associations, state employment commissions, state economic commissions, state tax commissions, personnel administrators in individual business establishments, labor unions, and state universities normally are the groups most interested. Once the decision has been reached as to what information is wanted, this will indicate the sources from which it must be obtained.

The decision as to what information is to be sought is largely made by management. Because labor is so important in our present economy

information on the part of American business firms and provided a shift of power to labor and their agreements reached between firms and unions in collective bargaining tend to some extent on knowledge of wages in specific industries, areas, or communities. These are the background factors which account for the present interest in wage data.

Fluctuating or falling wages, technological changes, shifts in population or increasing population, are the economic factors which affect the supply of and demand for labor. The statistics obtained in well conducted occupational wage surveys provide the data which business industry and community wage authorities. Such data may be useful to the firm seeking a solution to economic problems. If such data were made available for longer periods of time through successive reports, they could be of great value to one seeking to interpret trends and significant changes.

To that end, the first step in the planning of an occupational wage survey is to determine what information is to be sought. This necessitates cooperation among those interested in the particular labor sector. Chapters of commerce, trade associations, state employment commissions, state economic commissions, state and community, national administrators in individual business establishments, labor unions, and state universities normally are the groups most interested. Once the decision has been reached as to what information is sought, this will indicate the sources from which it may be obtained.

The decision as to what information is to be sought is largely one of convenience. Because labor is so important in our present economy

and because through organization labor has reached a position where it can no longer be told, the unions should be given a stronger voice in deciding what information is to be sought in a community occupational wage survey. It is shortsighted to deny them this voice, for if they want the information and it is denied them they will get it by their own efforts. But be that as it may, the fact is that in the surveys studied the emphasis was almost entirely on finding out that which management wanted to know.

Community occupational wage surveys certainly do serve useful and valuable purposes. They would, however, have infinitely more value if there were greater comparability among surveys and more historical continuity between surveys of the same area. But comparisons are discouraged because of lack of uniformity among survey agencies. Historical continuity is sacrificed because each survey operates independently and considers only the immediately current problems in the area under study. It is in this direction that there is greatest need for improvement in the field of community occupational wage surveys. Agreement on a group of basic and fixed questions to be used in all wage studies would provide a uniform foundation for maximum comparability between different studies made in different areas and offer comparative data that could be relied upon in successive studies of the same area.

The multitude of questions that are asked in some occupational wage studies on related benefits or so-called fringe benefits contributes very greatly to the lack of uniformity in the results. The effects of many of these fringe benefits cannot be measured by any yardstick

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Community occupational survey studies certainly do have value
and valuable purposes. They would, however, have infinitely more value
if there were greater responsibility among survey and non-survey
continuity between surveys of the same area. But responsibility is
disseminated because of lack of continuity among survey studies.
Historical continuity is essential, because each survey provides
independently and consistently with the immediately current picture in
the area under study. It is in this direction that there is greatest
need for improvement in the field of community occupational survey studies.
Agreement on a group of basic and fixed questions to be used in all
studies would provide a common foundation for making comparisons
between different studies made in different areas and other comparative
data that could be relied upon in cooperative studies of the same area.
The minimum of questions that are asked in such comparative
studies should be related to the so-called basic questions. Questions
very closely to the line of similarity in the results of the studies
any of these things would be desired by the community.

developed thus far, but have value only to the extent attached to them by those who introduced the special items into consideration. Fringe benefit questions should be standardized to cover basic related items. Other than the basic fringe benefit information, if desired by the survey agency or interested organization, is best reported in such separate reports as the Community Personnel Policy Survey, October, 1949 - Los Angeles Area, published by the Merchants and Manufacturers Association of Los Angeles. Through the use of such separate reports the local survey agency could satisfy both its need for special local information and its urge to be distinctive or individualistic.

The questions to be answered are obtained from those business firms which as a composite group are located in and reflect the labor market conditions of the area to be studied. The firms to be solicited can be selected from a list of all the known firms in the area. For this purpose such sources as state employment bodies, trade directories, trade associations, labor unions, chambers of commerce, and research organizations in state universities have been given earlier. Decisions as to the number and type of firms to participate are usually based on the judgement of the research people regarding the firm's representative status. Obviously, the research personnel should have a comprehensive economic knowledge of the area under study. Participating firms are assigned identifying codes and their identity and the information they furnish are kept in strictest confidence.

The selected firms should as far as is possible be a representative cross section of the industry of the area, include the known wage leaders,

developed thus far, but have been only in the nature of a preliminary study. Those who introduced the special items first mentioned, which were questions should be standardized as much as possible. It is true that the basic frame benefits information, it is true that the frame of an interested organization, it is true that a good separate report on the Community Personnel Policy Study, 1947-1948, was published by the Institute and that a number of questions of its own. Through the use of such separate reports the local survey agency could satisfy both the need for special local information and the need for distinctive or individualistic.

The questions to be answered are obtained from these sources. First, which are a composite group are located in and related to the local context conditions of the area to be studied. The first to be selected can be selected from a list of all the known firms in the area. For this purpose such sources as state employment bodies, state labor relations associations, labor unions, chambers of commerce, and research organizations in state universities have been given earlier. Questions as to the nature and type of firms to participate are usually asked in the preliminary survey. The research people studying the firms' records are usually asked to select the firms which should have a representative sample of firms. The area under study. Participating firms are selected on the basis of their identity and the information they furnish for the study. The confidence.

The selected firms should be asked to be a representative cross section of the industry or activity in which the survey is being

and represent a pre-determined percentage of the working population of the locality being surveyed. This percentage will vary greatly as among different groups, dependent upon the number of employees in the large and wage leading firms.

With respect to the determination of the occupations to be studied, the criteria offered by the Bureau of Labor Statistics on page 37 reasonably fits into a standardized procedure for any and all areas.

Insofar as the job descriptions employed in community occupational wage surveys are concerned, a strict application of the same criteria would limit the number of jobs that could be studied in the smaller cities and less populated areas. This limiting of occupations that are studied would tend to standardize certain general categories of jobs. The descriptions developed by the Bureau of Labor Statistics offer a pattern for national uniformity in the standardization of jobs to be studied and the descriptions of those jobs. It is not essential to provide data for all occupations in an area in order to describe an area's wage structure. A list of key jobs selected under this method would represent the total occupational wage structure of the area and these key jobs could be used as gauges against which the non-key jobs could be measured by relating one group to the other.⁶

⁶Techniques of Preparing Major B L S Statistical Series, United States Department of Labor, Bulletin 993, June 1950, p. 71.

It appears desirable that the data be collected by well trained research personnel through personal visits so that matters of interpretation

and represent a pre-determined percentage of the total population of the
the facility being surveyed. This procedure will result in a sample of
different groups, dependent upon the nature of the facility, and
and wage leveling items.

With respect to the determination of the number of jobs to be surveyed,
the criteria offered by the Bureau of Labor Statistics is that
reasonably like into a standardized group of jobs. The number of jobs
inserted as the job description is selected is determined by the number of
ways surveys are conducted, a small selection of jobs is selected
would limit the number of jobs that could be selected in the survey
and less populated areas. This listing of jobs is not intended to
which tend to standardize certain groups of jobs. The
descriptions developed by the Bureau of Labor Statistics are a guide
for national uniformity in the selection of jobs. It is not intended to
the descriptions of these jobs. It is not intended to standardize the
all occupations in an area in order to facilitate the selection of
A list of key jobs selected under this plan would include the following
occupational wage structure of the area. The plan is not intended to
used as a guide against which the number of jobs to be surveyed is
relating one group to the other.⁶

⁶ Techniques of Surveying by the Bureau of Labor Statistics, United States
Bureau of Labor Statistics, 1947, p. 10.

If specific details are not available, the plan is not intended to
research personnel through the use of the plan.

as to what is wanted can be answered by the investigator on the spot. The data should be collected to cover a specific payroll period ending as of a given date. It would be well to furnish the participant with a copy of the information furnished by him at the end of the interview.

The methods utilized in compilation of reports depends entirely upon the quantity of data to be assembled and the means at hand for computation and assembly of information. Machine tabulation when available permits speedy summary of complex data, but manual summarization often allows closer scrutiny of compilations in progress.

The budget allotted and the capabilities of those in charge of the research report in the field of printing layout will determine the form of publication. With reference to the budget allotted, Appendix K offers some simple details concerning costs of the 1951 Albuquerque survey.

as to what is wanted can be answered by the investigator on the spot. The data should be collected to cover a specific period ending as of a given date. It would be well to furnish the participant with a copy of the information furnished by him at the end of the interview. The methods utilized in compilation of reports depends entirely upon the quantity of data to be assembled and the means at hand for organization and assembly of information. Another limitation when available permits speedy assembly of complex data, but manual compilation often allows closer scrutiny of compilation in progress. The budget allotted and the responsibilities of those in charge of the research report is the field of writing papers with reference to the form of publication. With reference to the subject allotted, Appendix 2 offers some simple details concerning some of the 1951 questionnaire survey.

CHAPTER IV

PRACTICAL PROBLEMS ENCOUNTERED IN A SPECIFIC SURVEY

In the preceding chapter, the theory and practice of eight organizations engaged in making wage surveys was discussed and evaluated. The writer felt that it might not be thought presumptuous or superfluous to interject at this point a description of the method used in conducting a survey of the Albuquerque, New Mexico area late in 1951. The procedure is offered not as a model but rather as an account of the manner in which the experience of others was adapted to a particular situation. This study was commenced as a part of the author's graduate work at the University of New Mexico in the fall of 1951.

An earlier occupational wage survey of Albuquerque, patterned after the procedure employed by the Merchants and Manufacturers Association of Los Angeles, California, had been made by the Bureau of Business Research of the University of New Mexico in October, 1949. That study, frankly regarded as a pilot survey, covered the wages, earnings, and related facts prevailing in October 1949 on a selected list of occupations in twenty-eight firms in the Albuquerque area. The results were reported for public use in January 1950.

After the publication of the results of the 1949 study, the Bureau received many requests for factual information on subsequent developments and on occupations, particularly office and clerical, not covered by the 1949 study. The Bureau had originally hoped to conduct annual studies, but other commitments made it impossible to do this in

1950 or 1951.

As a consequence, the field was well prepared for the author's work. At the suggestion of the Director of the Bureau of Business Research of the University, the study was made a Bureau project. Throughout, the project benefitted from the guidance and active participation given it by Mr. Ralph L. Edgel, the Director.

In the pre-planning stages of this survey, the author was motivated in great part by a desire to secure information in that area where the literature on wage surveys is so remarkably sparse, namely that of the community survey of cities around 100,000. In this account an attempt will be made to credit the agencies from which ideas were borrowed. But since the practice of these agencies has already been described, they will not be recapitulated here. Likewise, the results of the survey, presented as Appendix B of this work, will be allowed to rest there. However, since a conviction as to the desirability of conducting a survey must in every case ultimately be reconciled with the practical considerations of available time and money, a detailed schedule of the man hours expended in this study is presented in Appendix J for the guidance of agencies contemplating similar studies. The same pattern will be used in describing this study as was used in the discussion of the steps in conducting a survey.

I. FINDING OUT WHAT INFORMATION IS WANTED

The requests which had been addressed to the Bureau of Business Research were reviewed. These requests indicated a demand for information needed to evaluate practices on wages, hours, and other personnel practices

prevailing in Albuquerque. Interest in this area was no doubt enhanced by the fact that one of the nation's largest manufacturers with a notably liberal personnel policy had recently located a newly formed subsidiary in the area. The new firm had quickly become the largest employer in New Mexico and had assumed leadership in many personnel matters.

Discussions regarding questions that should be included in a wage survey of the area were held with the personnel and employment officials of a number of local firms, including three of the wage leaders of the locality. Also the unemployment commission of the State offered data concerning questions raised in connection with the activities of that agency.

This first step in the planning of this community occupational wage study was encouraging because there was spontaneous cooperation on the part of everyone interviewed. The many requests which had been received, together with the suggestions obtained from the fifteen experienced personnel and wage administration practitioners interviewed, furnished bases for the next step in the planning of the survey.

II. DETERMINATION OF THE SPECIFIC INFORMATION TO BE SOUGHT

This study was intended as a community service for the general use of business in Albuquerque and was, as far as practical, to have historical continuity with the 1949 pilot study.

Although there was a wide variety in the overall interest, the requests and the suggestions which had been received clearly indicated a consensus as to the subjects on which information was desired. With respect to hours of work, information was wanted on the number of hours

presenting in Aligarh. Indeed it is not even to be denied that the fact that one of the nation's largest manufacturers with a steadily liberal personnel policy had recently located a newly formed subsidiary in the area, the new firm had definitely become the largest employer in the area and had assumed leadership in new personnel matters.

Classrooms regarding questions that should be included in a survey of the area were held with the personnel and engineering officials of a number of local firms, including those of the very best of the locality. Also the management committee of the State Welfare Board concerning questions raised in connection with the employment of that agency.

This first step in the planning of this community development wage study was encouraging because there was a general recognition on the part of everyone interviewed. The wage reports which had been received, together with the suggestions obtained from the various experienced personnel and wage administration specialists interviewed, furnished bases for the next step in the planning of the survey.

II. DETERMINATION OF THE SCOPE OF THE STUDY

This study was intended as a comparative survey of the general use of business in Aligarh and was as far as possible, to have historical continuity with the 1939 survey.

Although there was a wide variety in the overall interest, the reports and the suggestions which had been received that it included a comparison as to the subjects in which information was desired. With regard to some of which, information was desired in the form of a

in the work week, hours worked at base rate of pay, hours worked at overtime rate, and total hours worked. Data requested on wages included wages received at normal rate, overtime compensation, total wage, normal rate per hour and overtime rate per hour. Also desired was the split between union and non-union workers, further divided into clerical and craft occupations. There was also interest in the period of payment, i.e., whether paid hourly, weekly, or monthly. Data concerning benefits related to employee compensation was wanted on holidays paid for, vacations paid for, group life insurance plans, hospitalization plans, and retirement or pension plans.

Several changes between the information sought in the 1949 study and that sought in the 1951 survey should be commented upon. The 1949 study distinguished between male and female workers, but there was little desire for this breakdown in 1951, presumably because the new wage leader did not differentiate between the sexes insofar as wage policy was concerned. There was considerably more interest in paid for vacations in the later study and more detailed data were requested about sick leave policies, probably because it was widely felt that important changes had occurred in this area.

A great deal of interest was also shown in questions on group life insurance plans, hospitalization plans, and retirement or pension plans. This interest resulted in part from a state-wide controversy about the State of New Mexico welfare program. In this second step of the planning of the study, it did not appear that any particular problems had arisen which could not be reasonably and logically resolved.

in the work week, hours worked at base rate of pay, hours worked at
overtime rate, and total hours worked. Data requested on wages included
wages received at normal rate, overtime compensation, total wages, normal
rate per hour and overtime rate per hour. Also detailed was the split
between union and non-union workers, further divided into electrical and
other occupations. There was also interest in the period of payment, i.e.,
whether paid hourly, weekly, or monthly. Data concerning benefits related
to employee organizations was wanted on holidays paid for, vacations paid
for, group life insurance plans, hospitalization plans, and retirement
or pension plans.

Several changes between the information sought in the 1949 study
and that sought in the 1951 survey should be mentioned. First, the 1951
study distinguished between men and female workers, but there was little
desire for this distinction in 1949, presumably because the two wage levels
did not differentiate between the sexes insofar as wage policy was
concerned. There was considerably more interest in paid for vacations
in the later study and more detailed data were requested about sick
leave policies, probably because it was widely felt that important changes
had occurred in this area.

A great deal of interest was also shown in questions on group
life insurance plans, hospitalization plans, and retirement or pension
plans. This interest resulted in part from a state-wide controversy
about how much of the cost of these welfare programs should be borne by the
employees or the state, it did not seem that any particular problem had
arisen which called for a survey, and possibly resulted.

III. SELECTION OF THE SAMPLE

The assistance of the New Mexico Employment Security Commission was requested in the initial steps toward estimating the number of business establishments in the locality. Two lists were compiled: one showing the names of the firms known to be employing over seventy-five persons; the other listing the establishments known to be employing twenty-five to seventy-five workers. The feeling at first was that the firms employing more than seventy-five people would provide an adequate sample, but this idea was quickly discarded as closer scrutiny showed that such a sample did not represent a cross section of business in the locality. Such businesses as insurance, real estate, bottlers, printing, hardware distributors, and plumbing contractors were, for example, not represented. On the basis of the combined lists and discussions with local personnel administrators and the Chamber of Commerce, it was estimated that there were approximately 295 firms in the locality employing twenty-five or more workers.

The decision as to which firms should be included in the sample entailed much study. The methods of all the agencies dealt with in Chapter III were reviewed to determine their applicability in this study. The method of selection used by the Bureau of Labor Statistics was rejected because the detailed and expensive preliminary field work did not seem justified in this case. The Montana State University survey of 1951 was of no help either, as that survey sought to cover the entire field. The Oklahoma Employment Security Commission made a random selection representing about 50 per cent of the total working population

of the state, a procedure not feasible in this study.

The method finally chosen was patterned after that used by the Merchants and Manufacturers Association of Los Angeles. The outstanding feature of this method is that the firms in the area are analyzed according to such factors as size, past history, previous survey participation, type of business, and kinds of work performed. A sample is then selected which represents these factors as fairly as is possible. The size of the sample is set at 10 per cent - that is, the firms selected for the sample employ 10 per cent of the total working population in the area. No optimum figure as to the size of sample has been universally agreed upon, but the survey reports of the California group are held in high repute despite the relatively small sample used.

In the Albuquerque study, firms were selected with a view to having at least one of each industry represented in the area. A sample was sought that employed at least 10 per cent of the workers in the area and at the same time made up at least 10 per cent of the total number of firms. A careful examination of the lists showed that forty-eight concerns formed a reasonable cross-section of the business activities of the locality. These covered thirty-two types of business and included, among others, wholesalers, retailers, and public utilities.

Although the lists from which the sample was drawn were made up of firms hiring twenty-five or more workers, several smaller firms were added to the sample. This was done because the original lists did not represent some of the businesses which were interested in the survey results. The size of the concerns in the final sample ranged from one

of the state, a procedure not feasible in this case.

The method finally chosen was determined after consultation with the Bureau and the University of California. The following features of this method are that the time in the case was reduced to such factors as size, past history, previous survey, method, type of business, and kind of work performed. A sample is taken of the sample which represents these factors as follows: The size of the sample is set at 10 per cent - that is, the time selected for the sample is 10 per cent of the total working population in the area. No attempt is made to select a sample that is representative of the survey results of the California Survey and will be high reports despite the relatively small sample used.

In the Alameda study, there were selected three samples having at least one of each industry represented in the area. A sample was sought that employed at least 10 per cent of the workers in the area and at the same time made up at least 50 per cent of the total number of firms. A careful examination of the lists showed that twenty-eight companies formed a representative cross-section of the business activities of the locality. These covered thirty-two types of business and included many others, manufacturers, retailers, and public utilities.

Although the lists from which the sample was drawn were made up of firms having twenty-five or more workers, attention was also given to firms having fewer than twenty-five. This was done because the original lists were prepared from the business which was interested in the survey results. The time in the case was reduced to such factors as size, past history, previous survey, method, type of business, and kind of work performed. A sample is taken of the sample which represents these factors as follows: The size of the sample is set at 10 per cent - that is, the time selected for the sample is 10 per cent of the total working population in the area. No attempt is made to select a sample that is representative of the survey results of the California Survey and will be high reports despite the relatively small sample used.

hiring six people to another hiring over a thousand. The firm established as the area wage leader by the 1949 pilot study was included in the sample.

The manner in which the sample for this study was selected illustrates the theory of the Bureau of Labor Statistics that the research worker's knowledge of what is important cannot be replaced by any statistical formula. The final published report covers data obtained from 12 per cent of the firms in the area which firms hire 19 per cent of the estimated non-agricultural working population.

IV. SELECTION OF THE OCCUPATIONS TO BE SURVEYED

Before the occupations to be included in the study were selected, the methods used by the other agencies were carefully studied. The method used owes something to all of these, especially that developed by the Bureau of Labor Statistics, but it cannot be said that any one of them was followed. The local situation and the aims of the study necessitated a good deal of thoughtful improvisations.

In the very early stages of this study it was agreed that one of the aims should be to provide historical comparability on the representative occupations of the area with the 1949 study. Moreover, jobs were to be selected for study with a view to repetitive studies of the same occupations. It was generally agreed that the jobs covered in the 1949 study were representative, but that the list should be enlarged to secure a more comprehensive picture of the wage structure in the area.

A list of occupations was prepared on the basis of requests for current wage data received by the Bureau. All the occupations covered in the 1949 study were included. To this there was added selected office

listing six people to another listing over a long period. The first listing was as the wife was listed in the 1930 listing and the second as the wife was listed in the 1940 listing.

The manner in which the sample for this study was selected

illustrates the theory of the Bureau of Labor Statistics that the

worker's knowledge of what is important cannot be replaced by any

statistical formula. The final published report covers the following

from 12 per cent of the time in the area which time was 19

per cent of the estimated non-occupational working population.

IV. SELECTION OF THE OCCUPATIONS TO BE STUDIED

Before the occupations to be included in the study were selected,

the methods used by the other agencies were carefully studied. The

used were something to all of these, especially the Bureau of

Bureau of Labor Statistics, but it cannot be said that any one of them

was followed. The local situation and the size of the study population

a good deal of thoughtful consideration.

In the very early stages of this study it was agreed that the

the also should be to provide historical comparison in the

five occupations of the area with the 1930 study. However, it was

be selected for study with a view to representative status of the area.

occupations. It was generally agreed that the jobs covered in the 1930

study were representative, but that the list should be enlarged to cover

a more comprehensive picture of the wage structure in the area.

A list of occupations was prepared on the basis of responses from

persons were then received by the Bureau. All the occupations covered

in the 1930 study were included in this list and also a number of new

and clerical occupations which the writer knew from years of practical experience in the field of job analysis to be common occupations in business. A check was made of the requests placed by business concerns on the New Mexico Employment Security Commission for workers to ascertain whether any jobs currently in demand should be added. The occupations finally selected and the descriptions of each are shown in Appendix C.

V. PREPARATION OF JOB DESCRIPTIONS

In the preparation of job descriptions to be used in the survey, the experience of the Bureau of Labor Statistics and that of several other organizations was drawn upon. Especially was the Bureau of Labor Statistics' practice of including in a job description all of the major determining characteristics of the job but at the same time making it flexible enough with respect to minor variations to permit interplant comparisons adhered to in the Albuquerque study.

Final job descriptions were developed through consultation with experienced local personnel and wage administration practitioners who were completely familiar with conditions in the area. Cognizance was given to the fact that the number of highly specialized jobs is limited in Albuquerque and that most jobs require the performance of many related tasks, although the specific nature of the related tasks may vary from job to job. Job descriptions were designed to group employees in general designations of work requiring the performance of similar and related tasks. As stated above, the final descriptions are detailed in Appendix C.

VI. MANNER OF SECURING DATA

The agencies described in Chapter III employed a variety of

and similar occupations which the writer knew from years of experience in the field of job analysis to be common occupations in business. A check was made of the reports placed by business concerns on the New Mexico Employment Security Commission for workers to ascertain whether any jobs currently in demand should be added. The occupations finally selected and the descriptions of each are shown in Appendix B.

V. PREPARATION OF JOB DESCRIPTIONS

In the preparation of job descriptions to be used in the survey, the experience of the Bureau of Labor Statistics and that of several other organizations was drawn upon. Essentially was the Bureau of Labor Statistics' practice of including in a job description all of the major determining characteristics of the job but at the same time making it flexible enough with respect to minor variations to permit independent comparisons referred to in the kinship survey.

Final job descriptions were developed through consultation with experienced local personnel and some modification practitioners who were completely familiar with conditions in the area. Guidance was given to the fact that the nature of highly specialized jobs is limited in kinship survey and that most jobs require the performance of many related tasks, although the specific nature of the related tasks may vary from job to job. Job descriptions were designed to cover employees in general description of work requiring the performance of similar and related tasks. As noted above, the final descriptions are detailed in Appendix C.

VI. METHOD OF SURVEYING DATA

The survey is carried out through the employment of

methods to secure data from the participating firms. As in the other steps, the method used in the Albuquerque study was composed of elements of the others, adapted to the local situation.

Planning of the survey to this point permitted several important decisions to be made. First, the number of firms selected for participation was small and this made feasible the more desirable personal interview method of obtaining data. Second, the questionnaire form could be designed because the method of survey and the information wanted had been decided upon. The questionnaire was designed with the objective of securing the desired information through a minimum number of questions. A two part questionnaire was used: one part for general information; a second for the desired wage information. To the extent practical, questions on individual occupations were so worded as to permit answers by check marks. Questionnaire forms were designed to be completed in duplicate, the original to be for survey use and the copy to be retained by the participating firm. (Appendix D).

A folder entitled "Cooperator's Manual" was prepared to be given by the interviewer to the participating organizations. The purpose of the folder was to provide the participating firm with a full explanation of the reason for and intent of the study, to furnish instructions for completing the questionnaire, and to provide the participating firm with a record of the survey. The "Cooperator's Manual" contained an explanatory memorandum with the salutation, "Dear Cooperator," and signed by the Director of the Bureau; a general information instruction sheet; a wage information instruction sheet; and descriptions of the jobs being studied. After each interview was completed, the duplicate copy of each completed

...to secure data from the ...
the method used in the ...
...adapted to the local situation.
...Planning of the survey to ...
...to be made. First, the ...
...and this made possible the ...
...method of obtaining data. Second, ...
...the method of survey and the ...
...The questionnaire was ...
...facted information through a ...
...questionnaire was made; one ...
...desired type information. In the ...
...questionnaire were so ...
...forms were designed to be ...
...survey use and the copy to be ...
...A folder entitled "Questionnaire" ...
...by the interviewer to the ...
...folder was to provide the ...
...the reason for each instance of ...
...completing the questionnaire, ...
...two of the survey. The ...
...association with the ...
...Director of the ...
...information ...
...After each interview was ...

questionnaire form was added to the folder which was left with the participating firm. (Appendix E).

An "Interviewer's Manual" was prepared for the purpose of standardizing the interview procedure. This manual comprised a general explanation of the study. It also provided the interviewers with detailed instructions as to how to introduce themselves, how to secure the information, and how to close the interview. A copy of the "Cooperator's Manual" was made a part of the "Interviewer's Manual." (Appendix F).

Code numbers were assigned to the forty-eight concerns which participated. These code numbers were retained throughout the survey to insure that the identity of the participants would be kept confidential. The name and position of the responsible person to be interviewed in each firm was obtained from the Chamber of Commerce, from records of the previous survey, or by direct telephone inquiry.

The wording for telephone solicitation for interview appointments was prepared. (Appendix G). Appointments were made with twenty-four of the firms, selected at random, by telephone. Unannounced visits were made in the other twenty-four instances. The purpose was to find out how the results compared between arranged and unannounced visits. The total number of usable questionnaires finally obtained was eighteen by each method. However, forty-three visits were necessary, including call-backs, for the group with which advance telephone appointments were used; fifty-three visits, including call-backs, were needed for the participants who were called on unannounced. The time spent on the telephone making appointments would appear to have saved some time in

making personal calls. This test was inconclusive, but on the basis of the actual experience, the interviewers would prefer in future studies to make visits unannounced. It is hoped that this test may be verified in future studies. Appendix H shows the results in detail.

Computations were made in the spaces provided on the completed questionnaires to convert data on wages to an hourly figure based on normal wages and hours in the normal work period reported. The data were tabulated manually. One columnar work sheet was set up for each of the twenty-eight occupations finally reported on in the study. The mean (weighted average of the individual earnings) was used in computing comparative wage data. However, the median of the wage rate in each occupation was determined and reported. In addition, the interquartile range of the wage rate in each occupation was computed and reported. (Appendix I). One work sheet was set up to tabulate all data on holidays paid for; one work sheet for vacation data; and one for group life insurance, hospitalization, and retirement plan data. The complete report is shown in Appendix B.

The cooperation received from Albuquerque business firms during this survey was considered very good. Response to the published report has been most gratifying. The procedure as described is, to repeat, not offered as a model. However, the experience gained was of great value in the developing of the proposed universal procedure described in the next chapter.

making personal calls. This fact was acknowledged, but on the basis of the actual experience, the investigators would prefer to future studies to make visits unannounced. It is hoped that this fact may be verified in future studies. Appendix II shows the results in detail.

Investigations were made on the basis provided on the completed

questionnaires to convert data on hourly figures based on actual wages and hours in the actual work period reported. The data were tabulated manually. The columnar work sheet was set up for each of the twenty-eight occupations finally reported on in the study. The mean (weighted average of the individual earnings) was used in computing comparative wage data. However, the median of the wage rate in each occupation was determined and reported. In addition, the interquartile range of the wage rate in each occupation was computed and reported.

(Appendix I). The work sheet was set up to tabulate all data on holidays paid for, one week leave for vacation data; and also the group life insurance, hospitalization, and retirement plan data. The complete report is shown in Appendix II.

The cooperation received from Algonquin business firms during this survey was considered very good. Response to the solicited report has been most gratifying. The questionnaire described in the report, but offered as a model. However, the experience gained was of great value in the development of the proposed national procedure described in the next chapter.

CHAPTER V

RECOMMENDATIONS: A UNIFORM WAGE SURVEY PROCEDURE

This study was undertaken to secure information which might be helpful to local organizations undertaking community occupational wage surveys in smaller cities and less populated areas. The community occupational wage surveys conducted as a community service which were observed in this study have, on the whole, shortcomings which seriously affect their statistical value. With these shortcomings in mind, the writer will now recommend a procedure to be used by local agencies in conducting community occupational wage surveys in the smaller cities and less populated areas. Through this procedure, such studies could be standardized and made highly useful statistical devices with the kind of comparability needed to make them widely useful.

The occupational wage studies observed were found to be principally aimed at getting information on wages and related benefits for the use of businessmen and employers. The community at large would be better served if these studies also endeavored to answer the questions which labor asks. Another element of weakness in the community wage survey is the lack of significant historical comparability of one study with another study. Successive surveys in a given area should offer comparative information, and studies made of different areas should permit the wage structures of one area to be meaningfully compared with that of another area.

It was found that the information sought in these community wage

surveys differs so markedly in extent and scope that there is little relationship between the results of different studies. Numerous examples of this were cited in Chapter III. Each community occupational wage study seems to be designed to uncover different information even though successive surveys appear to have had similar aims. The information sought in these surveys must be standardized if comparability is to be achieved. Likewise, the lack of uniformity now shown in selecting the sample of the firms to participate in the survey must be remedied. A uniform method of selecting the sample and the retention of this sample throughout successive studies would increase the comparability of the results.

The wage surveys studied differed also in the occupations studied. The descriptions of the most commonly covered occupations were, however, somewhat similar, principally because they were generally derived from the descriptions developed by the Bureau of Labor Statistics. These job descriptions offer a pattern for further standardization.

Finally, community occupational wage surveys normally do nothing about reducing the wage data to a common denominator. They merely report rates or average rates by simple job title without weighting these according to the skills or attributes required for the job, despite the fact that these vary from job to job. All jobs reported on should be rated and put on the same plane to permit comparisons to be made directly.

survey differs so markedly in extent and scope that there is little relationship between the results of different studies. Numerous examples of this were cited in Chapter III. Even community occupational wage study seems to be designed to answer different information even though successive surveys appear to have had similar aims. The information sought in these surveys must be standardized if comparability is to be achieved. Likewise, the lack of uniformity now shown in selecting the sample of the firms to participate in the survey must be remedied. A uniform method of selecting the sample and the selection of this sample throughout successive studies would increase the comparability of the results.

The wage survey studies differed also in the occupations studied. The descriptions of the most commonly covered occupations were, however, somewhat similar, principally because they were generally derived from the descriptions developed by the Bureau of Labor Statistics. These job descriptions often a pattern for further classification.

Finally, community occupational wage surveys normally do not include about including the wage data in a common denominator. They merely report rates or average rates by single job titles without weighting these according to the skills or attributes required for the job, except the fact that these vary from job to job. All jobs reported on should be rated and put on the same plane or general comparison to be made directly.

A UNIFORM METHOD

A WAGE INFORMATION CLEARING AGENCY PLAN

I. THE AGENCY

The agencies conducting occupational wage surveys as a community service in the smaller cities and less populated areas could cooperate by using a standard survey procedure. Only by adopting a uniform method of securing the same information about the same jobs and adhering to the same pattern in successive studies can these agencies get data of the kind that will permit the wage structures of one locality to be precisely measured against those of another area. Under this plan, the many local agencies now conducting community occupational wage studies will continue to operate as the local survey agencies and will act as wage information clearing agencies for the area which they represent. These local survey agencies will all use the standardized plan and cooperate freely with like local agencies in the exchange of wage data and information.

II. STANDARDIZATION OF INFORMATION SOUGHT

To be of maximum usefulness it is necessary that all surveys seek the same information. It will at once be objected that no agency will, for the sake of standardization, seek information that it does not need at the sacrifice of that which it does need. Nor is that what is being recommended. Despite the variety of specific purposes in the surveys observed in the present study, it was notable that all of them sought a basic core of information. If for all surveys this basic information were to be standardized both as to what is sought and the form in which

A BUREAU REPORT

A BUREAU REPORT ON THE

II. THE BUREAU

The agencies conducting comparative work survey as a standard service to the smaller cities and have provided means for the use of a standard survey procedure. Only by adopting a standard method of securing the same information about the same data can the agencies be sure that the same patterns in successive studies and hence accurate comparison of the data that will permit the same standards of the results to be obtained. Secured against those of another study, for this data, the agencies now conducting community comparative work studies will continue to operate as the local survey agencies and will receive the information relating agencies for the area which they represent. From local survey agencies will all use the standardized data and compare results with the local agencies in the exchange of data and information.

III. STANDARDIZATION OF INFORMATION

To be of maximum usefulness it is necessary that all agencies seek the same information. It will be most as suggested that in a survey, for the sake of standardization, each organization should be directed to the collection of data which is most useful. It is that which is being recommended. Despite the variety of specific purposes in the survey, it is recommended that all of the data be reported in the same manner. It is recommended that all of the data be reported in the same manner. It is recommended that all of the data be reported in the same manner.

it is recorded, the principal questions regarding wages and related benefits would be answered to the satisfaction of both labor¹ and management. A recommended list of questions, designed to evoke such

¹William J. Haber and Wilbur J. Cohen, editors, Readings In Social Security (New York: Prentice Hall Inc., 1948) pp. 129-32.

Joseph Shister, editor, Readings In Labor Economics and Industrial Relations (Philadelphia: J.B. Lippincott Co., 1951) pp. 331-40.

standard basic data, follows:

General information obtained from each firm surveyed:

Total number of employees in the establishment _____

Provisions for paid vacations: _____ days per month (after _____
_____ days per year (service _____
_____ weeks per year (of _____

Holidays paid for: (number of) _____

Paid sick leave: _____ allowed after _____ of service

Non-production bonus: Christmas or year end _____ (explain amount and
Profit sharing _____ (how arrived at, as
Other _____ (briefly as possible
None _____

Insurance and pension plans: Life insurance _____ (
Health insurance _____ (explain
Retirement pension _____ (briefly
Other _____ (
None _____

If the provisions are different for different classes of employees, i.e., hourly, weekly, or monthly paid, one general sheet should be completed for each class.

For every job description surveyed:

Job title _____ *Total Points
(Appendix A) _____
*The applicable Job Evaluation Record should be attached hereto.
Number of employees in the job: male _____ female _____
Average wage, excluding any premium:
(indicate if hourly, weekly, or monthly paid) _____
Standard hours in the work week: _____

The individual survey agencies would, of course, be free to add any other questions they wished in order to explore fringe benefits or other personnel matters of interest to them or their clients. Additional data so obtained would be useful on a local basis. Moreover, this practice would encourage the kind of individual experiments essential for lively growth.

III. THE SAMPLE

The selection of the sample may be subject to certain allowable variations so long as a representative cross section of the business of the community under study is covered. Much has been published on the subject of selecting the sample for statistical studies. Without reference to any particular source, the writer believes that at least a ten per cent sample of the business firms of the area should be included in the local survey. This 10 per cent sample should include the wage leaders in the area if it is to be valid. Moreover, the total number of persons employed by the establishments selected should amount to approximately 15 per cent of the working population of the locality being surveyed. The sample thus selected should be kept essentially intact throughout successive studies so as to achieve the utmost in statistical and historical continuity.

IV. THE OCCUPATIONS STUDIED

The same occupations should be studied to the greatest extent possible in all surveys. The aim in selecting the occupations for study must be to choose those which represent the total occupational structure from the least skilled job through the highest skilled job. Consideration

The individual survey agencies would, of course, be free to ask any other questions they wished in order to acquire through samples or other personal surveys of interest to them or their clients. Additional data or obtained would be useful on a local basis. However, this question would emphasize the kind of individual experiments essential for lively growth.

III. THE SAMPLE

The selection of the sample may be subject to certain allowable variations as long as a representative cross section of the business is the primary consideration. Such has been indicated on the subject of selecting the sample for statistical studies. Without reference to any particular source, the writer believes that at least a few per cent sample of the business firms of the area should be included in the local survey. The 10 per cent sample should include the large business in the area, it is to be noted. Moreover, the total number of persons employed by the establishments selected should amount to approximately 45 per cent of the working population of the locality being surveyed. The sample thus selected should be kept essentially intact throughout successive studies as far as possible the object is statistical and statistical continuity.

IV. THE QUESTIONING METHOD

The same questions should be asked in the greatest extent possible in all surveys. The aim in selecting the questionnaire for study must be to obtain from it the maximum of the total questionnaire information from the least number of questions. The writer believes that the questionnaire should be designed to obtain the maximum of information from the least number of questions.

should be given to the numerical importance of the job, measured by the number of workers in the job; the definiteness of the occupation; the stability of the job from period to period; the prevalence of the occupation from establishment to establishment; and the historical importance of the job in establishing wage rates. A list of key jobs carefully selected according to these criteria would represent the total occupational wage structure of all communities and serve as gauges against which all non-key jobs could be measured. The following list of occupations is based on these criteria and is suggested for standardization in making wage studies:

Maintenance, Trade, & Shop Occupations

Carpenter, Maintenance
Electrician, Maintenance
Helper, Trades, Maintenance
Janitor
Machinist, Maintenance
Mechanic, Automotive
Mechanic, Maintenance
Painter, Maintenance
Plumber, Maintenance
Sheet-Metal Worker, Maintenance
Shipping & Receiving Clerk
Stock Handler & Trucker, Hand
Truck Driver
Watchman
Welder

Office Occupations

Bookkeeper, Hand
Clerk, Accounting
Clerk, File
Clerk, General
Clerk, Order
Clerk, Payroll
Clerk, Typist
Messenger
Secretary
Stenographer, General
Switchboard Operator
Typist

Other Occupations

Sales Clerk
Draftsman
Nurse

V. RATING THE JOBS

The occupations selected for study should be uniformly rated and put on the same plane so as to make valid comparisons possible. This, it must be admitted, will be difficult, as the character of the work and the

tasks performed on jobs of the same title differ from plant to plant and even within the same plant. But difficult though it may be, the differentials between the jobs must be adequately appraised and evaluated on a like basis; this is absolutely essential if wage structures are to be appraised on a statistically sound basis. Moreover, the method for doing this must be simple and easily understood by everyone concerned; it must be given consistent application, both in the individual plant and between plants; and it must include and properly weigh the important and essential job characteristics of required education, experience, and physical effort.²

² A. L. Kress, "How to Rate Jobs and Men," Factory Management and Maintenance, 97: 60-65, October, 1939.

Fortunately, this task is not as formidable as it at first glance appears. The rating plan recommended as a standard to be used by wage information clearing agencies is presented in Appendix A.³ It is designed for

³ Richard G. Smyth and Matthew J. Murphy, Job Evaluation and Employee Rating (New York: McGraw-Hill Book Company, Inc. 1946) pp. 42-49.

evaluating both craft (hourly) and clerical (salaried) occupations and it utilizes the point method of job evaluation which is widely used by industry and trade associations in rating jobs.⁴

⁴ For interesting discussions and criticisms of the point plan using degrees for each factor, see:

Ibid., pp. 59-66.

tasks performed on jobs of the same class differ from those of plants and even within the same plant. But differences should be noted, the differences between the jobs must be adequately recognized and evaluated as a basis; this is absolutely essential if wage structures are to be based on a statistically sound basis. However, the method for doing this must be simple and easily understood by everyone concerned; it must be given consistent application, both to the individual plant and between plants; and it must include and properly weigh the important and essential job characteristics of required education, experience, and physical effort.²

² A. L. Brown, "How to Rate Jobs and Men," Factory Management and Maintenance, 37: 66-67, October, 1937.

Fortunately, this task is not as formidable as it at first appears. The rating plan recommended as a standard to be used in wage determination clearing agencies is presented in Appendix A.³ It is designed for

³ Richard C. Goff and Matthew J. Murphy, Job Evaluation and Employee Rating (New York: McGraw-Hill Book Company, Inc., 1936), pp. 12-15.

evaluating both craft (heavy) and clerical (skilled) occupations and is entitled the point method of job evaluation which is briefly used by industry and wage associations in rating jobs.⁴

⁴ The International Association of Industrial Engineers has adopted the point plan rating system for wage determination.

1937, 37: 66-67.

Charles W. Lytle, Job Evaluation Methods (New York: The Ronald Press Company, 1946) pp. 42-49.

M. J. Murphy and R. G. Smyth, "Job Evaluation by the Point Plan," Factory Management and Maintenance, 104: 137-148, June 1946.

F. H. Johnson, and others, Job Evaluation (New York: John Wiley & Sons, Inc., 1946) pp. 3-8.

Eugene J. Benge, and others, Manual of Job Evaluation (New York: Harper & Brothers, 1941) pp. 30-38.

Jobs are rated according to those factors judged to be common to the basic needs of the average concern; the point values are assigned to these factors on an evaluative basis. Both labor and management are in agreement that the point plan system of job evaluation offers a realistic and accurate means for rating jobs; however, there is some disagreement both among labor and management as to factors required and the degree values of each.⁵ The proposed plan was designed to permit the evaluation

⁵ Joseph Shister, editor, Readings in Labor Economics and Industrial Relations (Chicago: J. B. Lippincott Co., 1951) pp. 243-48.

of both hourly and salary jobs and consists of twelve factors with six degrees each (see page 82). The factors selected and the degrees assigned are based upon the well known point plans which have been proved in actual practice by General Foods Corporation, Revere Copper and Brass, Inc., United States Steel Corporation, Cheney Brothers Company, Wright Aeronautical Corporation, American Optical Company, National Electrical Manufacturers

Association, and the National Metal Trades Association.⁶

⁶ Smyth and Murphy, op. cit., pp. 29-52.

A job rating manual should be provided each participating firm by the local wage information clearing agency. (Appendix A).

At this point, the intelligent cooperation of the participating firm is vital because the supervisor on the job must furnish, in terms of the twelve factors, the basic information as to what it takes to do the job in his organization. The supervisor is thus an active participant in the rating.

When the jobs included in the survey which apply to the participating firm have been rated, a summary sheet is made up on which the jobs are arranged according to total points scored. This point score is reported on the questionnaire which the survey agency requires of the participating firm.

The participating firms benefit materially from this standard job evaluation plan. First, it allows firms to compare their own wage structures with the wage structures of other organizations on a dependable basis which they thoroughly understand. Second, in connection with this rating activity, they are able to plot their own wage structure on a simple correlation chart on which jobs are plotted according to earnings and points scored. If the job rating plan really measures the equivalent skill, then the rate of pay should increase as the points scored increase.

Association, and the National Labor Union Association.

Graph and Survey, No. 11, pp. 11-12.

A job rating manual should be provided with participating firms for the local wage information clearing agency. (Appendix A).

At this point, the intelligent cooperation of the participating firms is vital because the agreement on the job must be made, in terms of the relative factors, the basic information as to what is being done in the job in the organization. The agreement is that no active participants in the rating.

When the jobs included in the survey which apply to the participating firms have been rated, a summary sheet is made up on which the jobs are arranged according to local points scored. This point score is reported on the questionnaire which the survey agency requires of the participating firm.

The participating firms benefit materially from this agreement. Job evaluation, first, it allows firms to compare their own wage structures with the wage structures of other organizations on a dependable basis which they themselves understand. Second, in comparison with this rating activity, they are able to find their own wage structure on a relative comparison chart on which jobs are placed according to standards and points scored. If the job rating plan really measures the equivalent value, then the rate of pay should be based on the points scored and not on the

Such a chart shows the individual management which of its jobs are out of line and has the following additional uses:

- a. Enables the management to appraise the fairness of its own wage structure.
- b. Points out potential sources of dissatisfaction that may arise because of the inequities of earnings.
- c. Enables management to appraise the kind of job that is being done in setting its own wage rates.
- d. Helps the supervisory force to think objectively in terms of jobs.
- e. Helps minimize the danger of inequities and favoritism.
- f. Furnishes a factual basis for the determination of wage differentials for use in discussing differences in wage rates or in wage negotiations.

The advantages enumerated above which will accrue to the participating firms should be used by the local agency to sell firms on participating. The recommended survey practices will become more effective with each succeeding study, both because of standardization and because the advantages to the participating firm will become better known.

SURVEY PROCEDURE

The survey agency will solicit the participation of the firms it has chosen for the sample and at the same time give them the questionnaire. The agency will also provide each participating firm with the rating manual (Appendix A) and models of the forms to be used in the standardized job rating procedure.

The survey agency will determine schedules for the wage studies in cooperation with other local wage information clearing survey agencies.

Such a chart shows the individual responsibilities of the various

of this and the following is a list of the

1. The first responsibility is to the public and to the community.

2. The second responsibility is to the individual and to the family.

3. The third responsibility is to the community and to the nation.

4. The fourth responsibility is to the individual and to the family.

5. The fifth responsibility is to the community and to the nation.

6. The sixth responsibility is to the individual and to the family.

or in any other way.

The following are the responsibilities of the individual:

1. The first responsibility is to the public and to the community.

2. The second responsibility is to the individual and to the family.

3. The third responsibility is to the community and to the nation.

4. The fourth responsibility is to the individual and to the family.

THE FOLLOWING ARE THE RESPONSIBILITIES OF THE INDIVIDUAL:

1. The first responsibility is to the public and to the community.

2. The second responsibility is to the individual and to the family.

3. The third responsibility is to the community and to the nation.

4. The fourth responsibility is to the individual and to the family.

THE FOLLOWING ARE THE RESPONSIBILITIES OF THE INDIVIDUAL:

1. The first responsibility is to the public and to the community.

2. The second responsibility is to the individual and to the family.

3. The third responsibility is to the community and to the nation.

4. The fourth responsibility is to the individual and to the family.

Under this plan, jobs of the same title may show different point scores in the completed questionnaires submitted by the various participating firms. This difference results from the fact that the important skills or necessary attributes for a job are weighted differently in the several firms. These like titled jobs to which point scores have been ascribed will be classified by the survey agency in accordance with point score ranges agreed upon by the cooperating local survey agencies and will be so reported in published wage results reports.

Thus, through cooperation among survey agencies of different communities, a universal plan may be applied. A standard pattern, such as is recommended here, could bring us nearer the ultimate goal of dependable community occupational wage reports which permit consistently reliable comparisons of wage structures and provide the historically significant data that is so badly needed for intelligent thinking on industrial relations problems.

Under this plan, jobs of the same title may have different point scores in the weighted questionnaire submitted by the various participating firms. This difference results from the fact that the respondent's own or necessary attributes for a job are weighted differently in the questionnaire. These like titled jobs to which point scores have been assigned will be classified by the survey agency in accordance with point ranges agreed upon by the participating local survey agencies and will be so reported in published wage results reports.

Thus, through cooperation among survey agencies of different communities, a universal plan may be applied. A standard questionnaire, as is recommended here, could bring us nearer the ultimate goal of dependable community occupational wage reports which would consistently reliable comparison of wage structures and provide the statistically significant data that is so badly needed for intelligent thinking on industrial relations problems.

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1. The first of the three main parts of the report is a general survey of the situation in the country.

2. The second part is a detailed account of the work done by the various departments during the year.

3. The third part is a summary of the results of the work done during the year.

GENERAL SURVEY

The general survey of the situation in the country is based on the following facts:

1. The population of the country is estimated to be about 10 million.

2. The area of the country is about 100,000 square miles.

3. The climate is generally temperate.

4. The principal occupations of the people are agriculture and stock raising.

5. The principal towns are London, Manchester, and Birmingham.

6. The principal industries are coal mining, iron and steel, and cotton spinning.

7. The principal exports are coal, iron and steel, and cotton.

8. The principal imports are foodstuffs, raw materials, and machinery.

9. The principal sources of revenue are customs, excise, and income tax.

10. The principal sources of expenditure are the Army, the Navy, and the Civil Service.

11. The principal sources of information are the Press, the Radio, and the Cinema.

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GENERAL INDEX

ALPHABETICALLY

INDEX OF SUBJECTS

APPENDIX

THE NEW YORK

LIBRARY

ASTOR LENOX TILDEN FOUNDATION

APPENDIX A

JOB RATING MANUAL

This manual is provided by (name of the local survey agency) for guidance in evaluating jobs in connection with occupational wage surveys of (community or area being studied).

This simple job rating plan will help your firm and all other firms that participate in (community or area being studied) wage surveys to:

- a. Appraise the fairness of your wage structure
- b. Locate potential sources of dissatisfaction that may arise because of inequities of earnings
- c. Appraise the kind of job that is being done in setting your wage rates
- d. Help your supervisors to think objectively in terms of jobs
- e. Minimize the danger of inequities and favoritism
- f. Obtain factual information for your use in the determination of wage differentials, for discussion of differences of wage rates, or for wage negotiations.

By use of this job rating plan, all jobs in (community or area) will be fairly evaluated and put on the same plane in the occupational wage reports of this area.

APPENDIX A

THE HATERS' MANUAL

This manual is provided by (name of the local survey agency) for reference in evaluating jobs in connection with occupational wage surveys of community or area being studied.

This single job rating plan will help your firm and all other firms that participate in (community or area being studied) wage surveys

to:

- a. Appraise the fairness of your wage structure
 - b. Locate potential sources of dissatisfaction that may arise because of inequalities of earnings
 - c. Appraise the kind of job that is being done in setting your wage rates
 - d. Help your employees to think objectively in terms of jobs
 - e. Minimize the danger of inequalities and favoritism
 - f. Obtain factual information for your use in the determination of wage differentials, for discussion of differences of wages, rates, or for wage negotiations.
- If use of this job rating plan, all jobs in (community or area) will be fairly evaluated and put on the same plane in the occupational wage reports of this area.

JOB EVALUATION RECORD

Job title _____

Summary description of the job _____

<u>Factors</u>	<u>Degree of each factor</u>	<u>Point Value</u>
1. Education required
2. Experience required
3. Initiative required
4. Physical effort required
5. Mental effort required
6. Visual attention required
7. Responsibility for tools and equipment
8. Responsibility for material or product
9. Responsibility for confidential data
10. Responsibility for reports and records
11. Working conditions
12. Unavoidable hazards

Total Points _____

Grade _____

Instructions: Use the next attached Schedule of Factors, Degrees, and Points, together with the Definitions of Factors to evaluate your job.

JOBS EVALUATION SHEET

Job title _____
 Summary description of the job _____

Factor	Weight	Rating
1. Education required	10	1
2. Experience required	10	1
3. Initiative required	10	1
4. Physical effort required	10	1
5. Mental effort required	10	1
6. Visual attention required	10	1
7. Responsibility for people and equipment	10	1
8. Responsibility for material or product	10	1
9. Responsibility for confidential data	10	1
10. Responsibility for reports and records	10	1
11. Working conditions	10	1
12. Growth/learning rewards	10	1

Total Points _____
 Grade _____

Instructions: Use the point system indicated in the job description and evaluate the job as a whole.

SCHEDULE OF FACTORS, DEGREES, AND POINTS ¹

Factors	Degrees and points					
	First	Second	Third	Fourth	Fifth	Sixth
1. Education required	15	30	45	60	75	90
2. Experience required	25	50	75	100	125	150
3. Initiative required	15	30	45	60	75	90
4. Physical effort required	6	12	18	24	30	36
5. Mental effort required	6	12	18	24	30	36
6. Visual attention required	6	12	18	24	30	36
7. Responsibility for tools & equipment	4	8	12	16	20	24
8. Responsibility for materials or product	4	8	12	16	20	24
9. Responsibility for confidential data	4	8	12	16	20	24
10. Responsibility for reports & records	4	8	12	16	20	24
11. Working conditions	6	12	18	24	30	36
12. Unavoidable hazards	5	10	15	20	25	30

¹ Richard C. Smyth and Matthew J. Murphy, Job Evaluation and Employee Rating (New York: McGraw-Hill Book Company, Inc. 1946) p. 42.

List of names						Notes
1	2	3	4	5	6	
1. [illegible]	12	13	14	15	16	
2. [illegible]	17	18	19	20	21	
3. [illegible]	22	23	24	25	26	
4. [illegible]	27	28	29	30	31	
5. [illegible]	32	33	34	35	36	
6. [illegible]	37	38	39	40	41	
7. [illegible]	42	43	44	45	46	
8. [illegible]	47	48	49	50	51	
9. [illegible]	52	53	54	55	56	
10. [illegible]	57	58	59	60	61	
11. [illegible]	62	63	64	65	66	
12. [illegible]	67	68	69	70	71	

1. [illegible]
 2. [illegible]
 3. [illegible]
 4. [illegible]
 5. [illegible]
 6. [illegible]
 7. [illegible]
 8. [illegible]
 9. [illegible]
 10. [illegible]
 11. [illegible]
 12. [illegible]

DEFINITIONS OF FACTORS ²

FACTOR 1. EDUCATION REQUIRED

This factor appraises the extent of educational background required by the average person working on the job, to perform the job satisfactorily.

- First Degree -- Ability to read and write
- Second Degree -- Grammar school education or equivalent
- Third Degree -- Two years of high school or trades school or equivalent
- Fourth Degree -- Four years of high school or graduation from business school or equivalent
- Fifth Degree -- Two years of college training or equivalent
- Sixth Degree -- College or university degree or equivalent

FACTOR 2. EXPERIENCE REQUIRED

This factor appraises the length of time required for the average person, with the education previously specified, to be able to perform the job satisfactorily.

- First Degree -- Up to 2 months
- Second Degree -- Over 2 months - up to 6 months
- Third Degree -- Over 6 months - up to 2 years
- Fourth Degree -- Over 2 years and up to 4 years
- Fifth Degree -- Over 4 years and up to 6 years
- Sixth Degree -- Over 6 years

FACTOR 3. INITIATIVE REQUIRED

This factor appraises the nature and extent of the independent decisions and/or action required of the average employee working on the job.

- First Degree -- Elementary type of job. The employee received detailed instructions and is expected to perform the job exactly as indicated without deviation.
- Second Degree -- Repetitive type of job. Requires the close following of instructions and procedures. Some very few simple minor decisions may be made by the employee if the decisions follow established precedent.
- Third Degree -- Requires the more frequent making of simple decisions by the employee, but only when definite clear-cut precedents are available.
- Fourth Degree -- In addition to the making of frequent simple decisions, the job requires occasional decisions or action following only general procedures in the absence of clear-cut precedents.

² Ibid., pp. 42-49.

REQUIREMENTS OF EMPLOYERS

FACTORS 1. EMPLOYER'S REQUIREMENTS

This factor specifies the extent of educational background required by the average person working in the job, to perform the job satisfactorily.

- First degree — Ability to read and write
- Second degree — Formal school education or equivalent
- Third degree — Two years of high school or states school or equivalent
- Fourth degree — Four years of high school or graduation from business school or equivalent
- Fifth degree — Two years of college training or equivalent
- Sixth degree — College or university degree or equivalent

FACTORS 2. EXPERIENCE REQUIREMENTS

This factor specifies the length of time required for the average person, with the education previously specified, to be able to perform the job satisfactorily.

- First degree — Up to 3 months
- Second degree — Over 3 months - up to 6 months
- Third degree — Over 6 months - up to 1 year
- Fourth degree — Over 1 year and up to 2 years
- Fifth degree — Over 2 years and up to 3 years
- Sixth degree — Over 3 years

FACTORS 3. INITIATIVE REQUIREMENTS

This factor specifies the nature and extent of the independent decisions and/or action required of the average employee working on the job.

- First degree — Elementary type of job. The employee received detailed instructions and is required to perform the job exactly as instructed without deviation.
- Second degree — Repetitive type of job. Requires the close following of instructions and procedures. The very few simple decisions may be made by the employee if the decisions follow established procedure.
- Third degree — Requires the more frequent making of simple decisions by the employee, but only when definite clear-cut precedents are available.
- Fourth degree — In addition to the making of frequent simple decisions, the job requires occasional decisions or action following well established precedents in the absence of clear-cut precedents.

DEFINITIONS OF FACTORS
(continued)

Fifth Degree -- Difficult and complex type of job. Requires the making of decisions where only general procedures are available.
Sixth Degree -- Extremely difficult and complex type of job. Requires independent and original action to achieve the desired results.

FACTOR 4. PHYSICAL EFFORT REQUIRED

This factor appraises the physical effort required of the average person to perform the job satisfactorily. Consider not only the weight handled but the frequency of handling and the working position which the employee must assume, i.e., standing, sitting, bending, etc.

First Degree -- Very light physical effort required.

Second Degree -- Light physical effort required. Works regularly with light weight objects. Comfortable work position. Typical of most office jobs.

Third Degree -- Repetitive continuous physical activity required. Light or average weight objects handled. Typical of the lighter type shop jobs.

Fourth Degree -- Moderately heavy physical activity required. Average weight objects handled. May occasionally do heavy lifting, pulling or pushing (not to exceed 20% of the job cycle).

Fifth Degree -- Arduous physical work. Heavy lifting, pulling or pushing required (not to exceed 50% of the job cycle).

Sixth Degree -- Extremely arduous physical work or a very difficult work position required. Typical of such jobs as shoveling coal, stevedoring, etc.

FACTOR 5. MENTAL EFFORT REQUIRED

This factor appraises the degree of mental effort required of the employee to perform the job satisfactorily. Consider the degree of organization and planning required and the complexity of the job.

First Degree -- Routine simple job, requiring a minimum of mental effort on the part of the employee.

Second Degree -- Repetitive job, requiring some mental effort on the part of the employee, but no organization or planning.

Third Degree -- Repetitive job, requiring considerable mental effort on the part of the employee, with some organization or planning occasionally involved.

Fourth Degree -- Fairly diversified job, requiring considerable mental effort and organization or planning on the part of the employee.

Fifth Degree -- Diversified complex job, requiring a sustained mental effort on the part of the employee, with careful organization or planning in advance.

SECTION 2. FACTORS
(continued)

First degree -- Involvement and control of the employee in making a decision where only personal resources are available.
Second degree -- Involvement and control of the employee in making a decision independent and original action to achieve the desired results.

SECTION 3. FACTORIAL EFFORT REQUIRED

This factor appraises the physical effort required of the employee to perform the job satisfactorily. Consideration must be given to the frequency of handling the work, position and the degree of exertion, i.e., standing, sitting, bending, etc.
First degree -- Very light physical effort required. Work is done with light weight objects. Involvement with the work is minimal. Work is done.
Second degree -- Repetitive continuous physical effort required. Light or average weight objects handled. Typical of light work.
Third degree -- Moderately heavy physical effort required. Heavy weight objects handled. Not necessarily the heavy lifting, pushing, pulling (not to exceed 50% of the job effort).
Fourth degree -- Heavy physical work. Heavy lifting, pulling, pushing (not to exceed 50% of the job effort).
Fifth degree -- Extremely heavy physical effort of a very high level work position required. Typical of work at the top of the scale. Strenuous, etc.

SECTION 4. MENTAL EFFORT REQUIRED

This factor appraises the degree of mental effort required of the employee to perform the job satisfactorily. Consideration must be given to the frequency and planning required and the complexity of the work.
First degree -- Routine simple job, requiring a minimum of mental effort on the part of the employee.
Second degree -- Repetitive job requiring some mental effort on the part of the employee, but no organization or planning.
Third degree -- Repetitive job, requiring considerable mental effort on the part of the employee, with some organization and planning. Occasionally involved.
Fourth degree -- Fairly involved job, requiring considerable mental effort and organization on the part of the employee.
Fifth degree -- Difficult complex job, requiring considerable mental effort on the part of the employee, with some organization and planning in advance.

DEFINITIONS OF FACTORS
(continued)

Sixth Degree -- Highly diversified complex work, requiring highest level of sustained mental effort and consistently superior planning or organization in advance.

FACTOR 6. VISUAL ATTENTION REQUIRED

This factor appraises the degree and continuity of visual attention required of the average employee to perform the job satisfactorily.

First Degree -- Minimum visual attention required. Job is largely automatic in nature.

Second Degree -- Ordinary visual attention required. Work not close or fatiguing to the eyes.

Third Degree -- Fairly close work. Typical of such jobs as routine typing or business machine operation, or most inspection work.

Fourth Degree -- Close visual attention required. Work reasonably close to eyes with fine differentiations to be made. Typical of close continuous inspection jobs.

Fifth Degree -- Very close work, with constant visual attention required. Applies to such jobs as tracing or drawing.

Sixth Degree -- Extremely close work, with intense and constant visual attention required. Job requires an aid to vision such as a magnifying glass or jeweler's eyepiece.

FACTOR 7. RESPONSIBILITY FOR TOOLS AND EQUIPMENT

This factor appraises the responsibility which goes with the job for preventing damage to the tools or equipment used in the performance of the job. Considering previous damage on the job, determine the approximate dollar value of the damage which would result from the average single mishap. Also, consider the possibility of salvage and repair.

First Degree -- Probable damage to tools or equipment will not exceed \$5 for the average mishap.

Second Degree -- Probable damage to tools or equipment will not exceed \$25 for the average mishap.

Third Degree -- Probable damage to tools or equipment will not exceed \$100 for the average mishap.

Fourth Degree -- Probable damage to tools or equipment will not exceed \$500 for the average mishap.

Fifth Degree -- Probable damage to tools or equipment will not exceed \$1,000 for the average mishap.

Sixth Degree -- Probable damage to tools or equipment will amount to over \$1,000 for the average mishap.

REQUIREMENTS OF EMPLOYERS
(Continued)

With degree — Highly diversified employment opportunities, broad range of advancement opportunities and consistently superior planning or organizational performance.

REQUIREMENTS OF EMPLOYERS

This factor measures the degree and consistency of the attention required of the average employee to perform the job satisfactorily.

First degree — Requires virtual attention throughout the job to largely unexciting or routine work.

Second degree — Requires virtual attention throughout the job but allows for occasional periods of relaxation.

Third degree — Fairly close work, typical of most jobs in routine typing or business machine operation.

Fourth degree — Close virtual attention required, but not necessarily close to eyes with some differentiation in work.

Fifth degree — Fairly close work, with occasional differentiation in work.

Sixth degree — Requires close work, with virtual attention required, typical of such jobs as typing or bookbinding.

Seventh degree — Requires close work, with virtual attention required, typical of such jobs as typing or bookbinding.

Eighth degree — Requires close work, with virtual attention required, typical of such jobs as typing or bookbinding.

REQUIREMENTS FOR WORK AND EQUIPMENT

This factor measures the equipment and tools required for the job. It is based on the requirements of the job, the requirements of the equipment and the requirements of the worker. It is based on the requirements of the job, the requirements of the equipment and the requirements of the worker.

First degree — Requires simple tools or equipment, all the standard for the average worker.

Second degree — Requires simple tools or equipment, all the standard for the average worker.

Third degree — Requires simple tools or equipment, all the standard for the average worker.

Fourth degree — Requires simple tools or equipment, all the standard for the average worker.

Fifth degree — Requires simple tools or equipment, all the standard for the average worker.

Sixth degree — Requires simple tools or equipment, all the standard for the average worker.

Seventh degree — Requires simple tools or equipment, all the standard for the average worker.

Eighth degree — Requires simple tools or equipment, all the standard for the average worker.

DEFINITIONS OF FACTORS
(continued)

FACTOR 8. RESPONSIBILITY FOR MATERIALS OR PRODUCT

This factor appraises the responsibility for preventing damage to raw materials or partly finished or completed products used in the performance of the job. Considering previous damage on the job, determine the approximate dollar value of the damage which would result from the average single mishap. Also consider the possibility of salvage and repair.

- First Degree -- Probable damage to materials or product is trivial or negligible for the average mishap.
- Second Degree -- Probable damage to materials or product will not exceed \$10 for the average mishap.
- Third Degree -- Probable damage to materials or product will not exceed \$50 for the average mishap.
- Fourth Degree -- Probable damage to materials or product will not exceed \$250 for the average mishap.
- Fifth Degree -- Probable damage to materials or product will not exceed \$1,000 for the average mishap.
- Sixth Degree -- Probable damage to materials or product will amount to over \$1,000 for the average mishap.

FACTOR 9. RESPONSIBILITY FOR CONFIDENTIAL DATA

This factor appraises the responsibility which goes with the job for safeguarding confidential information. Consider the type of information handled and probable disruptive effects of disclosure either upon the company's internal operations or upon its relationship with competing organizations.

- First Degree -- No legitimate access to any confidential information.
- Second Degree -- Occasional access to semi-confidential information, disclosures of which would be unimportant.
- Third Degree -- Occasional access to confidential information, disclosures of which would be somewhat disruptive to the company's operation.
- Fourth Degree -- Frequent access to confidential information, disclosure of which would be disruptive to the company's operation or might result in some financial loss to the company.
- Fifth Degree -- Occasional access to highly confidential information, disclosure of which would be very disruptive to the company's operations or would result in material financial loss.
- Sixth Degree -- Unrestricted access to very highly confidential information, disclosure of which would result in very great loss to the company.

FACTOR 10. RESPONSIBILITY FOR REPORTS AND RECORDS

This factor appraises the responsibility which goes with the job for

DEFINITIONS OF FACTORS (continued)

preparing or maintaining necessary reports or records. The amount of creative effort required and the number and complexity of the reports or records should be considered.

- First Degree -- No responsibility for reports or records.
- Second Degree -- Responsible for maintaining one simple record or report.
- Third Degree -- Responsible for maintaining a few simple records or reports.
- Fourth Degree -- Responsible for maintaining fairly complex records or for preparing several periodic reports.
- Fifth Degree -- Responsible for maintaining complex records or for preparing complex periodic reports.
- Sixth Degree -- Responsible for maintaining extremely complex records or for preparing complex special reports of a non-routine nature as requested.

FACTOR 11. WORKING CONDITIONS

This factor appraises the physical surroundings in which the job must be performed. Consider the extent of heat, cold, wet, dampness, glaring light, dirt, fumes, noise, etc.

- First Degree -- Excellent working conditions.
- Second Degree -- Occasional exposure to one or more mildly unpleasant conditions. Typical of most office jobs.
- Third Degree -- Constant exposure to one or more fairly unpleasant conditions. Typical of most shop jobs.
- Fourth Degree -- Intermittent exposure to one or more disagreeable conditions, Typical of such outside jobs as guard or truck driver, and such inside jobs as heat treat.
- Fifth Degree -- Continuous exposure to several disagreeable items. Typical of jobs such as wet grinder and electroplater.
- Sixth Degree -- Continuous exposure to several intensely disagreeable items. Typical of jobs such as coal mining.

FACTOR 12. UNAVOIDABLE HAZARDS

This factor appraises those accident or health hazards which exist, even though safety devices or procedures may have been installed. Taking past records into account, consider the degree of exposure to health or occupational hazards, or the type and extent of injuries which the employee on the job is most likely to receive.

REQUIREMENTS OF REPORTS (continued)

presenting or substantiating necessary reports or records.
The nature of questions asked reported and the manner
and consistency of the reports or records should be
examined.
First Report — The responsibility for reports of
records.
Second Report — Responsibility for maintaining the single
record or report.
Third Report — Responsibility for maintaining a file of
records or reports.
Fourth Report — Responsibility for maintaining single
copies records or for preparing several copies reports.
Fifth Report — Responsibility for maintaining copies
records or for preparing copies records reports.
Sixth Report — Responsibility for maintaining several
copies records or for preparing several copies reports
of a non-continuous nature as required.

TABLE II. REPORTING REQUIREMENTS

This factor requires the physical requirements of reports
job must be reported. Consider the extent of work, the
equipment, starting time, time, time, etc.
First Report — General and specific conditions.
Second Report — General conditions to be reported.
Third Report — General conditions to be reported.
Fourth Report — General conditions to be reported.
Fifth Report — General conditions to be reported.
Sixth Report — General conditions to be reported.
Seventh Report — General conditions to be reported.
Eighth Report — General conditions to be reported.
Ninth Report — General conditions to be reported.
Tenth Report — General conditions to be reported.
Eleventh Report — General conditions to be reported.
Twelfth Report — General conditions to be reported.
Thirteenth Report — General conditions to be reported.
Fourteenth Report — General conditions to be reported.
Fifteenth Report — General conditions to be reported.
Sixteenth Report — General conditions to be reported.
Seventeenth Report — General conditions to be reported.
Eighteenth Report — General conditions to be reported.
Nineteenth Report — General conditions to be reported.
Twentieth Report — General conditions to be reported.

TABLE III. REPORTING REQUIREMENTS

This factor requires the physical requirements of reports
job must be reported. Consider the extent of work, the
equipment, starting time, time, time, etc.
First Report — General and specific conditions.
Second Report — General conditions to be reported.
Third Report — General conditions to be reported.
Fourth Report — General conditions to be reported.
Fifth Report — General conditions to be reported.
Sixth Report — General conditions to be reported.
Seventh Report — General conditions to be reported.
Eighth Report — General conditions to be reported.
Ninth Report — General conditions to be reported.
Tenth Report — General conditions to be reported.
Eleventh Report — General conditions to be reported.
Twelfth Report — General conditions to be reported.
Thirteenth Report — General conditions to be reported.
Fourteenth Report — General conditions to be reported.
Fifteenth Report — General conditions to be reported.
Sixteenth Report — General conditions to be reported.
Seventeenth Report — General conditions to be reported.
Eighteenth Report — General conditions to be reported.
Nineteenth Report — General conditions to be reported.
Twentieth Report — General conditions to be reported.

DEFINITIONS OF FACTORS
(continued)

First Degreee -- No health or accident hazards exist.

Second Degree -- Nature of the work is such that the employee, if injured at all on the job, would most likely receive only minor cuts or bruises. No health hazards exist.

Third Degree -- Nature of the work is such that the employee, if injured on the job, would most likely receive such injuries as more severe cuts and bruises, minor eye injuries or burns (not to exceed 3 days of lost time). Health hazards negligible.

Fourth Degree -- Nature of the work is such that the employee, if injured on the job, would most likely receive a more serious lost time injury such as loss of fingers, serious burns, or hernia. Some exposure to minor health hazards.

Fifth Degree -- Nature of the work is such that the employee, if injured on the job, is most likely to receive a serious injury such as loss of a leg or arm. Some exposure to more serious health hazard, including occupational disease.

Sixth Degree -- Nature of the work is such that the employee, if injured on the job, is most likely to be killed by the injury. Exposure to extremely serious health and occupational disease hazards, which are most likely to result in complete incapacitation or death.

RECORD OF DEATHS
(1914-1915)

First Death — A female, age 45, died of heart disease, at her home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Second Death — A male, age 65, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Third Death — A male, age 35, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Fourth Death — A male, age 55, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Fifth Death — A male, age 45, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Sixth Death — A male, age 60, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Seventh Death — A male, age 70, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Eighth Death — A male, age 80, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Ninth Death — A male, age 90, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

Tenth Death — A male, age 100, died of heart disease, at his home, 1234 1st St., N. W., on May 15, 1914. Cause of death, heart disease. Buried at Mt. Hope cemetery.

OCCUPATIONAL WAGE SURVEY
OF

ALBUQUERQUE, NEW MEXICO

NOVEMBER 1951

RALPH L. EDGEL
And
H. WILSON MAGLIDT

BUREAU OF BUSINESS RESEARCH
UNIVERSITY OF NEW MEXICO
ALBUQUERQUE

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FOREWORD

Two years ago the Bureau of Business Research published the results of a study of wages and hours prevailing in Albuquerque during October 1949 for nineteen selected occupations. That survey was undertaken as a pilot study to determine the feasibility of such an undertaking and its usefulness to the community. The study was so well received that it was hoped that it might be repeated on a regularly recurring basis, not less frequently than once every year. Other commitments of the Bureau, however, have made it impossible to undertake a subsequent survey until the present.

The present survey was initiated and made possible by the enthusiasm and untiring efforts of Mr. H. Wilson Maglidt, a graduate student in the Department of Economics of this University. Mr. Maglidt undertook this ambitious project in connection with a graduate course in business research taught by the undersigned. He bore the responsibility of planning and organizing the project, setting up the new job descriptions, forms, and instructions, training the interviewers, and soliciting the cooperation of the business firms. He did a considerable part of the interviewing and also edited the returns, made the original calculations, and prepared the first draft of the manuscript.

As sponsor of the study, the Bureau of Business Research provided general guidance and the materials for the survey. The present survey followed very closely the pattern of the earlier one which was largely designed by Mr. Alan Carey, the Bureau's statistician. He also supervised the statistical procedures for handling the materials presented in this study. Mr. Vicente Ximenes, a research assistant in the Bureau, assisted with the interviewing, and he edited and verified the transcriptions, tabulations, and calculations of the data. Reve W. Conn of the Bureau staff arranged the final materials for publication and handled the details of getting the bulletin published with the patience and understanding that such a job demands. Eddie M. Dansby, also of the staff of the Bureau, effectively dispatched the onerous job of typing the numerous manuscripts and tables and preparing the stencils. In the preparation of the final text the undersigned drew upon many ideas and suggestions of the other participants, but he must accept responsibility for any shortcomings of the survey and the interpretations presented herein.

Without the wholehearted cooperation of the participating business firms, however, all our efforts would have been fruitless. It speaks well for their civic interest and community spirit that thirty-five Albuquerque businesses took the time and trouble to provide the detailed information upon which this report is based.

In a rapidly developing community there is frequent and serious need for current information such as is provided by this study. The Bureau of Business Research hopes that it may continue to merit the confidence and receive the cooperation of Albuquerque business houses in order that it may serve the community as a clearing house for wage information made available through periodic surveys such as this one.

Albuquerque
February 1952

Ralph L. Edgel, Director
Bureau of Business Research

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Number of workers and establishments included.	
Job descriptions.	
Wage rates: the mean, median, interquartile range, and array of normal hourly rates; mean overtime rate, and mean total hourly rate.	
Hours: means of the normal work week, overtime hours worked, and total weekly hours.	
Earnings: Mean total weekly wage.	

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OCCUPATIONAL WAGE SURVEY
OF
ALBUQUERQUE, NEW MEXICO

INTRODUCTION

This report presents the results of a survey of wage rates, hours, earnings, and related benefits prevailing in Albuquerque in November 1951 for selected occupations in a representative group of firms. Its purpose is to provide factual information concerning the wage structure and practices in the Albuquerque area. It brings up to date and expands somewhat the information provided by a similar study made by the Bureau of Business Research in 1949 which concerned wage practices in October of that year.

The 1949 survey was conducted as a pilot study and embraced wage and related practices as they applied to nineteen occupations in twenty-eight establishments. Although it was undertaken as a pilot study, it dealt with the same information as does the present survey. The present study also employed the same basic techniques for obtaining, processing, and presenting the information, with only minor refinements. It differs from the earlier one primarily in that it deals with a larger number of occupations and embraces a larger number of establishments. With the exception of those few occupations for which the sample in either survey is too small, the results of the two studies are fairly comparable and may be used to appraise the differences in the general level of wage rates as between the two periods.

Business in general has found this type of information to be useful with reference to hiring, wage administration, industrial relations, and personnel practices. For those seeking a better understanding of the economy of the area such data are indispensable. Trade associations, civic groups, and many others have frequent need for such information. This report is designed to meet some of the needs of these various groups.

SCOPE AND METHOD OF THE STUDY

This study deals specifically with wage rates, hours of work, overtime pay, and weekly earnings of workers in twenty-eight recognized occupations in Albuquerque. Two broad groups of occupations were covered: fifteen were in the general category of craft and manual jobs; thirteen were grouped together as clerical and related occupations. It is also concerned with the fringe benefits of paid leave, group insurance and retirement benefits offered by the employing establishments. The data for wages and related facts upon which the study is based were obtained from interviews with thirty-five cooperating employers who employ a total of approximately 7,900 people. The wage and hour information for 1,079 of these workers upon which this study is based was for the most part derived directly from the employers' payroll records.

While the scope of the study is frankly limited, it is felt that it affords a representative picture of wages and hours in the Albuquerque area from which reasonable conclusions may be drawn concerning the wage structure of the area. The firms who participated represented a cross-section of the varied business activities of the city. They ranged in

size from an establishment employing as few as six persons to one employing as many as one thousand.

Although the occupations selected for inclusion are not numerically as representative of all occupations as the sample of firms is representative of all businesses, it is felt that the wage and hour information for these jobs is well representative of Albuquerque's wage structure. The occupations which were included were selected upon the basis of preliminary job population information obtained from local organizations and the Employment Security Commission of New Mexico.

Job descriptions for the several occupations were developed after consultation with experienced local personnel and wage administration practitioners who were familiar with conditions in the area. With the exception of the occupations which were added for this survey, the job descriptions are virtually the same as those used in 1949. Some of these descriptions are rather broad in recognition of the peculiarities of local employment conditions and practices. Full cognizance was given to the fact that in this area the number of highly specialized jobs is limited and that most of them require the performance of many related tasks, although the specific nature of the related tasks vary from job to job. Since the duties of most of the jobs falling within the same job description could be performed satisfactorily by people in other jobs of the same general designation, narrowly defined job classifications would have resulted in a sample of wage rates for each which would have been too small to be representative.

On the basis of the results obtained in both the 1949 and 1951 surveys, and the comments of those who provided the wage information for the jobs as described, the job descriptions used in the survey quite satisfactorily served their purpose of grouping together workers with closely similar duties and responsibilities.

The distribution of the cooperating establishments among the different types of business activity and the number of workers in each occupation covered by the survey appear in Table I. Although the participating concerns were not evenly distributed among the several types of business, the distribution as shown in the table was necessary to obtain a sufficient number of wage quotations for each occupation selected for the study. This consideration was felt to be more important than the number of establishments representative of each category of business.

The detailed job descriptions and the individual wage rates paid in each occupation appear in the tables of the Appendix. See pages 33 through 62.

STATISTICAL PROCEDURES AND TERMINOLOGY EMPLOYED IN THIS STUDY

Not all employers interviewed kept wage records on a comparable time basis. It was necessary, therefore, to adopt a uniform basis for all wages and earnings and to adjust some reports to secure maximum comparability. The week was adopted as the standard basis of comparison and all rates were adjusted to this basis. For example, a wage reported to have been paid by a firm whose pay roll was on a semi-monthly basis

was multiplied by 24 (the number of pay periods in a year) to secure an annual wage. The annual wage was then divided by 52 (the number of weeks in a year) to obtain the weekly wage. If the pay period reported was a month, then the same procedure was employed except that the multiplier used was 12 instead of 24. In this manner, all wage reports were converted to a weekly basis.

To secure hourly wage rates on a comparable basis for all workers, converted weekly wages were divided by the number of hours in the normal work week for the individual employee (computed in the same fashion as described above).

Two types of averages are employed in the study of average wage rates, hours of employment, and earnings. The median has been used to express the average of hourly wage rates prevailing in particular job classifications. A median may be defined as that point which divides an array of items into two equal parts. Thus, a person drawing the median wage rate receives a rate that is higher than the rates received by exactly half of all others doing the same work, and lower than the rates received by the other half. The rate received by the "middle" person is frequently more representative of the general level of wages in an occupation than is the arithmetic average of the rates, since the latter may be unduly influenced by rates which are either unusually high or unusually low and are received by an unrepresentative few. This may be particularly true where occupational classifications are broad as in this study.

TABLE I

EMPLOYEES CLASSIFIED BY OCCUPATION AND INDUSTRY

Occupation	Autos, Trucks, and Machinery Sales & Service	Construction	Finance, Insurance, and Real Estate	Food and Kindred Products	Hotels and Restaurants
1 Carpenter, Journeyman		38			1
2 Carpenter's Helper		45			
3 Electrician, Journeyman		5			
4 Electrician's Helper		4			
5 Janitor	8	1	2	5	11
6 Laborer, Warehouseman	4	10		12	
7 Machinist, First Class	2				
8 Painter, Journeyman	4			1	
9 Painter's Helper	2			2	
10 Plumber, Journeyman		3			
11 Plumber's Helper		3			
12 Sheetmetal Worker	8				
13 Truck Driver, Heavy		25			
14 Truck Driver, Light	6	7		7	
15 Welder	4	3			
16 Accountant	3	4		2	2
17 Auditor			1		1
18 Bookkeeper	5	4	9	5	2
19 Clerk, File	1	1	5		
20 Clerk, Invoice (or Voucher)	8	1			
21 Clerk, Junior	13				2
22 Clerk, Payroll	3	2	1		1
23 Clerk, Shipping and Receiving	10	1		1	1
24 Clerk, Statistical			2		
25 Clerk, Typist	3	4	16	2	1
26 Hostess					6
27 Messenger			2		
28 Stenographer-Secretary	6	—	12	1	1
Total Number of Employees	90	161	50	38	29
Number of Establishments	4	6	3	4	3

* During the survey period one retail establishment employed sixty carpenters in an extensive building and remodeling program.

TABLE I (Continued)

Manufacturing	Public Utilities	Retail, General Merchandise	Trucking and Warehousing	Wholesalers	Other	Total	
		61*			9	109	1
		30			9	84	2
	44				8	57	3
	42				6	52	4
3	10	8			68	116	5
2		7	21	10	36	102	6
4					3	9	7
					7	12	8
						4	9
					9	12	10
						3	11
					14	22	12
1				5	6	37	13
6	12	6		4	14	62	14
13					5	25	15
2	1	1		2	2	19	16
1					8	11	17
2	1	1	3		2	34	18
1		4		1	15	28	19
1		3		5	8	26	20
		9	1		11	36	21
	2				6	15	22
4		10	2	2	1	32	23
					7	9	24
					29	55	25
						6	26
	3				5	10	27
2	6	2	1	3	56	90	28
42	121	142	28	32	344	1077	
4	2	2	2	3	2	35	

While an average wage is significant as being representative of all the wages sampled, its representativeness is qualified considerably by the extent to which wages paid for the same job spread out on either side of the average. The greater the spread on either side of the average, the less typical the average is of all the wages paid. The interquartile range is a measure of this spread from the median. With the median as the central point, the interquartile range describes the extent to which the middle 50 per cent of the wages received spread out on either side of the median. If the wages paid to the middle 50 per cent of the workers do not differ greatly from those of the median wage worker, the median may be regarded as very typical of the entire range of wages paid.

The second form of average employed is the everyday arithmetic average. It is merely the sum of a series of values divided by the number of values. Technically it is referred to as a mean.

In this study the term normal hourly wage rate is used to mean the straight-time rate and is computed by dividing the weekly wage received (before extra compensation for overtime, etc.) by the number of hours normally worked. It is based on the reports received for every individual doing a given job. Similarly the normal work week is that period of time which an individual normally or typically works during a week. Some individuals may usually work forty hours a week, others forty-four and one-half hours a week, or some other number of hours. The mean normal work week, therefore, is the average number of hours worked by all employees who were reported as being in each job category.

The mean overtime hours figure is an average of the hours reported to have been worked beyond the normal work period. It is not an average based on reports of all employees in each job classification, but only on reports of those employees in each job classification who actually worked overtime during the period studied. The total wages received for work other than at the normal hourly rates divided by the number of overtime hours results in the overtime rate. The mean overtime rate is an average of all overtime rates computed, and is based only on the reports concerning employees who actually did overtime work.

The mean total work week is the figure which expresses the average amount of time worked during the survey week by workers in the occupation. It is secured by taking the total number of hours worked, both normal and overtime, by all workers in the occupation and dividing by the total number of workers in the occupation.

A worker's weekly earnings are determined, of course, by the amount of time worked and the wage rate or rates at which he is paid. The mean total weekly earnings (or wage) were calculated by dividing the total earnings during the survey week of all the workers in the occupation by the number of individuals. It may be thought of as the per worker earnings for the survey week.

When the total of all wages received by an individual in the work week is divided by the total number of hours worked in that week, a total rate is obtained. The mean total rate is merely an average of the individual total rates. It cannot be secured by dividing the mean total work week for the occupation into the mean total weekly wage received by those in the occupation.

TABLE II

NORMAL HOURLY WAGES IN SELECTED OCCUPATIONS⁽¹⁾
 Albuquerque, New Mexico - November 1951

	Total Range of Rates					Relative Disper- sion (Per Cent) (3)
	Lowest	Interquartile Range (2)			Highest	
		Low	Median	High		
Carpenter, Journeyman	\$1.110	\$2.215	\$2.225	\$2.225	\$2.750	*
Electrician, Journeyman	2.020	2.080	2.080	2.080	2.610	0
Sheetmetal Worker	1.940	2.060	2.060	2.250	2.370	9
Plumber, Journeyman	1.940	1.940	1.940	2.500	2.500	29
Painter, Journeyman	1.380	1.910	1.910	2.050	2.150	7
Machinist, First Class	1.580	1.675	1.750	2.070	2.070	23
Carpenter's Helper	1.350	1.350	1.750	1.750	2.215	23
Welder	1.480	1.490	1.650	2.040	2.110	33
Truck Driver, Light	.940	1.250	1.550	1.630	1.680	25
Truck Driver, Heavy	1.200	1.430	1.430	1.560	1.850	9
Electrician's Helper	1.000	1.188	1.420	1.420	1.960	16
Plumber's Helper	1.250	**	1.350	**	1.500	**
Painter's Helper	.980	**	1.300	**	1.350	**
Laborer, Warehouseman	.750	1.050	1.185	1.390	1.813	29
Janitor	.580	.931	1.090	1.090	1.420	15
Accountant	1.540	1.920	2.150	2.450	3.410	25
Auditor	1.430	1.560	1.680	1.870	2.250	18
Stenographer-Secretary	1.080	1.360	1.670	1.670	2.030	19
Clerk, Payroll	1.190	1.375	1.580	1.580	1.810	13
Bookkeeper	.880	1.190	1.380	1.635	1.990	32
Clerk, Statistical	1.260	1.260	1.370	1.620	1.875	26
Clerk, Invoice	.850	1.065	1.335	1.350	2.140	21
Clerk, File	.680	.862	1.240	1.240	1.400	30
Clerk, Typist	.810	1.020	1.130	1.130	1.420	10
Clerk, Shipping & Receiving	.750	.996	1.100	1.378	1.980	35
Clerk, Junior	.710	.825	1.035	1.120	1.250	29
Hostess	.720	**	1.020	**	1.080	**
Messenger	.840	.867	.965	1.030	1.030	17

(1) Normal hourly wages designate the hourly rates for work done in the normal work week at straight-time rates, i.e., excluding overtime or other premiums.

(2) Includes middle 50 per cent of workers.

(3) High - Low ÷ Median

* Less than 1 per cent.

** Insufficient number in sample to justify use of interquartile.

WAGES AND HOURS IN NOVEMBER 1951

The survey dealt with two types of wage rates--those paid to workers for normal and regularly scheduled hours of work and those paid for overtime work. The Appendix to this study contains a table for each occupation which shows the complete array of the normal rates paid in the occupation, and the number of individuals who were paid at each rate, together with a summary of the data for hours, overtime pay, and earnings.

Normal Wages and Hours

The median normal wage rates for the occupations studied appear in the center column of Table II arranged in order from the highest to the lowest paid occupation and according to the two broad classifications of craft and manual workers and clerical and related jobs. The median rates ranged from a low of \$0.985 per hour for messengers to a high of \$2.225 for journeyman carpenters. The median of these rates, or the rate which divided the lower half of the rates from the upper half, was \$1.425. The survey showed that among the occupations included, those persons in the craft and manual classifications received higher rates of pay on the average than those in the clerical and related jobs.. Ten of the fifteen craft and manual occupations received average rates above the middle rate of \$1.425; nine of the thirteen clerical and related occupations received average rates below it.

At the same time it should be noted that in both of these broad groups there were occupations among both the highest and the lowest paid. The median rate paid to accountants ranked second only to that

paid journeyman carpenters who were at the top of the list; janitors received as an average only slightly more than the lowest paid occupation. Moreover, the highest individual rate was received by an accountant while the lowest was received by a janitor.

The median, or middle, rate for each of the occupations is used to represent all the rates received in that occupation. Actually, of course, the rates received by many individuals in the respective jobs differed considerably from the median. The extent to which the rates in given occupations spread out either way from the median rate is shown also in Table II, and in some instances this range was very large: \$1.87 for accountants, \$1.64 for journeyman carpenters, \$1.29 for invoice clerks, and \$1.23 for shipping and receiving clerks.

In general it may be said that the greater the spread around the median, the less representative is the median. Since both the highest and the lowest rates may be very unusual or may appear as the result of misclassification of individual workers, a more significant measure of the representativeness of the median is the spread, or dispersion, of the middle one-half of the wage rates around the median. This is called the interquartile range, and in order to make this interquartile spread comparable from one occupation to another, it may be expressed as a percentage of the median. This percentage spread around the median may be referred to simply as the dispersion, and is used to express the faithfulness with which the median represents all the rates paid in a given occupation.

Applying this measure to the spread of wage rates received in the various occupations, it appears that in all except a few instances the median rates were well representative of the normal wage rates prevailing in those jobs during the survey week. In those occupations for which the dispersion was particularly great (above 25 per cent) it appears either that the job description was too broad and included jobs which were essentially different in their requirements or that there was a great range of job requirements and abilities within the same occupation.

The average normal work week reported for most occupations covered by this study did not show much variation (see Table III). In nine of the twenty-eight occupations it was 40 hours; in ten of them it ranged between $40\frac{1}{2}$ to $41\frac{3}{4}$ hours; in eight, it ranged from 42 to $43\frac{3}{4}$; and hostesses worked a normal week of 48 hours.

Overtime Wages and Hours

In more than two-thirds of the occupations some of the workers put in overtime hours during the survey week for which most of them received pay at rates above their normal rates. See Table III for average overtime hours and rates of pay. In only one instance was the average overtime rate in an occupation less than the average normal rate. This resulted from the fact that most of the overtime was paid to workers whose normal rates were considerably under the average normal rate for their group. The average amount of overtime worked (computed only on those who worked any overtime) ranged from three hours for messenger and file clerks to nine hours for painter's helpers.

TABLE III

AVERAGE WAGES AND HOURS IN SELECTED OCCUPATIONS
Albuquerque, New Mexico - November 1951

Occupation	Normal Work		Overtime (1)		Total (2)	
	Median Hourly Rate	Mean Work Week (Hours)	Mean Rate	Mean Hours Worked	Mean Work Week (Hours)	Mean Weekly Earnings
Carpenter, Journeyman	\$2.225	40	\$2.230	5 3/4	40 1/2	\$89.11
Electrician, Journeyman	2.080	40	*	*	40	84.72
Sheetmetal Worker	2.060	42	*	*	42	88.23
Plumber, Journeyman	1.940	40	*	*	40	83.20
Painter, Journeyman	1.910	42 1/2	*	*	42 1/2	82.41
Machinist, First Class	1.750	42 3/4	2.569	5 3/4	41 1/2	68.13
Carpenter's Helper	1.750	40	*	*	35 1/2	58.87
Welder	1.650	42	2.578	5 3/4	41 1/2	75.49
Truck Driver, Light	1.550	41	1.830	5	42 1/2	61.40
Truck Driver, Heavy	1.430	43 3/4	2.339	4	46 1/2	72.57
Electrician's Helper	1.420	40	*	*	40	55.61
Plumber's Helper	1.350	40	*	*	40	54.67
Painter's Helper	1.300	40	1.350	9	40	48.73
Laborer, Warehouseman	1.185	41 1/2	1.574	4	41	49.46
Janitor	1.090	41	1.223	7 3/4	41 3/4	42.52
Accountant	2.150	41 1/2	2.711	5 3/4	42 1/2	95.66
Auditor	1.680	41 1/2	2.685	5 3/4	42	74.69
Stenographer-Secretary	1.670	40 1/2	1.859	3 3/4	40 1/2	62.81
Clerk, Payroll	1.560	41 3/4	2.052	7	41 3/4	63.75
Bookkeeper	1.380	42	1.859	5	42 3/4	60.96
Clerk, Statistical	1.370	41 1/4	*	*	41 1/4	60.23
Clerk, Invoice	1.335	40	1.790	5 3/4	43 3/4	57.94
Clerk, File	1.240	40 3/4	1.140	3	41	44.82
Clerk, Typist	1.130	40 3/4	1.444	4 1/2	41	45.03
Clerk, Shipping & Receiving	1.100	43 1/2	1.591	5 1/4	44 3/4	55.91
Clerk, Junior	1.035	42 1/4	1.211	4 1/2	42 1/2	42.72
Hostess	1.020	48	*	*	48	47.42
Messenger	.985	40	1.345	3	40 1/4	38.66

(1) Average for those who actually worked overtime.

(2) Average for all workers in the occupation.

* No overtime reported.

The differences among occupations in the average rates paid for overtime was even greater than in the average normal rates. The lowest average overtime rate was reported for file clerks and was below their average normal rate. Accountants had the highest average overtime rate. The ranking of the occupations with respect to overtime rates was quite different from that with respect to normal rates. Journeyman carpenters, who received the highest average normal wage rates, ranked below five other occupations in their average overtime rate. Although the lowest average normal rates were paid to messengers, their average overtime rate was greater than those for three other job classifications. Since earnings are a function of both the number of hours worked and the rates paid, the great variation in the amount of overtime and the rates paid for it had a considerable influence on the weekly earnings in various occupations.

Weekly Earnings

Averages of the total number of hours worked and the total weekly earnings received for that work by each occupation during the survey week are shown in the last two columns of Table III. As could be expected, the range of average earnings from the lowest to the highest was very great. It was greater than for either normal or overtime rates. Both the highest and the lowest rates appeared in the clerical and related occupations; the average of \$95.66 for accountants was nearly two and one-half times the average of \$38.66 for messengers. Even though the earnings of clerical and office workers were raised by

the fact that generally speaking they worked more hours than craft and manual workers, the earnings in the craft and manual job classifications were higher on the average than in the clerical and related jobs.

The Wage Structure

Although the survey was confined to twenty-eight occupations found in thirty-five establishments, the data reflect evidence of being representative of the wage structure in Albuquerque during the latter part of 1951. In the first place, the survey obtained a wide range of wage rates, indicating a fairly good coverage of at least two general groups of occupations. In the second place, the wage rates in most instances showed a good cluster around the median rate, attesting to their representative character. In addition, the wide range of both rates and earnings and the gradual gradation from the lowest to the highest indicate that they represent a good cross section of the wage workers in Albuquerque.

The differences and their gradations are significant also in that they afford a rough measure of the differences in the requirements of various occupations, the worth placed on the jobs by the employers, and the relative demand for, and supply of, workers in the several occupations. Although the occupations were grouped into two broad categories, there are considerable differences in the requirements demanded of workers from one occupation to another and from one particular job to another. Accountants and auditors may be classed as professional workers who must have considerably more

education and training than most of the others in the office group. Messengers, on the other hand, need have little training before entering upon the job. Journeyman craftsmen have to exercise great skill and knowledge of their trade which can be acquired only after considerable experience. The same degree of skill is not required of janitors and laborer-warehousemen. Consequently, the ranking within the two broad occupational groups, as well as the ranking overall, is an index of the relative position in the labor market of the various occupations.

The wide range of the rates within occupations is also useful information. In a general way it measures the competition among workers fitting the same general job description. The larger the deviation of wage rates from the median rate, the less the competition between members of the same group because of such barriers to transferring from job to job as substantial differences in the requirements of different jobs, inability to meet the requirements of higher paying positions, disinclination to transfer, union restrictions, lack of initiative, and insufficient knowledge of opportunities for higher pay. Substantial differences in the rates of pay for jobs meeting the same specifications may result from improperly drawn job descriptions; the job descriptions may cover too many duties or be worded ambiguously. Substantial variation in rates may reflect overcrowding in the occupation, so that keen competition results in the most competent workers holding the best paying jobs.

Fringe Benefits

Whether or not fringe benefits are regarded as part of the pay of workers, they are made available for much the same purpose that wages are paid--to induce people to work at a particular job. They are, therefore, related to the matter of wages. The fringe benefits studied in this survey were limited to paid holidays, paid vacation, group life insurance and hospitalization plans, and retirement plans. To simplify the collection of information as much as possible, data concerning fringe benefits were gathered and tabulated with respect to company practices rather than for individual workers or occupations. Because fringe benefits frequently differ as between hourly, weekly, or monthly rated employees, the data were classified on this basis.

The information concerning the practices of the participating companies with reference to paid holidays is summarized in Table IV. The paid holidays most frequently observed were New Years, Decoration, Independence, Labor, Thanksgiving, and Christmas. All but three of the companies observed some paid holidays for clerical and related workers. Workers in the craft and manual jobs did not fare as well as those in the office jobs. The fact that office workers generally fared better in the matter of paid holidays partially offset their generally lower rate of pay. Only one-half of the reporting companies gave paid holidays to these workers.

A rather detailed summary of the practices with reference to paid vacations appears in Table V. As a generalization it appears that the majority of establishments grant paid vacations to workers

TABLE IV
 NUMBER OF ESTABLISHMENTS OBSERVING PAID HOLIDAYS
 Albuquerque, New Mexico - November 1951

Holiday	Clerical and Related Occupations			Craft and Manual Occupations		
	Hourly Workers	Weekly Workers	Monthly Workers	Hourly Workers	Weekly Workers	Monthly Workers
January 1	7	8	20	9	5	6
February 12	---	---	1	---	---	1
February 22	1	1	8	1	1	2
May 30	8	6	20	10	4	6
July 4	10	7	20	12	5	6
Labor Day	8	8	20	11	6	6
October 12	---	---	1	---	---	1
November 11	1	1	4	1	1	1
Thanksgiving	9	7	20	11	6	6
December 25	9	8	20	11	6	7
No paid holidays	3	---	3	13	---	5
Number of establish- ments employing each type of worker	13	8	24	26	6	12

TABLE V

NUMBER OF ESTABLISHMENTS REPORTING ANNUAL PAID VACATION PLAN
Albuquerque, New Mexico - November 1951

Type of Vacation Plan	For Clerical and Related Occupations			For Craft and Manual Workers		
	Hourly Workers	Weekly Workers	Monthly Workers	Hourly Workers	Weekly Workers	Monthly Workers
One day for each 54 days worked	---	---	---	1	---	---
One and one-half days per month worked	---	---	1	---	---	1
Two days per month worked	1	1	1	1	---	---
One week after one year	---	---	---	3	1	---
One week after one year and two weeks after two years	1	1	8	3	1	3
One week after one year and two weeks after three years	---	---	---	1	---	---
One week after one year and two weeks after four years	---	---	1	1	---	---
One week after one year and two weeks after five years	1	---	1	2	---	1
Two weeks after one year	9	3	10	4	1	3
No paid vacation	1	3	2	10	3	4
Number of establishments employing each type of worker	13	8	24	26	6	12

whether they are paid on an hourly, a weekly, or a monthly basis; that more workers on a monthly pay basis get paid vacations; and that more concerns give paid vacations to clerical and office workers than to their craft and manual workers. Again it appears that the lower wage rates of the office workers are offset to some extent by somewhat better treatment in the matter of paid vacations. The most frequent arrangements for paid leave were (1) one week after two year's service and two weeks after two years and (2) two weeks after one year's service, with that latter somewhat more frequent.

Table VI shows that of the 35 companies reporting: 20 had a group life insurance plan in which the company paid part or all of the premiums; 23 had a group hospitalization plan, but in 9 of these plans the company did not help in the payment of premiums; and 6 had a retirement plan (other than the Federal Old Age and Survivors Insurance) in which the company paid all or part of the cost.

COMPARISON OF 1949 AND 1951 SURVEYS

Among the purposes of the Bureau of Business Research in undertaking the survey was the desire to provide information which would make possible comparisons with the information obtained in 1949. There were, however, certain differences in timing and coverage of the present survey which should be understood in appraising the difference in wage rates, hours worked, and weekly earnings.

TABLE VI

NUMBER OF ESTABLISHMENTS REPORTING GROUP LIFE INSURANCE,
HOSPITALIZATION PLAN, AND RETIREMENT PLAN FOR EMPLOYEESAlbuquerque, New Mexico
November 1951

Company Participation	Group Life Insurance Plan	Hospitalization Plan	Retirement Plan
Companies with a plan	20	23	6
Company pays all cost	8	5	1
Company pays part of cost	12	14	5
Company pays nothing	---	9	---
Companies with no plan	15	7	29
Total number of establishments reporting	35	35	35

Owing to circumstances beyond control of the Bureau, the 1951 survey obtained data for the November pay period instead of the October one. Although it would be more desirable to have both sets of data for the same period in the year, it is felt that this difference in timing had no appreciable effect upon the comparability of the wages and earning data.

Differences in coverage probably had more effect on the comparability of results. The increased number of establishments participating in the survey in 1951 afforded a better cross section of business in Albuquerque. More types of business were represented, and there was not so much emphasis on the building trades in the 1951 survey. The addition of nine more occupations, all in the clerical and office group, also served to decrease the relative emphasis on the building trades and at the same time gave a better cross section of wage occupations.

The number of workers in each occupation for whom information was obtained in each of the two surveys appears in the first two columns of Table VII. The relative dispersion of each sample is also shown. The sample for two occupations (machinists and plumber's helpers) was not as good as for the 1949 survey because the number of useable returns was too small to insure the representativeness of the data. In some occupations (particularly electrician's helpers and sheetmetal workers) the sample was considerably improved.

On neither survey did there appear to be much relationship between the size of the sample and the relative dispersion. Nor can it be said

TABLE VII

COMPARISON OF NUMBER OF WORKERS
AND DISPERSION OF NORMAL HOURLY WAGE RATES
IN THE SAMPLE OF SELECTED OCCUPATIONS

Albuquerque, New Mexico
October 1949 and November 1951

Occupation	Number of Workers		Relative Dispersion(1) (Per Cent)	
	1949	1951	1949	1951
Carpenter, Journeyman	126	109	0	x
Carpenter's Helper	26	34	24	23
Electrician, Journeyman	40	57	29	0
Electrician's Helper	10	52	8	16
Janitor	91	116	18	15
Laborer, Warehouseman	141	102	29	29
Machinist, First Class	30	9	13	23
Painter, Journeyman	24	13	32	7
Painter's Helper	3	4	*	*
Plumber, Journeyman	24	12	0	29
Plumber's Helper	13	3	32	*
Sheetmetal Worker	5	22	*	9
Truck Driver, Heavy	23	37	32	9
Truck Driver, Light	30	62	21	25
Welder	53	27	11	33
Accountant	**	19	**	25
Auditor	**	11	**	18
Bookkeeper	57	35	18	32
Clerk, File	**	28	**	30
Clerk, Invoice	**	26	**	21
Clerk, Junior	**	36	**	29
Clerk, Payroll	**	15	**	13
Clerk, Shipping & Receiving	45	32	20	35
Clerk, Statistical	**	9	**	26
Clerk, Typist	193	55	33	10
Hostess	**	6	**	*
Messenger	**	10	**	17
Stenographer-Secretary	172	90	27	19

(1) $Q_3 - Q_1 \div \text{Median}$

x Less than 1 per cent

* Insufficient number in sample to justify use of interquartile

** Occupation not included in 1949 survey

that either the larger or the smaller samples obtained for the 1951 survey consistently showed either more or less dispersion than those for the 1949 sample. In two instances a larger sample produced a better cluster around the median; in three instances it produced a greater spread. In three instances a smaller sample (than obtained in 1949) produced a better cluster around the median; in five it resulted in a wider spread. In two instances a smaller sample of rates resulted in no change in the dispersion. Both of these were large samples even in the 1951 survey. Overall, the median rates for the 1951 survey appeared only slightly more representative than those for the previous one.

Although the sample for machinists, journeyman painters, journeyman plumbers, and plumber's helpers was not as good as for the 1949 survey (painter's helper was inadequate for both surveys), the overall sample of establishments and occupations was considerably better for the 1951 survey. It appears justifiable, consequently, to claim greater validity for the 1951 survey as a representative picture of the Albuquerque wage structure. In making comparisons of individual rates between the two surveys, however, readers should be cautioned that the comparability of the data are definitely affected by differences in the number and character of participating establishments. The following comparisons are based on the findings of the two surveys. It is believed that they reveal the general character of the changes that have taken place since 1949, but they may not measure the exact amount of such changes.

Because the data concerning fringe benefits were related to concerns (rather than to workers) and because the individual participating concerns and the number in the sample differed considerably from the previous survey, there is no attempt made in this study to compare the results with reference to fringe benefits.

Wage Rates

The comparison of normal wage rates shown by the two surveys appears in Table VIII. That wage rates generally advanced between 1949 and 1951 was widely recognized prior to the survey and was confirmed by it. The extent of the advance, however, varied widely from occupation to occupation. The median rate for light truck drivers showed an increase of nearly 45 per cent. The averages of the rates reported for machinists and journeyman plumbers, on the other hand, were 12.1 per cent and 13.5 per cent below their 1949 averages. The average of the rates reported for sheetmetal workers and shipping and receiving clerks were also lower than in 1949.

Since the decrease in the wage rates of these four occupations runs contrary to the general assumption that all rates have increased, some explanation seems necessary. Possibly the explanation lies in the fact that in all four cases the size of the sample was greatly different for the two surveys. With respect to the median rate for machinists (and possibly also for journeyman plumbers) the number of rates reported was too small to justify a firm conclusion. In the

TABLE VIII

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COMPARISON OF NORMAL HOURLY WAGE RATES IN SELECTED OCCUPATIONS

Albuquerque, New Mexico
October 1949 and November 1951

Occupation	Lowest and Highest Normal Rates		Median Normal Rates		
			1949	1951	Percent Change '49-'51
	1949	1951			
	Low High	Low High			
Carpenter, Journeyman	\$1.154-2.600	\$1.110-2.750	\$2.000	\$2.225	11.2
Carpenter's Helper	.866- 1.750	1.350- 2.215	1.375	1.750	27.3
Electrician, Journeyman	1.529- 2.500	2.020- 2.610	1.933	2.000	7.6
Electrician's Helper	.750- 1.500	1.000- 1.960	1.260	1.420	4.4
Janitor	.500- 1.333	.500- 1.420	.600	1.090	23.9
Laborer, Warehouseman	.750- 1.750	.750- 1.813	1.000	1.185	18.5
Machinist, First Class	1.250- 2.130	1.500- 2.070	1.990	1.750	-12.1
Painter, Journeyman	.950- 1.875	1.380- 2.150	1.460	1.910	30.8
Painter's Helper	1.000- 1.125	.980- 1.350	1.000	1.300	30.0
Plumber, Journeyman	1.154- 2.250	1.940- 2.500	2.250	1.940	-13.8
Plumber's Helper	.866- 2.250	1.250- 1.500	1.350	1.350	0.0
Sheetmetal Worker	1.960- 2.500	1.940- 2.370	2.250	2.060	- 8.4
Truck Driver, Heavy	.800- 1.570	1.200- 1.850	1.340	1.430	6.7
Truck Driver, Light	.797- 1.475	.940- 1.680	1.070	1.550	44.9
Welder	1.250- 2.500	1.480- 2.110	1.420	1.650	16.2
Accountant	*	1.540- 3.410	*	2.150	*
Auditor	*	1.430- 2.250	*	1.680	*
Bookkeeper	.721- 1.836	.880- 1.990	1.125	1.380	22.7
Clerk, File	**	.680- 1.400	**	1.240	**
Clerk, Invoice	*	.850- 2.140	*	1.335	*
Clerk, Junior	**	.710- 1.250	**	1.035	**
Clerk, Payroll	*	1.190- 1.810	*	1.580	*
Clerk, Shipping & Receiving	.824- 1.442	.750- 1.980	1.190	1.100	- 7.6
Clerk, Statistical	*	1.260- 1.875	*	1.370	*
Clerk, Typist	.500- 1.875	.810- 1.420	.976	1.130	15.8
Hostess	*	.720- 1.080	*	1.020	*
Messenger	*	.840- 1.030	*	.985	*
Stenographer-Secretary	.710- 1.590	1.080- 2.030	1.190	1.670	40.3

* This occupation not included in the 1949 survey.

** This occupation not included in the 1949 survey but a number of workers in the occupation were reported with clerk-typists.

case of sheetmetal workers and shipping and receiving clerks, the sample for the 1951 survey was large enough to justify the conclusion that those working in these occupations were not being paid at rates as high as those paid (perhaps to different workers) in 1949. This does not necessarily mean that individuals working on the same job in 1951 as in 1949 have actually suffered cuts in wage rates.

The median of the percentage changes in average rates paid to the various occupations may be taken as the most representative measure of the average increase in wage rates. The median is used in order to rule out the abnormal influence of the decreases and the unusually large increases. The median increase was the 15.8 per cent increase for the clerk-typist classification. On this basis of measurement, the survey shows that the average increase in hourly rates from October 1949 to November 1951 was around 16 per cent.

The 1951 survey produced some evidence of a narrowing of the range of rates paid. In eleven of the nineteen occupations covered on both surveys the range had narrowed, in some instances appreciably so. For six jobs, however, the range between the bottom and top rates had widened. In seven instances the narrowing of the range was the result of lower rates at the top. To some extent the narrowing of the range in rates was the result of more careful classification of workers, and (in the case of clerk-typists) the narrowing of the job description and the establishment of separate job descriptions for several clerical jobs whose workers were reported with clerk-typists in the earlier survey.

Hours Worked

Although the normal work week for most occupations remained unchanged from that prevailing in October 1949, the average number of hours worked in the survey week was generally lower in November 1951 as the result of less overtime being worked in several occupations. Comparisons of the average length of the work week appear in Table IX. In nine of the occupations the average length of the work week had been reduced in amounts ranging from five hours to one-quarter of an hour. In five occupations, on the other hand, the number of hours in the work week was greater. The median change in the total hours worked in the nineteen occupations covered by both surveys, showed a decrease of almost 2 per cent from 1949 to 1951.

Average Weekly Earnings

A comparison of average weekly earnings shown by the two surveys also appears in Table IX, together with the calculated percentage of change. The figures show that the variations of the changes in weekly earnings were almost as great as those in hourly rates, but because of the differences in the amount of time worked by various occupations, these changes do not follow the same pattern as those for hourly rates. Lower weekly earnings were reported for six occupations, whereas lower hourly rates were reported for only four. In only three instances did the lower weekly earnings correspond with lower hourly rates. Of the other three, only one was accounted for by fewer hours worked. In the remaining two occupations, fewer workers were employed at the top rates.

TABLE IX

COMPARISON OF HOURS AND EARNINGS IN SELECTED OCCUPATIONS

Albuquerque, New Mexico
October 1949 and November 1951

Occupation	Mean Total Work Week		Mean Total Weekly Wage		Per Cent Change 1949 to 1951
	1949	1951	1949	1951	
Carpenter, Journeyman	39	40 $\frac{1}{2}$	77.19	89.11	15.4
Carpenter's Helper	40 $\frac{1}{2}$	35 $\frac{1}{2}$	57.38	58.87	2.6
Electrician, Journeyman	45	40	114.38	84.72	-25.9
Electrician's Helper	40	40	53.32	55.61	4.3
Janitor	39	41 $\frac{3}{4}$	34.84	42.52	22.0
Laborer, Warehouseman	42 $\frac{3}{4}$	41	45.89	49.46	7.8
Machinist, First Class	42	41 $\frac{1}{2}$	77.24	68.13	-11.8
Painter, Journeyman	42	42 $\frac{1}{2}$	64.86	82.41	27.1
Painter's Helper	40	40	48.83	48.73	- 0.2
Plumber, Journeyman	40	40	85.82	82.41	- 4.0
Plumber's Helper	40	40	57.71	54.67	- 5.3
Sheetmetal Worker	41 $\frac{1}{2}$	42	91.41	88.23	- 3.5
Truck Driver, Heavy	49	46 $\frac{1}{2}$	67.85	72.57	7.0
Truck Driver, Light	45 $\frac{3}{4}$	42 $\frac{1}{2}$	52.82	61.40	16.2
Welder	44	41 $\frac{1}{2}$	72.96	75.49	3.5
Accountant	*	42 $\frac{1}{2}$	*	95.66	-----
Auditor	*	40	*	74.69	-----
Bookkeeper	43	42 $\frac{3}{4}$	50.79	60.96	20.0
Clerk, File	**	41	**	44.82	-----
Clerk, Invoice	*	43 $\frac{3}{4}$	*	57.94	-----
Clerk, Junior	**	42 $\frac{1}{2}$	**	42.72	-----
Clerk, Payroll	*	41 $\frac{3}{4}$	*	63.75	-----
Clerk, Shipping & Receiving	42 $\frac{1}{2}$	44 $\frac{3}{4}$	49.75	55.91	12.4
Clerk, Statistical	*	41 $\frac{1}{2}$	*	60.23	-----
Clerk, Typist	42 $\frac{1}{2}$	41	41.10	45.03	9.6
Hostess	*	48	*	47.42	-----
Messenger	*	40 $\frac{1}{2}$	*	38.66	-----
Stenographer-Secretary	40 $\frac{1}{2}$	40 $\frac{1}{2}$	48.26	62.81	30.1

* This occupation not included in the 1949 survey.

** This occupation not included in the 1949 survey but a number of workers in this occupation were reported with clerk-typists.

The reduction in the number of hours worked resulted in a reduction of average weekly earnings for journeyman electricians, despite the fact that their rate of pay was nearly 16 cents higher than in 1949. As a group, machinists also received smaller weekly pay than the machinists for whom earnings were reported in 1949, the result of both a lower rate and fewer hours worked. Smaller weekly earnings were also reported for journeyman plumbers and sheetmetal workers, largely because the workers in the sample of these two groups received lower rates of pay than those included in the 1949 survey. Despite the fact that the shipping and receiving clerks included in the 1951 survey received a lower average hourly rate, their weekly earnings were considerably larger than those of the 1949 group.

The median of the percentage changes was 7.0 per cent. The calculated mean was 6.7 per cent. It appears that weekly earnings were about 7 per cent larger in 1951 than in 1949.

APPENDIX

Detailed Wage and Hour Data
for Selected Occupations

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Plumber, Journeyman	44
Plumber's Helper	45
Sheetmetal Worker	46
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Truck Driver, Light	48
Welder	49

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Hostess	60
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OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CARPENTER, JOURNEYMAN

Median Normal Hourly Wage Rate \$ 2.225 **

Interquartile Range \$ 2.215 - \$ 2.225 *

Size of Sample: Number of establishments 6

Number of employees 109

Mean Normal Rate \$ 2.218

Mean Overtime Rate \$ 2.230

Mean Total Rate \$ 2.218

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 40 1/4

Mean Total Weekly Wage \$ 89.11

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$2.750	1
2.500	2
2.225	63 ** *
2.215	33 *
2.010	9
1.110	1

Job Description:

Performs all journeyman carpenter duties required in the repair and maintenance of shop and office buildings. Repairs and replaces window frames, sashes, worn or damaged flooring and steps. Removes partitions, builds new partitions, and constructs small frame structures. Estimates type and amount of materials required for performing the job. May supervise one or more helpers.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CARPENTER'S HELPER

Median Normal Hourly Wage Rate \$ 1.750 **

Interquartile Range \$ 1.350 - \$ 1.750 *

Size of Sample: Number of establishments 4

Number of employees 84

Mean Normal Rate \$ 1.635

Mean Overtime Rate None

Mean Total Rate \$ 1.635

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours None

Mean Total Work Week (Hrs) 35 1/2

Mean Total Weekly Wage \$ 58.87

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$2.215	11
2.000	1
1.750	32 ** *
1.450	9
1.400	2
1.350	29 *

Job Description:

Under supervision of journeyman carpenter, works with carpenters performing various helper duties such as carrying supplies to site of work, measuring and cutting lumber to lengths where rough cut is sufficient, nailing lumber into place where such nailing is a definite routine. Also performs any labor required by carpenters at work site such as digging and moving earth for footings, cleaning up work site, loading and disposing of salvage material.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: ELECTRICIAN, JOURNEYMAN

Median Normal Hourly Wage Rate \$ 2.080 **

Interquartile Range \$ 2.080 - \$2.080 *

Size of Sample: Number of establishments 3

Number of employees 57

Mean Normal Rate \$ 2.118

Mean Overtime Rate None

Mean Total Rate \$ 2.118

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours None

Mean Total Work Week (Hrs) 40

Mean Total Weekly Wage \$ 84.72

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.610	5
2.080	44 ** *
2.020	8

Job Description:

Performs duties of a journeyman electrician in the installation, repair and maintenance of electrical service lines (both primary and secondary), transformers, switches, panels, electrical appliances, instruments and motors. Works with 2300 volt primary service, 220 and 110 single and three phase secondary service, and 28 volt D. C. circuits, etc. Performs duties of electrician lineman when required. Estimates materials required for jobs, and may supervise one or more helpers.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: ELECTRICIAN'S HELPER

Median Normal Hourly Wage Rate \$ 1.420 **

Interquartile Range \$ 1.188 - \$ 1.420 *

Size of Sample: Number of establishments 4

Number of employees 52

Mean Normal Rate \$ 1.390

Mean Overtime Rate None

Mean Total Rate \$ 1.390

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours None

Mean Total Work Week (Hrs) 40

Mean Total Weekly Wage \$ 55.61

Normal Hourly Rate	
Rate	Number Receiving Each Rate
\$1.960	2
1.690	6
1.420	31 ** *
1.110	11
1.000	2

Job Description:

Under supervision of journeyman electrician, performs various helper duties such as carrying supplies to work site, measuring and cutting wire, setting poles, hoisting transformers up to crossarms or racks; acts as groundman for pole lineman; peels insulation from wire ends, lays out wire; fastens fixtures in place and replaces fuses and lamps; digs holes for poles, places line hardware on poles before same are raised and set; makes minor adjustments to and lubricates fans, heaters, and motors.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: JANITOR

Median Normal Hourly Wage Rate \$ 1.090 **

Interquartile Range \$.931 - \$ 1.090 *

Size of Sample: Number of establishments 21

Number of employees 116

Mean Normal Rate \$ 1.016

Mean Overtime Rate \$ 1.223

Mean Total Rate \$ 1.029

Mean Normal Work Week (Hrs) 41

Mean Overtime Hours 7 3/4

Mean Total Work Week (Hrs) 41 3/4

Mean Total Weekly Wage \$ 42.52

Job Description:

Performs common janitorial services which include cleaning windows, walls, furniture; sweeping, scrubbing, and waxing floors; emptying waste and refuse containers; cleaning lavatories, and policing grounds surrounding buildings.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.420	1
1.250	1
1.175	1
1.140	1
1.125	3
1.100	4
1.090	67 ** *
1.025	1
1.000	5
.995	1
.965	1
.950	1 *
.925	1
.900	3
.887	1
.850	5
.825	1
.815	1
.800	2
.790	1
.750	5
.725	8
.580	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: LABORER, WAREHOUSEMAN

Median Normal Hourly Wage Rate \$ 1.185 **

Interquartile Range \$ 1.050 - \$ 1.390 *

Size of Sample: Number of establishments 14

Number of employees 102

Mean Normal Rate \$ 1.192

Mean Overtime Rate \$ 1.574

Mean Total Rate \$ 1.214

Mean Normal Work Week (Hrs) 41 $\frac{1}{2}$

Mean Overtime Hours 4

Mean Total Work Week (Hrs) 41

Mean Total Weekly Wage \$ 49.46

Job Description:

Under general supervision of a warehouse foreman or "straw boss," performs unskilled labor duties such as loading, unloading, moving and storing of equipment, furniture and materials. May operate small trucks, trailers, and tier-lifts. May also pack and wrap merchandise.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.813	1
1.390	36 *
1.280	1
1.275	1
1.250	4
1.200	8
1.170	14 **
1.150	2
1.130	6
1.125	1
1.110	2
1.050	4 *
1.025	2
1.000	4
.950	2
.900	4
.850	5
.750	5

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: MACHINIST, 1st CLASS

Median Normal Hourly Wage Rate \$ 1.750

Interquartile Range \$ 1.675 - \$ 2.070

Size of Sample: Number of establishments 4

Number of employees 9

Mean Normal Rate \$ 1.832

Mean Overtime Rate \$ 2.569

Mean Total Rate \$ 1.909

Mean Normal Work Week (Hrs) 42 3/4

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 41 1/2

Mean Total Weekly Wage \$ 68.13

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$2.070	3 *
1.850	1
1.750	3 **
1.600	1
1.580	1

Job Description:

Produces simpler tools, instruments, dies and performs the more complicated general machine work (e.g. makes and presses bearings, builds heavy handling equipment, etc.). Machines parts from steel, aluminum, brass, copper, lead, graphite and plastics. Must be able to do lapping and perform bench work such as filing and fitting of assemblies and sub-assemblies. Operates all machine shop equipment such as lathes, drill presses, shapers, grinders, milling machines, jig borers, precision hand tools and such measuring equipment as verniers, calipers, micrometers, indicators and height gauges.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: PAINTER, JOURNEYMAN

Median Normal Hourly Wage Rate \$ 1.910 **

Interquartile Range \$ 1.910 - \$ 2.050 *

Size of Sample: Number of establishments 4

Number of employees 12

Mean Normal Rate \$ 1.929

Mean Overtime Rate None

Mean Total Rate \$ 1.929

Mean Normal Work Week (Hrs) 42½

Mean Overtime Hours None

Mean Total Work Week (Hrs) 42½

Mean Total Weekly Wage \$ 82.41

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.150	2
2.050	2 *
1.910	7 *** *
1.380	1

Job Description:

Mixes and applies paints and other finishes to exterior and interior surfaces using both hand brushes and mechanically operated spray guns. Supervises helper in preparation of surfaces to be painted. Estimates materials needed for various jobs.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: PAINTER'S HELPER

Median Normal Hourly Wage Rate \$ 1.300 **

Interquartile Range ----- *

Size of Sample: Number of establishments 2

Number of employees 4

Mean Normal Rate \$ 1.213

Mean Overtime Rate \$ 1.350

Mean Total Rate \$ 1.233

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours 9

Mean Total Work Week (Hrs) 40

Mean Total Weekly Wage \$ 48.73

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.350	2
1.250	1
.980	1

Job Description:

Under supervision of journeyman painter, works with painters performing various helper duties such as carrying supplies to work place, stirring paint, cleaning brushes and spray equipment, scraping and cleaning surfaces to be painted, placing and handling "drop cloths," cleaning up site of work upon completion of job.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: PLUMBER, JOURNEYMAN

Median Normal Hourly Wage Rate \$ 1.940 **

Interquartile Range \$ 1.940 - \$ 2.500 *

Size of Sample: Number of establishments 3

Number of employees 12

Mean Normal Rate \$ 2.080

Mean Overtime Rate None

Mean Total Rate \$ 2.080

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours None

Mean Total Work Week (Hrs) 40

Mean Total Weekly Wage \$ 83.20

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.500	3 *
1.940	9 ***

Job Description:

Performs all work required of a journeyman plumber in the installation, maintenance and repair of natural gas, water, sewer, compressed air and vacuum utility lines. Installs, repairs, and maintains all fixtures and appliances used in connection with the above mentioned utilities. Estimates type of material and amount required for performing job. May supervise one or more helpers. Uses all common tools of the trade, hand and power drive, including torches, wrenches, pipe threaders, pipe cutting machines, etc.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: PLUMBER'S HELPER

Median Normal Hourly Wage Rate \$ 1.350 **

Interquartile Range ----- *

Size of Sample: Number of establishments 2

Number of employees 3

Mean Normal Rate \$ 1.367

Mean Overtime Rate None

Mean Total Rate \$ 1.367

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours None

Mean Total Work Week (Hrs) 40

Mean Total Weekly Wage \$ 54.67

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.500	1
1.350	1 **
1.250	1

Job Description:

Under supervision of journeyman plumber, assists plumbers by carrying tools and equipment to site of work. Measures, cuts and threads pipe as directed. Assists plumber in removing, assembling, laying and hanging of pipe. Lifts pipe into place and fastens same. Places insulation on exposed pipe, digs ditches for laying pipe. Clears plumbing stoppages, replaces valve gaskets and performs other union maintenance duties on plumbing services.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: SHEETMETAL WORKER, 1st CLASS

Median Normal Hourly Wage Rate \$ 2.060 **

Interquartile Range \$ 2.060 - \$ 2.250 *

Size of Sample: Number of establishments 3

Number of employees 22

Mean Normal Rate \$ 2.106

Mean Overtime Rate None

Mean Total Rate \$ 2.106

Mean Normal Work Week (Hrs) 42

Mean Overtime Hours None

Mean Total Work Week (Hrs) 42

Mean Total Weekly Wage \$ 88.23

Normal Hourly Rates			
Rate	Number Receiving Each Rate		
\$2.370	1		
2.250	5	*	
2.060	14	**	*
1.940	2		

Job Description:

Makes chassis, assemblies, special-formed boxes, dollies, ramps, or other sheetmetal structures from sheet aluminum, steel, brass, copper, and stainless steel. May make special brackets, cones and air-conditioning equipment. Hand forms (and does bend block work) on reasonably simple to fairly complicated farrings and other non-standard shapes from sheet aluminum and stainless steel. Makes constructions by riveting, spot welding, soldering and crimping. Uses normal sheetmetal equipment such as shears (circular, brake and pinching), mechanical and press brakes, band saw, burrhole rolls, sanders, router, drills, rivet guns, beating machines, and such measuring equipment as micrometers, verniers, calipers, etc.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: TRUCK DRIVER, HEAVY

Median Normal Hourly Wage Rate \$ 1.430 **

Interquartile Range \$ 1.430 - \$ 1.560 *

Size of Sample: Number of establishments 4

Number of employees 37

Mean Normal Rate \$ 1.509

Mean Overtime Rate \$ 2.339

Mean Total Rate \$ 1.565

Mean Normal Work Week (Hrs) 43 3/4

Mean Overtime Hours 4

Mean Total Work Week (Hrs) 46 1/2

Mean Total Weekly Wage \$ 72.57

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.850	6
1.560	5 *
1.430	25 ** *
1.200	1

Job Description:

Operates heavy duty vehicles with capacities of 15,000 pounds and more, including semi-trailers with floats of 30 to 40 feet in length. Hauls loads between relatively short distances, i.e., between railheads and truck terminals to warehouse and storage areas. May have helper on truck if material hauled requires handling. Not a long distance operator.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: TRUCK DRIVER, LIGHT

Median Normal Hourly Wage Rate \$ 1.550 **

Interquartile Range \$ 1.250 - \$ 1.630 *

Size of Sample: Number of establishments 16

Number of employees 62

Mean Normal Rate \$ 1.431

Mean Overtime Rate \$ 1.830

Mean Total Rate \$ 1.445

Mean Normal Work Week (Hrs) 41

Mean Overtime Hours 5

Mean Total Work Week (Hrs) 42

Mean Total Weekly Wage \$ 61.40

Job Description:

Operates light weight vehicles with capacities less than 15,000 pounds designed for hauling light loads over short distances, such as hauling materials about an industrial yard or in moving materials from the company to or from other nearby locations. Does not necessarily make deliveries over established route. May be required to load and unload trucks.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.680	14
1.630	12 *
1.620	2
1.600	3
1.500	1 **
1.420	6
1.300	1
1.295	6
1.250	4 *
1.200	2
1.150	2
1.125	1
1.000	1
.995	1
.950	1
.940	5

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: WELDER

Median Normal Hourly Wage Rate \$ 1.650 **

Interquartile Range \$ 1.490 - \$ 2.040 *

Size of Sample: Number of establishments 5

Number of employees 25

Mean Normal Rate \$ 1.750

Mean Overtime Rate \$ 2.578

Mean Total Rate \$ 1.807

Mean Normal Work Week (Hrs) 42

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 41 1/2

Mean Total Weekly Wage \$ 75.49

Job Description:

Fabricates and modifies assemblies of cabinets, tanks, vessels, frames and similar equipment. Accomplishes same by burning, soldering, brazing, gas and arc welding. Performs the above operations using such metals as copper, brass, steel, cast iron, aluminum, etc. Manufactures necessary fixtures and jigs to hold work during welding. Uses burning machine, atomic hydrogen torches, acetylene torches, welding generators, and such measuring equipment as scales, dividers, protractors, levels, squares, etc.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.110	5
2.100	1
1.980	1 *
1.900	3
1.680	2
1.650	3 **
1.580	3
1.500	1
1.480	6 *

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: ACCOUNTANT

Median Normal Hourly Wage Rate \$ 2.150 **

Interquartile Range \$ 1.920 - \$ 2.450 *

Size of Sample: Number of establishments 18

Number of employees 19

Mean Normal Rate \$ 2.248

Mean Overtime Rate \$ 2.711

Mean Total Rate \$ 2.268

Mean Normal Work Week (Hrs) 41½

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 42½

Mean Total Weekly Wage \$ 95.66

Job Description:

Analyzes accounting results for purpose of issuing results and control reports. Involves reviewing reports for reasonableness and use of proper methods; reconciling any discrepancies; rationalizing variations from normal; making studies such as budgets or forecasts for management purposes; determining appropriate methods and procedures for preparation and presentation; coordinating results covering a variety of reported figures for accounting or control purposes; reviewing functional accounting routines and changes. May also perform related clerical and accounting duties necessary or subsidiary to principal duties outlined above.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$3.410	1
3.125	1
2.950	1
2.500	1
2.450	1 *
2.410	1
2.375	1
2.270	1
2.180	1
2.150	2 **
2.080	1
1.990	1
1.980	1
1.920	1 *
1.820	1
1.790	1
1.630	1
1.540	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: AUDITOR

Median Normal Hourly Wage Rate \$ 1.680 **

Interquartile Range \$ 1.560 - \$ 1.870 *

Size of Sample: Number of establishments 4

Number of employees 11

Mean Normal Rate \$ 1.765

Mean Overtime Rate \$ 2.685

Mean Total Rate \$ 1.777

Mean Normal Work Week (Hrs) 41½

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 42

Mean Total Weekly Wage \$ 74.69

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.250	1
2.140	1
1.870	3 *
1.680	2 **
1.560	2 *
1.510	1
1.430	1

Job Description:

Performs formal examination and verification of books of accounts, accounting statements, and reports relating thereto. Usually involves scrutiny, review, and check of recording, or failure to record, all business transactions which include such as inventory and handling of cash and negotiable items, payroll, sales, accounts payable, and material and stores inventory, using devices and practices peculiar to auditing activities such as spot checks, statement and account ratios, direct verification, reconciliations, etc. Observes procedures in connection with transactions to determine that methods are proper and that adequate safeguards are provided, to detect improper recording or handling, to insure rigid adherence to prescribed routines, and to ascertain that good accounting practice is being followed. Usually expresses findings in a written report and recommends corrective action.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title:

BOOKKEEPER

Median Normal Hourly Wage Rate \$ 1.380 **Interquartile Range \$ 1.190 - \$ 1.635 *Size of Sample: Number of establishments 23Number of employees 34Mean Normal Rate \$ 1.344Mean Overtime Rate \$ 1.859Mean Total Rate \$ 1.418Mean Normal Work Week (Hrs) 42Mean Overtime Hours 5Mean Total Work Week (Hrs) 42 3/4Mean Total Weekly Wage \$ 60.96

Job Description:

Performs office work involving all or most of the following functions: posts and balances subsidiary ledger, cash books and/or journal; posts subsidiary ledger transactions in general ledger; prepares routine accounting statements; classifies documents to be posted; may compute wages and salaries of company employees, including deductions for withholding taxes and similar items; prepares bills and invoices to be sent to customers, and may perform a variety of other clerical duties.

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$1.990	1
1.875	2
1.730	2
1.700	2
1.650	1
1.590	1 *
1.560	1
1.510	1
1.495	1
1.490	2
1.430	1
1.420	2
1.340	1 **
1.310	2
1.250	2
1.200	3
1.190	2 *
1.160	1
1.080	1
1.010	1
1.000	1
.960	1
.940	1
.880	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, FILE

Median Normal Hourly Wage Rate \$ 1.240 **

Interquartile Range \$.862 - \$ 1.240 *

Size of Sample: Number of establishments 8

Number of employees 28

Mean Normal Rate \$ 1.092

Mean Overtime Rate \$ 1.140

Mean Total Rate \$ 1.098

Mean Normal Work Week (Hrs) 40 3/4

Mean Overtime Hours 3

Mean Total Work Week (Hrs) 41

Mean Total Weekly Wage \$ 44.82

Job Description:

May perform any or all of the following: Maintains files of specified material in accordance with an established system, involving the placement and withdrawal of file material such as correspondence, drawings, forms, instructions, receipts, etc., in cabinets or holders arranged alphabetically, chronologically, numerically or in some accepted pattern; renders telephone service pertinent to filed material. May include duties of preparing file material for storage, servicing requisitions for reproduction work, distributing copies of material, rendering service on stationery supplies, aiding in locating papers, and preparing routine reports of file activities.

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$1.400	1
1.310	1
1.240	15 ** *
1.140	1
1.000	1
.938	1
.875	1
.850	1 *
.825	1
.780	1
.750	1
.710	2
.680	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, INVOICE (or VOUCHER)

Median Normal Hourly Wage Rate \$ 1.335 **

Interquartile Range \$ 1.065 - \$ 1.350 *

Size of Sample: Number of establishments 8

Number of employees 26

Mean Normal Rate \$ 1.269

Mean Overtime Rate \$ 1.790

Mean Total Rate \$ 1.316

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours 5 3/4

Mean Total Work Week (Hrs) 43 3/4

Mean Total Weekly Wage \$ 57.94

Job Description:

Reviews, processes, and verifies for payment purposes, invoices and incoming bills for supplies and services. Usually involves checking invoices or bills for accuracy of description and prices, approvals, and conformance with authorizations, purchase orders, and receiving reports; transcribing required information to records or journals; reconciling discrepancies through contact with responsible personnel; making required adjustments; arranging, compiling, summarizing, and balancing details for varied purposes; preparing and maintaining associated records and reports; and passing invoices for payment. May include checking invoices passed for payment by others; preparation of vouchers or remittance advices covering payments due creditors; maintaining files; operating office machines; and performing miscellaneous related functions as required.

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$2.140	1
1.600	1
1.540	1
1.530	1
1.430	1
1.350	8 *
1.320	1 **
1.250	3
1.190	1
1.110	1
1.080	1
1.020	1 *
.950	1
.938	1
.900	1
.850	2

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

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Job Title: CLERK, JUNIOR

Median Normal Hourly Wage Rate \$ 1.035 **

Interquartile Range \$.825 - \$ 1.120 *

Size of Sample: Number of establishments 7

Number of employees 36

Mean Normal Rate \$.983

Mean Overtime Rate \$ 1.211

Mean Total Rate \$ 1.002

Mean Normal Work Week (Hrs) 42½

Mean Overtime Hours 4½

Mean Total Work Week (Hrs) 42½

Mean Total Weekly Wage \$ 42.72

Job Description:

Performs any combination of simple clerical and service functions requiring little or no experience, previous training, or transferable skill. Usually involves a wide variety of duties in assisting others in the performance of more involved clerical duties by performing assignments which consist of combinations of the following typical functions:

- (a) Posting, recording, or transcribing routine information, usually of a repetitive nature and readily identified.
- (b) Sorting, selecting, collating, gathering, disassembling, or rearranging material into specified sequences, groups, or sets.
- (c) Stapling, stamping, noting, or numbering papers.
- (d) Making simple arithmetical computations necessary to other functions.
- (e) Maintaining simple lists, records, files, or stocks of materials in accordance with specific routines or directions.
- (f) Opening, sorting, routing, recording, delivering, or collecting mail or similar material for one or more groups as assigned.
- (g) Performing general errand service as required.

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$1.250	1
1.200	1
1.150	2
1.120	9 *
1.110	3
1.090	1
1.070	1 **
1.000	2
.970	1
.940	1
.910	2
.830	1
.825	5 *
.810	1
.780	1
.710	4

- (h) Operating duplicating machine equipment on routine material.
- (i) Arranging for services such as reproduction, duplication, or transcription as instructed and checking results against standard requirements.
- (j) Receiving and directing visitors.
- (k) Performing private office services such as adjusting facilities for heat, light, and ventilation, dusting office furniture.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, PAYROLL

Median Normal Hourly Wage Rate \$ 1.580 **

Interquartile Range \$ 1.375 - \$ 1.580 *

Size of Sample: Number of establishments 7

Number of employees 15

Mean Normal Rate \$ 1.497

Mean Overtime Rate \$ 2.052

Mean Total Rate \$ 1.525

Mean Normal Work Week (Hrs) 41 3/4

Mean Overtime Hours 7

Mean Total Work Week (Hrs) 41 3/4

Mean Total Weekly Wage \$ 63.75

Job Description:

Performs a variety of clerical functions associated with the preparation and maintenance of payrolls and related records. Usually involves computing, compiling, and posting wages and various deductions; verifying or computing allowances, supplementary or benefit pay; summarizing and balancing various payroll elements, including clearing or assisting in clearing discrepancies; maintaining payroll records and rendering information as requested; compiling, classifying, and summarizing data for report or accounting purposes; preparing or checking information on employee transfer or rebate records; and reviewing payroll forms for accuracy and adherence to operational requirements or contract agreements. May include operation of business machines in any of these functions.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$ 1.810	1
1.600	1
1.580	6 ** *
1.540	2
1.535	1
1.375	1 *
1.200	1
1.190	2

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, SHIPPING AND RECEIVING

Median Normal Hourly Wage Rate \$ 1.100 **

Interquartile Range \$.996 - \$ 1.378 *

Size of Sample: Number of establishments 14

Number of employees 32

Mean Normal Rate \$ 1.203

Mean Overtime Rate \$ 1.591

Mean Total Rate \$ 1.248

Mean Normal Work Week (Hrs) 43 1/2

Mean Overtime Hours 5 1/2

Mean Total Work Week (Hrs) 44 3/4

Mean Total Weekly Wage \$ 55.91

Job Description:

Performs all or most of the following functions: Weighs, sorts, marks, counts, and addresses parcels or crates of merchandise or materials to be shipped. May select, pack, wrap and crate goods to be shipped. Prepares bills of lading and related shipping forms; calculates postage, insurance, registry rates, etc. Receives and unloads incoming shipments, opens crates and cartons and stores material within the warehouse. Examines shipments for breakage or spoilage and verifies completeness of orders. Fills out claims, due bills, etc. Routes incoming shipments to proper destination within organization.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.980	1
1.760	1
1.750	1
1.620	1
1.590	1
1.560	1
1.540	1
1.420	1
1.250	1 *
1.220	2
1.200	1
1.190	1
1.170	1
1.140	1
1.110	3 **
1.080	1
1.020	1
1.000	4 *
.995	4
.965	1
.937	1
.850	1
.750	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, STATISTICAL

Median Normal Hourly Wage Rate \$ 1.370 **

Interquartile Range \$ 1.260 - \$ 1.620 *

Size of Sample: Number of establishments 2

Number of employees 9

Mean Normal Rate \$ 1.460

Mean Overtime Rate None

Mean Total Rate \$ 1.460

Mean Normal Work Week (Hrs) 41 $\frac{1}{2}$

Mean Overtime Hours None

Mean Total Work Week (Hrs) 41 $\frac{1}{2}$

Mean Total Weekly Wage \$ 60.23

Normal Hourly Rate	
Rate	Number Receiving Each Rate
\$1.875	1
1.620	2 *
1.560	1
1.370	1 **
1.320	1
1.260	3 *

Job Description:

Compiles data for studies and reports based on varied information, using company prescribed statistical methods. Usually involves reviewing and verifying reported information for accuracy, applicability, consistency, or other statistical characteristics; applying necessary adjustments, prorations, ratios, or formulae consistent with company statistical procedure in compiling, reporting, and portraying results; preparing comments, explanations, or qualifying statements necessary to understanding or interpretation of studies; making necessary references to significant changes, deviations, controls, trends, or other related elements; forecasting or projecting information as required to reach conclusions; preparing and maintaining records, reports, charts, graphs, and simple formulae to be used in depicting continuity of results.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: CLERK, TYPIST

Median Normal Hourly Wage Rate \$ 1.130 **

Interquartile Range \$ 1.020 - \$ 1.130 *

Size of Sample: Number of establishments 11

Number of employees 55

Mean Normal Rate \$ 1.089

Mean Overtime Rate \$ 1.444

Mean Total Rate \$ 1.097

Mean Normal Work Week (Hrs) 40 3/4

Mean Overtime Hours 4 1/2

Mean Total Work Week (Hrs) 41

Mean Total Weekly Wage \$ 45.03

Job Description:

Performs general office work involving the performance of many or all of the following duties: typing, in finished form, correspondence, reports, stencils, etc., from rough draft or final copy; transcribing dictation from transcribing machine records; maintaining simple records and files, etc.; posting data to card records; proof reading work of other typists or clerks; preparing statements, bills and invoices to be sent to customers by hand or by use of billing machine.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.420	1
1.330	1
1.310	1
1.290	1
1.260	1
1.250	2
1.140	6
1.130	20 ** *
1.090	1
1.070	3
1.060	1
1.050	1
1.030	1
1.020	2 *
1.010	1
.990	1
.960	3
.940	2
.910	1
.900	1
.875	2
.813	1
.810	1

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: HOSTESS

Median Normal Hourly Wage Rate \$ 1.020 **

Interquartile Range ---- *

Size of Sample: Number of establishments 3

Number of employees 6

Mean Normal Rate \$.990

Mean Overtime Rate None

Mean Total Rate \$.990

Mean Normal Work Week (Hrs) 48

Mean Overtime Hours None

Mean Total Work Week (Hrs) 48

Mean Total Weekly Wage \$ 47.42

Normal Hourly Rates

Rate	Number Receiving Each Rate
\$1.080	2
1.012	3 **
.720	1

Job Description:

Receives and arranges for seating and service of people in dining room. Usually involves: greeting patrons in a manner to accommodate their wishes, to promote prompt service, and to balance waitresses' assignments; assisting waitresses in table arrangements, place settings, and table service where necessary; assigning waitresses to stations in dining room; inspecting or observing waitresses for personal appearance and conduct; keeping dining room and adjacent areas under surveillance to assure cleanliness, neatness, and attractiveness; handling patrons' complaints about service, charges, food, or similar items; handling attendance records of waitresses, including the preparation of assignment charts; instructing waitresses or individuals in such subjects as personal conduct, hygiene, food content, or dining room practices; and maintaining assigned restaurant records and reports on menus, food consumption, patrons' complaints, or related subjects.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: MESSENGER

Median Normal Hourly Wage Rate \$.985 **

Interquartile Range \$.867 - \$ 1.030 *

Size of Sample: Number of establishments 3

Number of employees 10

Mean Normal Rate \$.960

Mean Overtime Rate \$ 1.345

Mean Total Rate \$.961

Mean Normal Work Week (Hrs) 40

Mean Overtime Hours 3

Mean Total Work Week (Hrs) 40½

Mean Total Weekly Wage \$ 38.66

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$1.030	5 *
.940	2 **
.867	2 *
.840	1

Job Description:

Renders pick-up and delivery service over a scheduled route or in connection with miscellaneous errand requests. Usually consists of: making scheduled pick-ups of mail or other materials; assisting in sorting for distribution, bundling, packaging, or wrapping for delivery; and performing required errands within company or to any designated outside location, using accepted mode of transportation. May include duties of: assisting others in minor clerical tasks; answering organization telephones; relieving receptionist; and escorting visitors.

OCCUPATIONAL WAGE SURVEY
Albuquerque Area--November, 1951

Job Title: STENOGRAPHER-SECRETARY

Median Normal Hourly Wage Rate \$ 1.670 **

Interquartile Range \$ 1.360 - \$ 1.670 *

Size of Sample: Number of establishments 20

Number of employees 90

Mean Normal Rate \$ 1.545

Mean Overtime Rate \$ 1.859

Mean Total Rate \$ 1.550

Mean Normal Work Week (Hrs) 40½

Mean Overtime Hours 3 3/4

Mean Total Work Week (Hrs) 40½

Mean Total Weekly Wage \$ 62.81

Job Description:

Acting as a secretary for an official or an executive, incumbent performs many or all of the following duties: takes and transcribes general, legal or technical dictation, receives visitors and makes appointments; sorts correspondence and related work and makes minor decisions for supervisor; maintains a complete set of files or records as necessary for the operation of the office; prepares routine correspondence on own initiative or in accordance with general instructions; makes arrangement for travel and accommodations; arranges meetings and conferences, taking minutes of meeting as required, compiles information from files and prepares routine or special reports as directed; issues orders and distributes work to supervisor's subordinates.

Normal Hourly Rates	
Rate	Number Receiving Each Rate
\$2.030	1
1.850	3
1.705	1
1.680	1
1.670	51 ** *
1.590	2
1.560	1
1.510	1
1.486	1
1.410	3
1.400	1
1.375	1
1.360	2 *
1.340	1
1.335	1
1.321	1
1.310	1
1.300	1
1.285	1
1.270	1
1.250	1
1.210	2
1.200	4
1.190	1
1.150	1
1.140	1
1.120	1
1.100	1
1.090	1
1.000	1

JOB DESCRIPTIONS

CRAFT AND MANUAL WORKERS

Carpenter, Journeyman

Performs all journeyman carpenter duties required in the repair and maintenance of shop and office buildings. Repairs and replaces window frames, sashes, worn or damaged flooring and steps. Removes partitions, builds new partitions, and constructs small frame structures. Estimates type and amount of materials required for performing the job. May supervise one or more helpers.

Carpenter's Helper

Under supervision of journeyman carpenter, works with carpenters performing various helper duties such as carrying supplies to site of work, measuring and cutting lumber to lengths where rough cut is sufficient, nailing lumber into place where such nailing is a definite routine. Also performs any labor required by carpenters at work site such as digging and moving earth for footings, cleaning up work site, loading and disposing of salvage material.

Electrician, Journeyman

Performs duties of a journeyman electrician in the installation, repair and maintenance of electrical service lines (both primary and secondary), transformers, switches, panels, electrical appliances, instruments and motors. Works with 2300 volt primary service, 220 and 110 single and three phase secondary service, and 28 volt D. C. circuits, etc. Performs duties of electrician lineman when required. Estimates materials required for jobs, and may supervise one or more helpers.

Electrician's Helper

Under supervision of journeyman electrician, performs various helper duties such as carrying supplies to work site, measuring and cutting wire, setting poles, hoisting transformers up to crossarms or racks; acts as groundman for pole lineman; peels insulation from wire ends, lays out wire; fastens fixtures in place and replaces fuses and lamps; digs holes for poles, places line hardware on poles before same are raised and set; makes minor adjustments to and lubricates fans, heaters, and motors.

DEPT AND MANUAL WORK

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Carpenter, Journeyman

Performs all journeyman carpenter duties required in the repair and maintenance of shop and office buildings. Repairs and replaces windows, doors, and floors, and makes alterations in all types of woodwork, partitions, and counters. Also performs all types of carpentry work and makes alterations in all types of woodwork.

Carpenter's Helper

Carpenter's Helper

Under supervision of journeyman carpenter, works with carpenter in performing various helper duties such as carrying material to site, setting up and taking down scaffolding, and other work as assigned. Also performs any jobs required by carpenter, such as digging and leveling earth for footings, cleaning up work site, loading and unloading of salvage material.

Electrician, Journeyman

Electrician, Journeyman

Performs duties of a journeyman electrician in the installation, repair and maintenance of electrical service lines (both primary and secondary), transformers, switches, panels, electrical appliances, and instruments. Works with 2200 volt primary service, 110 volt secondary service, and 110 volt secondary service. Also performs duties of electrician when required, such as digging and leveling earth for footings, and any other work as assigned.

Electrician's Helper

Electrician's Helper

Under supervision of journeyman electrician, performs various helper duties such as carrying material to work site, setting up and taking down scaffolding, and other work as assigned. Also performs any jobs required by electrician, such as digging and leveling earth for footings, cleaning up work site, loading and unloading of salvage material, and any other work as assigned.

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Janitor

Performs common janitorial services which include cleaning windows, walls, furniture; sweeping, scrubbing, and waxing floors; emptying waste and refuse containers; cleaning lavatories, and policing grounds surrounding buildings.

Laborer, Warehouseman

Under general supervision of a warehouse foreman or "straw boss," performs unskilled labor duties such as loading, unloading, moving and storing of equipment, furniture and materials. May operate small trucks, trailers, and tier-lifts. May also pack and wrap merchandise.

Machinist, 1st Class

Produces simpler tools, instruments, dies and performs the more complicated general machine work (e.g. makes and presses bearings, builds heavy handling equipment, etc.). Machines parts from steel, aluminum, brass, copper, lead, graphite and plastics. Must be able to do lapping and perform bench work such as filing and fitting of assemblies and sub-assemblies. Operates all machine shop equipment such as lathes, drill presses, shapers, grinders, milling machines, jig borers, precision hand tools and such measuring equipment as verniers, calipers, micrometers, indicators and height gauges.

Painter, Journeyman

Mixes and applies paints and other finishes to exterior and interior surfaces using both hand brushes and mechanically operated spray guns. Supervises helper in preparation of surfaces to be painted. Estimates materials needed for various jobs.

Painter's Helper

Under supervision of journeyman painter, works with painters performing various helper duties such as carrying supplies to work place, stirring paint, cleaning brushes and spray equipment, scraping and cleaning surfaces to be painted, placing and handling 'drop clothes', cleaning up site of work upon completion of job.

Plumber, Journeyman

Work

Performs all work required of a journeyman plumber in the installation, maintenance and repair of all types of plumbing fixtures, including but not limited to: sinks, tubs, showers, toilets, water heaters, boilers, radiators, and steam heating systems. Also performs all types of pipe fitting, including soldering, brazing, and welding. Responsible for the proper installation and maintenance of all types of plumbing fixtures and equipment.

Plumber's Helper

Learning

Under supervision of journeyman plumber, performs all work required of a plumber's helper, including but not limited to: carrying tools and equipment, assisting in the installation and maintenance of plumbing fixtures and equipment, and performing all types of pipe fitting and soldering. Responsible for the proper installation and maintenance of all types of plumbing fixtures and equipment.

Sheetmetal Worker, Job Sheetmetal Worker, Job Class

Sheetmetal worker, job sheetmetal worker, job class. Performs all work required of a sheetmetal worker, including but not limited to: fabricating and installing sheetmetal ductwork, hoods, and other sheetmetal components. Also performs all types of sheetmetal fitting, including soldering, brazing, and welding. Responsible for the proper installation and maintenance of all types of sheetmetal components.

Truck Driver, Heavy

Operates heavy duty vehicles, including but not limited to: trucks, trailers, and semi-trailers. Responsible for the safe and efficient operation of all types of heavy duty vehicles. Also performs all types of truck driving, including loading and unloading of cargo. Responsible for the proper maintenance and repair of all types of heavy duty vehicles.

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Truck Driver, Light

Operates light weight vehicles with capacities less than 15,000 pounds designed for hauling light loads over short distances, such as hauling materials about an industrial yard or in moving materials from the company to or from other nearby locations. Does not necessarily make deliveries over established route. May be required to load and unload trucks.

Welder

Fabricates and modifies assemblies of cabinets, tanks, vessels, frames and similar equipment. Accomplishes same by burning, soldering, brazing, gas and arc welding. Performs the above operations using such metals as copper, brass, steel, cast iron, aluminum, etc. Manufactures necessary fixtures and jigs to hold work during welding. Uses burning machine, atomic hydrogen torches, acetylene torches, welding generators, and such measuring equipment as scales, dividers, protractors, levels, squares, etc.

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Trucks with capacities less than 15,000 pounds are used for light loads over short distances, such as hauling materials from an industrial yard or in moving materials from the warehouse to other nearby locations. Trucks not licensed for highway use are used for deliveries over established routes. They are required to follow established routes.

Trucks and trailers are used for the hauling of materials, tanks, vessels, frames and similar equipment. Accomplishes work by burning, soldering, welding, gas and arc welding. Performs the above operations using such materials as copper, brass, steel, cast iron, aluminum, etc. Handicrafts necessary fixtures and jigs to hold work during welding. Uses burning machines, atomic hydrogen torches, oxy-acetylene torches, welding generators, and such measuring equipment as scales, dividers, protractors, levels, squares, etc.

JOB DESCRIPTIONS

CLERICAL AND RELATED

Accountant

Analyzes accounting results for purpose of issuing results and control reports. Involves reviewing reports for reasonableness and use of proper methods; reconciling any discrepancies; rationalizing variations from normal; making studies such as budgets or forecasts for management purposes; determining appropriate methods and procedures for preparation and presentation; coordinating results covering a variety of reported figures for accounting or control purposes; reviewing functional accounting routines and changes. May also perform related clerical and accounting duties necessary or subsidiary to principal duties outlined above.

Auditor

Performs formal examination and verification of books of accounts, accounting statements, and reports relating thereto. Usually involves scrutiny, review, and check of recording, or failure to record, all business transactions which include such as inventory and handling of cash and negotiable items, payroll, sales, accounts payable, and material and stores inventory, using devices and practices peculiar to auditing activities such as spot checks, statement and account ratios, direct verification, reconciliations, etc. Observes procedures in connection with transactions to determine that methods are proper and that adequate safeguards are provided, to detect improper recording or handling, to insure rigid adherence to prescribed routines, and to ascertain that good accounting practice is being followed. Usually expresses findings in a written report and recommends corrective action.

Bookkeeper

Performs office work involving all or most of the following functions: posts and balances subsidiary ledger, cash books and/or journal; posts subsidiary ledger transactions in general ledger; prepares routine accounting statements; classifies documents to be posted; may compute wages and salaries of company employees, including deductions for withholding taxes and similar items; prepares bills and invoices to be sent to customers, and may perform a variety of other clerical duties.

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Clerk, Junior

Performs any combination of simple clerical and service functions requiring little or no experience, previous training, or transferable skill. Usually involves a wide variety of duties in assisting others in the performance of more involved clerical duties by performing assignments which consist of combinations of the following typical functions:

- (a) Posting, recording, or transcribing routine information, usually of a repetitive nature and readily identified
- (b) Sorting, selecting, collating, gathering, disassembling, or rearranging material into specified sequences, groups, or sets
- (c) Stapling, stamping, noting, or numbering papers
- (d) Making simple arithmetical computations necessary to other functions
- (e) Maintaining simple lists, records, files, or stocks of materials in accordance with specific routines or directions
- (f) Opening, sorting, routing, recording, delivering, or collecting mail or similar material for one or more groups as assigned
- (g) Performing general errand service as required
- (h) Arranging for services such as reproduction, duplication, or transcription as instructed and checking results against standard requirements
- (i) Receiving and directing visitors
- (j) Performing private office services such as adjusting facilities for heat, light, and ventilation, dusting office furniture
- (k) Operating duplicating machine equipment on routine material

Clerk, Payroll

Performs a variety of clerical functions associated with the preparation and maintenance of payrolls and related records. Usually involves computing, compiling, and posting wages and various deductions; verifying or computing allowances, supplementary or benefit pay; summarizing and balancing various payroll elements, including clearing or assisting in clearing discrepancies; maintaining payroll records and rendering information as requested; compiling, classifying, and summarizing data for report or accounting purposes; preparing or checking information on employee transfer or rebate records; and reviewing payroll forms for accuracy and adherence to operational requirements or contract agreements. May include operation of business machines in any of these functions.

-4-

Clerk, Shipping and Receiving

Performs all or most of the following functions: Weighs, sorts, marks, counts, and addresses parcels or crates of merchandise or materials to be shipped. May select, pack, wrap and crate goods to be shipped. Prepares bills of lading and related shipping forms; calculates postage, insurance, registry rates, etc. Receives and unloads incoming shipments, opens crates and cartons and stores material within the warehouse. Examines shipments for breakage or spoilage and verifies completeness of orders. Fills out required forms such as receiving memoranda, damage or shortage claims, due bills, etc. Routes incoming shipments to proper destination within organization.

Clerk, Statistical

Compiles data for studies and reports based on varied information, using company prescribed statistical methods. Usually involves reviewing and verifying reported information for accuracy, applicability, consistency, or other statistical characteristics; applying necessary adjustments, prorations, ratios, or formulae consistent with company statistical procedure in compiling, reporting, and portraying results; preparing comments, explanations, or qualifying statements necessary to understanding or interpretation of studies; making necessary references to significant changes, deviations, controls, trends, or other related elements; forecasting or projecting information as required to reach conclusions; preparing and maintaining records, reports, charts, graphs, and simple formulae to be used in depicting continuity of results.

Clerk-Typist

Performs general office work involving the performance of many or all of the following duties: typing, in finished form, correspondence, reports, stencils, etc., from rough draft or final copy; transcribing dictation from transcribing machine records; maintaining simple records and files, involving reading materials, indexing, searching files, etc.; posting data to card records; proof reading work of other typists or clerks; preparing statements, bills and invoices to be sent to customers by hand or by use of billing machine.

General, Shipping and Insurance

The following is a list of the various items of property and equipment owned by the company, and the location of each item. The items are listed in alphabetical order, and the location of each item is given in parentheses. The items are: (1) Office equipment, (2) Shipping equipment, (3) Insurance equipment, (4) Miscellaneous equipment, (5) Other equipment.

General

The following is a list of the various items of property and equipment owned by the company, and the location of each item. The items are listed in alphabetical order, and the location of each item is given in parentheses. The items are: (1) Office equipment, (2) Shipping equipment, (3) Insurance equipment, (4) Miscellaneous equipment, (5) Other equipment.

Shipping

The following is a list of the various items of property and equipment owned by the company, and the location of each item. The items are listed in alphabetical order, and the location of each item is given in parentheses. The items are: (1) Office equipment, (2) Shipping equipment, (3) Insurance equipment, (4) Miscellaneous equipment, (5) Other equipment.

Hostess

Receives and arranges for seating and service of people in dining room. Usually involves: greeting patrons in a manner to accommodate their wishes, to promote prompt service, and to balance waitresses' assignments; assisting waitresses in table arrangements, place settings, and table service where necessary; assigning waitresses to stations in dining room; inspecting or observing waitresses for personal appearance and conduct; keeping dining room and adjacent areas under surveillance to assure cleanliness, neatness, and attractiveness; handling patrons' complaints about service, charges, food, or similar items; handling attendance records of waitresses, including the preparation of assignment charts; instructing waitresses or individuals in such subjects as personal conduct, hygiene, food content, or dining room practices; and maintaining assigned restaurant records and reports on menus, food consumption, patrons' complaints, or related subjects.

Laboratory Assistant (Add A, B, or C to identify as per notes below)

Assists laboratory personnel by performing any of a variety of laboratory tests, usually in accordance with prescribed routines, for the purpose of determining characteristics and properties of assigned materials or equipment for conformance check against requirements or specifications. Usually involves applying a series of standard tests or samplings peculiar to the nature of the item being examined to establish properties such as chemical content, physical characteristics, etc.; selecting and preparing appropriate tests from conditions and available equipment; establishing test patterns; recording observations; and preparing reports and explanations of findings which may include the use of applicable chemical or algebraic formulae or the conversion of results for report purposes. May also include: assisting in scheduling the use of laboratory equipment and facilities; conducting inventories and preparing orders for laboratory supplies. The following duties are typical in their respective fields:

Notes:

- (a) Making quantitative and qualitative analyses of chemicals or using chemical-electrical processes to determine the chemical or physical makeup of the material, using a variety of accepted methods and laboratory equipment.
- (b) Examining and testing electrical products of all kinds for qualities such as conductivity, resistance, load capacity, capacitance, calibration, inductance, and breakdown point.
- (c) Conducting standard tests for tensile strength, absorption, heat resistance, hardness compression, coating, or similar properties.

Messenger

Renders pick-up and delivery service over a scheduled route or in connection with miscellaneous errand requests. Usually consists of: making scheduled pick-ups of mail or other materials; assisting in sorting for distribution, bundling, packaging, or wrapping for delivery; and performing required errands within company or to any designated outside location, using accepted mode of transportation. May include duties of: assisting others in minor clerical tasks; answering organization telephones; relieving receptionist; and escorting visitors.

Nurse

Renders required emergency or delegated first aid and performs functional duties of a medical nature as prescribed or assists a doctor in the examination or treatment of patients. Usually involves preparatory interview of patients and preparing and noting case histories with pertinent preliminary data; treating, where permissible, for minor injuries or sickness such as cuts, splinters or nausea; assists doctor in serious cases, minor surgery and other cases requiring sterilizing, selecting, laying out instruments and equipment, administering local anesthetics or hypodermics, taking blood samples for tests, operating diathermy or physio-therapy equipment, taking sample x-rays or obtaining electro-cardiograph or blood pressure readings. Prepares swabs, dressings or similar material for use. May perform a variety of related functions as assigned and maintain office records including case histories. May include obtaining details necessary for benefit or compensation purposes, rendering statements, use of typewriter, and driving car to make visits.

Stenographer-Secretary

Acting as a secretary for an official or an executive, incumbent performs many or all of the following duties: takes and transcribes general, legal or technical dictation, receives visitors and makes appointments; sorts correspondence and related work and makes minor decisions for supervisor; maintains a complete set of files or records as necessary for the operation of the office; prepares routine correspondence on own initiative or in accordance with general instructions; makes arrangement for travel and accommodations; arranges meetings and conferences, taking minutes of meeting as required, compiles information from files and prepares routine of special reports as directed; issues orders and distributes work to supervisor's subordinates.

Bureau of Business Research
University of New Mexico
Albuquerque, New Mexico

CODE: _____
DATE: _____

ALBUQUERQUE AREA WAGE SURVEY
GENERAL INFORMATION:

NUMBER OF EMPLOYEES IN THE COMPANY:

Paid on--	Clerical & Related	Craft & Manual	TOTAL
Hourly rate	_____	_____	_____
Weekly rate	_____	_____	_____
Monthly rate	_____	_____	_____
Additional comments: _____			

PROVISIONS FOR OVER TIME COMPENSATION:

	Clerical & Related				Craft & Manual			
	None	Straight Time	Time and one half	Double Time	None	Straight time	Time and one half	Double Time
Over 8 hrs. any one day	_____	_____	_____	_____	_____	_____	_____	_____
Over 40 hrs. any week	_____	_____	_____	_____	_____	_____	_____	_____
7th consecutive day worked	_____	_____	_____	_____	_____	_____	_____	_____
Other - describe	_____	_____	_____	_____	_____	_____	_____	_____

PAID HOLIDAYS OBSERVED:

	Clerical & Related			Craft & Manual		
	Hourly Rated	Weekly Rated	Monthly Rated	Hourly Rated	Weekly Rated	Monthly Rated
New Years - Jan. 1	_____	_____	_____	_____	_____	_____
Lincoln's - Feb. 22	_____	_____	_____	_____	_____	_____
Washington's - Feb. 22	_____	_____	_____	_____	_____	_____
Decoration Day - May 30	_____	_____	_____	_____	_____	_____
Independence Day - July 4	_____	_____	_____	_____	_____	_____
Labor Day	_____	_____	_____	_____	_____	_____
Pres. Election Day	_____	_____	_____	_____	_____	_____
Thanksgiving	_____	_____	_____	_____	_____	_____
Christmas - Dec. 25	_____	_____	_____	_____	_____	_____
Others (specify).	_____	_____	_____	_____	_____	_____

PROVISIONS FOR PAID VACATIONS

Clerical and Related			Craft and Manual		
_____ days per month	after _____	_____	_____ days per month	after _____	_____
_____ days per year	service _____	_____	_____ days per year	service _____	_____
_____ weeks per year	of _____	_____	_____ weeks per year	of _____	_____

Bureau of Economic Research
 1115 North 17th Street
 Washington, D.C. 20036

ALLEGATIONS OF SLAVE TRAFFIC
 GENERAL INFORMATION

NAME OF COMPANY IN THE COMPANY:

Address: _____
 City: _____
 State: _____
 Zip: _____
 Telephone: _____
 Fax: _____
 E-mail: _____
 Website: _____
 Other: _____
 Date: _____

PROVISIONS OF THE COMPANIES:

Name of Company: _____
 Address: _____
 City: _____
 State: _____
 Zip: _____
 Telephone: _____
 Fax: _____
 E-mail: _____
 Website: _____
 Other: _____
 Date: _____

PROVISIONS OF THE COMPANIES:

Name of Company: _____
 Address: _____
 City: _____
 State: _____
 Zip: _____
 Telephone: _____
 Fax: _____
 E-mail: _____
 Website: _____
 Other: _____
 Date: _____

PROVISIONS FOR PAID VACATIONS

Name of Company: _____
 Address: _____
 City: _____
 State: _____
 Zip: _____
 Telephone: _____
 Fax: _____
 E-mail: _____
 Website: _____
 Other: _____
 Date: _____

Albuquerque Area Wage Survey
General Information (continued)

PROVISION FOR COMPANY SPONSORED PLAN FOR:	<u>Clerical & Related</u>	<u>Craft & Manual</u>
Group life insurance (Yes or No)	_____	_____
Company pays all premiums (check if yes)	_____	_____
Company pays part of premiums (check if yes)	_____	_____
Company pays nothing (check if yes)	_____	_____
Hospitalization expenses (Yes or No)	_____	_____
Company pays some expenses (check if yes)	_____	_____
Company sponsored insurance (yes or no)	_____	_____
Company pays full premium (check)	_____	_____
Company pays partial premium (check)	_____	_____
Company pays nothing (check)	_____	_____
Retirement (Separate from OASI) (Yes or No)	_____	_____
Company makes retirement payment (check if yes)	_____	_____
Annuity plan (yes or no)	_____	_____
Company pays total premium (check)	_____	_____
Company pays partial premium (check)	_____	_____
Employee pays total premium (check)	_____	_____

EMPLOYEES COVERED BY OASI (Yes or No) _____

GENERAL COMMENTS: (Please include any other related information such as annual bonuses not covered above which affects the annual income of employees - show applicability to Clerical and Related and Craft and Manual separately.)

INFORMATION PROVIDED BY:

_____	_____	_____
Name	Title	Interviewer

Job Title: _____ (as used by Bureau) _____ (as used by informant)

Period covered _____ Hiring _____
(week or month ending): _____ Rates: Minimum: _____

Duties other than indicated in job description: _____ Maximum: _____

[illegible]

ALBUQUERQUE AREA WAGE SURVEY
COOPERATORS' MANUAL

Note: The Job Descriptions shown under Appendix C, pages 154-163 were included in this Cooperator's Manual

Dear Cooperator:

This folder is furnished for your information in connection with your participation in an occupational wage survey of the Albuquerque area being conducted by the Bureau of Business Research of the University of New Mexico.

The study will cover the wages, hours, and certain related information for selected occupations as of November 1951 payrolls, and the results will be published in a report by the Bureau in January 1952.

The results of a similar study were published by the Bureau in January 1950, and the current survey is being made to satisfy a general demand for up to date information on the subject.

Business in general in Albuquerque has found the published information to be of value in relation to policies of hiring, wage administration, and personnel relations. The report also supplies useful data in the efforts toward attracting new business to keep Albuquerque growing.

The sources of information will be kept strictly confidential and treated in such fashion that the names of participating companies will not be disclosed. The data will be obtained from a selected list of representative firms which reflect a cross section of Albuquerque industry and business.

Information for this study will be recorded on two separate forms. The General Information form concerns provisions for overtime pay, paid holidays, paid vacations, and company sponsored plans for hospitalization, life insurance, and retirement. The Wage Information form, one of which will be completed for each occupation covered by this survey, concerns hours, wages, and number of workers employed at various wage rates. Instructions for completing the two forms are found on the following two pages. Forms are to be filled out in duplicate, the duplicate copy to be retained by the Company for its records. It is suggested that all duplicate forms be kept in the Manual.

There are also included in this folder job descriptions of the occupations to be surveyed. These describe in detail what is believed to be a standard specification for the common craft and manual jobs, or clerical and related jobs, included in this study.

ALPHAPRAXIS
INDUSTRY AND BUSINESS

Page 107

This folder is intended for your information in connection with your participation in an ongoing and major survey of the Alphasprax industry conducted by the Bureau of Business Research at the University of Chicago.

The survey will cover the wages, hours, and certain related information for selected occupations in the Alphasprax industry and the results will be added in a report by the Bureau in January 1953.

The results of a similar study are published by the Bureau in January 1950, and the current survey is being made to satisfy a general demand for more detailed information on the subject.

Business in general in Alphasprax has found the published information to be of value in relation to policies of hiring, wage administration, and personnel relations. The report also supplies useful data in the Alphasprax industry and business to keep Alphasprax growing.

The sources of information will be kept confidential and treated in such fashion that the name of participating companies will not be disclosed. The data will be obtained from a selected list of representative firms which represent a cross section of Alphasprax industry and business.

Information for this study will be recorded on two separate forms. The General Information form contains provisions for covering pay, paid holidays, paid vacation, company sponsored plans for hospitalization, life insurance, and other benefits. The Wage Information form, one of which will be completed by each occupation covered by this survey, contains names, wages, and number of workers employed at various wage rates. Instructions for completing the two forms are found on the back of each form. The forms to be filled out are found on the back of each form. A duplicate copy of the forms for the company is suggested that the duplicate forms be kept in the records. It is suggested that the duplicate forms be kept in the Manual.

There are also included in this folder job descriptions of the occupations to be surveyed. These describe in detail what is to be done by a standard classification for the reason that it is necessary for clerical and other jobs included in this study.

--2--

Plans are being perfected to keep the information current and to publish reports more frequently. This will be accomplished by means of a query system under which interested firms may direct questions on which they want information to the Bureau of Business Research, University of New Mexico. The Bureau will act as a clearing medium. Periodically, the Bureau will direct by mail to participating firms wage and information forms, such as in this folder, to be filled in and returned.

Thus, there will be historical continuity, uniformity in job descriptions, and development of information most desired by the using firms. Surveys by individual firms will no longer be necessary and participating firms will be contacted once by the clearing medium, rather than by a number of individual firms.

Your cooperation in this community survey is greatly appreciated. Your recommendations and suggestions with respect to the occupations covered or the format of the information forms are sincerely solicited.

Bureau of Business Research
University of New Mexico

Ralph L. Edgel
Director

HWM:emd

ALBUQUERQUE AREA WAGE SURVEY
GENERAL INFORMATION INSTRUCTION SHEET

Note: In filling out this form, please observe the following:

1. Fill out each form in duplicate
2. Line out (---) each space where no answer is obtained
3. Sign the form in the space for Interviewer
4. Enter the duplicate copy in the Manual for Cooperators

<u>Caption</u>	<u>Instruction</u>
Code	This is code number used instead of firm name to insure that information is kept confidential
Date	Date information is filled in
Number of employees	Fill in number of employees under each category in the participating Company
Provisions for overtime compensation	Write in yes on appropriate line to indicate type of overtime compensation paid
Paid holidays observed	Write in yes on appropriate line to indicate holidays observed and paid for
Provisions for paid vacations	Enter number of days granted and the related amount of service necessary as applicable
Provision for other company sponsored plans	Fill in as indicated
Employees covered by OASI	Fill in yes or no
General comments	Fill in other pertinent information which is considered as benefits affecting annual income of employees.

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1. Fill in the following information:
2. Fill in the following information:
3. Fill in the following information:
4. Fill in the following information:

Instructions

Notes: In filling out this form, please observe the following:

1. Fill out each form in duplicate.
2. Line one (—) each space should be filled with the name of the company.
3. Sign the form in the space provided for the signature of the official.
4. Attach the duplicate copy in the space provided for the duplicate copy.

This information is filled in:

Information

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

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Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Fill in the number of copies of each form as indicated in the space provided for the number of copies. This form is to be filled in duplicate.

Code: _____

Date: _____

Number of copies: _____

Provision for overtime: _____

Provision for paid vacation: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Provision for other: _____

Bureau of Business Research
University of New Mexico
Albuquerque, New Mexico

CCDE: _____
DATE: _____

ALBUQUERQUE AREA WAGE SURVEY
GENERAL INFORMATION:

NUMBER OF EMPLOYEES IN THE COMPANY:

Paid on--	Clerical & Related	Craft & Manual	TOTAL
Hourly rate	_____	_____	_____
Weekly rate	_____	_____	_____
Monthly rate	_____	_____	_____
Additional comments: _____			

PROVISIONS FOR OVER TIME COMPENSATION:

	Clerical & Related				Craft & Manual			
	None	Straight Time	Time and one half	Double Time	None	Straight time	Time and one half	Double Time
Over 8 hrs.	_____	_____	_____	_____	_____	_____	_____	_____
any one day	_____	_____	_____	_____	_____	_____	_____	_____
Over 40 hrs.	_____	_____	_____	_____	_____	_____	_____	_____
any week	_____	_____	_____	_____	_____	_____	_____	_____
7th consecu-	_____	_____	_____	_____	_____	_____	_____	_____
tive day	_____	_____	_____	_____	_____	_____	_____	_____
worked	_____	_____	_____	_____	_____	_____	_____	_____
Other -	_____	_____	_____	_____	_____	_____	_____	_____
describe	_____	_____	_____	_____	_____	_____	_____	_____

PAID HOLIDAYS OBSERVED:

	Clerical & Related			Craft & Manual		
	Hourly Rated	Weekly Rated	Monthly Rated	Hourly Rated	Weekly Rated	Monthly Rated
New Years - Jan. 1	_____	_____	_____	_____	_____	_____
Lincoln's - Feb. 22	_____	_____	_____	_____	_____	_____
Washington's - Feb. 22	_____	_____	_____	_____	_____	_____
Decoration Day - May 30	_____	_____	_____	_____	_____	_____
Independence Day - July 4	_____	_____	_____	_____	_____	_____
Labor Day	_____	_____	_____	_____	_____	_____
Pres. Election Day	_____	_____	_____	_____	_____	_____
Thanksgiving	_____	_____	_____	_____	_____	_____
Christmas - Dec. 25	_____	_____	_____	_____	_____	_____
Others (specify).	_____	_____	_____	_____	_____	_____

PROVISIONS FOR PAID VACATIONS

Clerical and Related			Craft and Manual		
_____ days per month	after	_____	_____ days per month	after	_____
_____ days per year	service	_____	_____ days per year	service	_____
_____ weeks per year	of	_____	_____ weeks per year	of	_____

Item	Amount	Description
1		Provision for company sponsored life insurance
2		Company pays full premium (Yes or No)
3		Company pays part of premium (Specify %)
4		Company pays nothing (Specify %)
5		Company pays full premium (Yes or No)
6		Company pays part of premium (Specify %)
7		Company pays nothing (Specify %)
8		Company pays full premium (Yes or No)
9		Company pays part of premium (Specify %)
10		Company pays nothing (Specify %)
11		Company pays full premium (Yes or No)
12		Company pays part of premium (Specify %)
13		Company pays nothing (Specify %)
14		Company pays full premium (Yes or No)
15		Company pays part of premium (Specify %)
16		Company pays nothing (Specify %)
17		Company pays full premium (Yes or No)
18		Company pays part of premium (Specify %)
19		Company pays nothing (Specify %)
20		Company pays full premium (Yes or No)
21		Company pays part of premium (Specify %)
22		Company pays nothing (Specify %)
23		Company pays full premium (Yes or No)
24		Company pays part of premium (Specify %)
25		Company pays nothing (Specify %)

GENERAL COMMENTS: (Please include any other related information such as annual bonus not covered above which affects the annual income of employees - show responsibility to General and Related and Related and Related separately.)

EMPLOYEE COMMENTS: (Please include any other related information such as annual bonus not covered above which affects the annual income of employees - show responsibility to General and Related and Related and Related separately.)

INFORMATION PROVIDED BY: _____

DATE: _____

Signature: _____

Print Name: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone: _____

Other: _____

ALBUQUERQUE AREA WAGE SURVEY
WAGE INFORMATION INSTRUCTION SHEET

Note: In filling out this form, please observe the following:

1. Fill out each form in duplicate
2. Line out (---) each space where no answer is obtained
3. Sign the form in the space for Interviewer
4. Enter the duplicate copy in the Manual for Cooperators

<u>Caption</u>	<u>Instruction</u>
Code	This code number used instead of firm name to insure that information is kept confidential
Job Title (as used by Bureau)	This is the title used by the Bureau
Job Title (as used by informant)	Enter here the title used by the participating Company for this job, if different from above
Period covered	Indicate the payroll period reported on
Hiring Minimum Rates: Maximum	Enter here the minimum and the maximum established hiring rates for the particular job title
Other duties	Indicate in this space any other duties performed by incumbents of the particular job at participating Company not included in job description which are considered to be important parts of the job.
Work Period	Fill in number of hours indicated, using a separate horizontal line for each pay rate
Wage Received	Fill in dollars and cents of wages paid for time as indicated. Enter on same horizontal line as used under "Work Period" for the applicable pay rate. Check in proper block to show whether wage is at hourly, weekly, or monthly rate
Average Wage	This will be computed by the Bureau
Number of Employees	Enter on applicable horizontal line the number of employees for whom "Wages Received" are shown. Show both the number of workers covered by union contract and the total number of workers at each rate

Cooperatives

Notes: In filling out this form, please observe the following instructions:
1. Fill out each item in duplicate.
2. Use only (—) and (X) for answers.
3. Sign the form in the space provided.
4. Enter the duplicate copy in the space provided.

Indicate the title used by the
Company for this job
different from above

Indicate the minimum and the maximum
wages paid for this job
Indicate the title used by the
Company for this job

Indicate in this space any other data
pertaining to the job
Indicate the title used by the
Company for this job

Indicate the number of hours indicated
using a separate horizontal line
each pay rate

Indicate in dollars and cents of
paid for this job as indicated
same horizontal line as used
above for the number of
hours. Check in proper block
whether rate is at hourly or
daily rate.

This will be computed by
Enter on applicable horizontal line
the number of employees for
each rate shown. Show
number of workers covered
contract and the total
workers at each rate.

Indicate the number of employees for each
contract and the total number of
workers at each rate.

Notes: In filling out this form, please observe the following instructions:
1. Fill out each item in duplicate.
2. Use only (—) and (X) for answers.
3. Sign the form in the space provided.
4. Enter the duplicate copy in the space provided.

Indicate the title used by the
Company for this job
different from above

Indicate the minimum and the maximum
wages paid for this job
Indicate the title used by the
Company for this job

Indicate in this space any other data
pertaining to the job
Indicate the title used by the
Company for this job

Indicate the number of hours indicated
using a separate horizontal line
each pay rate

Indicate in dollars and cents of
paid for this job as indicated
same horizontal line as used
above for the number of
hours. Check in proper block
whether rate is at hourly or
daily rate.

This will be computed by
Enter on applicable horizontal line
the number of employees for
each rate shown. Show
number of workers covered
contract and the total
workers at each rate.

Indicate the number of employees for each
contract and the total number of
workers at each rate.

Code
Job title (as used by Bureau)
Job title (as used by informant)
Period covered
Rating
Reasons
Received
Other details

Number of employees
Average rate
Number of employees
Average rate

ALBUQUERQUE WAGE SURVEY
INTERVIEWER'S MANUAL

Note: This Interviewer's Manual included all the papers that are shown in the Cooperator's Manual, Appendix E.

GENERAL

This manual covers the procedure to be followed in obtaining data from a selected list of representative firms of Albuquerque, New Mexico, in connection with an occupational wage study being conducted by Mr. H. Wilson Maglidt for the Bureau of Business Research of the University of New Mexico.

This study will cover the wages, hours, and certain related information from selected occupations as shown in November 1951 payrolls.

Definite appointments for interviews have been made with the firms to be visited.

PREPARATION

An interview folder (manual for cooperators) will be provided for each firm to be interviewed to facilitate the interview and make it business-like. Each occupation form to be filled in and the general information questionnaire are set up in duplicate in the order in which they are to be completed.

The interviewer shall familiarize himself thoroughly with the instruction sheet, a copy of which is in each Interviewer's Manual.

INTRODUCTION

In accordance with assignments as shown in Appendix A, the firms indicated will be called on by the interviewer at the appointed time. The interviewer will introduce and identify himself to the person to be interviewed by giving the following information:

- a. Name
- b. Statement that he is representing the Bureau of Business Research of the University of New Mexico
- c. Statement that he has an appointment at that time
- d. Explanation that the call is made for the purpose of obtaining data in connection with an occupational wage survey of the Albuquerque area; that the firm being called on is one of a selected list of representative firms of the area; and that certain selected occupations are being surveyed.

CLASSIFICATION
SECRET

1. This document contains information of a confidential nature and is to be controlled as such.

EXPLANATION

The word "SECRET" is used to indicate that the information contained in this document is of a confidential nature and is to be controlled as such. It is not to be disclosed to the public or to any unauthorized person.

The word "CONFIDENTIAL" is used to indicate that the information contained in this document is of a confidential nature and is to be controlled as such. It is not to be disclosed to the public or to any unauthorized person.

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- e. Assure him that the source of information and information furnished will be kept strictly confidential.
- f. Point out that an occupational wage survey was conducted by the Bureau in October 1949 and published in January 1950. At this point show him a copy of the January 1950 report. Tell him that there has been much demand for this information by Albuquerque business firms, and that there have been many requests for up to date information since that time.
- g. Statement that in this survey the scope, number of firms included, and number of occupations covered has been greatly expanded.
- h. Explanation that the study will be based on November 1951 payrolls and that the results will be published in January 1952.
- i. Therefore, that information is requested from his records as of November or as near that period as is possible.

If for any reason, the person to be interviewed cannot keep the appointment or furnish the information requested, the interviewer shall:

- a. Ask to talk to someone else in the firm who can furnish the information or
- b. Ask for another appointment.

If the firm so requests, the forms may be left to be filled in and called for, or mailed in, later. When this is done, a copy of the Manual for Cooperators and an addressed envelope should be left also. Also make sure that the respondent thoroughly understands the manner of completing the forms.

OBTAINING INFORMATION

When the introduction has been completed and the detailed information listed in the preceding paragraph has been imparted to the person being interviewed, the interviewer shall then proceed as follows:

- 1. Hand to the person being interviewed his copy of the Manual for Cooperators so that he may read it as he gives the required information.
- 2. Obtain the data to complete the General Information form (WS-1) according to the instructions set forth on the General Information Instruction Sheet, and observing the following:
 - a. Hand the respondent a copy of the General Information Sheet
 - b. Read each question aloud and record the answers furnished.

- a. Assume that the source of information and information furnished will be kept strictly confidential.
- b. Point out that an investigation will be conducted by the Bureau in January 1950, in this connection with the January 1950 report, and that the source will be kept confidential for this information to the Bureau. It will, however, be made known to the Bureau and the source will be kept confidential.
- c. Inform the source that the source will be kept confidential for this information to the Bureau and the source will be kept confidential.
- d. Explain that the source will be kept confidential for this information to the Bureau and the source will be kept confidential.
- e. Inform the source that the source will be kept confidential for this information to the Bureau and the source will be kept confidential.

If for any reason, the source is to be interviewed and the information or furnish the information to the Bureau, the source will be kept confidential.

- a. Ask to talk to the source about the information to the Bureau.
- b. Ask for further information.

If the first request, the source will be kept confidential for this information to the Bureau and the source will be kept confidential.

REMARKS:

When the information has been completed and the source interviewed, the source will be kept confidential for this information to the Bureau and the source will be kept confidential.

1. Ask to the person being interviewed the copy of the information to the Bureau and the source will be kept confidential.
2. Explain the information to the Bureau and the source will be kept confidential.
3. Explain the information to the Bureau and the source will be kept confidential.

- a. Ask the person being interviewed the copy of the information to the Bureau and the source will be kept confidential.
- b. Ask the person being interviewed the copy of the information to the Bureau and the source will be kept confidential.

3. Obtain data to complete a Wage Information form (WS-2) for each occupation in the Company which is covered by this survey. Follow the instructions set forth on the Wage Information Instruction Sheet and observe the following:
 - a. Hand the respondent a copy of the Wage Information form
 - b. Ask him to read the applicable job description in his Manual for Cooperators before giving any wage information about a particular occupation
 - c. In every case where it is possible, obtain information from actual payroll records.

CLOSE

When the general information form and all occupation forms have been completed, the interviewer shall:

- a. Again assure the person being interviewed that all information will be kept strictly confidential
- b. Explain that the Bureau of Business Research through Mr. H. Wilson Maglidt is perfecting plans to keep the information current and to publish a regular and periodic report. This will be accomplished by means of a query system under which interested firms may direct questions on which they want information to the Bureau of Business Research of the University of New Mexico. The Bureau will act as a clearing medium. Thus, there will be historical continuity, uniformity in job descriptions, and development of information most desired by the using firms. Surveys by individual firms will no longer be necessary and participating firms will be contacted once by the clearing medium, rather than by a number of individual firms.
- c. Ask that if he has any suggestions with respect to the occupations covered or the format of the forms that he direct them to the Bureau of Business Research, University of New Mexico.
- d. While closing, place the completed forms in an envelope, write in code number in proper space on outside of envelope, and seal envelope. Do this in such manner that the person being interviewed will observe the care with which his information is being handled.
- e. Thank him for his cooperation.

The sealed envelopes containing forms filled in during interviews shall be delivered to the Bureau of Business Research.

3. Obtain data to complete a case history form (1-2-1) for each category in the case which is covered by this survey. Obtain the information set forth on the case information form and enter the following:

1. Enter the respondent's name on the Case Information form.
2. Ask him to read the questionnaire and explain to him the Bureau's purpose in conducting the survey. Obtain information about a past or present occupation.
3. In every case where it is possible, obtain information from several payroll records.

Notes

When the general information form and all categories of data have been completed, the information shall:

1. Be submitted to the person being interviewed and all information will be kept strictly confidential.
2. Be retained by the Bureau of Business Research for Mr. W. Wilson Smith's personal use to keep the information current and to prepare a regular and periodic report. This will be accomplished by means of a query system which includes a summary of direct questions on which the respondent is asked to answer. The Bureau of Business Research of the University of New Mexico will act as a clearing house. Thus, there will be a constant exchange of information in the development, and development of information, and a constant exchange of information. This will be done by the Bureau of Business Research of the University of New Mexico.
3. Be submitted to the person being interviewed and all information will be kept strictly confidential.
4. Be submitted to the person being interviewed and all information will be kept strictly confidential.
5. Be submitted to the person being interviewed and all information will be kept strictly confidential.
6. Be submitted to the person being interviewed and all information will be kept strictly confidential.
7. Be submitted to the person being interviewed and all information will be kept strictly confidential.
8. Be submitted to the person being interviewed and all information will be kept strictly confidential.
9. Be submitted to the person being interviewed and all information will be kept strictly confidential.
10. Be submitted to the person being interviewed and all information will be kept strictly confidential.

The general information form and all categories of data shall be retained by the Bureau of Business Research.

APPENDIX G

ALBUQUERQUE WAGE SURVEY
GUIDE FOR TELEPHONE SOLICITATION

Call firms where name of the possible contact is known.

Use the following as a guide in making telephone solicitation for appointment to secure wage data. Condense what is said insofar as the conversation permits.

Mr. _____, I am calling for the Bureau of Business Research of the University. We are making an Albuquerque wage survey to get a picture of the wage structure here. This will give you and local firms information in relation to policies on wage administration and some personnel practices. You will recall the wage report we published in 1950 and there is a general demand to bring it up to date.

We come to you, as a representative business firm of Albuquerque, for some information based on your November payrolls, which should not take much time. The information will be kept strictly confidential.

Say this coming _____, what time may we see you?

APPENDIX 2

ALPHABETICALLY LISTED
GUIDE FOR TECHNICAL ASSISTANTS

Call first where name of the possible contact is known.
Use the following as a guide in making telephone contacts.
For appointment to secure wage data. Confirm that a valid contract for
the construction period.

Mr. _____, I am calling for the Bureau of Industrial Relations at
the University. We are making an alphabetical wage survey of the
persons of the wage structure here. This will give you and I will
give information in relation to policies as well as wages.
and some personnel questions. We will report the wage survey
published in 1950 and there is a general demand to improve the
to date.
We come to you, as a representative business firm of the region,
for some information based on your business position, and we would
not take much time. The information will be used strictly for
this.
By this contact, _____, what time may we see you?

APPENDIX H

INTERVIEWS OBTAINED BY TELEPHONE
APPOINTMENT AND BY UNANNOUNCED VISIT

TELEPHONE APPOINTMENT

<u>No. of firms called</u>	<u>Appoint- ments made</u>	<u>Declined</u>	<u>No interview, no outright declination</u>	<u>One call back</u>	<u>Two calls back</u>	<u>Three calls back</u>	<u>No. of inter- views</u>
24	24	3	3	7	1	1	18
Number of visits to secure the above							
	24		7	7	2	3	
Total number of interviews completed							18
Total number of calls made							43

UNANNOUNCED VISITS

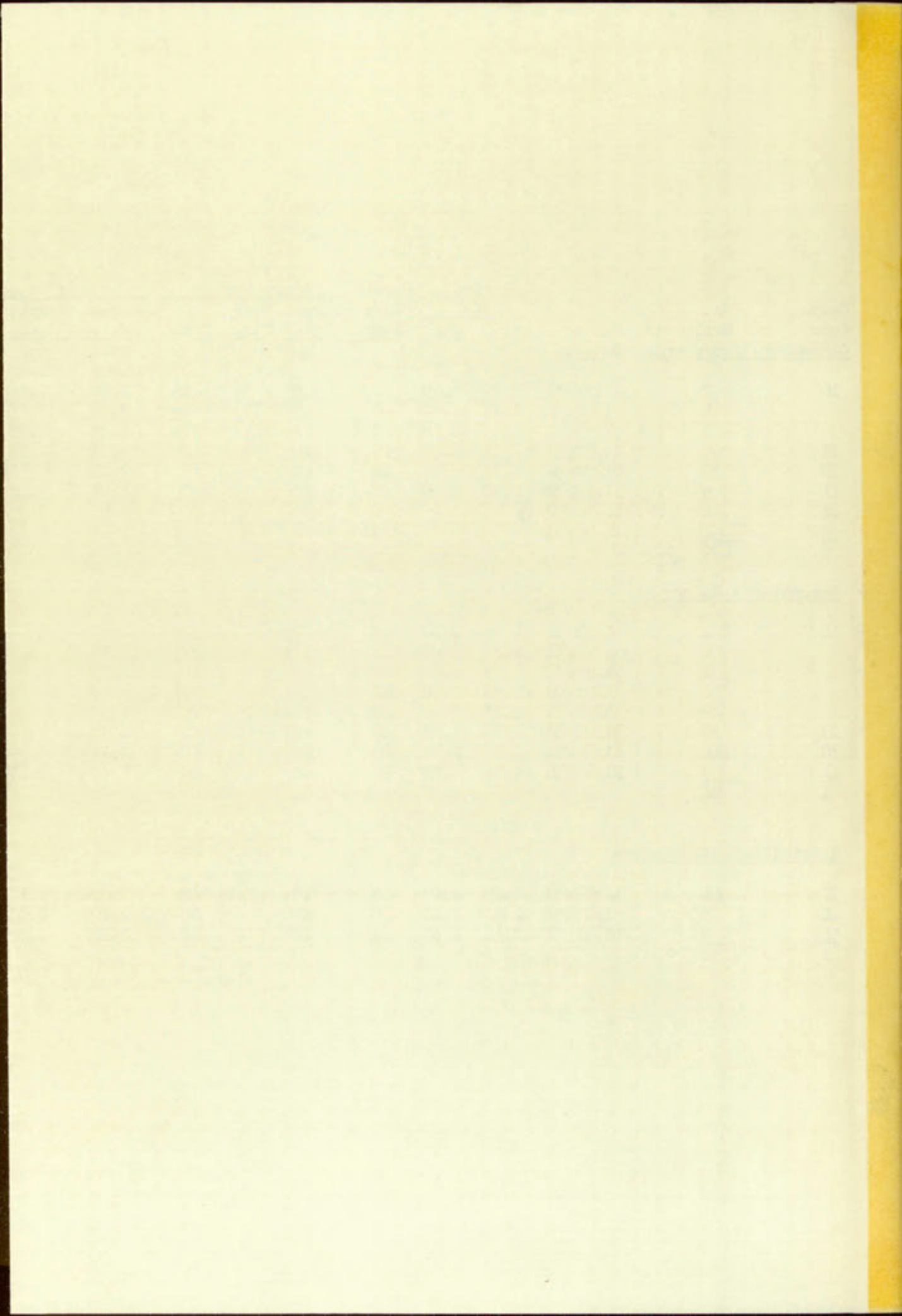
<u>No. of firms visited</u>	<u>Declined</u>	<u>No interview, no outright declination</u>	<u>One call back</u>	<u>Two calls back</u>	<u>Three calls back</u>	<u>No. of inter- views</u>
24	2	4	2	2	3	18
Number of visits to secure the above						
24		14	2	4	9	
Total number of interviews completed						18
Total number of visits made						53

TABULATION OF WAGE DATA

No. of Employees	Period Covered	Hiring Rate		Normal Work Week	Hours Worked		Wages Received			Total Weekly Wage	Normal Hourly Wage Rate Mean Computation	Total Hourly Rate Mean Computation	Mean Normal Rate	Mean Overtime Rate	Mean Total Rate
		Min.	Max.		Normal Rate	Over Time	Normal Rate	Overtime Rate	Total						
2	12/5/51	2.25	2.50	40	40	4½	2.50	2.50	\$111.25	\$111.25	2.50	2.50	5.000	5.000	5.000
1	12/5/51	2.25	2.50	40	40	17½	2.25	2.25	129.38	129.38	2.25	2.25	2.250	2.250	2.250
2	12/5/51	2.25	2.50	40	38	½	2.25	2.25	86.07	86.07	2.25	2.25	4.500	4.500	4.500
60	11/30/51	2.25	2.25	40	40		2.25	2.25	90.00	90.00	2.25	2.25	135.000	135.000	135.000
33	11/30/51	1.75	2.25	40	40		2.21½	2.21½	88.64	88.64	2.21½	2.21½	73.095	73.095	73.095
9	11/17/51	1.80	2.28	40	40		2.01	3.01½	80.40	80.40	2.01	2.01	18.090	27.135	18.090
1	11/30/51			30	30		2.75	2.75	82.50	82.50	2.75	2.75	2.750	2.750	2.750
1	11/30/51			48	40	8	1.11	1.65½	57.64	57.64	1.11	1.20	1.110	1.655	1.20
109													241.795		241.804
													109		109
													\$2.218	\$2.306	\$2.218
s Helper															
2	12/5/51	1.35	2.00	40	37½		1.40		52.50	52.50	1.40	1.40	2.80	2.80	75
1	12/5/51	1.35	2.00	40	37½		1.75		65.63	65.63	1.75	1.75	1.75	1.75	37½
1	12/5/51	1.35	2.00	40	40		1.75		70.00	70.00	1.75	1.75	1.75	1.75	40
1	12/5/51	1.35	2.00	40	33½		2.00		67.00	67.00	2.00	2.00	2.00	2.00	33½
29	12/5/51	1.35	2.00	40	26.6		1.35		35.91	35.91	1.35	1.35	39.15	39.15	771.4
30	11/30/51	1.75	1.75	40	40		1.75		70.00	70.00	1.75	1.75	52.50	52.50	1200
11	11/30/51	1.75	2.00	40	40		2.21½		88.60	88.60	2.21½	2.21½	24.36	24.36	440
9	11/17/51	1.34	1.70	40	40		1.45	2.17½	58.00	58.00	1.45	1.45	13.05	19.58	360
84													137.36	143.89	2957.4
													84	84	84
													\$1.635	\$1.713	\$1.635
n, Journeyman															
44	11/30/51	2.08	2.08	40	40		2.08	3.12	83.20	83.20	2.08	2.08	91.52	137.28	3660.80
8	11/17/51	1.92	2.40	40	40		2.02	3.03	80.80	80.80	2.02	2.02	16.16	24.24	646.40
5	11/21/51	2.61	2.61	40	40		2.61	3.91½	104.40	104.40	2.61	2.61	13.05	19.58	522.00
57													120.73	181.10	4829.20
													57	57	57
													\$ 2.118	\$3.177	\$2.118

Appendix I

Computation of			
Mean Normal Work Week	Mean Overtime Hours	Mean Total Work Week	Mean Total Weekly Wage
80	9	89	222.50
40	17½	57.5	129.38
80	½	76.5	172.14
24.00		24.00	5400.00
13.20		13.20	2925.12
3.60		3.60	723.60
30		30	82.50
48	8	48	57.64
43.58	35	43.81	9712.88
109		109	109
39.982	5.8	40.19	\$89.11
		75	105.00
		37½	65.63
		40	70.00
		33½	67.00
		771.4	1041.39
		1200	2100.00
		440	974.60
		360	522.00
		2957.4	4945.62
		84	84
40	None	35.2	58.87
			3660.80
			646.40
			522.00
			4829.20
			57
40	None	40	84.72



APPENDIX J

INFORMATION SOUGHT

The Bureau of Labor Statistics in conducting cross industry occupational wage surveys during the year 1951, sought the following information:¹

1. For each office occupation studied:

Number of workers - Male _____ Female _____
Average weekly hours (standard)
Average weekly earnings (standard)
Number of workers receiving straight-time weekly earnings
of (23 rate ranges were listed with the request that the
number of employees be filled in where appropriate)

2. For each occupation other than office occupation:

Number of workers - Male _____ Female _____
Average hourly earnings (standard)
Number of workers receiving straight-time hourly earnings
of (23 rate ranges were listed with the request that the
number of employees be filled in where appropriate)

3. General information, identified whether applicable to office occupations and other:

Minimum entrance rate (37 rate ranges were listed and it was
requested that the appropriate rate be indicated)
Shift differential provisions
Per cent of workers in 2nd shift
Per cent of workers in 3rd shift
Per cent receiving shift differentials
Per cent receiving uniform cents per hour (6 differential
rate ranges were listed and the appropriate per cent
was to be filled in)
Per cent receiving uniform percentage (5 differential
percentage rates were listed and it was asked that the
appropriate per cent be filled in)

¹Occupational Wage Survey - Dayton, Ohio - June, 1951, Bulletin 1041, United States Department of Labor, Bureau of Labor Statistics.

1. General Information

The first of the following questions is to be answered by the respondent in the first column of the table. The second question is to be answered by the respondent in the second column of the table.

2. General Information, Identification and Description

1. Name of the person or persons who have been identified as the source of the information. (If the information is from a single source, the name of the source should be given. If the information is from multiple sources, the names of the sources should be given.)

2. Date and place of birth of the person or persons who have been identified as the source of the information. (If the information is from a single source, the date and place of birth of the source should be given. If the information is from multiple sources, the dates and places of birth of the sources should be given.)

3. General information, identification and description of the person or persons who have been identified as the source of the information. (If the information is from a single source, the general information, identification and description of the source should be given. If the information is from multiple sources, the general information, identification and description of the sources should be given.)

4. Information concerning the person or persons who have been identified as the source of the information. (If the information is from a single source, the information concerning the source should be given. If the information is from multiple sources, the information concerning the sources should be given.)

Per cent receiving other kind of differential pay
 Per cent receiving no differential
 Scheduled weekly hours (12 categories of hours in the week were listed and the appropriate column was to be checked)
 Paid holidays (12 different categories of number of holidays paid for were listed and it was asked that the appropriate category be checked)
 Paid vacations (formal provisions)
 6 months of service (5 categories were listed with the request that the appropriate data be checked)
 1 year of service (5 categories)
 2 years of service (6 categories)
 10 years of service (5 categories)
 Paid sick leave (formal provisions)
 6 months of service (5 categories)
 1 year of service (9 categories)
 2 years of service (10 categories)
 10 years of service (10 categories)
 Non-production bonuses (4 categories)
 Insurance and pension plans
 Life insurance
 Health insurance
 Hospitalization
 Retirement pension
 None

The Merchants and Manufacturers Association of Los Angeles sought information for each job description surveyed as follows:²

1. Rates paid on an hourly basis (straight-time hourly rate)

Number of workers - Male _____ Female _____
 Current number of hours worked per week
 Base
 Overtime
 Total
 Rate overtime is paid
 Straight-time
 Time and one-half

2. Rates paid on a salaried basis (straight-time weekly rate)

The breakdown here is the same as hourly basis workers next above.

²Community Wage Rate Survey, August, 1949, Los Angeles Area,
 Merchants and Manufacturers Association, Los Angeles, California.

For each respondent, other than the differential pay
 for each respondent to differential
 benefits, weekly pay (15 categories) is listed in the
 first column and the respondent's column is to be
 marked.
 Full benefits (15 differential categories of number of benefits
 paid for each listed and 15 was added that the respondent
 category is checked)
 Full benefits (15 differential categories)
 6 months of service (15 categories) were listed with the
 respondent that the respondent had to check)
 1 year of service (15 categories)
 2 years of service (15 categories)
 3 years of service (15 categories)
 4 years of service (15 categories)
 5 years of service (15 categories)
 6 years of service (15 categories)
 7 years of service (15 categories)
 8 years of service (15 categories)
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 92 years of service (15 categories)
 93 years of service (15 categories)
 94 years of service (15 categories)
 95 years of service (15 categories)
 96 years of service (15 categories)
 97 years of service (15 categories)
 98 years of service (15 categories)
 99 years of service (15 categories)
 100 years of service (15 categories)

The respondents and respondents' association of two figures
 against information for each job description survey is follows:
 1. Jobs paid on a hourly basis (straight-time hourly rate)

Number of workers - Rate
 Current number of hours worked per week
 Rate
 Over-time
 Total
 Rate over-time
 Straight-time
 Total and over-time

2. Jobs paid on a salaried basis (straight-time weekly rate)
 The question here is the rate as hourly rate is unknown
 next above.

3. Rates paid on a salaried basis (straight-time monthly rate)

The breakdown here is the same as the next above.

This is the information which the Merchants and Manufacturers Association of Los Angeles sought in making wage surveys. It should be noted that this organization makes companion surveys of personnel policies and the results published in separate reports on Community Personnel Policy. The personnel policy survey covers 106 subjects, examples of which are: accident insurance, bulletin boards, cafeteria, communication methods, disability programs, employee handbook, exit interviews, holidays, incentive wage programs, job evaluation programs, physical examinations, rest periods, service awards, time clocks, training programs, etc.

Montana State University in making a cross industry occupational wage survey in 1951, asked for the following information:³

1. For each job description surveyed:

Number of employees - Male _____ Female _____
Average weekly wages

2. General information:

Total number of employees
Type of paid vacation
None)
One week) To be checked in the
Two weeks) appropriate column
More than two weeks)
Group insurance (yes or no)
Pension plan (yes or no)
Holidays paid
None)
One to five days) To be checked in the
Six days) appropriate column
More than six days)

³Wage Survey of Office Workers in the Missoula Area, Bureau of Business and Economic Research, Montana State University, October, 1951.

3. These data are a selected part of the data collected.

The breakdown of the data is as follows:

This is the information which the National and State

Association of Public Health is using as a basis.

It is noted that this organization makes comparison of national and

and the results published in separate reports on different subjects.

Following the personal policy survey covers the subjects, methods of

which are: accident insurance, public health, education, communication

methods, disability program, employee handbook, child insurance, religious

insurance wage program, job evaluation program, physical education,

test methods, medical records, time clocks, training program, etc.

Indiana State University is making a study of the following:

wage survey in 1951, asked for the following information:

1. For each job description survey:

Number of employees - 1000
Average weekly wage

2. General Information:

Total number of employees	
Type of paid vacation	
To be checked in the	
- None	
- One week	
- Two weeks	
- More than two weeks	
Group insurance (yes or no)	
Pension plan (yes or no)	
Religious plan	
- None	
- One to five days	
- Six days	
- More than six days	
To be checked in the	
- None	
- One to five days	
- Six days	
- More than six days	

Provisions for company sponsored plans for:

- Group life insurance (yes or no)
 - Company pays all premiums (check if yes)
 - Company pays part of premiums (check if yes)
 - Company pays nothing (check if yes)
- Hospitalization expenses (yes or no)
 - Company pays some expense (check if yes)
 - Company sponsored insurance (yes or no)
 - Company pays full premium (check)
 - Company pays partial premium (check)
 - Company pays nothing (check)
- Retirement (separate from CASI) (yes or no)
 - Company makes retirement payment (check if yes)
 - Annuity plan (yes or no)
 - Company pays total premium (check)
 - Company pays partial premium (check)
 - Employees pays total premium (check)
- Employees covered by CASI (yes or no)

The Oklahoma Employment Security Commission in its occupational wage surveys in 1951 sought the following information:⁵

1. For each occupation studied:

Number of workers - Male _____ Female _____
 Earnings, excluding pay for overtime and night work
 Hourly
 Weekly

2. General information:

Total number of employees
 Scheduled weekly hours
 Paid holidays (number of)
 Paid vacation (formal provisions)
 Service required
 Length of vacation
 None
 Paid sick leave (formal provision)
 Service required
 None

⁵Occupational Wage Survey of Muskogee, Oklahoma Employment Security Commission, 1951.

Non-production bonus
 Christmas or year end
 Profit sharing
 Other
 None
 Insurance and pension plans
 Life insurance
 Health insurance
 Retirement pension
 Other
 None

One of the business firms observed in this study, in conducting cross-industry surveys of the area in which it was located, asked the following:

1. For each occupation surveyed:

Number of employees) actual distribution of employees by
 Rate) wage rates, excluding incentive and
 designating whether hourly, weekly,
 semi-monthly, or monthly.
 Occupational title
 Rate structure
 Start rate
 Job rate
 Top rate
 Grade

2. General information:

Presently scheduled work week
 Clerical and related: Days _____ Hours _____
 Crafts and manual: Days _____ Hours _____
 Other _____
 Provisions for overtime compensation:
 Over 8 hours any one day) Checked to distinguish clerical
 Over 40 hours any week) and related from craft and
 7th consecutive day worked) manual, and to indicate under
 Other) each if none, straight time,
 time and one-half, or double
 time.
 Shift differential pay:
 2nd shift) Clerical and related distinguished from craft
 3rd shift) and manual, and checked to show hours covered
 and amount of differential pay.
 Lunch periods
 Length) Checked to indicate whether
 Time paid for by company) applicable to 1st shift, 2nd
 Lunch paid for by company) shift, or 3rd shift.
 Continuous operation

Are employees required to punch time clocks?

All _____ None _____ Some _____

If some, please specify groups and purpose (i.e., for payroll purposes, cost accounting purposes, for establishing time scheduling purposes, etc.)

Group _____ Purpose _____

Special pay policies pertaining to:

Minimum hours paid for
Clerical & Craft &
related manual

Call-in due to emergency

Employees sent home due to
 lack of work

Layoff-permanent

Termination allowance

Others (describe)

Provisions for cost of living adjustment: Yes ___ No ___

Special Bonuses (briefly describe such as Christmas, loyalty, profit sharing, attendance, etc.)

Benefit plans:

Pension) Checked to indicate if no plan, per cent
 Hospitalization) paid by company, per cent paid by employee,
 Life insurance) and maximum provision. Brief explanation
 Sick leave) of any of these.
 Others)

Pay for traveling time:

Do employees receive pay for time spent traveling to and from work? Within grounds (yes or no)?

From point of departure of company operated bus to work area (yes or no)? Describe other.

Pay treatment for employees traveling on company business:

Pay for all time enroute _____

Paid only for time traveled during regularly scheduled work day _____

Paid for a specific number of hours per day _____

Number of hours straight time _____ overtime _____

Other _____

Provisions for military activity:

Summer encampment & call out emergencies

No provision _____

Time off in lieu of vacation _____

Time off without pay _____

Time off with full pay _____

Time off with differential pay _____

Maximum time allowed per year _____

Other _____

REPORT

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Calls to extend active duty (N.G., Res., Sel. serv.):

No policy___

Special pay allowances or differential___ Amount___

Dependency allowance___

Other (describe)

Vacation payment

6 months service)

1 years ") Distinguish between clerical and
2 " ") related and craft and manual, and
3 " ") indicate number of days of vacation
5 " ") allowed.
10 " ")

15 " ") Briefly state policy, if any, in
20 " ") regard to pay in lieu of vacation
25 " ") and termination pay for unused
vacation.

Paid holidays observed:

9 holidays listed in order) Check to show holidays
Other) observed. Distinguished

between clerical and
related and craft & manual.

Rest periods:

During 1st half of work period) Split between men and

During 2nd half of work period) women, and between

Other) clerical & related and
craft & manual.

Personal leaves of absence:

Jury duty) Distinguished between
Election service) clerical & related
Voting time) and craft & manual,
Quarantine) show allowable time,
Death in immediate family) and with or without
Educational) pay for each condition.
Personal business (1 day or less))
Personal business (extended))
Other)

Suggestion system:

Formal suggestion system? yes or no___

If yes, do you use:

Flat payment method___ Amount___

Per cent of saving___ Per cent___

No compensation for suggestion

Special clothing furnished to employee by the company:

General categories of employees Appropriate cost per
person/hr., week, mo. or yr.

Are certain categories of employees allowed company time
to change clothes and/or wash up before and after work?

Yes___ No___ If yes:

General categories

Paid time allowed
Before work After work

Tools:

All tools furnished by the company_____

Tradesmen required to furnish own tools:

	Own tools required
<u>Trade</u>	<u>All Peculiar to trade Special</u>

All tools are furnished by the company, but tradesmen are allowed to use their own if they so desire_____

Are employees represented by a union?

No) Distinguished between clerical & related and craft & manual.
Yes	
Name of union	
Affiliation	

Are employees that are not covered by a union agreement accorded the same treatment as union members? Yes__ No__

If no, indicate item number in this questionnaire where difference occur and briefly explain the difference.

Compensation for occupational disability:

In accordance with Workmen's Compensation Law_____

In accordance with own plan_____. Describe_____.

Another business firm in conducting occupational wage surveys of the area in which it is located asked for the following:

1. For each office occupation studied:

Title, code number, and grade of the described job.

Rate range - Minimum rate_____ Average rate_____ Maximum rate_____

Flat rate

Number of workers

Weekly rate

2. For each hourly factory job:

Your title, code number, and grade level of the described job.

Rate range - Daywork rate

Minimum rate_____ Job rate_____ Maximum rate_____

Incentive rate

Minimum rate_____ Job rate_____ Maximum rate_____

Flat rate_____

Number of workers_____ Base rate_____

Incentive earnings (total)

3. General information, identified as applicable to office or factory workers:

This firm seeks answers to some 130 questions on 21 subjects, among which are: use of time clocks, apprentice pay plan, leave of absence plan, job evaluation, suggestion plan, smoking privileges, and general wage increases.

1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part of the report is devoted to a detailed analysis of the economic situation.

3. The third part of the report is devoted to a detailed analysis of the social situation.

4. The fourth part of the report is devoted to a detailed analysis of the political situation.

5. The fifth part of the report is devoted to a detailed analysis of the cultural situation.

6. The sixth part of the report is devoted to a detailed analysis of the international situation.

7. The seventh part of the report is devoted to a detailed analysis of the future prospects.

8. The eighth part of the report is devoted to a detailed analysis of the conclusions.

9. The ninth part of the report is devoted to a detailed analysis of the recommendations.

10. The tenth part of the report is devoted to a detailed analysis of the annexes.

11. The eleventh part of the report is devoted to a detailed analysis of the bibliography.

12. The twelfth part of the report is devoted to a detailed analysis of the index.

13. The thirteenth part of the report is devoted to a detailed analysis of the appendices.

14. The fourteenth part of the report is devoted to a detailed analysis of the maps.

15. The fifteenth part of the report is devoted to a detailed analysis of the tables.

16. The sixteenth part of the report is devoted to a detailed analysis of the figures.

17. The seventeenth part of the report is devoted to a detailed analysis of the charts.

18. The eighteenth part of the report is devoted to a detailed analysis of the diagrams.

19. The nineteenth part of the report is devoted to a detailed analysis of the photographs.

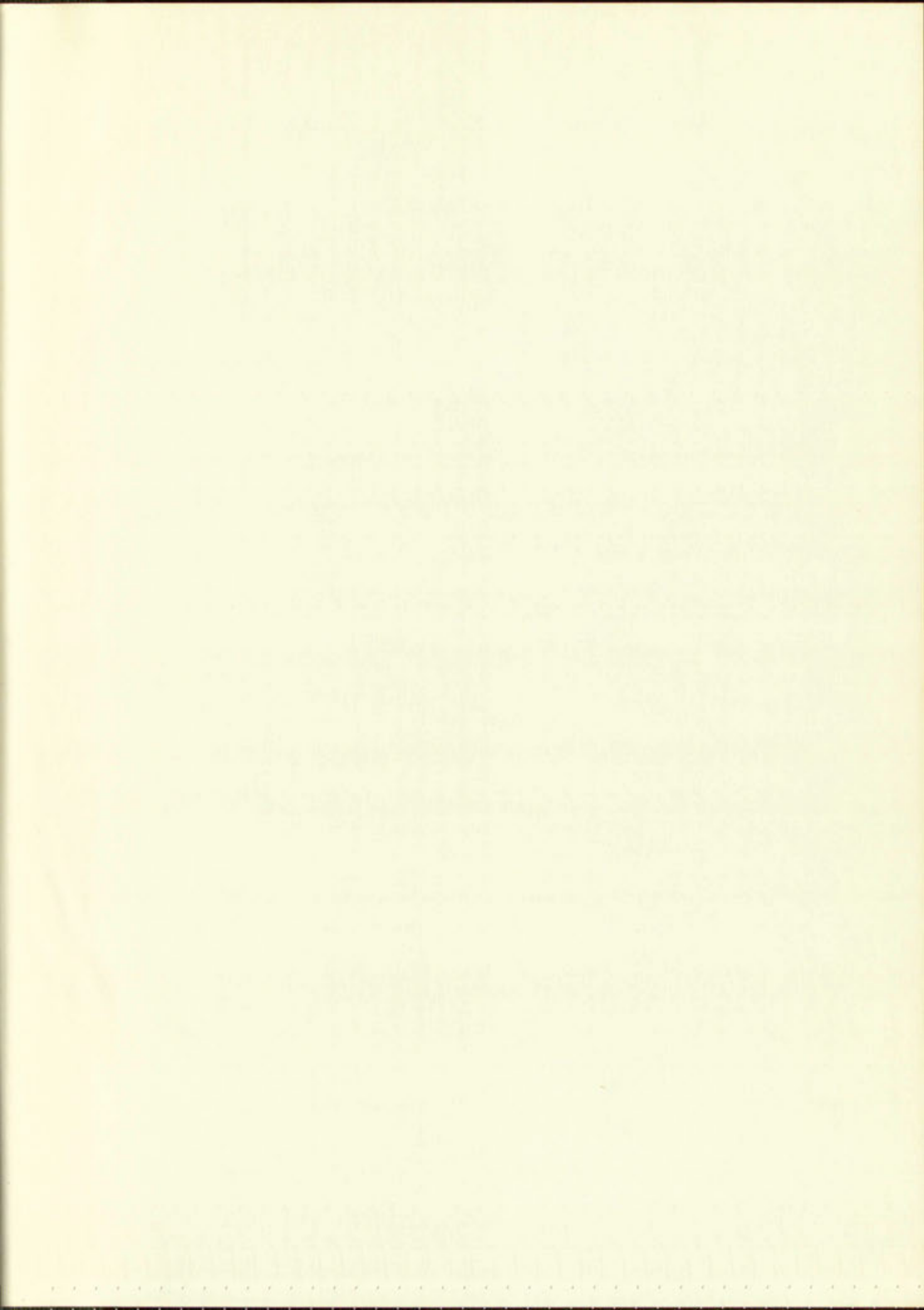
20. The twentieth part of the report is devoted to a detailed analysis of the illustrations.

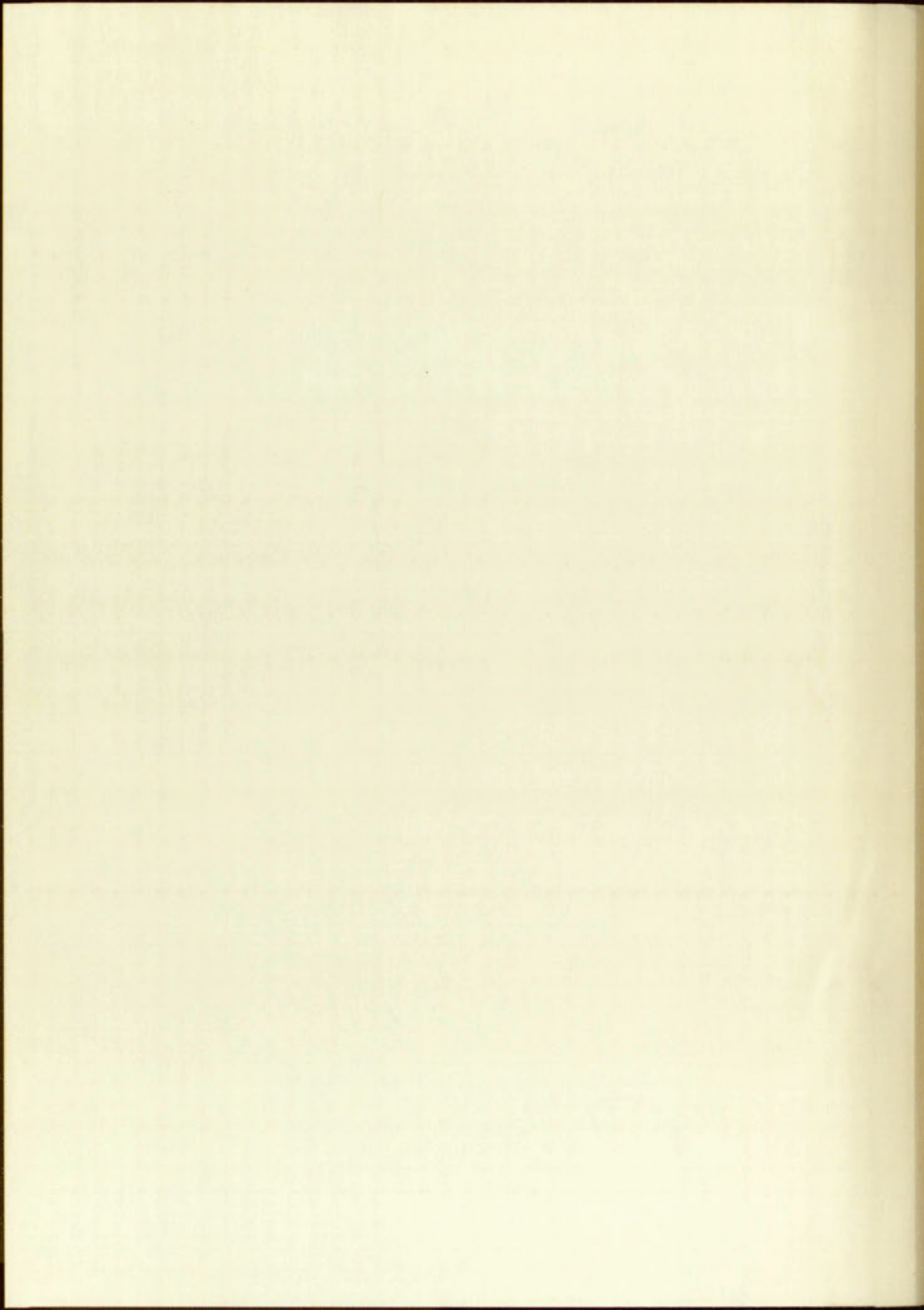
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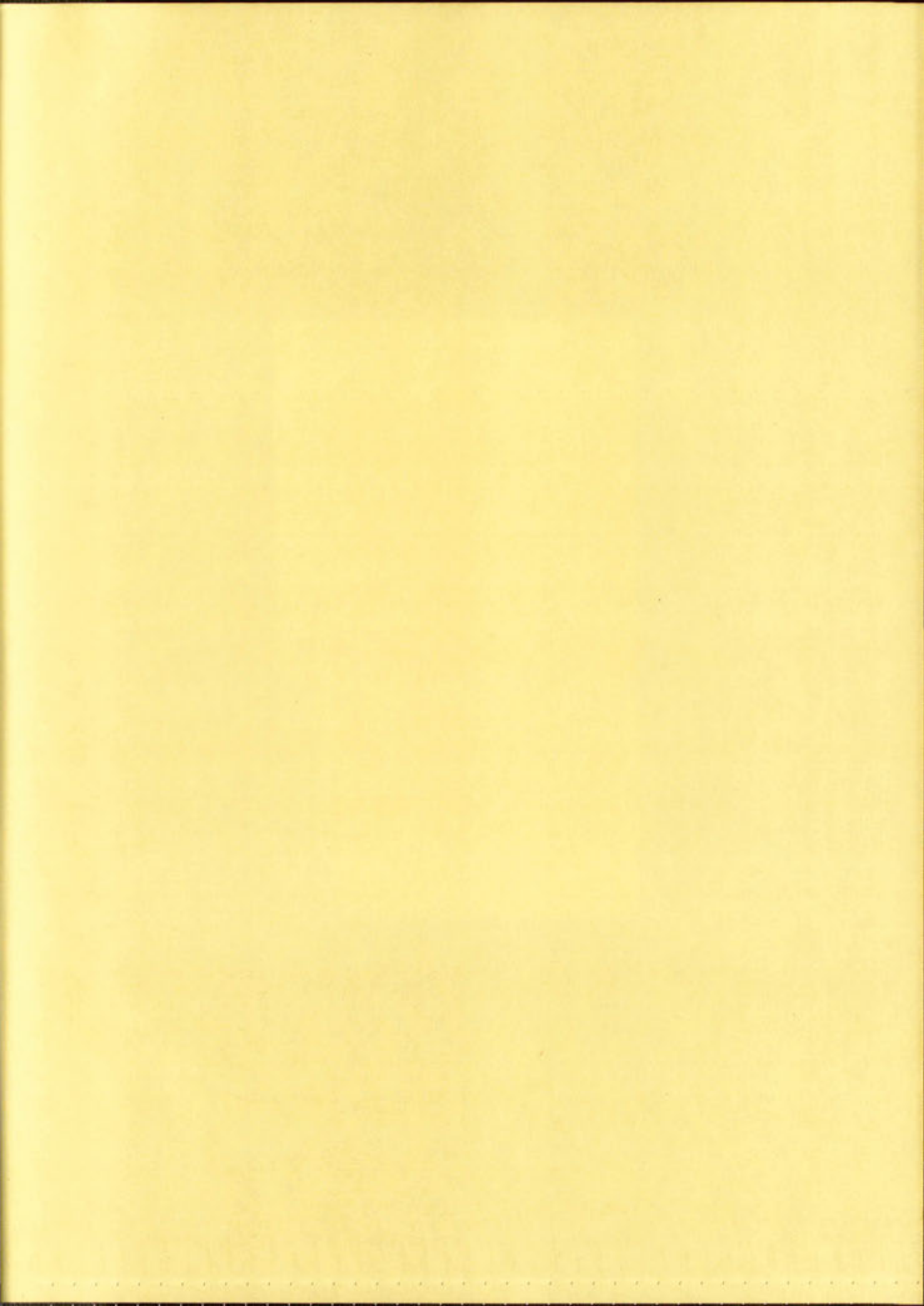
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